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Foreword

This Economic Survey was prepared by Margit Molnar and Serdar Sengul, under the supervision of Sebastian Barnes. Research assistance was provided by Lutecia Daniel and editorial support by Jean-Rémi Bertrand. Christian Greus and Beloslava Ouzounova provided invaluable inputs to the Survey.

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Basic statistics of Bulgaria, 2024

(Numbers in parentheses refer to the OECD average)

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	6.4		Population density per km ²	59.3	(39.6)
Under 15 (%)	14.5	(16.7)	Life expectancy at birth (years, 2023)	75.8	(81.2)
Over 65 (%)	22.0	(18.6)	Men (2023)	72.0	(78.6)
International migrant stock (% of population)	4.4	(15.7)	Women (2023)	79.7	(83.8)
Latest 5-year average growth (%)	-0.5	(0.5)	Latest general election	October 2024	
ECONOMY					
Gross domestic product (GDP)			Headline inflation (y-o-y % change, Dec-2025, OECD: Nov-2025)	5.0	(3.91)
In current prices (billion USD)	113.3		Key monetary policy rate (%, Sep-2025)	1.82	
In current prices (billion EUR)	104.8		Value added shares (%)		
Latest 5-year average real growth (%)	2.7	(1.8)	Agriculture, forestry and fishing	2.7	(2.6)
Per capita (thousand USD PPP, OECD: 2023) ²	41.9	(59.0)	Industry including construction	24.2	(26.0)
			Services	73.1	(71.4)
GENERAL GOVERNMENT (per cent GDP)					
Expenditure	39.2	(42.7)	Gross financial debt	32.8	(112.5)
Revenue	36.1	(37.9)	Net financial debt	6.9	(65.9)
EXTERNAL ACCOUNTS					
Exchange rate (EUR per USD)	0.92		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	0.39		Machinery and electronics	18.8	
In per cent of GDP			Metals	16.9	
Exports of goods and services	56.4	(30.3)	Miscellaneous	11.5	
Imports of goods and services	53.9	(29.9)	Main imports (% of total merchandise imports)		
Current account balance	-1.4	(-0.4)	Machinery and electronics	20.6	
Net international investment position	-2.6		Fuels	12.3	
			Metals	10.2	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate (aged 15 and over, %)	53.3	(58.0)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	4.2	(4.9)
Men	59.4	(65.4)	Youth (aged 15-24, %)	12.3	(11.1)
Women	47.7	(51.0)	Long-term unemployed (1 year and over, %)	2.1	(1.0)
Participation rate (aged 15 and over, %)	55.5	(61.0)	Tertiary educational attainment (aged 25-64, %)	33.8	(41.2)
Average hours worked per year	1 625	(1 736)	Gross domestic expenditure on R&D (% of GDP, 2022)	0.8	(3.0)
ENVIRONMENT					
Total primary energy supply per capita (toe)	2.6	(3.7)	CO2 emissions from fuel combustion per capita (tonnes)	4.7	(7.5)
Renewables (%)	13.7	(13.1)	Water abstractions per capita (1 000 m ³ , 2022)	0.8	
Exposure to air pollution (more than 10 µg/m ³ of PM 2.5, % of population, 2020)	99.6	(56.5)	Municipal waste per capita (tonnes, 2022, OECD: 2023)	0.5	(0.6)
SOCIETY					
Income inequality (Gini coefficient, 2023, OECD: latest available)	0.385	(0.315)	Education outcomes (PISA 2022 score)		
Relative poverty rate (%, 2023, OECD: 2022)	14.6	(11.5)	Reading	404	(476)
Median disposable household income (thousand USD PPP, 2023, OECD: 2022)	11.3	(30.5)	Mathematics	417	(472)
Public and private spending (% of GDP)			Science	421	(485)
Health care (2023, OECD: 2024)	7.9	(9.3)	Share of women in parliament (%)	20.8	(33.3)
Pensions (2021)	9.0	(9.9)	Net official development assistance (% of GNI, 2022)	0.3	(0.4)
Education (total spending, 2020)	3.6	(5.1)			

Note: The year is indicated in parenthesis if it deviates from the year in the main title of this table. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.

1. OECD aggregate refers to weighted average.

Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank..

Executive summary

Key messages

Bulgaria's income has continued to converge to the OECD advanced economies, albeit at a slower pace than some economies in the region and the productivity gap remains relatively large. Education outcomes are weak. The population is ageing rapidly, and outward migration has reduced the supply of workers, even though net migration has turned positive in recent years. The economy is now growing at a relatively fast pace, driven by strong real wage growth and low real interest rates. Bulgaria joined the euro area in 2026.

- A front-loaded fiscal consolidation needs to be implemented. In the longer term, Bulgaria needs to address fiscal pressures from defence spending, the green transition, ageing and the need to make investments, including through strengthening efforts to reduce informality and increase tax compliance.
- Business investment and productivity would be boosted by improving the business environment and removing obstacles to setting up a new business, more effective supports for business and innovation, boosting competition and stepping up the fight against corruption.
- Greenhouse gas emissions have declined but remain high. A clearer plan for coal phase out, reforms to vehicle and fuel taxation and accelerating grid investments would help achieve further reductions while maintaining energy security.
- Major education reforms to raise outcomes are ongoing, the salary raise for teachers should be implemented and reforms in further areas introduced. Delaying tracking, rotating good teachers to disadvantaged areas and providing workplace-based training would help.

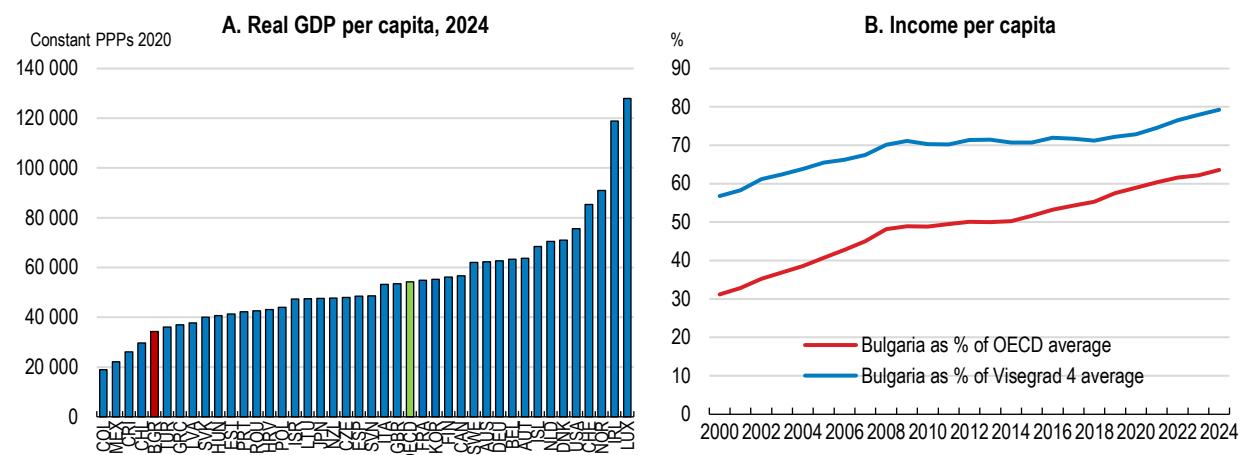
Bulgaria's economy has been converging to the more advanced economies

Bulgaria's living standards have continued to converge towards OECD standards but remain low. Following a period of prolonged political uncertainty, Bulgaria has the opportunity to undertake more active reforms to boost growth and make better use of EU-funded investments and to benefit from euro area membership.

Bulgarian incomes have continued to converge towards OECD countries, albeit at a slower rate than regional peers. Labour productivity has been catching up with OECD countries, though the gap remains sizeable. Average per capita incomes have reached over 60% of the OECD average (Figure 1). However, the shrinking of the workforce has been a drag on aggregate growth. While unemployment is low, a large number of working-age people are outside the labour force, including nearly half of the 24-29 age group with tertiary education are either unemployed or inactive.

An immigration strategy is needed as well as further efforts to attract and integrate return migrants and to bring people into the formal labour market. Disadvantaged people with low skills, mostly from the Roma community, need to be supported to enrol in basic skills and vocational training. Free health insurance for a limited period for new registrants to the employment agency would incentivise registration and reduce emergency care costs.

Figure 1. Real GDP per capita is relatively low and its convergence to more advanced countries is moderate



Source: OECD Economic Outlook 118 database.

StatLink <https://stat.link/8wmy3x>

Strong consumption growth has driven activity, while a fiscal deficit has emerged

Economic growth needs to rebalance gradually from consumption to investment. Euro area membership will need to be carefully managed at the early stages. Achieving a prudent fiscal path will require consolidation in the coming years and in the long-term, putting the pension system on a sustainable footing and increasing revenues, including by improving tax compliance.

Economic growth has returned to its pre-pandemic rate, driven by strong consumption growth supported by rising wages and low real interest rates (Figure 2). Inflation has declined since the energy crisis, but underlying price pressures persist due to sustained wage growth. A shrinking labour force and minimum wage indexation put upward pressures on wages.

Domestic consumption has been strong while investment has been weak following a period of extended political uncertainty and slower disbursement of EU funds. The financial system remains robust and overall credit is low, despite fast growth of household lending in recent years.

Real GDP is expected to grow by 3.0% in 2025 and 2.6% in 2026 (Table 1), driven by a projected gradual rebalancing of the economy from consumption to investment-driven growth. Wage growth is set to slow, and absorption of EU funds should increase. Bulgaria is relatively less exposed to rising global trade tensions.

Bulgaria joined the euro area in January 2026, replacing the longstanding currency board. This should reduce costs and strengthen integration with euro area economies. However, a temporary increase in inflation as prices are reset may require action to avoid triggering further wage-price pressures. Interest rates largely track those in the euro area, but mortgage and deposit rates have been lower due to high liquidity in the domestic banking system.

The economic outlook for Bulgaria remains uncertain. Prolonged political instability could delay reforms and disbursement of EU funds, and increase uncertainty, weighing on investment and growth. Continued high wage growth poses an upside risk to inflation. Regional and global geopolitical developments could push up energy prices, leading to higher inflation and lower growth.

A fiscal deficit emerged following the recent crises and unfunded spending increases, requiring a front-loaded consolidation. In 2024, the fiscal deficit reached 3% of GDP following unfunded increases in pensions, wages and other spending since the COVID pandemic. The government's medium-term budget plan relies heavily on higher tax collection to fund increases in pensions, public salaries, social transfers and investment spending, while aiming to maintain the deficit around 3%. Front-loaded consolidation should aim to narrow the deficit and maintain the current debt ratio, while helping moderate strong domestic demand and inflationary pressures.

Table 1. Growth is projected to moderate as the economy rebalances, but there are important risks

Annual growth rates, %, unless specified

	2023	2024	2025	2026	2027
Real GDP	1.7	3.4	3.0	2.6	2.4
Private consumption	1.1	4.9	6.7	3.0	2.3
Unemployment rate (% labour force)	4.3	4.2	3.5	3.5	3.5
Inflation (CPI)	9.5	2.4	3.8	2.7	2.4
General government balance (% GDP)	-2.0	-3.0	-3.0	-3.0	-3.0
Current account (% GDP)	-0.9	-1.6	-4.4	-4.5	-4.4

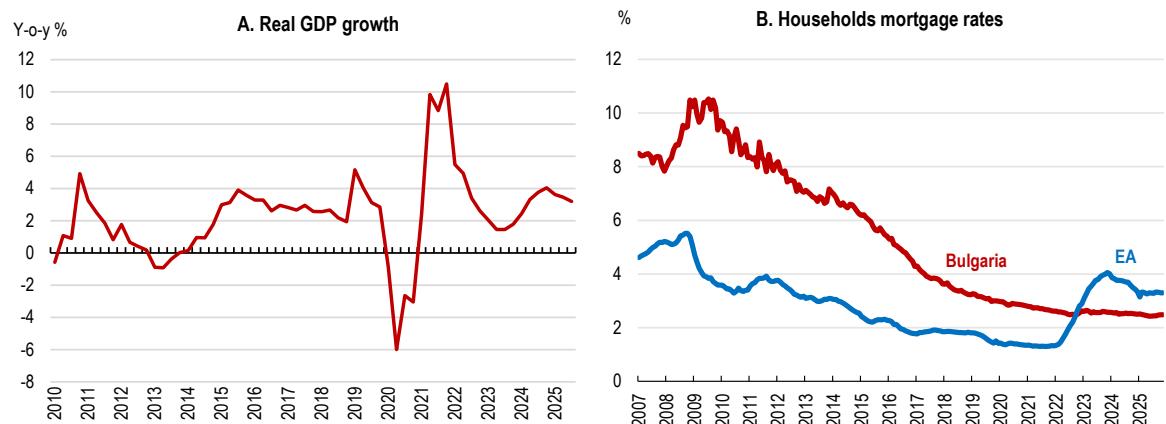
Source: OECD Economic Outlook 118 database.

Bulgaria faces long-term spending pressures and raising additional revenue is complicated by tax non-compliance. In the years ahead, pressures will come from ageing, the climate transition and defence commitments. Growth-enhancing spending is required on education, health, active labour market policies and public investment. While government debt is low, a long-term fiscal plan is needed together with reforms on both the revenue and expenditure side, including further adjustments in the pension system. Long-term capital budgeting would ensure public investment to meet infrastructure needs.

Recent pension increases have widened the system deficit, adding to fiscal challenges. Past reforms will improve the long-term sustainability of the system, although pension system deficit will continue to rely heavily on financing from the state budget. This will come with declining replacement rates, worsening the already widespread old age poverty in the coming decades. To ensure meeting future pension costs in an ageing and declining population, a long-term plan is needed, with measures including extending working lives, activating disability pension recipients with work capacity while ensuring pension adequacy for low-wage earners and further developing private pensions.

Reducing informality, increasing the enforcement of tax collection and raising more revenues from immovable property would help. Introducing mandatory bank-based salary payments along with proof of legal source requirement for deposits would reduce labour informality. Updating property valuations would significantly raise revenues.

Figure 2. Economic growth has been driven by consumption, supported by low interest rates



StatLink  <https://stat.link/01ld9x>

There is ample room to boost productivity by removing obstacles to doing business

Investment is relatively low and FDI channelled heavily to services and residential property. While services industries perform somewhat better, the manufacturing sector is dominated by micro and small firms and focused on low value-added activities. Innovation and the use of new technologies are low. A range of structural reforms is required to make Bulgaria more attractive for foreign investors, improve the business environment, better support innovation and rein in corruption.

Business investment has been weak, despite low real interest rates, high returns on capital and a modest capital stock. Fewer firms borrow from banks than before. Access to bank lending could be improved with a collateral registry for non-real estate properties. Foreign companies are more productive than domestic ones (Figure 3), but FDI has mostly been channelled to services, in particular real estate, though flows to that sector are slowing. Remaining FDI restrictions should be eased, whilst an upgraded investment agency would increase Bulgaria's visibility for investors.

Industrial parks play a central role in the government's approach to supporting the development of higher value-added activities. Subsidies need to be carefully targeted and regularly evaluated to ensure they have their intended effects at limited fiscal costs. Fees and in-kind benefits need to be published in a transparent manner.

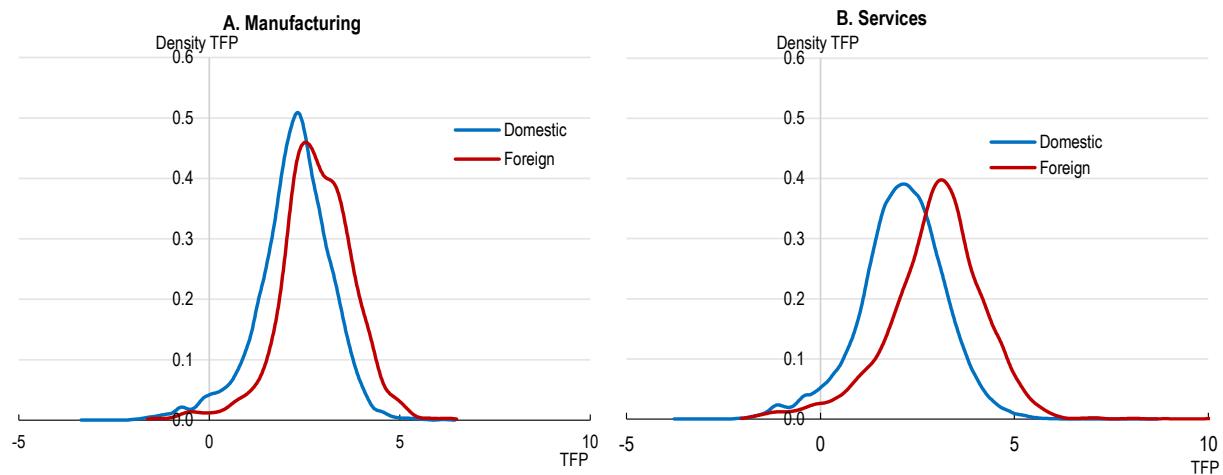
Firm entry and exit need to be more dynamic, while support to small firms need to be improved. Reforms have improved the bankruptcy system and product markets are relatively open, but red tape and corruption impose a hefty burden on businesses. Formalities to set up a firm should be simplified and available through a one-stop shop and access to connection to utilities and land made easier.

Informality and perceived corruption, including through political influence, are barriers to investment and business. The fight against corruption should be further strengthened by conducting in-depth analysis of all transactions involving significant amounts of public resources continuing to strengthen institutional capacity to detect unlawful behaviour and effectively enforcing anti-corruption legislation.

Competition is relatively weak, and profit margins are high in some sectors. Competition should be fostered in industry segments where feasible technically and economically. While the Competition Protection Commission plays an active role, its independence could be strengthened and its capacity further reinforced.

Innovation is low and the take-up of digital technologies lags other countries. Public research spending should be increased and a targeted system of supports for business innovation developed. Links between academic and private research should be strengthened. Adult course curricula should be jointly designed with stakeholders and joint adoption of digital tools could be promoted by business associations.

Figure 3. Foreign firms are more productive in both manufacturing and services, 2023



Note: TFP is in logarithmic form and is based on the Wooldridge estimation method.

Source: OECD estimations based on the National Statistics Institution database.

StatLink  <https://stat.link/mc7g4h>

Carbon emissions are high and need to be reduced without compromising energy security

Bulgaria needs to tackle high emissions linked to the country's reliance on coal for electricity generation, a strong role of transport by road, and poor housing insulation with solid fuel heating. Bulgaria needs to accelerate efforts to address its vulnerability to the increasing frequency of extreme weather events.

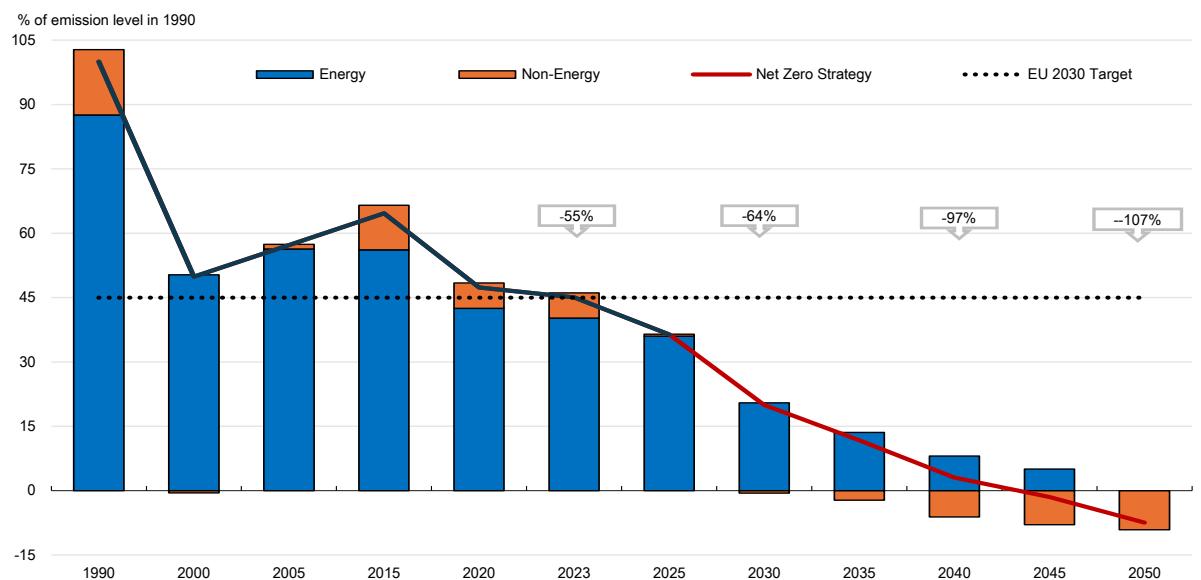
Despite reducing emissions and meeting the EU target of a 55% reduction by 2030, emissions remain high and need to decrease further. The Integrated National Climate and Energy Plan is welcome as it sets more ambitious goals to reach the country's net zero target by 2050, but additional measures are needed alongside a detailed implementation plan (Figure 4).

A significant share of emissions is generated by the energy industries and replacing coal will require a major overhaul of the energy mix. Bulgaria has a non-binding commitment to phase out coal by 2038, and current policy focuses on increasing renewables and nuclear capacity. A managed phase-out of coal is needed without compromising energy security, while addressing its socioeconomic impacts. Investments in renewable energy, domestic transmission and cross-border interconnection networks, as well as energy storage, should be complemented by fostering more competition in the electricity market and developing a price-based demand response mechanism.

Emissions from the transport and housing sectors are high, while vehicle and fuel taxation fall short of best practices. Rebalancing the vehicle tax with higher rates for high-emission cars and gradually raising fuel taxes in the medium term should be accompanied by strengthening public transport. Renovations and decarbonisation of heating need to accelerate to improve energy efficiency with support measures targeting energy-poor households.

Climate change is increasing the frequency of extreme weather events in Bulgaria, and floods and prolonged droughts have become more common. Bulgaria has taken initial steps to build national resilience to climate-related risks, including the adoption of a national adaptation plan and 2030 adaptation strategy. However, public infrastructure resilience needs to be increased while insurance coverage expanded to help manage the financial impacts of extreme weather events and increase household and business resilience.

Figure 4. Achieving climate goals requires further policy action



Note: LULUCF stands for Land Use, Land-Use Change, and Forestry. Bulgaria is projecting a 64% emission reduction by 2030, 97% by 2040 and 107% by 2050.

Source: Ministry of Energy (2025), Integrated Plan Energy and Climate, The Republic of Bulgaria (Updated).

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Education outcomes are weak

Significant reforms in the education system are underway to tackle weak outcomes of the school system. These reforms need to be implemented to raise salaries and the status of teachers, switch to a competence-based curriculum, and boost school infrastructure spending. Further reforms are required to delay tracking, better support vulnerable students, and provide more workplace-based training.

Education outcomes as measured by the OECD PISA (Figure 5) and national assessment tests are very low. While disadvantaged students perform worse than in other countries, so does the top tier, indicating system-wide issues with quality. Basic skills are weak due to outdated curricula, low teachers' performance, early tracking and segregation, inadequate infrastructure and equipment and insufficient care for socio-economically disadvantaged children.

Major on-going reforms address several key issues, such as raising the status and salaries of teachers and eliminating “double-shift schooling”. More support should be given to disadvantaged students, including providing free school meals to poorer students. Additional funding should depend on the outcomes of past reforms and progress carefully monitored.

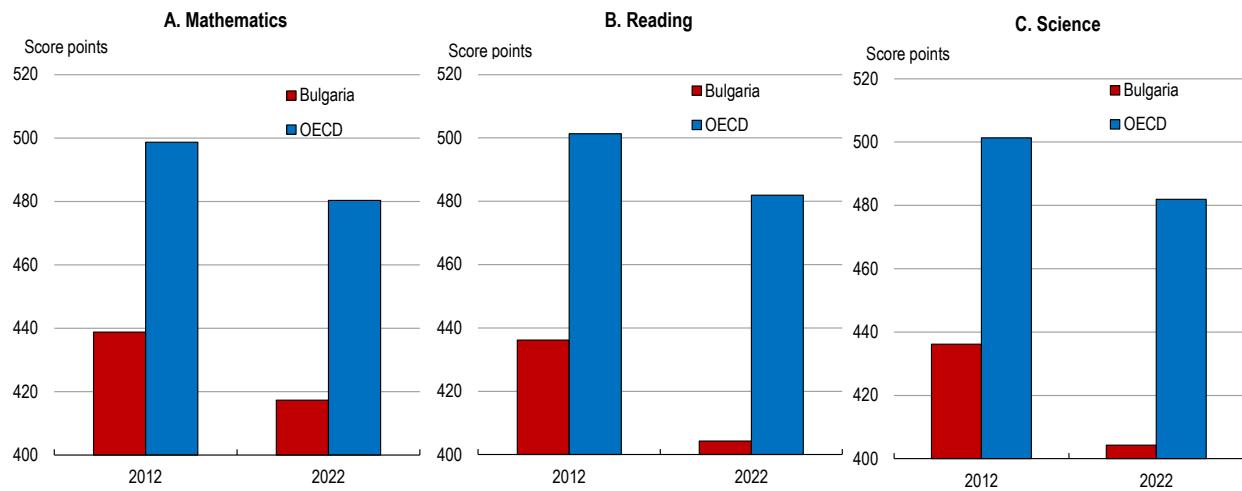
The quality of teaching needs to be boosted. Greater efforts to upskill teachers based on continuous training and career development opportunities would help. Due

to high average age, some technical skills such as coding may be hard to acquire, and such classes could be provided by outside specialists. Rotating high-performing teachers to less performing schools, for instance as a condition for career advancement, would help to make the best use of resources.

Early tracking and the specialisation of schools contributes to disparities in outcomes and locks children into career paths at an early stage. Tracking should be delayed until a higher grade. Schools should be desegregated (i.e. avoiding placing students by socio-economic background) to provide more equitable opportunities for all.

Many disadvantaged children are channelled into vocational schools, many of which are located in areas without industry and thus opportunities for workplace-based training should be extended to all vocational students to allow them to acquire technical skills that are more needed in the labour market.

Figure 5. PISA scores in mathematics, reading and science lag behind OECD and fell recently



Source: OECD PISA 2022 database.

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MAIN FINDINGS	KEY RECOMMENDATIONS
Returning to convergence	
Inflation has been strong on the back of low real interest rates and strong credit growth, while a fiscal deficit has emerged.	Implement a front-loaded fiscal consolidation to narrow the primary deficit.
Bulgaria has major long-term pressures from ageing, the need to improve public services and invest, finance the climate transition and higher defence spending.	Develop a long-term fiscal and growth strategy setting out a plan to address long-term pressures, while ensuring that spending is growth-friendly, and the debt ratio remains stable.
Widespread labour informality and gaps in tax compliance result in significant fiscal losses.	Strengthen ongoing tax compliance enforcement by extending the requirement to use bank-based salary payments while requiring proof of legal source for deposits to reduce labour informality.
Bulgaria faces strong pressures on its pension system from population ageing with current plans set to decrease the replacement rate in a context of existing pension poverty problems.	Develop a long-term plan with measures to extend working lives, activate disability pension recipients with work capacity while ensuring pension adequacy for low-wage earners.
Net migration flows had been negative for long, only turning positive in recent years, and many immigrants only stay temporarily.	Facilitate the return of Bulgarians and make the migration strategy comprehensive with integration measures to attract the immigrants needed.
Lifting business productivity	
Investment incentives so far have been limited to accelerated or simplified procedures but now cash incentives are being introduced.	Target cash incentives for investment based on cost-benefit criteria and competition considerations and regularly evaluate their effectiveness.
FDI could play a more important role in developing high-value added activities and generating spillovers to domestic firms.	Increase capacity of the Invest Bulgaria Agency and undertake a comprehensive review of incentives to foster FDI.
The Bulgarian manufacturing sector is dominated by micro and small firms with limited scope for high value-added production and exports.	Support micro firms and SMEs with a focus on regional and sectoral clusters, to build scale and capabilities required for integration into higher value-added segments of global value chains.
The Competition Protection Commission plays an active role but has achieved few successful prosecutions.	Strengthen the independence of the Competition Protection Commission by continuing providing the needed budget and implementing the hiring of members purely on professional grounds and staggering the appointment of members.
Administrative requirements for starting a business, licensing and connecting to basic utilities remain burdensome.	Simplify entry, licensing and utility connection procedures and consolidate application processes in a digital one-stop shop.
The fight against corruption is progressing with reinforcing of anti-corruption agencies, but policy gaps remain in anti-bribery measures and integrity in public life.	Conduct in-depth analysis of all transactions involving significant amounts of public resources to detect potential unlawful personal gain.
Reducing emissions	
Bulgaria remains heavily reliant on coal power generation and lacks a detailed coal-phase out strategy.	Implement the plans to phase-out coal and develop detailed closure plans while ensuring energy security and leaving a reserve power generation for ancillary services.
Bulgaria has the second lowest petrol and diesel tax among EU countries, while the vehicle fleet is old and polluting despite the relief provided to low-emission vehicles within the current vehicle tax system. Public transport has decreased by around 40% and is largely based on buses.	Gradually raise fuel duties and rebalance the current vehicle tax system with a higher tax for high-emission cars and accelerate development of charging infrastructure. Invest in and expand public transport, including rail, and increase its urban usage with sustainable urban mobility measures.
Reinforcing the compulsory stage of education	
The education system is being revamped with a vision to reach the EU average on many indicators by 2030, while spending has increased.	Additional increase in education spending should be conditioned on further reforms and meeting performance targets.
The early tracking system contributes to unequal outcomes and entrenches social stratification. Vocational education is still mostly classroom-based.	Initiate systemic reforms to delay tracking, desegregate schools and expand workplace-based training to all vocational students.
Moving a student from the teacher who is in the bottom 5th percentile of the quality distribution to another one at the top 5th percentile would raise the student's scores by 7 in math both in the 7th and 10th grades.	Raise the quality of teachers by offering continuous training and career development opportunities and encourage rotation of good teachers to vulnerable areas.



1

Achieving stronger and sustainable growth

Margit Molnar

Serdar Sengul

Bulgaria's economic growth has returned to its pre-pandemic average rate, driven by strong consumption growth. Per capita incomes continue to converge to the advanced economies. Interest rates are low, and wages have continued to rise, fuelling mortgage lending and housing prices, but the financial system appears robust. Inflation has declined since the energy crisis, but underlying price pressures persist. Euro area accession in 2026 will bring benefits but may temporarily increase inflation. Bulgaria maintained strong fiscal discipline over the past two decades. A deficit has now emerged following the recent crises and unfunded spending increases, but public debt remains low, and debt dynamics are favourable. A near-term fiscal consolidation should be implemented. However, a longer-term fiscal strategy is needed to manage the public finances and support long-term growth, while managing medium-term fiscal pressures, including ageing, health and education needs, higher defence spending, climate change costs, and the need to maintain investment to boost growth and rising expectations of its citizens.

1.1. Time is ripe for deeper reforms

Growth in Bulgaria has returned to its pre-pandemic 2015-19 average rate of 3%, driven by strong consumption growth, which in turn has been supported by robust wage increases and credit growth. Bulgaria has benefitted from the earlier opening of its economy and increasing integration into the European economy, though most of the attracted foreign investment has been channelled to services and value chains producing low value added and living standards remain relatively low by EU and OECD norms. Economic convergence has been sustained, but at a slower pace than in many other Central and Eastern European economies and productivity growth appears to have slowed since the pandemic.

Following a period of prolonged political and economic uncertainty, Bulgaria has the opportunity to undertake more active reforms to lift the growth potential, including better use of EU-funded investments. Eurozone accession in 2026 will bring benefits, in addition to having joined the Schengen area in 2025. Anchoring inflation expectations during euro adoption is particularly important given known experiences of “rounding up” effects in other adopting countries. While the level of government debt is low, a deficit has now emerged, and fiscal consolidation is needed to narrow the budget deficit. There are substantial longer-run fiscal pressures stemming from ageing, health and education needs, defence spending commitments, climate change costs and public investment needs. A clearer long-term fiscal strategy, making spending both more efficient and supportive of growth and boosting the capacity to raise revenue would help. Bulgaria has embarked on a range of growth-enhancing structural reforms, including education, investment and the green transition, which will help pave the way for continued convergence to achieve sustained increases in living standards.

1.2. Real incomes are converging but remain relatively low

Bulgaria's real per capita incomes have continued to grow over the past decade at an average pace of around 3½%, despite COVID and energy crises as a result of higher investment and total factor productivity, supported by growing integration into the European economy and enhanced structural reform settings compared to the past. Nevertheless, real incomes per capita in Bulgaria are the lowest in the EU in purchasing power terms and lower than in OECD countries except Colombia and Costa Rica. Economic convergence with OECD high-income countries has been slower than the Visegrad-4 countries. Lower per capita incomes than OECD countries is largely explained by lower labour productivity, where the shortfall is even larger than for income as Bulgarians on average work longer hours (Figure 1.1). There is also a gap in labour utilisation, while a decade ago Bulgaria recorded better labour utilisation than some regional peers. While recent trends are difficult to assess given the pandemic, energy crisis and cyclical factors, per capita income growth and labour productivity gains appear to have slowed as growth has become more consumption focused. Total factor productivity has been a major driver of growth and played a greater role over the past decade than earlier when growth was more driven by accumulation of capital and higher employment. Furthermore, regional inequalities in income growth are high, with the Southwest, where Sofia is located, driving the entire economy. The productivity gap is the major factor behind income differences across regions, although in some regions labour utilisation also lags behind (Figure 1.2).

Figure 1.1. Real income differences are due to the productivity gap, while Bulgarians work long hours

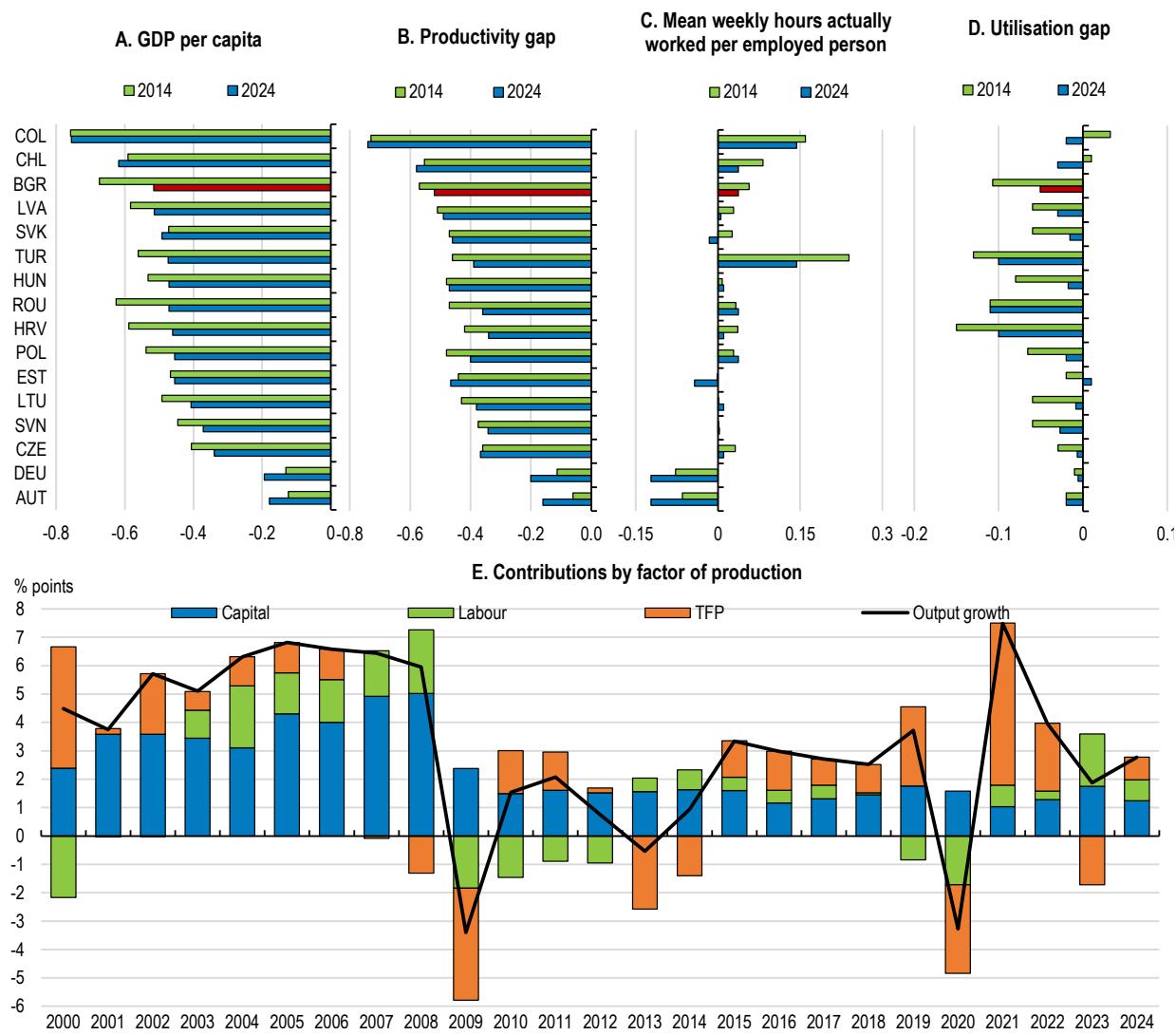
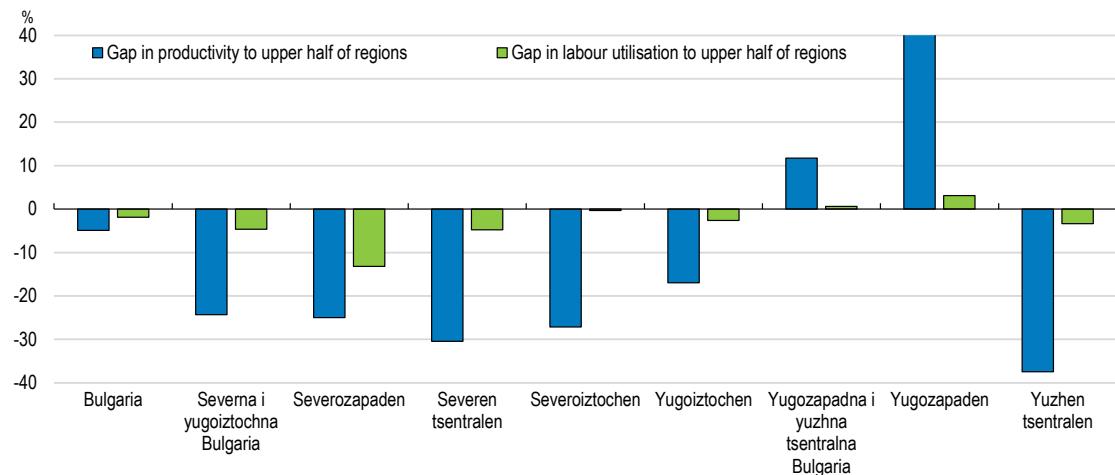


Figure 1.2. The region where Sofia is located is pulling the whole economy

Percentage of GDP per capita to the upper half of regions, 2023



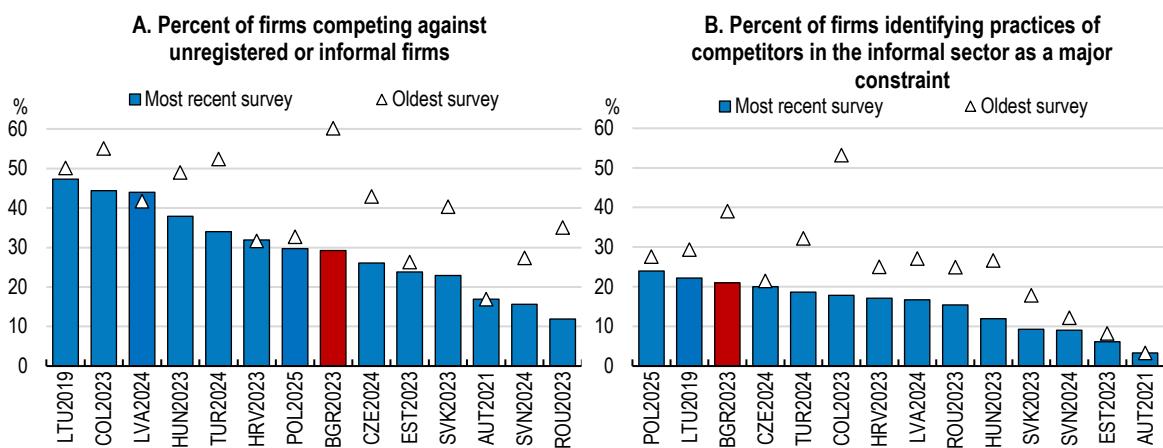
Note: Yugozapaden is the Southwest, where Sofia is located.

Source: OECD calculations based on data from the National Statistics Institute.

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Continued widespread informality, notably in the form of “envelope wages” whereby people are registered but incomes are not fully declared (discussed more in the previous Economic Survey (OECD, 2023^[1])), is a critical issue for Bulgaria in terms of its harmful effect on productivity and through narrowing options to raise government revenues to support social spending and growth-enhancing investments. There is an important interaction between informal payments of wages and the use of cash payments for other transactions. Certain types of payments that circumvent social security charges and personal income taxes are entirely legal, such as vouchers up to BGN 200 per month. Nearly 30% of firms say that they are competing against informal enterprises, roughly the same as in Poland and more than in Romania though this share has decreased over time (Figure 1.3). Even though this share halved in the past couple of decades, still 20% of firms consider this as a major constraint on their ability to function. Empirical research shows that the shadow economy has a negative causal effect on FDI inflows in Bulgaria, as in Croatia or Romania (Bayar et al., 2020^[2]).

Figure 1.3. Informality remains widespread, despite progress



Note: As World Bank Enterprise Surveys are not conducted annually, the closest years were selected for both the most recent and the oldest surveys. The oldest survey corresponds to 2006 for Colombia, 2007 for Croatia and Bulgaria, 2008 for Turkey, 2009 for Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia and 2021 for Austria.

Source: World Bank Enterprise Surveys database.

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Since Bulgaria joined the European Union in 2007, the institutional framework and economic performance have improved significantly, but insufficient convergence of institutions to best EU practices and structural problems have prevented it from taking full advantage of the opportunities provided by the large common market. Emigration has further contributed to Bulgaria's challenging demographics with a falling population and demographic ageing as many younger people, among which many high skilled, have left. Research suggests that convergence is not to be taken as granted but is conditional on efforts taken by governments to strengthen their institutions, the rule of law and implement the needed structural reforms (Box 1.1).

Box 1.1. Convergence of new EU Members

Joining the European Union raised hopes in the new members for a rapid catching up with Western European economies in terms of income, productivity and living standards. Indeed, a number of mechanisms support that process. Wage convergence is important as it reflects the extent of economic integration and the success of cohesion policies.

Being a member of the EU Single Market increases demand for goods produced in the country, encourages specialisation and enhances competitive pressure by eliminating tariffs, aligning standards and allowing access to a larger market and exploitation of economies of scale. The same mechanism also allows citizens to benefit from a greater choice of goods. Free movement of labour opens up opportunities to earn more and gain new skills and benefit the sending country from remittances, though the risks of brain drain loom large.

EU membership strengthens institutional credibility and therefore attracts foreign investment, which in turn facilitates technology transfer, creates jobs and spurs industry diversification and upgrading. It also eases access to international financial markets, reduces borrowing costs and promotes financial sector modernisation. Equally importantly, adherence to EU norms and standards in governance, anti-corruption setting, competition and regulation strengthens the rule of law, improves the business environment and boosts investor confidence, all contributing towards institutional and policy convergence.

A number of tools have been designed to support the above processes, including massive transfers from the European Union budget through the European Regional Development Fund, the Cohesion Fund and the European Social Fund. The Horizon Europe initiative supports cross-border research projects, thereby facilitating cross-border technology and knowledge spillovers.

Empirical research, however, shows that convergence has been slow, or in some cases has even stalled. Real wage convergence across all EU countries and regions cannot be confirmed, instead, often distinct convergence clubs are identified, delineated as core versus periphery countries (Arčabić, Globan and Markušić, 2024^[3]). The formation of such clubs suggests barriers to labour mobility and wage convergence. The lack of wage convergence can be explained by the lack of convergence of labour market institutions, which can result in sustained differences in employment and unemployment rates across countries, indicative of poor labour market integration (Obadić, Arčabić and Rogić Dumančić, 2023^[4]).

Integration with more developed EU economies resulted in faster productivity growth in tradables relative to non-traded sectors and led to economy-wide wage increases. This Balassa-Samuelson effect appears to have been stronger in Bulgaria than in other countries, possibly due to greater initial room for catching up in productivity as well as wage and price levels and the currency board system, where real appreciation stemming from productivity gains occurred through domestic price increases, unlike through nominal exchange rate changes like in other countries. In addition, domestic services prices responded more strongly to rising wages and costs as many services industries are not exposed to competitive pressures.

The last Bulgarian government had entered office on 16 January 2025 following a period of political instability with seven early elections in four years, but resigned in December 2025. The government had set a range of priorities including 11 key policy areas: sustainable public finances; business environment; strengthening justice, governance and financial integrity; transport; energy; digitalisation; health and social inclusion; education, skills and employment; water and waste treatment; climate, environment and agriculture; and defence (Box 1.2).

Box 1.2. Policy priorities

A coalition of the GERB, BSP and ITN political parties had been in government since January 2025. The key policy priorities included:

Euro area accession is set for 1 January 2026, following positive assessments from the European Commission, the European Central Bank, ECOFIN and the EU Parliament.

Ensuring sustainable public finances by improving revenue collection and enhancing control activities and reducing the informal economy. A new methodology for assessing and prioritising capital projects, including improved cost-benefit analysis and monitoring tools, is being introduced to strengthen sustainable public investment.

Boosting competitiveness and innovation through targeted support for industrial zones, SME development, and green transformation. The Economic Transformation Programme supports high-tech and green investments, while AttractInvestBG will provide incentives and a centralised support mechanism for investors.

Strengthening justice and governance by expanding digital court services (e-justice portals), piloting a unified case management system, and improving training for judges and prosecutors. National anti-corruption strategy is being reinforced through new legislation on lobbying and revolving door rules.

Improving transport connectivity by completing priority sections of the TEN-T Core Network, including rail upgrades along the Sofia–Plovdiv–Burgas corridor and cross-border links with Romania and Greece. The development of intermodal terminals and clean urban mobility plans is also underway.

Advancing the energy transition through the rollout of renewable energy generation and battery energy storage systems, building two new nuclear reactors and hydro-pump power plants, simplifying licencing procedures for renewable energy, increasing energy efficiency with support to building renovations and heating decarbonisation. A national definition of energy poverty has been adopted to better target support.

Accelerating digitalisation by integrating public registers into a single access platform, expanding eID usage, and launching a new construction and spatial planning digital system. Investments are underway to improve broadband with very high-capacity networks, targeting underserved rural areas.

Improving health and social inclusion by investing in hospital infrastructure, enhancing health promotion and disease prevention, expanding the financial protection with regard to the access to pharmaceuticals and upgrading and enlarging e-health system's functionalities. Additional measures include increasing funding for services for persons with disabilities and expanding community-based social services.

Enhancing education, skills, and employment with the expansion of early childhood education in underserved areas, introduction of new STEM education programmes, and improved digital competencies through teacher training. The Youth Employment Programme will promote dual training and apprenticeships, especially for NEETs (youth not in education, employment, or training).

Upgrading water and wastewater systems by completing infrastructure projects co-financed under the EU cohesion policy, expanding wastewater collection in small settlements, and implementing digital water monitoring and loss reduction programmes through regional operators.

Strengthening climate action and sustainable agriculture by supporting afforestation and erosion control, and modernising irrigation systems. Measures also include carbon farming pilots and innovation grants under the Strategic Plan for Agriculture and Rural Development.

Modernising defence capacity by increasing investment in personnel, equipment, and infrastructure, including under NATO's Capability Targets. Military mobility is being enhanced with EU co-financing particularly in the Black Sea region, and a national plan is being developed to boost defence industry capacity and research partnerships.

Source: (Ministry of Finance, 2025^(s))

Alongside managing short-term challenges, the authorities need to raise the speed of convergence in living standards through more ambitious reforms while securing long-term sustainability. Even though Bulgaria's growth has been double of the OECD average, at such rates it would take 28 years for Bulgaria to converge even to average OECD income levels. There is ample room for Bulgaria to lift its potential growth rate by structural reforms, such as those raising investment, boosting skills, in particular basic skills (see Chapter 2), participation in labour markets and productivity (see Chapter 4). Structural reforms recommended in this Survey, including measures to raise competition and improve skills, would raise per capita GDP by an estimated 2.3% in the next ten years and around 9% by 2060 (Box 1.3). This would raise living standards and wages, reduce the incentives to emigrate and contribute to the ability to finance pensions for Bulgaria's ageing population. These reforms would allow Bulgaria to maintain the same path of economic convergence as in the past, counteracting the effect of convergence potential slowing as incomes rise (Figure 1.4).

Box 1.3. Potential impact of selected policy recommendations

Table 1.1 illustrates the growth impact of some key structural reforms proposed in this and the previous Survey. Such estimates are based on cross-country estimates from OECD research and provide an illustrative sense of the potential impact. Lowering informality, as recommended in this Survey, would also have a large positive impact on long-term growth but its impact is not included in Table 1.1 due to uncertainty around its impact.

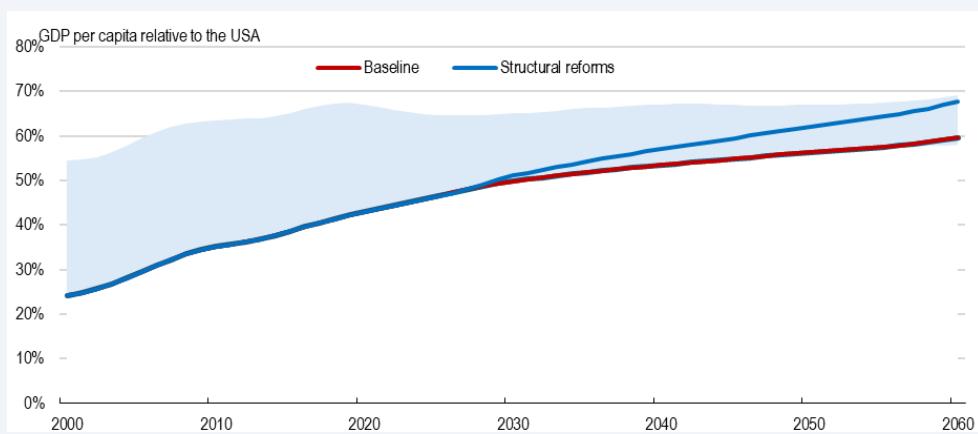
Table 1.1. Potential Impact of selected proposed reforms on the level of GDP per capita

Policy	Description	10-year effect (2036)	Long run effect (2060)
<i>Measures to boost investment, innovation and overall productivity</i>			
Reducing restrictive product market regulations (PMR)	Simplify administrative barriers to start up new company and remove regulated electricity and gas retail tariffs	0.4%	1.1%
Lower equity, access and reciprocity restrictions on FDI	Lower FDI restrictiveness index to the average of Visegrad-4 countries	0.2%	0.5%
Increase spending for basic research and R&D	Double basic research spending and introduce targeted R&D subsidies for business	0.1%	1.0%
Reducing corruption by strengthening existing efforts	Reduce corruption to the average of Visegrad-4 countries by 2040	0.6%	2.1%
<i>Measures to improve skills and labour market outcomes</i>			
Raise PISA scores	Raise PISA scores to the average of Visegrad-4 countries by 2040	0.4%	2.9%
Increase ALMP spending	Increase ALMP spending to the level of the Visegrad-4 countries by 2040	0.5%	1.4%
Total		2.3%	9.0%

Note: Illustrative estimates based on historical relationships between reforms and growth in OECD countries.

Source: OECD calculations based on the OECD Long-term Model.

Figure 1.4. Structural reforms would increase the speed of convergence



Note: The blue shaded area shows a range of GDP per capita relative to the United States, as a percentage, for Visegrad-4 countries, including Poland, Hungary, Slovakia, and Czechia.

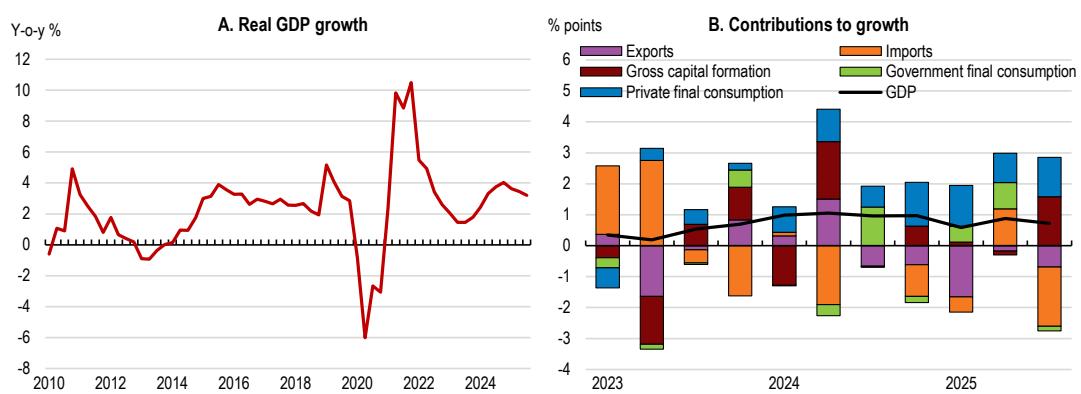
Source: Guillemette, Y. (forthcoming), "A range of possible worlds: global scenarios to 2100", OECD Economic Department Working papers.

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1.3. Recent growth has been driven by consumption, supported by real income growth and low real interest rates

Bulgaria's economy grew by 3.4% in 2024, with household consumption acting as the main engine of growth (Figure 1.5 Panel A). Consumption has been supported by low interest rates and sustained wage increases, while government consumption has provided an additional boost since the pandemic through supports to both households and businesses, as well as higher public wages and pensions (Figure 1.5 Panel B). While cyclical conditions are difficult to assess, demand is estimated to have been persistently above potential. Trade has been sluggish with lower import growth and negative export growth relative to the 5-year average prior to pandemic, reflecting growing competitive pressures from higher energy prices and labour costs on Bulgarian companies as well as regional and global trading conditions. Weak investment has further constrained growth prospects. Both private and public investment have been subdued due to extended political uncertainty and delays in the disbursement of EU funds, limiting the economy's capacity to expand productive capital and strengthen competitiveness. Investment growth has only picked up recently, with the implementation of EU projects gaining pace after the formation of a government at the beginning of 2025.

Figure 1.5. GDP growth has returned to its pre-pandemic trajectory



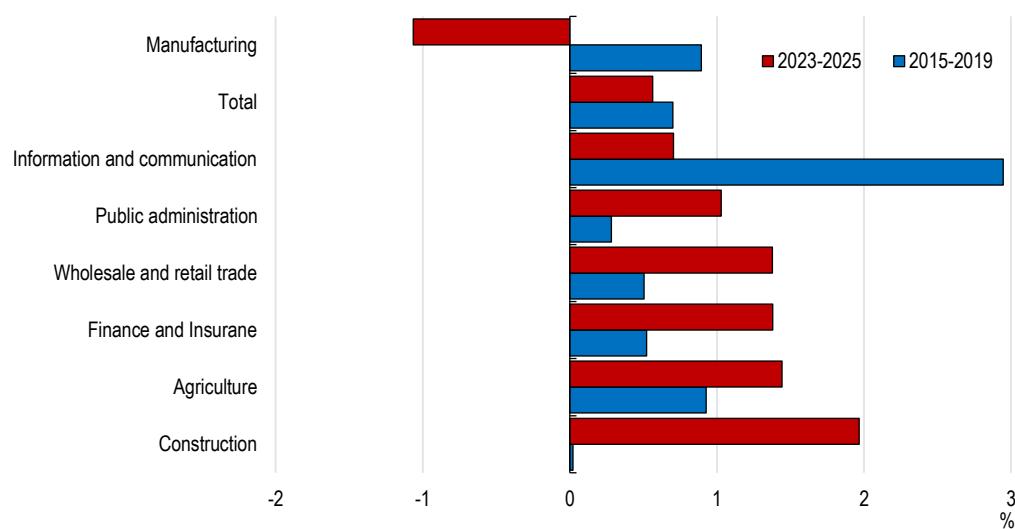
Source: Economic Outlook 118 database.

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Higher energy prices and labour costs have weighed on business activity. While construction, wholesale and retail trade, and the public sector (Figure 1.6) increased their average quarterly growth since 2023, reflecting strong consumption growth, a housing boom and expanded government spending, other sectors have recorded negative average quarterly growth. Key exporting sectors, such as manufacturing and information and communication, have seen sharp slowdowns compared to pre-pandemic norms. Average quarterly growth in the manufacturing sector (around 15% of the economy), in particular, has turned negative since 2023 (Figure 1.6), signalling growing competitiveness pressures, driven by higher energy prices (see Chapter 3) and unit labour costs, as well as weak external demand.

Figure 1.6. Output growth has been lower compared to pre-pandemic in most sectors

Average quarterly GVA growth before and after pandemic and energy crisis



Note: 2023-2025 average includes data until the third quarter of 2025.

Source: Eurostat.

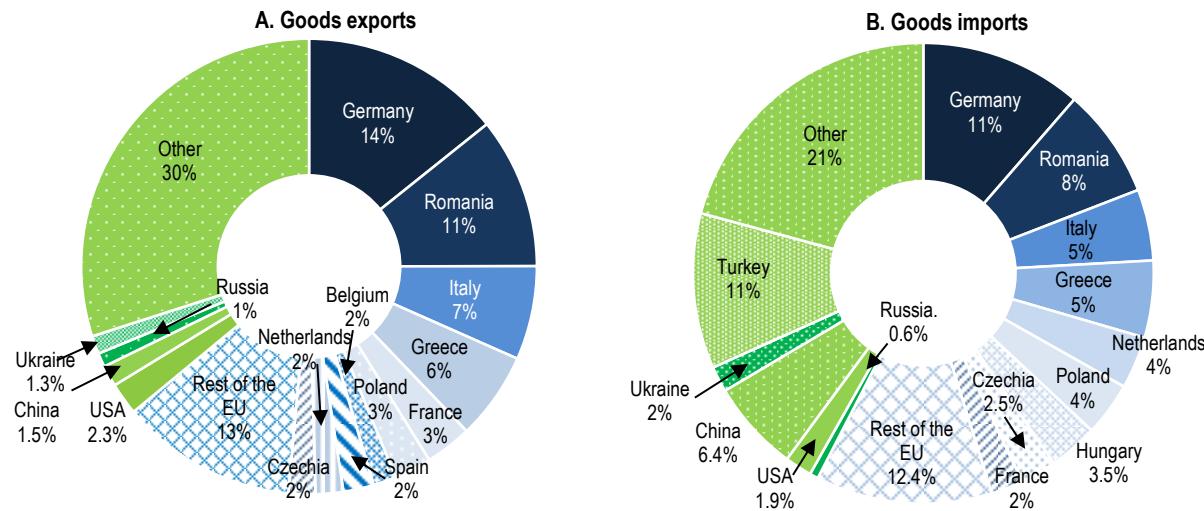
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Energy costs remain a critical challenge for firms. Bulgarian wholesale electricity prices were among the highest in the EU throughout 2024 (see Chapter 3). While households are shielded from market prices through regulated tariffs, contributing to consumption growth, Bulgarian businesses were impacted by higher energy prices, despite the subsidies compensating for some of the increases.

Exports, which were a key driver of growth prior to the pandemic, have weakened sharply, with average quarterly growth turning negative since 2023. Bulgaria's trade (exports and imports) comprises more goods (80% of GDP) than services (22% of GDP). The country is integrated into European manufacturing value chains and is sensitive to European and global developments, particularly the performance of major trading partners such as Germany and Italy (Figure 1.7). The recent export slowdown reflects both a weak external environment and rising competitive pressures. Compared to the average of the five years prior to the pandemic, exports of some labour intensive low value-added sectors, such as clothing and furniture, have fallen by 0.6-1.6 percentage points of GDP, whereas exports in medium-high tech goods, such as electrical machines, increased by around 0.5 percentage points of GDP, reflecting deeper and stronger integration into value chains (see Chapter 4). Meanwhile, defence exports have more than tripled since 2021 from 0.65% of GDP to 2.5% of GDP in 2024 and are expected to increase further with the EU's plans to boost defence spending and announcements of the construction of two major new factories. Additional headwinds may arise from new transatlantic trade policy developments: the EU and the United States have reached a political agreement on tariffs and trade, establishing a single, all-inclusive United States tariff ceiling of 15% on most EU exports, with government estimates suggesting this could reduce Bulgaria's exports to the United States by 32.8% and GDP by 0.35%.

Figure 1.7. Large EU members and neighbours are key goods trading partners

Goods exports and imports as of November 2025



Source: National Statistical Institute and Bulgarian National Bank.

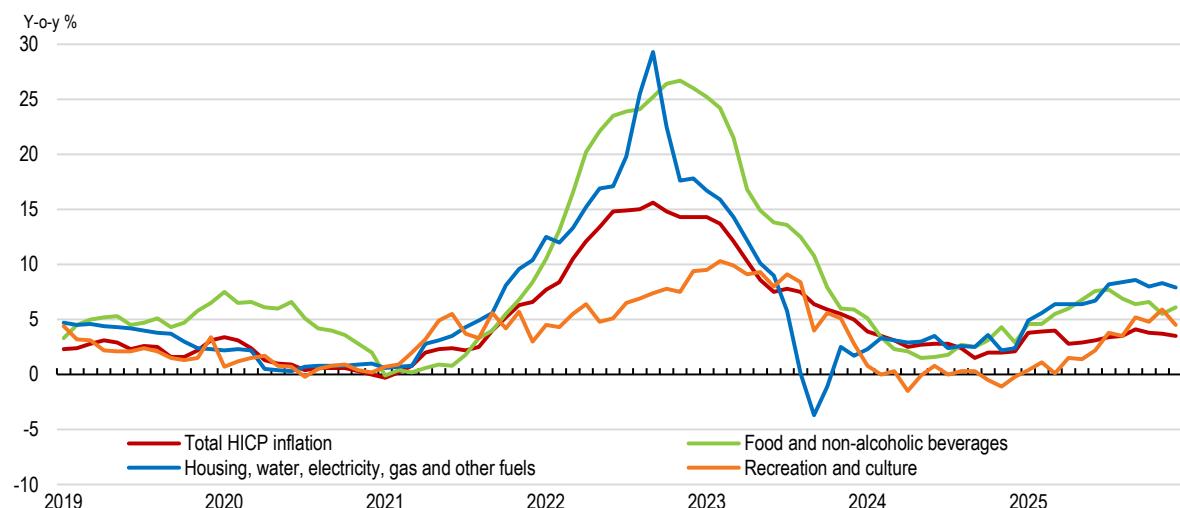
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Overall, competitiveness pressures have contributed to the weakening of Bulgaria's external position. Since 2020, a 1.7% decline in the terms of trade, driven by higher energy prices, together with rising unit labour costs, have weighed on export performance while stimulating higher import demand. As a result, the current account balance has shifted, deteriorating from a surplus of 1.7% of GDP in 2019 to a deficit of 1.8% in 2024. The composition of this deterioration points to an external imbalance: the goods trade deficit has deepened while positive net services trade and remittances have not been sufficient to offset these losses. Some relief came from EU funds inflows in 2025. Disbursements under cohesion policy and a partial payment of the remaining Recovery and Resilience Facility (RRF) funds supported secondary income accounts. Nevertheless, without productivity gains that offset wage-driven cost pressures and policies that support export competitiveness, strong domestic demand risks current account deficits becoming entrenched.

1.3.1. Inflation pressures remain elevated

Bulgaria was heavily exposed to high energy prices due to the relatively large share of energy spending in its consumption basket and the dynamics of the regional energy market, but inflation has now declined due to the fall in energy prices (Figure 1.8). Government interventions, such as temporary VAT reductions on selected food items and services as well as energy price support schemes, helped to limit the peak in inflation. Inflation had been volatile in 2025, with annual headline HICP inflation reaching to 3.5% in December 2025. Several factors contributed to the sharp increase at the beginning of 2025, including restored higher VAT rates for bread and restaurants, higher food prices as well as wage-driven cost pressures and strong demand, underpinned by a tight labour market and indexation of minimum wages and pensions. The most important contribution, however, came from administered energy prices, where annual inflation jumped from 0% in December 2024 to 7.8% in January 2025. This reflects a 9% upward adjustment in regulated household electricity prices from the beginning of January 2025 to account of higher market prices and costs to meet the higher demand during the winter months. Countering this sharp increase in inflation, annual administered non-energy price growth turned suddenly negative in April 2025 (-2.9%) after a substantial reduction in daily fees for hospital stays in April from BGN 5.8 to BGN 1. This contributed to the decline in annual headline inflation in April.

Figure 1.8. Inflation has fallen but remains above 3%

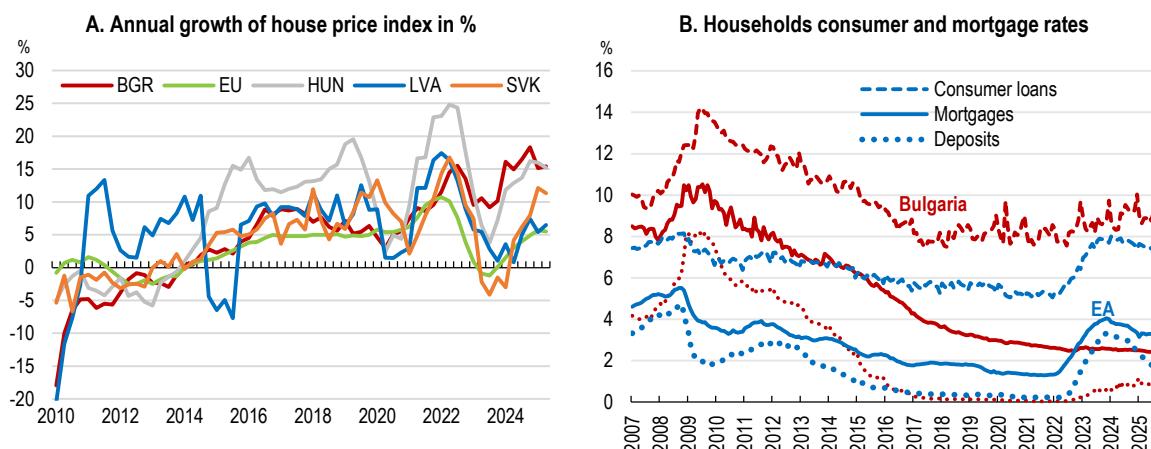


Source: National Statistical Institute.

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However, underlying inflationary dynamics have remained strong, driven by strong consumer demand and significant increases in nominal wages. Services inflation remained persistently high throughout 2024 and peaked at 7.4% at the beginning of 2025 before moderating to 3.9% in December. Despite a temporary slowdown due to changes in hospital fees, underlying services inflation remains strong, especially in key services linked to the housing market, such as rents, and with high labour intensity and wage shares, including restaurants, accommodation and package holidays.

Figure 1.9. Low interest rates have fuelled housing prices



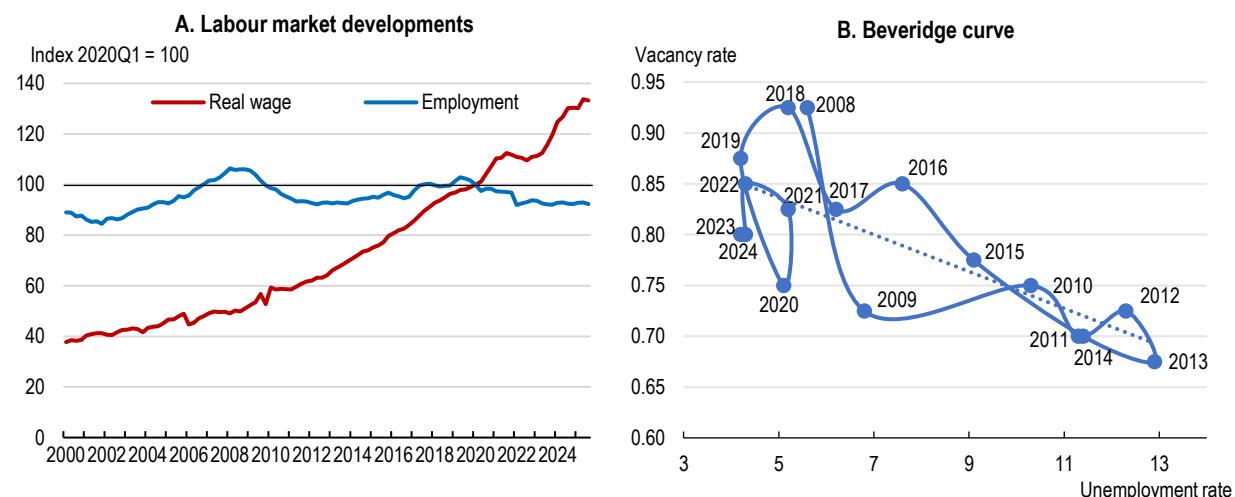
Source: OECD Economic Outlook 118 database and ECB.

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Annual house price growth reached 15.4% in the third quarter of 2025, ranking the third highest in the EU and higher than neighbouring economies (Figure 1.9 Panel A). Despite very high home ownership rates, as in other countries in the region, the housing market has been booming since the pandemic with strong growth in transactions and construction in new residential building across the country, although largely concentrated in big cities such as Sofia, Plovdiv and Varna. Housing investment has become a more attractive saving option than bank deposits with very low deposit rates (Figure 1.9 Panel B), contributing to strong housing demand and soaring house prices. While mortgage and deposit rates in Bulgaria largely track those in the euro area due to its currency board arrangement, they have diverged from the euro area and did not rise to the same extent during the tightening cycle

from 2022, leading to negative rates with inflation well above that in the euro area. This is the result of high liquidity that has been maintained in the domestic banking system.

Figure 1.10. A shrinking labour force has led firms to retain existing staff, fuelling wage growth



Source: OECD Economic Outlook 118 database and National Statistical Institute.

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There are risks that high inflation and wage growth could become entrenched. The average wage is around 80% higher than in 2019 in nominal terms and the minimum wage is 65% higher, around a third of which can be accounted for by compensating for higher inflation and strong growth in real wages (Figure 1.10 Panel A). Real average wages are 30% higher than in 2019, nearly double the rate of productivity growth. This widening gap reflects tightening labour market conditions but also institutional factors and choices. Employers are struggling to recruit high-skilled workers, as consistently highlighted in business surveys. Many firms are choosing to retain existing staff, even when they are not fully utilised. This leads to job vacancies remaining below their historical relationship to unemployment as well as weak employment growth (Figure 1.10 Panel B).

Minimum wage policy has also played a role in wage dynamics. In 2023, Bulgaria introduced a statutory formula linking minimum wage growth to 50% of the average gross salary over the first two quarters of the current year and the last two quarters of the previous year, in line with the EU Minimum Wage Directive's indicative reference values. While this ensures predictability, it has made the tripartite consultation process between government, employers, and trade unions rather procedural and better account is needed of productivity developments. The minimum wage remains low in absolute terms compared to most EU countries, but it has an outsized influence in Bulgaria, where many workers report earning it but receive additional informal "envelope" payments. The minimum wage stands at 38% of the average wage and 51% of the median wage in 2024 (OECD, 2024^[6]). Recent increases have not been closely aligned with productivity growth, raising concerns about cost competitiveness and potential second-round inflationary effects if firms pass on higher labour costs. Future adjustments should be informed by productivity developments and labour market conditions to balance wage adequacy with competitiveness and employment growth.

The composition of growth has also influenced price dynamics. Bulgaria's GDP deflator has diverged from CPI inflation since 2024, driven largely by stronger price growth in government consumption relative to consumer prices. Rising public wages and spending have increased the cost of government services such as healthcare, education, and public administration, compared to their prices in the CPI basket set administratively. The divergence also reflects statistical factors, including weighting differences, and a higher investment deflator with the increase in industrial producer prices in capital goods (Bulgaria ranked fifth highest in the EU in 2024) and accelerated implementation of EU-funded projects following the formation of a new government. Continued public wage growth, government spending, and investment demand supported by further EU fund disbursements are expected to sustain this gap before it gradually narrows.

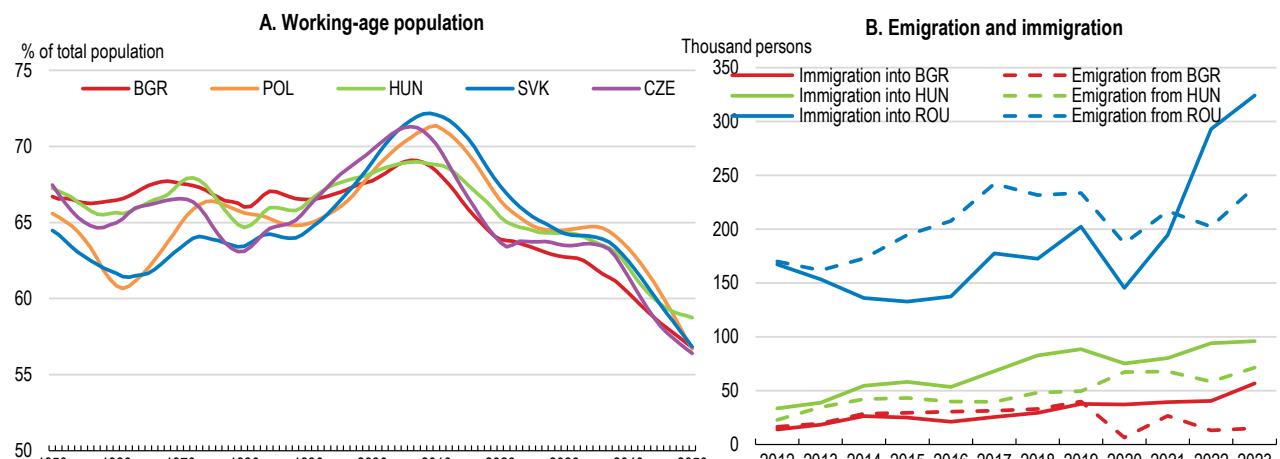
1.3.2. The population decline is a challenge

Total employment remains below the 2017-18 levels, and the labour force has continued to shrink due to population ageing and until COVID-19 also due to net outward migration. Since its peak in 2019, the labour force has contracted by roughly 10%. This has been partly offset by the employment rate rising to over 70%, while the unemployment rate has dropped from over 5% before the pandemic to around 4% today.

Population prospects are among the bleakest among all countries. In addition to natural decrease, emigration of both skilled and unskilled labour remains a serious issue even though net migration has turned positive since 2020. The working-age population has been shrinking more rapidly than in most of the Visegrad-4 countries (Figure 1.11). It remains to be seen whether the current trend of net immigration since the COVID-19 pandemic will be sustained, including if prospects in key emigration destinations improve. A somewhat similar pattern, though at a much greater amplitude, is observed in Romania. Once they leave, relatively few Bulgarians return (Figure 1.12). A comprehensive strategy to attract and integrate immigrants, including Bulgarian returnees, that would go beyond the recently released immigration strategy (the National Strategy for Migration and Asylum Management 2025-2030 issued on 3 September 2025, Decision No. 616/2025 of the Ministerial Council) is needed to avoid a rapid shrinking of the labour force as argued in the previous Economic Survey. For a country with a rapidly shrinking population like Bulgaria, a more proactive and long-term strategy would be needed focusing primarily on attracting back Bulgarian emigrants but also with objectives and measures to settle immigrants in the country to make up for the shrinking labour force (OECD, 2023^[1]). The group of inactive individuals may serve as a potential source of labour for Bulgaria. The Employment Agency is making significant efforts to attract them to the labour market and managed to reduce their number by nearly 6% since 2019, while the labour force fell by over 10%.

Figure 1.11. The share of the working-age population is shrinking rapidly, but net outward migration has turned positive since the pandemic

Percentage of population aged 15-64 of the total



Source: Panel A: United Nations Population Prospects database, Panel B: Eurostat.

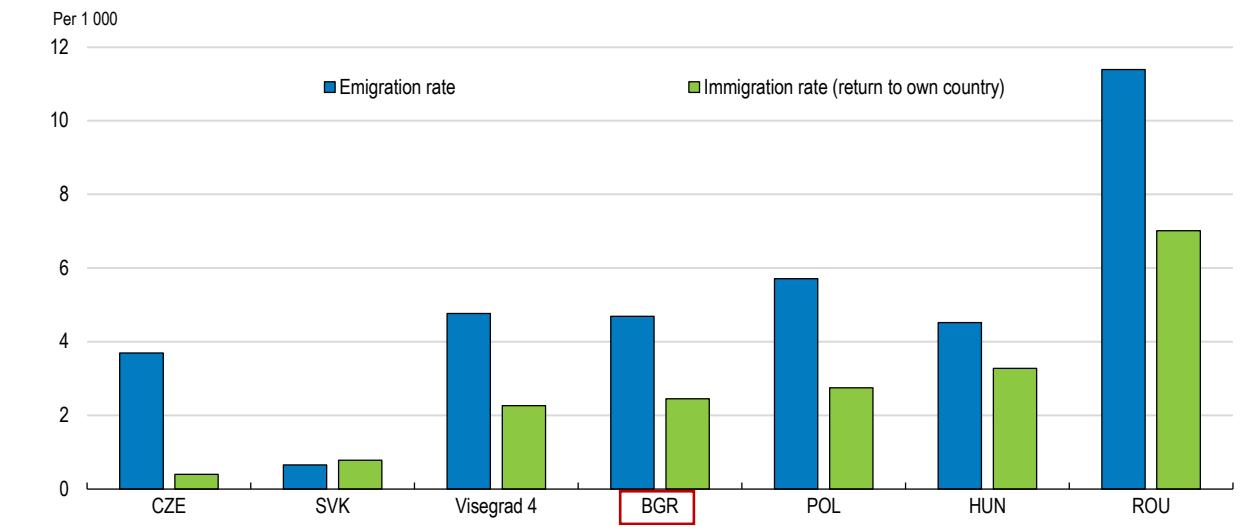
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Table 1.2. Past OECD recommendations to create more and better jobs

Past recommendation	Action Taken
Ensure access to subsidised quality childcare country wide. Allow keeping 75% of the maternity allowance for mothers willing to return to work before the end of the 1-year maternity leave.	Nursery and kindergarten care is free now. No action taken.
Reduce teenage childbearing by keeping school-age children in school and equipping the young with marketable skills.	The National Program for Educational Desegregation focuses on improving access to quality education for children from vulnerable groups, including the Roma community. It involves recruiting non-teaching staff such as educational mediators and teacher's assistants to support educational desegregation and prevent secondary segregation. Free transport is provided for children going to schools located in a different place from their residence.
Develop a comprehensive suite of measures including the provision of information about jobs and support related to administrative requirements for the (re)settlement in Bulgaria.	In 2024, as part of the National Migration Strategy, an "External Portal" was launched, connected to the consular system, to simplify visa applications, appointment scheduling, and payment for consular services. No comprehensive strategy has so far been seen, though.
Encourage registration with the Employment Agency and offer training for professional development more proactively.	With the amendment to Article 27, paragraph 4 of the Employment Promotion Act, job seekers can be referred to subsidised employment and training in all LOs in the country, regardless of their place of registration.
Accelerate the rollout of home-based caretaking by professionals. Nurture the caretaking sector by expanding current institutions and training professionals to free family members (mainly women) for labour market participation and to meet demand amid rapid ageing of the population.	No action taken.
Extend the minimum unemployment insurance disbursement period to six months, provide young graduates with non-contributory social assistance and withdraw benefits in a staggered manner when taking up a job.	No action taken.
Increase incentives to register with the Employment Agency, including improved training and consider providing minimum (social) health coverage for people who register, with a six-month limit.	Incentives to register have increased. Art. 18. EPA, supplemented - SG, No. 41 of 2022, effective 03.06.2022 states that the registered unemployed enjoy alleviations for free medical examinations in health and dental facilities, advantages/grounds for use of dormitories, receiving scholarships, etc. in the education system, etc. However, free health coverage, as recommended in the 2023 Economic Survey, is not yet provided for people who register.
Reduce the subsidy share of wages in subsidised employment, in particular where they are at full or close to full subsidisation to avoid adverse incentives and create sustainable employment.	No action taken. Full subsidisation still exists, not only for disabled people.
Allocate more resources to the Employment Agency to digitalise its services and handle a larger number of registrations once health insurance coverage is offered.	Digitalisation is ongoing, has not been completed yet.
Introduce specific vocational rehabilitation programmes tailored to the skills needs of people with disabilities.	No action taken.
Consider the specific needs of Roma when designing labour market programmes and increase outreach to their communities to raise awareness of services and benefits of the Employment Agency.	No action taken.

Figure 1.12. Few Bulgarians return

Emigration rate and immigration rate of citizens to their own country of origin, average 2016-2023



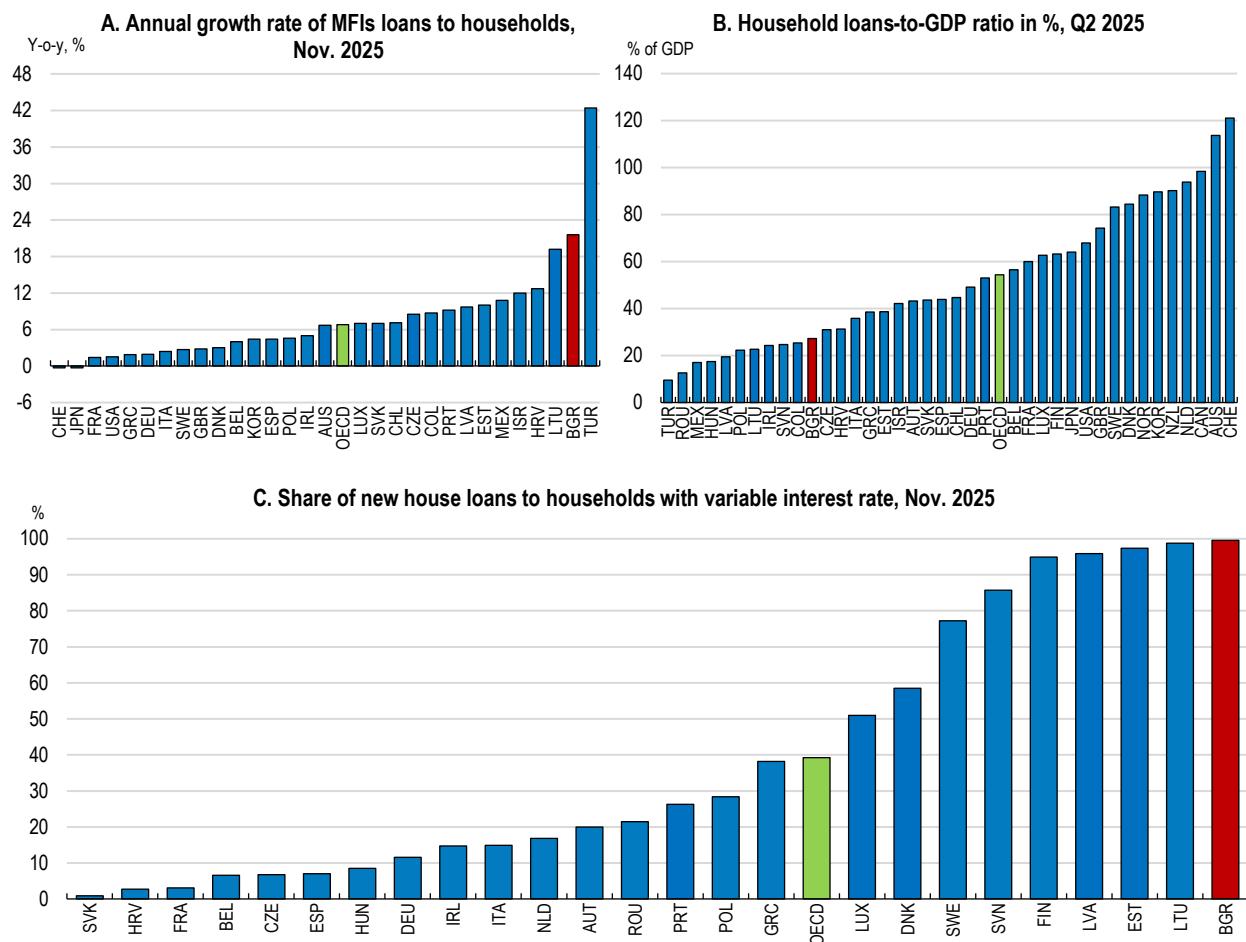
Source: Eurostat.

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1.4. Household credit has grown strongly, but the financial system appears stable

Bank loans to households have been growing at a fast pace, much faster than in the Visegrad-4 countries and were up by 21% in the year to November 2025 (Figure 1.13). Even though Bulgaria had a very low household loans-to-GDP ratio of 27% at mid-2025, the very strong growth of lending to households warrants some caution. Mortgage lending has been fuelled by very low mortgage interest rates due to them being linked to deposit rates and has been associated with soaring housing prices. This mortgage lending boom is ongoing despite very high home ownership rates, which is not uncommon in the region. Bulgarian households are sensitive to rising interest rates given that the vast majority of loans carry variable interest rates, which is unusual for the region. However, the sensitivity to a change in the interest rates is mitigated by the relatively low level of household indebtedness (similar to other countries in the region) and the interest benchmark anchored to a local deposit index. Credit to firms is growing more moderately in line with average growth rates in EU countries against the background of overall modest corporate debt levels.

Figure 1.13. Loans to households and house prices have increased rapidly

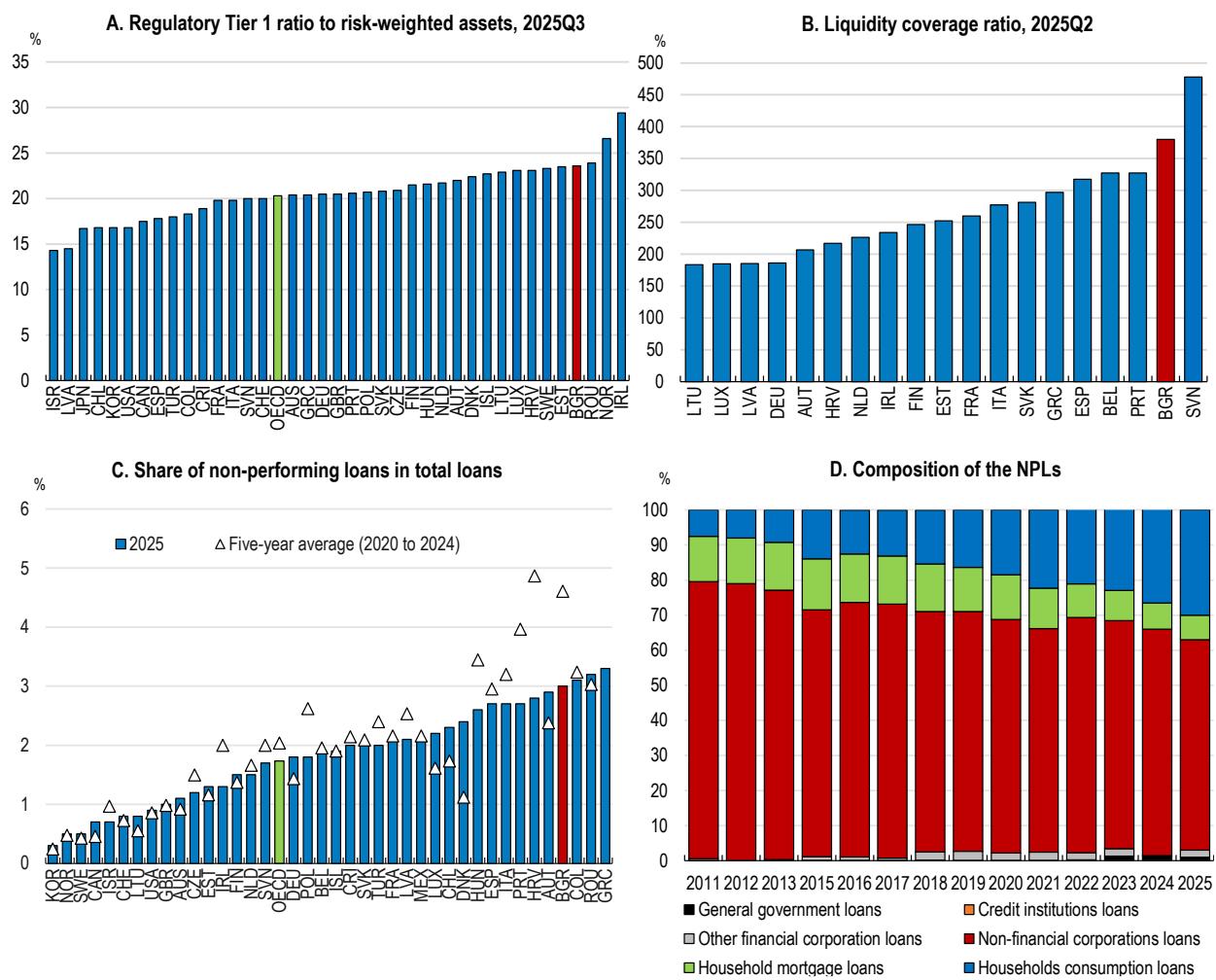


Source: ECB, BIS, OECD and National Statistical Institute.

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Bulgaria's banks appear to be well-capitalised and are largely foreign owned. The financial system is dominated by the banking sector. The banking system's total assets are around 100% of GDP, comparable to neighbouring OECD countries. Foreign banks control 70% of bank assets, primarily in the form of subsidiaries. Four banks, which represent approximately two-thirds of total bank assets, are classified as significant institutions and have been subject to direct supervision by the European Central Bank since Bulgaria joined the European Banking Union in 2020. While the presence of larger foreign banks is a valuable source of capital and know-how, their dominance could expose Bulgaria to potential withdrawal during financial crises, although they have played a stabilising role in the region during recent crises. The banking system is well capitalised and liquid (Figure 1.14). The liquidity coverage ratio is more than three-and-a-half times higher than required by regulatory requirements. The adverse market conditions since 2020 had temporarily reduced profitability before it started to recover in early 2022. Nevertheless, the ratio of non-performing loans (NPL) remains relatively high compared to the OECD average, reflecting historic credit problems during the Global Financial Crisis. However, the NPL share has been gradually decreasing through write-offs and sales, reaching 3% as of the third quarter of 2025. The gross NPL remains covered with the accumulated impairments at a level of 50%.

Figure 1.14. Banks are well capitalised and liquid, though the share of non-performing loans is high

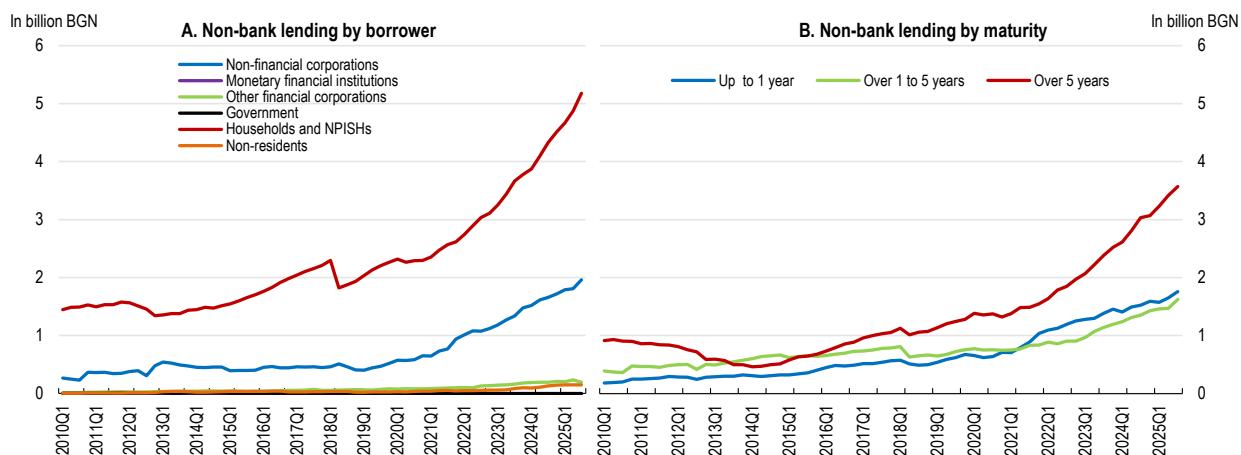


The Bulgarian National Bank tightened prudential regulations governing mortgage lending in September 2024, it introduced new standards including a maximum loan-to-value ratio of 85% and a maximum loan-to-income ratio of 50% and limited the lending term to 30 years. For comparison, the average loan-to-value ratio stood at 73%, the average loan-to-income at 37% and the average term was 25 years at end-2024. In addition, the Bulgarian National Bank has repeatedly increased countercyclical capital buffer requirements to further strengthen the resilience of banks and prevent an excessive build-up of risks.

Households have also rapidly increased their borrowing from the non-bank financial sector. The non-bank financial sector in Bulgaria includes consumer credit and microlending, jointly reaching 2.5% of GDP in the first quarter of 2025 (Figure 1.15), without regular data made available for the split between those two destinations. Moreover, the data disclosed reflect only the term of lending in the past as only data with a remaining maturity of less than a year are analysed by the central bank. Disclosing the split between the two forms of credit and reporting on a standard basis would allow for a better assessment of risks. While this lending segment remains relatively small, it may involve high risks for the borrowers and target less financially savvy customers. NPLs are currently around 9%, well above those by banks. Currently there is a cap on costs, which implies that lending small amounts is not feasible as costs of creditworthiness checks would exceed the profits. To circumvent this, non-banks often bundle various services that are not directly related. In addition, there is a 50% cap on interest rates, which, instead, should be expressed in terms of multiples of benchmark lending rates, including any additional fees to avoid excessive costs

for borrowers. Non-banks raise their funds from other financial institutions or individuals. Such loans constitute somewhat below 5% of bank credit. While they are not allowed to take deposits, non-bank financial institutions can solicit individual savings even through advertising, but they are called investors and not depositors and their number is limited to 30. As non-banks are not deposit-taking institutions, the central bank's supervisory authority does not cover them. They are supervised by the Consumer Protection Agency, which is the enforcer of the Consumer Credit Act and the Law on Mortgage Credit. The agency's task is to ensure fair business practices, prevent deceptions and unfair contract terms. It carries out its work through planned and ad hoc inspections. The most common irregularity in non-bank lending is hidden fees. Twenty non-banks that refused to comply, have been taken to court, but the agency mostly handles mediation and out-of-court settlement. Greater transparency, including disclosure of interest rates would help reducing irregularities and better protect consumer interests.

Figure 1.15. Non-bank lending to households is rising quickly



Note: Maturity refers to past maturities.

Source: Bulgarian National Bank.

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Table 1.3. Past OECD recommendations on monetary and financial policies

Recommendation	Action Taken
Continue to prepare for euro adoption.	On 4 June 2025, the European Commission assessed in its convergence report that Bulgaria fulfils the conditions and complies with the legal requirements for the adoption of the euro on 1 January 2026.
Reduce the interest rate cap on consumer loans by non-bank finance companies and express it as a multiple of benchmark lending rates. Tighten oversight of non-banks providing lending, increase their data disclosure and enhance the capacity of the Consumer Protection Commission to better represent consumers' interests.	No action taken.

1.5. Bulgaria joined the euro area in 2026

Bulgaria joined the eurozone on 1 January 2026, following positive assessments from the European Commission, the European Central Bank, a decision of the eurozone finance ministers in June and on 8 July the unanimous votes by ECOFIN and the EU Parliament. This has significantly reduced foreign currency risks in the economy and should benefit the country in the long run. The decision to adopt the euro has already increased the credit rating of Bulgaria and is expected to raise trade, investment, job creation, and access to finance even though its direct impact on GDP growth may be limited (Bosna, Brlečić Valčić and Peša, 2024^[7]). Furthermore, eurozone membership may reduce some fluctuations in growth but can also propagate severe economic disturbances if not correctly managed as the experience of new entrants shows in the past two decades (Heller and Warzala, 2019^[8]).

Although Bulgaria has had a currency board with a fixed exchange rate of the Bulgarian lev aligned to the euro since 1999, euro adoption may still trigger some short-run pressures. A short-term spike in inflation may follow the euro's introduction, a trend observed in other member states during their own transitions (Box 1.4). The rise is likely to be driven by the resetting of prices in euros, even if the relationship between the leva and the euro is well-established. The inflationary effect, however, will likely be temporary and minor if addressed carefully. The authorities have already introduced dual-price displays and have committed to active surveillance to avoid inflation "rounding-up" effects observed in previous euro adopters. During their adoption of the euro, Slovakia and Slovenia mitigated the "rounding-up" effects with price monitoring campaigns. Public campaigns on price comparison and reporting unfair pricing could potentially help prevent inflation spikes in Bulgaria. Managing inflation expectations are crucial as they could potentially become self-fulfilling through cost-push pressures, which could be avoided by coordination with labour unions and employer associations to halt pre-emptive wage hikes in fear of inflation.

Box 1.4. The impact of Bulgaria's entry to the eurozone

Membership of the euro area has been a long-standing objective for Bulgaria. The advantages should include providing a strong institutional underpinning for independent monetary policy and full integration in EU product and financial markets.

With euro area entry, Bulgaria is now fully integrated into the European banking framework and subject to its supervisory standards. The elimination of currency conversion costs reduces the costs of doing business and enhances competitiveness. The euro increases price transparency as consumers and businesses are able to easily compare prices across borders, ultimately exerting downward pressure on inflation. Bulgaria has become part of the European Stability mechanism, which will provide additional financial protection and access to significant resources and expertise if needed. Banks are now required to keep lower reserves at the central bank, boosting the funds available for lending. Taken together these developments should contribute to long-run economic stability and growth.

Managing economies without independent monetary policy can be a challenging task, however, Bulgaria has been in a similar position for long time having adopted a currency board linking the leva to the deutschemark and then the euro since 1997 and it has proved to manage well this most often-cited downside of a monetary union. A risk that was highlighted prior to monetary union was the management of asymmetric shocks, where a country's cyclical position diverges from that of that area as a whole and therefore monetary policy can fail to play a stabilising role for domestic demand. Bulgaria is strongly integrated with the euro area and its business cycles have been synchronised, conditions conducive to full realisation of the benefits of euro area membership (Wolff et al., 2023^[9]).

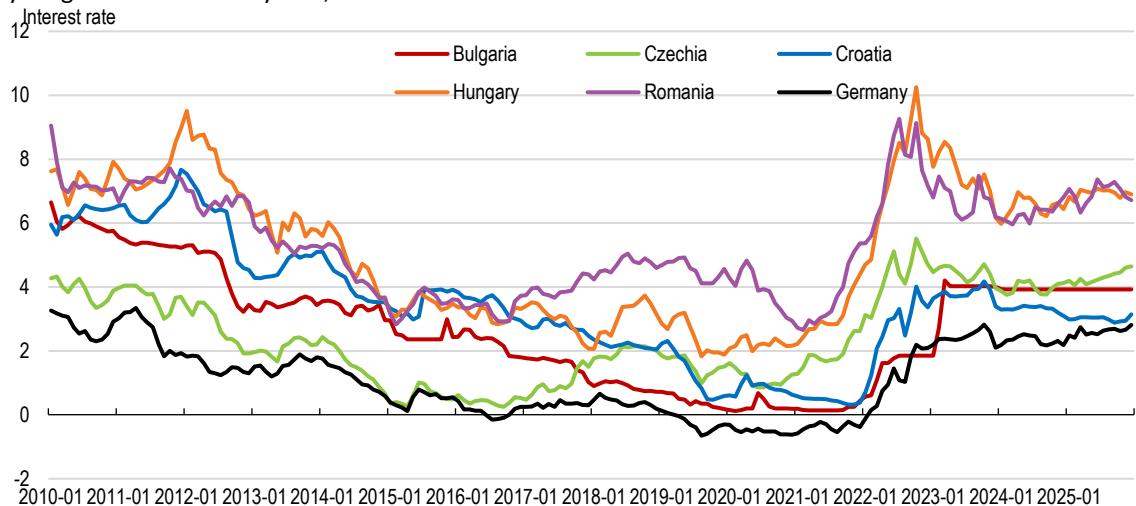
While the euro area has strengthened its surveillance and support mechanisms, the onus remains on countries to manage their economies prudently. This requires prudent management of the public finances and fiscal policy may need to take steps to control domestic demand that go beyond what fiscal sustainability alone would dictate (Checherita-Westphal, Leiner-Killinger and Schildmann, 2024^[10]). Flexible wages and prices are also important to avoid losses of competitiveness including appropriate setting of the minimum wage coordinated among stakeholders, can help mitigate price pressures and competitiveness problems. While banks are mostly foreign-owned and the level of credit relatively low, macroprudential policies at the national level need to be used actively to manage domestic credit developments, combined with robust microprudential regulation to ensure the soundness of the banking system.

Source: OECD compilation.

Due to the currency board arrangement and low government debt, long-term government interest rates have largely tracked those in the euro area with a spread reflecting country risk. As in other countries joining the euro area in the past such as Spain, Portugal and Greece, long-term interest rates have fallen to converge with those of core euro area members such as Germany (Figure 1.16). Spreads have increased recently in Bulgaria following a long period of near or below zero rates, reflecting increased perceived risk related to political instability. Moreover, low market liquidity makes yields more sensitive to infrequent trades and higher volatility. The spread to yields in Germany is still considerably lower than in neighbouring countries.

Figure 1.16. Interest rates have remained stable, and spreads have risen

10-year government bond yields, selected countries



Note: The following bond yields are shown: BGR: average ten-year government bond yield in the secondary market; DEU: ten-year government bond yield; HUN: benchmark ten-year government bond yield; ROU: ten-year government bond yield.

Source: European Central Bank database.

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1.6. Growth is projected to remain around trend, but there are risks

Looking ahead, growth is likely to slow to around 2½ per cent (Table 1.4). Growth is expected to rebalance from consumption to more investment-driven growth. Private consumption will continue to be strong but is expected to moderate following slowdown in real wage growth driven by lower nominal wage increases and return of inflation. Public investment will accelerate as EU funding is disbursed, while private investment will be supported by a more stable political environment and improved investor confidence following euro adoption. This will contribute to stable growth in investment in key areas, such as digitalisation and decarbonisation, and support a sustainable modernisation of the Bulgarian economy. Government consumption growth will be limited by the need to meet fiscal objectives. While cyclical conditions are difficult to assess, the output is expected to remain above potential. Export growth is expected to remain subdued due to challenges in key export markets as well as competitive pressures generated domestically, while imports will track consumption and investment growth, increasing the current account deficit and weighing on GDP growth.

Table 1.4. Growth is projected to become more balanced as consumption growth slows

	2021	2022	2023	2024	2025	2026	2027
	Current prices BGN billion	Percentage changes, volume (2020 prices)					
GDP at market prices	139.6	4.0	1.7	3.4	3.0	2.6	2.4
Private consumption	80.9	3.9	1.1	4.9	6.7	3.0	2.3
Government consumption	26.4	8.0	1.1	4.6	8.2	4.4	3.3
Gross fixed capital formation	22.7	6.5	10.2	1.5	7.0	4.7	3.5
Final domestic demand	130.0	5.2	2.7	4.0	7.0	3.7	2.7
Stockbuilding ¹	6.2	0.8	-4.6	0.8	-0.6	-0.2	0.0
Total domestic demand	136.1	5.6	-2.2	4.8	6.3	3.3	2.7
Exports of goods and services	86.3	12.1	0.0	1.8	-3.1	1.8	2.2
Imports of goods and services	82.8	15.3	-5.5	3.9	2.1	2.7	2.7
Net exports ¹	3.5	-1.6	3.8	-1.2	-2.9	-0.5	-0.3
Memorandum items							
GDP deflator	-	15.9	8.0	7.2	5.0	5.5	2.5
Consumer price index	-	15.3	9.5	2.4	3.8	2.7	2.4
Core consumption price index ²	-	7.6	8.9	3.1	2.8	2.8	2.4
Unemployment rate (% of labour force)	-	4.1	4.3	4.2	3.5	3.5	3.5
Household saving ratio, net (% of disposable income)	-	-7.9	-2.2	0.4	0.6	0.5	0.5
General government financial balance (% of GDP)	-	-3.0	-2.0	-3.0	-3.0	-3.0	-3.0
General government gross debt (% of GDP)	-	32.0	32.2	32.6	34.1	35.5	37.4
General government debt, Maastricht definition ³	-	22.5	22.9	23.8	25.4	26.7	28.6
Current account balance (% of GDP)	-	-2.7	-0.9	-1.6	-4.4	-4.5	-4.4

1. Contributions to changes in real GDP, actual amount in the first column.

2. Consumer price index excluding food and energy.

3. The Maastricht definition of general government debt includes only loans, debt securities, and currency and deposits, with debt at face value rather than market value.

Source: OECD Economic Outlook 118 database.

The economic outlook is clouded by a number of risks and uncertainties, including those linked to the geopolitical environment (Table 1.5). These could lead to weaker growth in the near term or more pronounced growth but with rising risks. It is unclear to what extent inflation will be persistent. Continued high wage growth accompanied by strong minimum wage increases could elevate upside risks to inflation. A prolonged political uncertainty could lead to delay in implementing reforms, disbursement of EU funds and higher uncertainty, pushing investment and growth even further down. Geopolitical risks remain elevated. An escalation of the war in Ukraine or Middle East, or a broadening of these conflicts could push up energy prices again, leading to higher inflation, while higher uncertainty would weigh on investment and GDP growth. Bulgaria is also vulnerable to extreme weather events such as floods and droughts (Chapter 3). A prolonged drought would lead to a drop in crop yields, leading to food price inflation, and water scarcity which could negatively impact water-intensive industries. The government would need to increase spending on drought relief, agricultural subsidies, and social support for affected communities, together slowing economic growth.

Table 1.5. Events that could lead to major changes to the outlook

Shock	Possible Impact	Policy option
Prolonged political uncertainty.	Delays in reforms and implementation of EU projects along with eroding investor confidence could weigh on investment growth.	Consider designing a roadmap for key policy reforms and implementation of EU projects to ensure continuity.
Aggravation of geopolitical tension in the region or globally.	Bulgaria is sensitive to fuel and energy prices, while higher uncertainty could lead businesses postpone investments and there could be a greater need for security measures.	Avoid extending broad-based debt moratoria to business and proceed with plans to phase out market-distorting energy price caps.
Prolonged and severe droughts disrupting agricultural production.	Sharp declines in crop yields lead to higher food prices. If water scarcity occurs, this could impact key industries like hydroelectric power, and some manufacturing, increasing operational costs.	Provide support to household and business.

1.7. Fiscal policy needs to support long-run growth and sustainability

1.7.1. A budget deficit has emerged, and a more detailed consolidation plan is needed

Following the recent crises and unfunded spending increases, a fiscal deficit has opened up. Bulgaria achieved budget surpluses averaging over 1% of GDP in the 3 years prior to the pandemic. However, discretionary spending increases to wages, pensions and support schemes have outstripped the growth in revenues, leading to a large deficit, peaking at close to 4% GDP in 2021 before moderating to 3% in 2024 with the economic recovery and boost from inflation (see Table 1.6). For 2025, support measures other than energy subsidies were withdrawn and the authorities project a deficit of 3% of GDP. The easing of underlying fiscal position since 2019 has contributed to stronger demand, leaving a substantial structural deficit and domestic demand above potential, thereby risking overheating (Figure 1.17).

Table 1.6. Budget balance turned from surplus to deficit between 2019 and 2024

General government budget, measured in % GDP

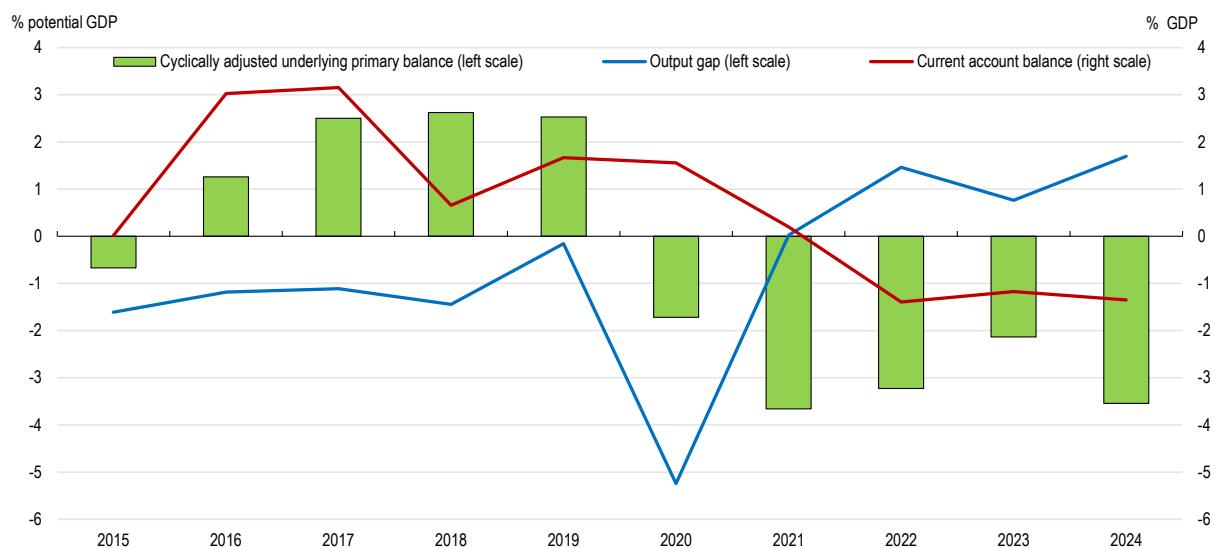
	% GDP	2019	2024
Total Revenue			
Total taxes	21.6	21.8	
Taxes on production and imports	15.4	14.9	
Current taxes on income, wealth, etc.	5.9	6.6	
Capital taxes	0.3	0.3	
Social security contributions	8.9	9.1	
Other revenues	7.9	5.8	
Total Expenditure		36.3	39.7
Compensation of employees	10.3	11.4	
Social transfers	13.5	16.0	
Intermediate consumption	4.4	4.6	
Subsidies	2.4	2.3	
Gross fixed capital formation	3.2	2.9	
Capital transfers	1.2	0.4	
Interest expenditure	0.6	0.6	
Other expenditures	0.7	1.5	
Primary Balance		2.6	-2.4
Net lending / borrowing		2.1	-3.0

Note: Other revenues include sales income from goods and services sold; property income, including distributed income of state-owned enterprises; and current transfers, including transfers from the EU. Other current expenditure includes change in inventories and acquisitions less disposals of valuables and non-produced assets.

Source: Ministry of Finance, Convergence Programme 2020-2023; and 2025 National Medium-term Fiscal-Structural Plan.

Figure 1.17. The underlying fiscal position has deteriorated, while the current account has moved into deficit and the output gap has turned positive

Underlying primary budget balance and cyclical position of the Economy



Note: The cyclically adjusted underlying primary budget balance is the actual budget balance net of the cyclical component minus the interest paid.
Source: OECD Economic Outlook Database

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The government's resignation in December 2025 has increased fiscal uncertainty. The parliament approved an extension of the 2025 budget until a new government is formed and a 2026 budget adopted. Bulgaria's 2025 Medium-Term Budget Plan sets a 3-year path for modest fiscal adjustments in primary budget balance from 2025 to 2028, averaging around 0.4 percentage points of GDP per year. This would maintain a budget deficit around 3% of GDP, allowing the debt-to-GDP ratio to rise over the medium term from 23.8% of GDP in 2024 to 45.3% of GDP in 2038. The Medium-Term Plan relies heavily on better collection of tax revenues outpacing consumption growth, with all additional revenues earmarked for higher spending. While there is certainly more scope to raise more revenue through better enforcement, the gains can be hard to predict. Moreover, there is also uncertainty around how the planned rise in defence spending will be financed and the Medium-Term Plan does not include measures adjusting expenditures for this increase. Bulgaria has been temporarily allowed to exceed the approved net expenditure path until 2028. Given that the exemption for higher defence spending is temporary and that current plans would leave debt on an upward path, maintaining the debt ratio close to its current levels and avoiding near-term risk of overheating will require a frontloaded fiscal consolidation. This should be supported by a more-detailed long-term plan setting out reforms on both the revenue and expenditure side (see below).

As highlighted by the previous Economic Survey (OECD, 2023^[1]), the Fiscal Council would be well placed to increase transparency around short-term fiscal policy and to plan for longer-term pressures, including around pensions and growth enhancing spending. To make it a more effective body to safeguard fiscal discipline and provide expert opinion, its capacity and role should be increased and be in line with the EU requirements. The Fiscal Council should provide a richer independent assessment of the macroeconomic situation, including developing its own macroeconomic tools or forecasts, in-depth analysis of the public spending and revenue forecasts, medium-term projections including debt sustainability analysis (DSA), and long-term reports analysing future trends in pensions spending and fiscal risks.

1.7.2. The pension system needs to be strengthened in a sustainable way

Bulgaria's rapidly ageing population contributes to one of the largest pension system deficits in the EU. By law, shortfalls in the pension fund are covered through tax revenues, imposing a substantial fiscal burden. The deficit reached 5.4% of GDP in 2024 and is projected to rise to 6.2% of GDP by 2027 (National Social Security Institute,

2024_[11]), driven by COVID-19 pension increases (Box 1.5) and growth in the number of pensioners. Over the long term, the deficit is projected to remain persistently high at around 4.4-5.2% of GDP (National Social Security Institute, 2024_[11]), despite past parametric reforms (Box 1.5) that tightened eligibility and linked pension indexation to a 50:50 mix of inflation and insured income growth. While these measures are expected to contain spending growth, they will reduce pension adequacy and risk exacerbating widespread old-age poverty over time. Further reforms beyond parametric adjustments may be needed to reduce the pensions spending pressures on the budget without risking deeper old-age poverty.

Box 1.5. Overview of the pension system

Since the late 1990s, Bulgaria has undertaken significant pension reforms, transforming its traditional pay-as-you-go system into a three-pillar model combining compulsory and voluntary supplementary pension insurance. The current pension system was established in 2000 to stabilise the state social insurance system (first pillar) and enhance retirement incomes through participation in the second and third pillars.

The first pillar is a defined benefit scheme financed on a pay-as-you-go basis through social security contributions and state-transfers. The State remains responsible for covering any deficits in the system. The working-old-age pension is calculated according to a formula that combines (i) national average monthly insurable income (12 months before retirement); (ii) an individual coefficient measured as the ratio of individual's average insurable income after 31 Dec 1999 to the national average; (iii) length of insurance; and (iv) accrual rate. The formula also includes an additional BGN 60 that was initially included as a COVID-19 supplement but made permanent. From 1 July each year, pensions are adjusted using the Swiss Rule, 50% of the insured income growth and 50% of the HICP increase. Disability pensions are granted to insured persons with at least 50% loss of working capacity who meet the minimum insurance period (1 year for age 20-24, 3 years for age 25-29, and 5 years for age 30+). Survivors' pensions are also available for children, spouses, and parents. Bulgaria also provides non-contributory social old-age pension as a social assistance from state budget to people aged 70+ that do not qualify for any other pensions, if the annual income per member of their family is less than 30 % of the poverty line for the previous 12 months (6 117 people as of end 2024).

The pension system also includes the supplementary mandatory pension insurance, the "second pillar" and a supplementary voluntary pension insurance, the "third pillar". The second and third pillars cover individual pension schemes based on defined contributions, financed on a capital basis. The proceeds from insurance contributions are accumulated in individual accounts and invested for the purpose of profitability. These schemes are managed by private pension insurance companies. However, pensions accumulated in the "second pillar" are allowed to be transferred to the state pension system.

The total pension contribution rate is 19.8% of gross income. Employers pay 56% of the total contribution, and employees pay 44%. For those born after 1959, 5 percentage points of total contributions are allocated to the second pillar. However, since 2015, pensioners have the option to opt out of the second pillar and revert their 5% contribution to the first pillar. This choice is reversible up to one year before the retirement age, gradually extending to five years before the retirement age after 2037.

The 2015 pension reform tightened the eligibility requirements by increasing the retirement age to 65 for both women and men, with a required contribution period of 37 years for women and 40 years for men. Women's retirement age will increase by 2 months annually until 2029, then by 3 months until reaching 65 in 2037. Men's retirement age will rise by 1 month annually until reaching 65 in 2029. After 2037, retirement ages for both genders will be adjusted based on life expectancy but the mechanism has not been defined yet. However, those who contribute for 15 years of insurance are eligible at least for a minimum pension and many people receive payment at this level.

Recent changes to pensions since the Covid-19 pandemic:

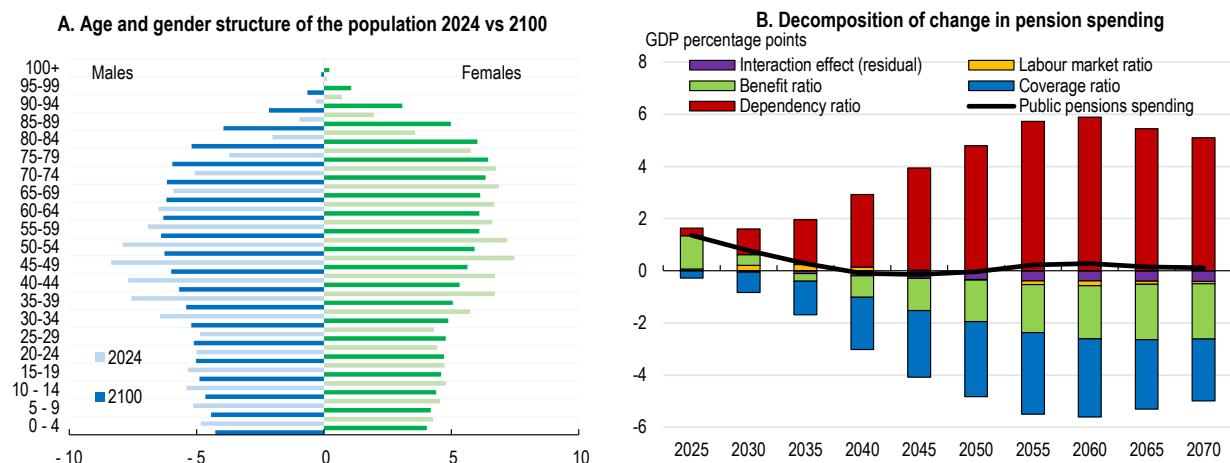
A number of recent measures raised the value of pensions beyond those implied by the indexation mechanisms while others adjusted the benefit formula and reference periods, increasing starting pensions for future retirees:

- All contributory pensions granted until 31 December 2021 were raised by 10% instead of the 6.1% determined by the pension adjustment formula (Swiss Rule).
- Pensions granted before 31 December 2021 were recalculated with the higher of insurance income growth and inflation as of 30 September 2022.
- The "COVID supplement" BGN 60 was made permanent.
- In July 2023 all pensions granted until the end of 2022 increased by 12.0%.
- From 1 January 2022, the accrual rate for new pensions increased to 1.35%. For pensions already granted until the end of 2021, a recalculation was made to increase accrual rates to between 1 and 1.2%, depending on the year pensions were awarded the first time.
- Since January 1, 2022, the individual pension coefficient is calculated solely based on income earned after December 31, 1999, using a minimum reference period of 36 months. The previous option to include income from earlier periods (pre-2000) has been discontinued. During a transitional phase from 2019 to 2021, individuals could opt for the pre-2019 calculation method if it yielded a higher pension.

These measures nearly doubled the ratio of the minimum pension to the minimum wage, from 0.34 to 0.60 between 2020 and 2025, and aligned the level of minimum pension with the poverty line.

Source: (National Social Security Institute, 2024_[11]; Economic and Social Council, 2024_[12]; National Social Security Institute, 2024_[13]).

Figure 1.18. Demographic changes put pressure on long-term pension spending



Note: Panel B shows the change in pension spending in GDP percentage points relative to 2022 based on the demographic and macroeconomic assumptions in the Bulgaria country fiche of the 2024 European Commission Ageing Report.

Source: United Nations World Population Prospects 2024 and National Social Security Institute (2024), 2024 Ageing Report Bulgaria - Country Fiche.

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The largest pressures on the pension system come from Bulgaria's ageing and shrinking population. Although subject to uncertainty (particularly around migration), Bulgaria's population is projected to decline by nearly 23% by 2070, one of the sharpest drops in the EU, with the working-age population (25–64) falling by 10 percentage points and those over 65 increasing by the same amount (Figure 1.18 Panel A). As a result, the old-age dependency ratio is projected to increase from 38% in 2024 to around 60% by 2070. These demographic shifts are expected to reduce pension system revenues while placing growing pressure on expenditures, with pension spending projected to rise by 5.9 percentage points of GDP by 2060 (see red bars in Figure 1.18 Panel B).

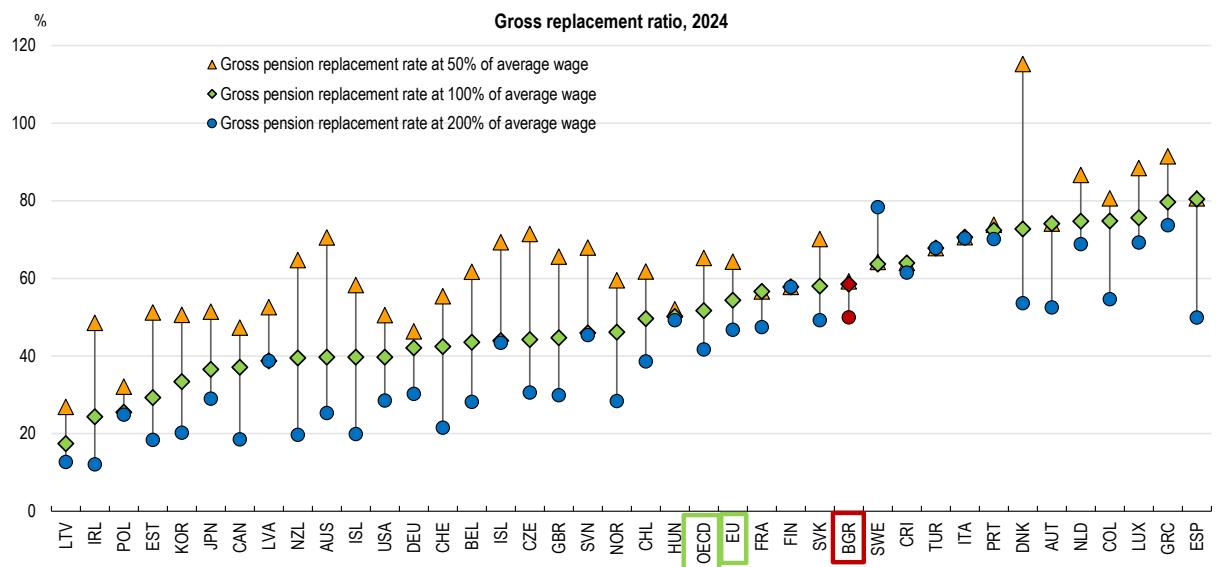
A number of past parametric reforms will broadly offset the upward pressures on the pension system as the population ages by reducing the generosity of the system and shifting towards the second pillar. Raising the contribution period to 40 years for men and 37 years for women, alongside the gradual and equalised increase in the statutory retirement age to 65 by 2037 are expected to lower pension expenditures by around 3 percentage points of GDP by 2060 (see blue bars in Figure 1.18 Panel B). Redirecting 5 percentage points of social contributions from the first to the second pillar will gradually reduce first-pillar benefits, by around 10% in 2024 and 25% by 2060, and pension system spending in the long-term. The reduced Pillar I benefits may be offset by returns from privately managed second pillar funds, depending on the investment performance. In addition, indexing pensions to a 50:50 mix of inflation and insured income growth will slow pension growth relative to wages, as productivity gains lift wage growth above inflation, thereby raising revenues faster than expenditures. Together, these will reduce pension spending by another 2 percentage points of GDP by 2060 (see green bars in Figure 1.18 Panel B), albeit at the cost of a lower replacement rate over time under the first pillar.

Nevertheless, even with these measures, high pension costs and a large pension deficit will continue to account for a large part of government spending and revenue. Bulgaria should consider further measures to extend working lives and activate disability pension recipients who still have work capacity. While around 15% of pensioners continue working, 39% of the 60-64 age group are inactive and 6% of contributory pensioners left the labour market before completing the full-service contribution period. Furthermore, 15% of contributory pensioners receive disability pensions for general illness. While some people may be unable to work in any way, many people are likely to have work capacity that could be used to boost their own incomes as suggested by the Economic and Social Council (Economic and Social Council, 2024^[12]). As recommended by the previous Economic Survey (OECD, 2023^[1]), Bulgaria should discourage early retirement before the statutory age, while strengthening incentives to work longer. Medical assessments of incapacity should be carried out regularly, with tailored support to help people return to work while gradually phasing out disability benefits as individuals re-enter employment. More broadly, activating inactive individuals, especially, Roma and NEET, nearly half of whom are inactive or unemployed, and reducing informality would ease pressure on the old-age dependency ratio and help closing the pension system deficit (see section 1.7.5).

Bulgaria should also collect more social contribution from high-income earners, especially from those underreporting their incomes, and reduce pension spending for those that are well off. Bulgaria applies a ceiling on income subject to social contributions (BGN 4 130) and its growth (25%) significantly lagged growth in the minimum wage (43%) over 2019-2025: as a result, the share of contributors who benefit from the cap on contributions nearly doubled from 6.4% to 12% in the same period. In addition, minimum insurable income thresholds – designed to combat underreporting of income by setting a minimum notional income based on occupation and sector – have not been comprehensively updated since 2019, apart from ensuring that no threshold falls below the minimum wage. As a result, around 98% of positions had a minimum insurable income equal to the minimum wage. Together, these negatively affect revenues and result in lower social contributions from high wage earners. Bulgaria should update regularly maximum and minimum insurable incomes in line with wage developments. In terms of pension benefits, Bulgaria caps pension entitlements with maximum pension benefits (BGN 3 400). Some countries, such as Italy, have implemented measures that reduce the value of relatively large pensions to prioritise resources on those with lower incomes, which could be achieved by lowering the cap or paying a lower rate. Taking a step further, some OECD countries, such as Australia, apply asset tests to pension benefits, including housing and financial assets, to better target available pension resources. These tests would depart from the insurance principle but would reflect the reality that the system is being funded in part from general taxation.

While past reforms will help improving the sustainability of the pension system, pension adequacy will remain a challenge over time together with the interaction of the level of benefits with the minimum pension and social assistance pension. Recent increases in pensions raised the average gross replacement rate to its highest level since 2000, reaching 55% in 2023 (National Social Security Institute, 2024^[11]), above the OECD average. However, this will decline over time: the long-term impact of past reforms is projected to reduce the adequacy of pensions down to 43% by 2060. This may impact those on low incomes (earning around 50% of the average reported wage) (Figure 1.19) particularly hard and increase the risk of more people living in poverty in old age.

Figure 1.19. Bulgaria's replacement rates display limited redistribution



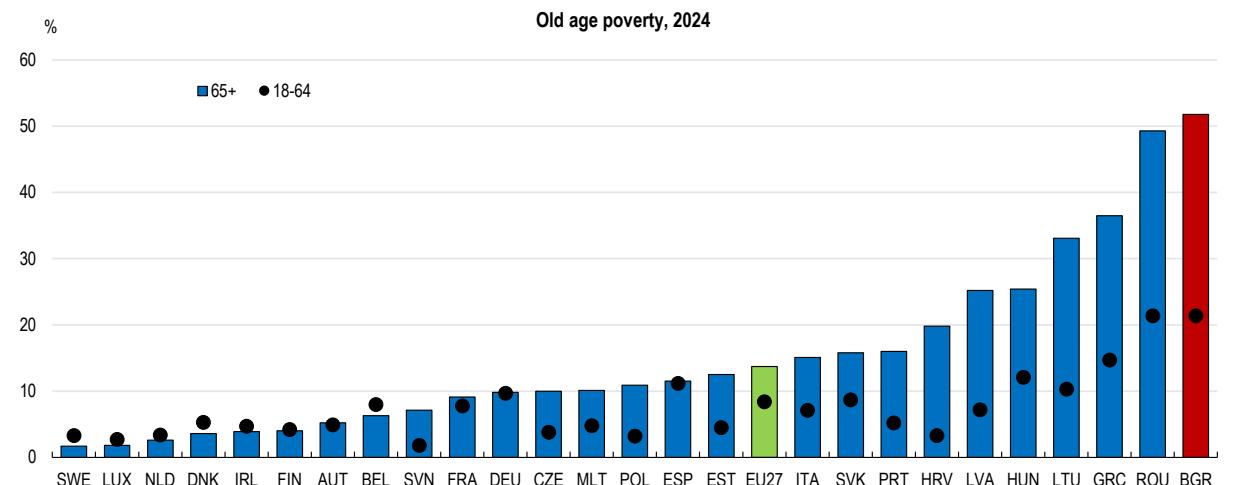
Note: The future gross replacement rate represents the level of pension benefits in retirement from mandatory public and private pension schemes relative to earnings when working.

Source: OECD Pensions at a Glance database.

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Bulgaria has the highest share of older people in poverty in the EU (Figure 1.20). In 2024, 52% of people aged 65 and over faced material deprivation, more than double the rate of 18–64-year-olds (21%). Bulgaria provides a social old-age pension for those ineligible for contributory benefits, but its level remains very low: despite more than doubling between 2021 and 2024, it is still less than half of the minimum pension. The precarious situation of older Bulgarians is driven by low-income levels leading to low pension levels and a low degree of redistribution within the pension system. The gross replacement rate for those earning 50% of the average wage is 59%, which is somewhat below the OECD low earners' replacement rate of 65% (Figure 1.19). Bulgaria should consider measures to ensure pension adequacy for low wage earners. Several OECD countries have adopted direct approaches to preventing old-age poverty through the use of minimum pensions, particularly as the overall level of benefits is reduced in relative terms. For example, Czechia and Denmark index basic pensions to nominal wage growth, Lithuania links them to wage bill growth, and the Netherlands ties basic pensions to minimum wages, even if other parts of these systems are not protected in the same way. Spain sets non-contributory benefits at 75% of the at-risk-of-poverty threshold for a single individual at 60% of median equivalised disposable income (OECD, 2023^[14]).

Figure 1.20. Bulgaria has the highest share of older people in poverty across the EU



Note: The indicator is defined as the percentage of population with an enforced lack of at least seven out of thirteen material deprivation items.
Source: Eurostat.

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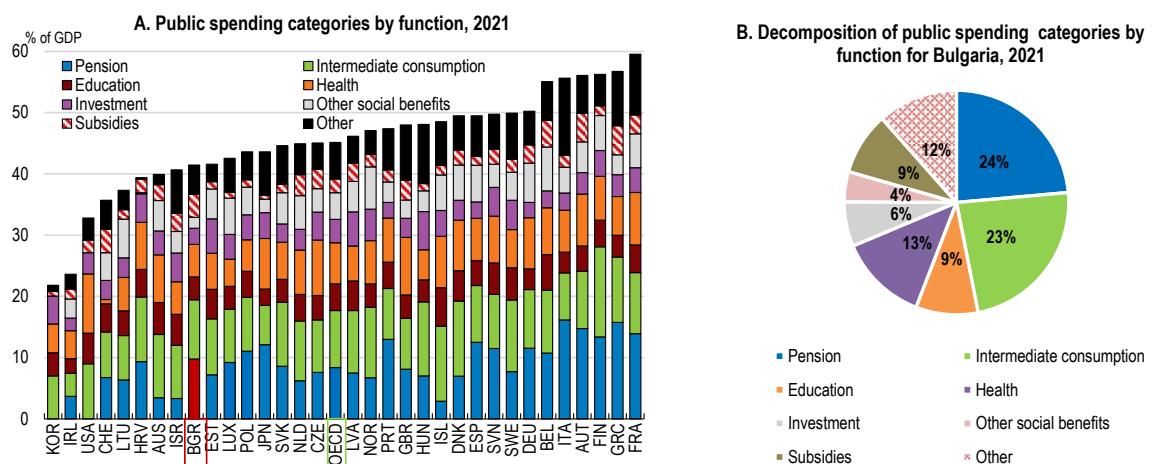
Overall, a long-term vision of the pension system and how it fits with wider spending and taxation priorities needs to be developed. Measures that would reduce spending pressures and/or increase revenues include extending working lives, activating the inactive, especially disability pension recipients with work capacity, and continued development of private pensions, including defined-contribution (DC) pension schemes, while maintaining pension adequacy for low-wage earners. While Bulgaria has introduced a mandatory defined-contribution (DC) supplementary pension scheme, its effectiveness is constrained due to the low contribution rates and the option to revert to defined-benefit (DB) state pension system may undermine incentives. The pension system should be put on a sounder footing by replacing the existing requirement for deficits to be financed from general taxation with a rule about how much financing comes from the general government, for example based on a fixed share of contributions or outlays, to prevent discretionary pension increases from creating permanent structural deficits. It would be advisable to have higher income to the fund in the near term and build higher reserves to raise additional revenues from the current larger cohorts in the population rather than operating on a pure pay-as-you-go model.

1.7.3. Bulgaria spends a low share on growth-enhancing spending and faces mounting spending pressures in other areas

Bulgaria's general government spending, at 42% of GDP, is lower than the OECD average and most OECD EU peers. This reflects both limited revenues and Bulgaria's commitment to fiscal prudence. The pension system is the main recipient of public resources, almost reaching the combined expenditure on health and education, and thereby limits room for spending on growth-enhancing areas, such as education, labour market activation, health and infrastructure investments (Figure 1.21), although needs are high. These are crucial for achieving income convergence and reducing inequalities.

Spending reviews could help Bulgaria prioritise spending and raise its effectiveness. The World Bank's 2023 Public Finance Review identified efficiency gains in public procurement, education and social spending. And with defence spending set to rise as required by its international commitments, which will further exacerbate spending pressures in the medium-term, efficiency gains achieved through spending reviews could help provide the necessary fiscal room for growth enhancing spending. More than half of OECD countries were conducting spending reviews annually (20 out of 35 or 57%), while nine conducted them periodically (26%) by 2023, and most (80%) used them to improve the effectiveness of programmes and policies while 53% used to control total expenditure and 40% to align expenditure with government priorities. Making spending reviews a routine budget process would strengthen expenditure prioritisation and reallocation. Political leadership and commitment are crucial for defining the objective and scope of spending reviews, adopting policy options, and making decisions based on the review findings.

Figure 1.21. A large part of public spending goes to pensions, wages and government purchases, leaving little room for growth-enhancing spending



Note: Other social benefits include sickness and disability, family, child and targeted or untargeted social assistance benefits.

Source: Pina, A., Hitschfeld, M. and T. Miyahara (2025), "Reducing public debt in OECD countries: macroeconomic conditions, fiscal consolidation and public finance composition", OECD Economics Department Working Papers.

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Bulgaria's defence spending stood at 1.3% of GDP in 2024 and is projected to rise to around 2.5% over the next three years, driven by military equipment purchases. The country has committed to increase its defence spending to 5% of GDP by 2035 to align with NATO's new, more ambitious targets, and will develop and adopt a National Defence Investment Plan. In the near term, Bulgaria has been allowed to use the exceptional circumstances clause for higher defence spending and exceeding the approved net expenditure path temporarily until 2028. While there is scope to phase this in over a period of years without fundamentally impacting debt sustainability given the low level of debt, Bulgaria will need to continue to meet the EU's deficit thresholds, including permanently higher defence costs, once the temporary allowance expires. Bulgaria should therefore establish permanent financing for defence spending to leave fiscal space for much needed growth enhancing spending while maintaining prudent debt ratio.

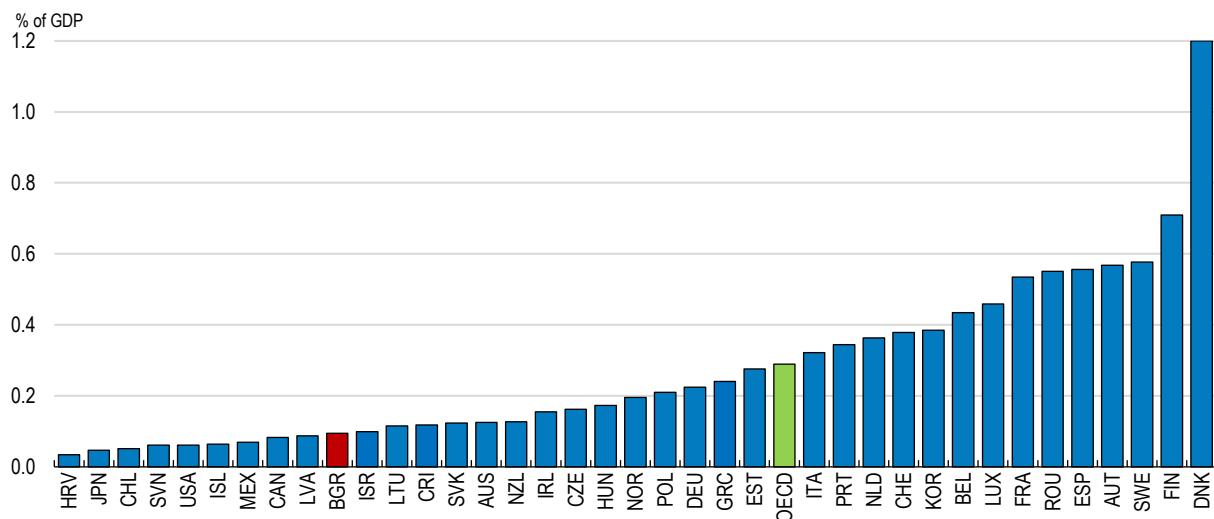
Bulgaria will need to strengthen labour force potential, which will require higher and better targeted spending on healthcare and labour market activation measures. Health outcomes remain weak, partly reflecting low public healthcare spending and high reliance on out-of-pocket payments, which create barriers to access and exacerbate inequalities in care. Bulgaria records high rates of avoidable mortality and low healthy life expectancy, with large disparities in access to outpatient services and essential medicines. The ageing of the healthcare workforce; half of physicians are aged 55 or older, the second highest share in the EU (Eurostat, 2024_[15]); also risks medium-term shortages and upward pressure on personnel costs. Expanding public healthcare spending, with spending efficiency gains and evidence-based budget planning, could strengthen primary and preventive care and reduce out-of-pocket payments.

At the same time, addressing low employment rates and skills shortages (see above) will require more effective activation policies. Inactivity is the main driver of Bulgaria's relatively low employment rates, with sizeable groups such as Roma and NEET, nearly half of whom are inactive or unemployed, remaining hard to reach. Bulgaria recently adopted a data-sharing mechanism on economically inactive persons across government institutions, to improve outreach and targeting of activation measures. In addition, the previous Economic Survey recommended the provision of free healthcare insurance coverage for those who register with the employment agency. That would help reducing public spending on emergency healthcare, which is free of charge and would incentivise the inactive to start searching for a job actively. Tailored measures would help getting the Roma incentivised to register and customised training programmes could help bringing them ready for the labour market. A registry of inactive persons is being developed by the Employment Agency. The EU is also providing additional support with a budget of EUR 50 million for vulnerable and marginalised communities, including the Roma, from end-2025. However, spending on activation measures is low (Figure 1.22), and often not well targeted. Short-term fiscal gains could be

achieved by better targeting and greater spending efficiency, including not providing highly subsidised jobs to avoid adverse incentives. In the longer term, higher and better-targeted investment in activation policies will be needed to strengthen labour supply.

Figure 1.22. Spending on labour market activation measures is low

Spending on active labour market measures for the 15-64 year olds, 2023



Note: Active labour market measures are without employment maintenance incentives (i.e. measures 20-70 except 42 according to the OECD classification of labour market programmes).

Source: OECD Labour Market Statistics database and Eurostat.

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Public investment stood at 3.4% of GDP in 2024, below many other countries in the region and most OECD countries. Given Bulgaria's low capital stock, there is clear scope for greater investment, especially in infrastructure projects delivering high social value without commercial returns, such as rural roads, basic utilities, and key public service institutions. This would help to address infrastructure gaps that hold back private business (Chapter 4), support the energy transition and help improve public services. While the National Development Programme: Bulgaria 2030 provides a broad vision in areas such as digital communications, low-emissions energy, and transport, the absence of a comprehensive long-term public investment planning limits the coherence and predictability of investment planning. Publishing long-term investment strategies is a common practice among OECD countries. The former department in the Ministry of Finance in charge of capital budgeting was abolished before being reestablished recently, which is a welcome first step towards reinforcing long-term investment planning. This department should be tasked with coordinating investment across line ministries to ensure consistency and reap synergy effects across projects (OECD, 2023^[16]), which are currently happening in isolation. The lack of an investment planning also increases uncertainty at the local level as local governments have no projects in the pipeline when applying for EU funds. Long-term capital budgeting that goes beyond the medium-term framework needs to be reinstated to meet infrastructure investment needs, including with a strong focus on cost-benefit analysis. Public investment efficiency at the local level could be raised by providing funds on a predictable basis for priority projects (OECD, 2026 (forthcoming)^[17]).

1.7.4. EU funds should be better mobilised to support growth enhancing spending

EU funds are a key source of public investment in Bulgaria, accounting for around 40% of public investment and 1.6% GDP. They play a particularly important role in financing infrastructure, education and health-related investments (OECD, 2025^[18]; OECD, 2023^[19]). The absorption rate of EU funds has slowed significantly in recent years, with uptake under the 2021–2027 Multiannual Financial Framework remaining at just 12%, and the Recovery and Resilience Facility (RRF) at 21%, both well below previous periods, and there are still timing and execution risks on the RRF as all milestones and targets must be completed by 31 August 2026. Overall, the full potential of EU

funds remains underutilised due to persistent structural and institutional barriers. Delayed implementation of structural reforms, regulatory bottlenecks, and capacity limitations in project preparation and administration contributed to this underperformance. Moreover, these funds can be less predictable, in particular, in times of political instability as the past few years have shown.

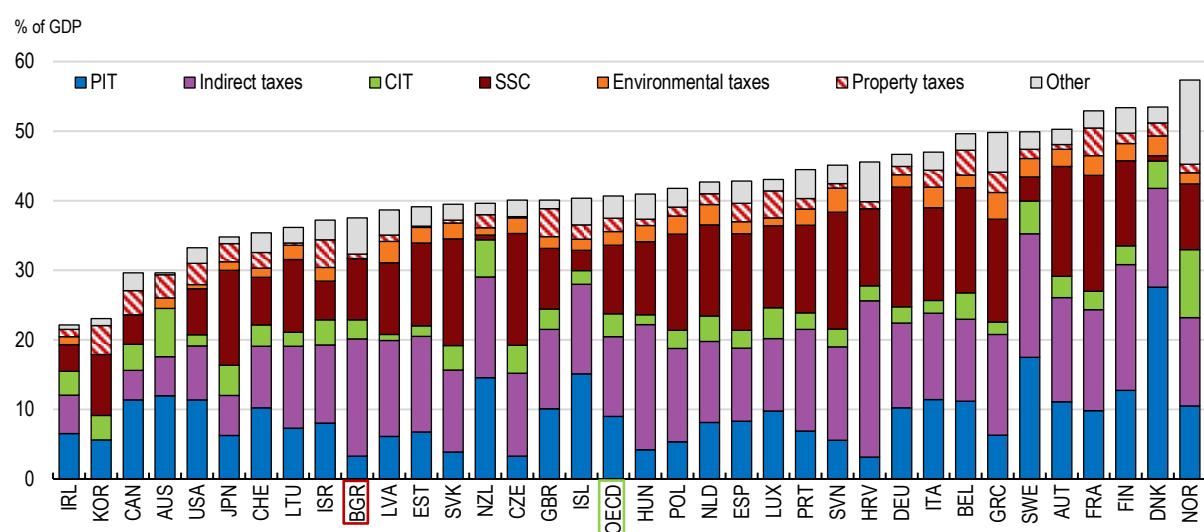
To make the best use of EU funds and enhance the growth impact of investments, Bulgaria should strengthen administrative capacity, accelerate regulatory reforms, and embed investment within a coherent, long-term planning. Shifting from a short-term, project-based approach to a more integrated and forward-looking investment planning is essential. The importance of an investment planning will become even more important with the large inflow of EU funds in the coming programme period. Developing a long-term public investment framework, supported by reliable and integrated data systems, would allow for better prioritisation and alignment of projects with national development goals. Strengthening strategic planning capacity across government is critical to ensuring that EU funds are mobilised effectively to support inclusive and sustainable growth while reducing structural spending pressures.

1.7.5. Improving tax collection capacity would boost fiscal revenues

Bulgaria's tax-to-GDP ratio is low compared to most OECD countries (Figure 1.23). The tax system is skewed towards social security contributions and VAT with low statutory rates on personal and corporate income. Direct taxes account for around 22% of tax revenues (6.6% of GDP), while social contributions represent 28% (8.5% of GDP). The personal income tax is among the lowest in the EU (10% flat rate), while social security contributions are relatively high, varying between 32.7% and 33.4% (the difference is due to the work injury insurance), with employers covering nearly three-fifths of the contribution.

Figure 1.23. The tax system is heavily reliant on VAT and social security contributions

Public revenue categories by function, 2021



Note: PIT is personal income tax, CIT corporate income tax and SSC social security contributions. Property taxes include recurring taxes on the holding of property as well as transaction taxes. Indirect taxes include the value added tax and consumption and sales taxes. The other category includes other taxes and non-tax revenues.

Source: Pina, A., Hitschfeld, M. and T. Miyahara (2025), "Reducing public debt in OECD countries: macroeconomic conditions, fiscal consolidation and public finance composition", OECD Economics Department Working Papers.

StatLink <https://stat.link/a9qyx4>

There are persistent challenges in tax compliance and enforcement with a substantial amount of informality. Widespread underreporting of wages, particularly around the minimum wage threshold, significantly reduces revenues. The National Revenue Agency (NRA) estimated an average annual revenue loss of BGN 420 million in 2023. The problem is most acute in micro, small, and medium-sized enterprises operating in wholesale and retail, construction, tourism, transport, engineering, advertising, and other service sectors. This estimate, however, covers

only cases where wages are reported below formal contract levels and does not capture fully undeclared employment, such as work without a contract. A broader assessment estimates average total revenue losses of 2.2% GDP in years from 2017 to 2021, split between 0.5% GDP in lost personal income tax and 1.7% GDP in lost social security contributions (Ernst & Young, 2023^[20]).

Tackling informality is essential to broadening the formal tax base and securing sustainable revenue increases. As identified in the previous Economic Survey, the drivers of informal employment are multifaceted, ranging from short-term economic benefits to limited trust in the state and social insurance as well as low perceived risk of detection by employers and employees and limited awareness of the consequences of undeclared work (OECD, 2023^[1]). Bulgaria has a balanced tax enforcement approach, combining incentives and enforcement, including information campaigns and self-assessment tools to help workers verify their employment status as well as joint inspections by the NRA and labour inspectorate. However, these efforts resulted in only approximately BGN 50 million (0.03% GDP) in recovered revenues in 2023, significantly below the estimated lost income to informality. More efforts are needed (see Box 1.6). A key difficulty is proving that undeclared cash payments made "in an envelope" are part of labour compensation, especially when verbal agreements replace written contracts. To improve detection and recover lost revenues to informality, Bulgaria should extend the requirement for bank-based salary payments, currently limited to employers with over 100 employees, to a wider range of employers. In addition to salary payments, all other transactions should be made online, limiting opportunities for unrecorded corporate revenues. This would make all transactions auditible, limit the use of cash for undeclared payments, and significantly reduce large cash reserves used for informal wage payments. Regular monthly cash payments and deposits by employees could also be monitored by lowering the BGN 10 000 limit for cash payments set by anti-money laundering laws to a much lower level and subjecting them to the requirement of proving the origin of funds, which would discourage employees to receive salaries in an envelope.

Box 1.6. Tax enforcement strategies to tackle labour market informality

There is no silver bullet to reduce informality. A comprehensive strategy is required, with actions needed in several policy areas, combining tax administration strategies with labour and social policy reforms. This box reviews some of the tax enforcement strategies employed by Bulgaria and OECD countries.

Focusing on different types of taxpayer behaviour can help target specific interventions, but multifaceted strategies also reinforce compliance across the shadow economy as a whole. Informal labour is frequently hidden through under-declared wages, unregistered workers, or cash-only transactions. Digitising payroll reporting systems and linking them to tax and social security databases is a first step because it can help detecting unregistered workers, and allow rapid algorithmic checks of employer payouts, worker registration, tax declarations and social security payments. It also allows employees to verify the details of their employment. Bulgaria has recently transitioned into electronic employment records and payroll reporting to the National Revenue Agency (NRA) in June 2025, strengthening these detection capabilities.

Limiting cash transactions can also help reducing the informal economy by increasing the traceability of financial flows. Cash transactions are inherently anonymous and difficult to monitor, making cash a preferred medium for tax evasion, money laundering, and undeclared ("under-the-table") work. For example, Italy has implemented a regulatory ceiling on cash transactions (set at EUR 5 000). Payments above this threshold must be conducted through traceable methods such as bank transfers, credit or debit cards, or checks.

Broader digital data collection from businesses, suppliers, intermediaries, and government agencies can further improve detection when accessible to tax administrations. Combined datasets can reveal under-declared income or unreported activity. For example, in Peru, the tax administration SUNAT matched financial system credit data with tax records to identify individuals and small enterprises without tax registration. This 2015 exercise flagged 1.8 million "informal individuals," representing 19.2% of the financial system's client base, with potential tax evasion equivalent to 0.7% of GDP.

Whole-of-government approaches further strengthen enforcement by enabling cross-agency collaboration and data sharing. In Finland, the Grey Economy Information Unit (GEIU) has legal access to bulk data from multiple public agencies and shares compliance reports with relevant authorities. These reports cover registrations, tax and social security obligations, organisational links, and financial status, helping identify emerging risks and

guiding enforcement actions. Cross-checking financial transactions and wage bill data, for example, can help identify those businesses paying undeclared wages.

Inspections and sanctions remain important tools. In Bulgaria, undeclared work in the construction sector declined sharply after firms found employing workers without contracts were excluded from public tenders for three years. Combining advice with inspection can increase compliance more sustainably than punitive measures alone. The Bulgarian labour inspectorate already integrates guidance into its inspection activities, offers a self-assessment tool for employers and workers, and carries out joint inspections with the NRA.

Traditional enforcement remains important in sending strong signals about the risks of non-compliance, but targeted campaigns and behavioural interventions can amplify results. The NRA's proactive outreach through thematic campaigns, targeting to undeclared health contributions and non-payment of public liabilities, aim to encourage voluntary declarations and payments. In the United Kingdom, HM Revenue & Customs (HMRC) conducts campaigns in high-risk sectors, including those earning undeclared second incomes. These campaigns combine employer engagement, staff communications, web resources, and advice lines to encourage voluntary compliance. In New Zealand, Inland Revenue focuses on high-risk sectors such as construction and hospitality. Investigations in 2015–16 revealed NZD 166 million in undeclared revenue, and marketing campaigns highlighting casual “under-the-table” work reduced cash jobs in construction from 29% in 2012 to 19% in 2016. Behavioural insights, including data-driven analysis of taxpayer motivations, help administrations design more effective compliance strategies and reduce the need for costly enforcement actions. Bulgaria has begun using inspection data and data mining techniques to identify firms at higher risk of under-reporting, such as those paying below sectoral or regional wage benchmarks.

Source: (OECD, 2017^[21]; OECD, 2023^[1]).

There are also significant gaps in VAT compliance. According to the European Commission's (EC) 2024 assessments, Bulgaria's VAT gap stood at 6.3% of VAT Total Tax Liability (VTLL) in 2022, above the EU average but broadly aligned with the median. By comparison, the National Revenue Agency (NRA) estimates a larger gap of 11.5% in 2022, with a projected reduction to 10.6% in 2024 (around 1.1% of GDP), driven primarily by overstated refund claims and compliance challenges among small taxpayers. Bulgaria introduced the Standard Audit File for Tax Purposes (SAF-T), implemented horizontal monitoring system on large taxpayers to improve the voluntary tax compliance as part of business audit processes, and carried out on-site audits under the Compliance and Risk Mitigation Programme. Through fraud analysis, and follow-up on non-compliance reports, the NRA uncovered additional BGN 938 million of unpaid taxes (0.7% GDP). To further strengthen VAT compliance and boost revenue mobilisation, Bulgaria should focus on improving audit and verification processes, especially targeting fraudulent refund claims and high-risk sectors.

Bulgaria is likely to need to raise revenues to meet future spending pressures and there is scope to make the tax system more growth friendly and equitable, within the constraints of high informality. Currently, there is an inconsistency between the flat personal income tax, introduced to reduce underreporting of wages, and informality, and high flat social security contributions, which impose a relatively high burden on lower earnings compared to most OECD countries and thereby encourage informality. Over the long run, a more progressive income tax system could be considered. This would contribute to narrowing inequalities and allow more revenue to be raised to support social spending. Nevertheless, any transition in this direction should proceed hand-in-hand with more effective measures to support tax compliance and reduce informality as income levels rise.

Bulgaria should also increase revenues from immovable property as these have been shown to be efficient in terms of growth, help to dampen house price cycles and can be helpful in the context of challenges of collecting income-based taxes. Location coefficients underlying the tax assessment of houses have not been updated since 2009, despite house prices more than doubling. Bulgaria should move towards a system of value-based property taxation, used in many OECD countries, that reflects more accurately land value and would be more progressive and efficient (see Box 1.7). Immovable property taxes were only 0.2% GDP in 2023, among the lowest shares in the EU and well below neighbouring countries such as Greece (2% GDP in 2023). There is scope to increase tax revenues from immovable property over time by updating the location coefficients in line with the increase in house prices, moving to value-based taxation system, and increasing the tax collection efficiency, which dropped 30-35% after collection

was assigned to local authorities due to frequent use of ad hoc exemptions. Revenue collection efficiency could be increased by reassigning the administration and collection of the property tax to the central level (OECD, 2023^[1]).

Box 1.7. Modernising property taxes through value-based taxation and regular revaluations

Property taxes linked to regularly updated market values are more effective than those based on size or area. Capital-value systems are preferred to rental-value systems as they capture the property's "highest and best use" and avoid distortions linked to rent controls. Regular revaluations are essential to preserve efficiency and equity: outdated valuations reduce revenue, weaken incentives for efficient housing use, and risk creating inequities across households.

While traditional valuation methods based on sales or rental data comparisons, and frequent reappraisals can be costly and administratively demanding, digitalisation has lowered these barriers. Computer-assisted mass appraisal (CAMA) systems now enable large-scale, consistent valuations using statistical models and extensive datasets. These datasets typically include digitised transaction records, price listings and certain property characteristics. Online real estate platforms can further improve accuracy. Establishing a dedicated team for data quality management and building a robust data infrastructure are essential for a reliable mass appraisal system.

OECD country experiences highlight the importance of value-based systems with regular revaluations. In Denmark, a freeze on property values to calculate taxes from 2002 led to rapid house price growth and declining effective tax rates, particularly in Copenhagen. A 2017 reform reinstated biennial revaluations based on market values, lowered statutory rates, introduced a surtax on high-value properties, and allowed households facing sharp increases to defer payments until sale. Ireland faced similar challenges with the Local Property Tax introduced in 2013, where self-assessed values and postponed revaluations left many new properties untaxed. A 2021 reform broadened the base, cut rates, and required updated valuations, while easing burdens through higher income thresholds for deferral and lower interest charges. Elsewhere, land values in New South Wales, Australia, are updated annually and averaged over three years to smooth volatility; New Zealand uses a triennial cycle; Norwegian municipalities revalue either annually or every ten years; and Lithuania updates annually but applies values over a five-year period.

Property tax collection can create liquidity pressures, as payments are often due in large instalments. Deferral schemes, typically targeted at low-income or elderly households, can ease pressures by postponing payments until sale or improved financial circumstances, usually with interest charged to preserve neutrality. Some countries use equity-based deferrals in which the tax authority acquires a claim on part of the property, though these expose governments to housing market risks. Deferrals, together with instalment options and targeted relief, can help protect vulnerable households and sustain regular revaluations without undermining social acceptance.

Source: (OECD, 2022^[22]).

1.7.6. A strategy is required to address medium-run fiscal pressures

At 24% of GDP in 2024, the general government debt ratio is below almost all OECD countries and debt dynamics are favourable with expected nominal growth well-above interest rates on government debt, which benefit from a relatively modest spread to the most creditworthy euro area countries. However, with current tax and spending settings (including maintaining the existing pension generosity), Bulgaria's government debt-to-GDP ratio (EU Maastricht definition) would rise to 160% by 2060 (Figure 1.24 blue line). This reflects a combination of the current budget deficit and the projected pressures from ageing. While reforms beyond parametric adjustments recommended in this Survey can reduce fiscal pressures from pension spending, implementing these may prove difficult given that there is already high old-age poverty with inadequate pensions and the limited nature of private pension savings as observed with recent large increases.

A comprehensive package of tax and spending measures, presented in Table 1.7 below, would support sustainable growth while maintaining debt ratio on a prudent path in the medium run by generating additional revenues and implementing existing and additional pension reforms (Figure 1.24 red line). This would largely close the deficit in

the near term and is consistent with keeping the debt ratio close to current levels and avoiding contributing to excess demand. A third scenario in Figure 1.24 (green line) includes higher GDP growth resulting from the implementation of structural reforms recommended in this and the previous Survey (Table 1.1). This would improve mainly productivity and GDP per capita and have some positive effects on the budget balance and debt dynamics.

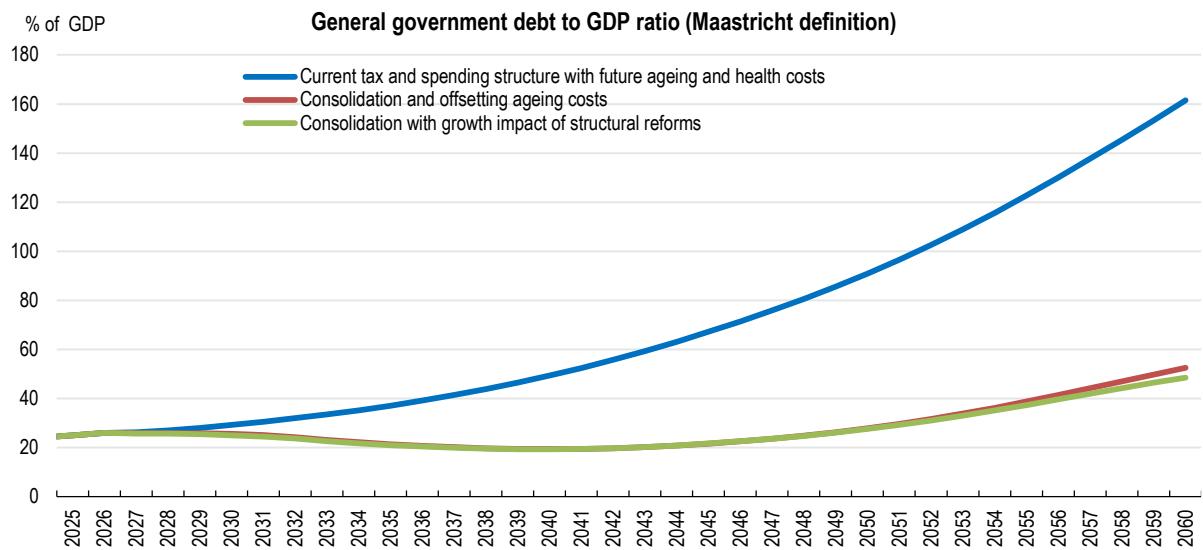
Table 1.7. Illustrative fiscal impact of recommended reforms

	Medium-term fiscal savings (+) and costs (-) % GDP
Spending measures	
Double public research spending, and introduce targeted R&D subsidies for business	-0.3
Increase ALMP spending	-0.1
Increasing the general social assistance benefit to the poverty line	-0.06
Increase teacher training while controlling its quality	-
Link the disbursement of funds for education reform to performance targets and use benchmarks	-
Ensure workplace-based training for all vocational students	-
Increase public investment	--
Removing regulated electricity and gas retail tariffs to cover only vulnerable customers	+0.3
Spending efficiency gains achieved through comprehensive spending reviews	+
Total spending measures	-0.2
Revenue measures	
Recovering revenues from the underreported wages through bank-based salary payments	+0.6
Improving business audit processes by targeting fraudulent refund claims and high-risk sectors	+0.7
Increase revenues from recurrent immovable property tax	+0.9
Increase petrol and diesel taxes	+0.2
Total revenue measures	+2.4
Total	+2.2

Note: These estimates are undertaken where feasible given available data and evidence and come with significant uncertainty. Indirect effects, such as those induced by the positive impact of the reforms on growth and therefore, tax revenues, are not taken into account.

Source: OECD calculations.

Figure 1.24. The government debt ratio would rise in the coming years without policy adjustments to address pension pressures



Note: Consolidation scenario assumes an improvement in the primary fiscal balance by 0.5 % of GDP per year over 2027-2033, that achieves positive budget balance in the near-term.

Source: OECD calculations based on OECD Economic Outlook database and OECD Long-Term Model.

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Table 1.8. Past OECD recommendations on economic growth and public finances

Recommendation	Action Taken
Stand ready to tighten fiscal policy if inflation remains high.	Budget deficit has been kept within the EU's 3% GDP ceiling.
Make support measures to households and firms more targeted to the most vulnerable and ensure that they incentivise energy savings.	No action.
Ensure effective functioning of the fiscal council based on best practices.	No action.
Continue to prepare for euro adoption.	Bulgaria will join euro area on 1 January 2026.
Assess the medium- to long-term needs for infrastructure and other capital spending and prepare a public investment strategy based on cost-benefit analysis.	Public investment plans are incorporated into Medium-Term Budgetary Forecast but there is still no public investment strategy.

Table 1.9. Policy recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Ensuring macroeconomic and financial stability	
Inflation has been strong on the back of low real interest rates and strong credit growth, while a fiscal deficit has emerged.	Implement a front-loaded fiscal consolidation to narrow the primary deficit.
Bulgaria will join the euro area on 1 January 2026.	Continue to conduct public campaigns to anchor inflation expectations, encourage reporting of unfair pricing and avoid broad price controls around euro adoption.
Credit growth has been strong and house prices are rising, leading the central bank to strengthen macroprudential regulations.	Continue to monitor credit risks in the household sector carefully and consider tightening macroprudential rules if needed.
Non-bank finance companies lend to individuals without access to formal bank loans at exorbitant rates and often impose hidden fees.	Reduce the interest rate cap on consumer loans by non-bank finance companies and express it as a multiple of benchmark lending rates. Tighten oversight of non-banks providing lending, increase their data disclosure, including interest rates and reporting maturities on a standard basis.
Minimum wages are currently indexed to past average wage growth, contributing to rising inflation.	Ensure that minimum wage increases remain in line with productivity.
Maintaining sustainable public finances for the medium term	
Bulgaria has major long-term pressures from ageing, the need to improve public services and invest, finance the climate transition and higher defence spending.	Develop a long-term fiscal and growth strategy setting out a plan to address long-term pressures, while ensuring that spending is growth-friendly and the debt ratio remains stable.
Establish permanent revenues to meet permanent increase in defense spending.	Increase growth-enhancing spending over time, including on education and infrastructure, whilst improving efficiency and outcomes, including through comprehensive spending reviews.
Education, health, labour market activation and infrastructure investment spending are low and does not meet needs.	Continue developing long-term capital budgeting that goes beyond the medium-term framework to meet investment needs, including with a strong focus on cost-benefit analysis. Increase administrative capacity for project preparation and implementation including EU projects.
Bulgaria has major investment needs, but there is no long-term investment strategy. Investment efficiency at the local level is lower.	Enhance the effective functioning of the fiscal council based on best practices.
The fiscal council has a limited impact on fiscal transparency.	Strengthen ongoing tax compliance enforcement by extending the requirement to use bank-based salary payments while requiring proof of legal source for deposits to reduce labour informality.
Widespread labour informality and gaps in tax compliance result in significant fiscal losses.	Increase the property tax base by updating periodically property valuations to reflect changes in housing prices.
Improving financial sustainability of the pension system and the adequacy of pensions	
Bulgaria faces strong pressures on its pension system from population ageing with current plans set to decrease the replacement rate in a context of existing pension poverty problems	Develop a long-term plan with measures to extend working lives, activate disability pension recipients with work capacity while ensuring pension adequacy for low-wage earners.
Continue the development of private pensions, including defined-contribution arrangements.	Update maximum and minimum insurable income thresholds regularly.
Minimum and maximum insurable incomes have not tracked recent wage increases and resulted in lower contribution from high-wage earners	Consider replacing the state financing requirement with a rule on how much financing comes from the general government.
The pension deficit is financed by the state as required by law.	
Securing long-term growth	
Net migration flows have been negative, only turning positive in recent years, and many immigrants only stay temporarily.	Facilitate the return of Bulgarians and make the migration strategy comprehensive with integration measures to attract the immigrants needed.
Labour shortages are severe while a large share of working-age people is out of the labour force.	Better take into account the specific needs of vulnerable groups when designing labour market programmes and increase outreach to their communities to raise awareness of services and benefits of the Employment Agency.
Many inactive people do not engage with the Employment Agency, while there are important gaps in health insurance.	Increase incentives to register with the Employment Agency, including considering to provide minimum (social) health coverage for people who register, with a six-month limit.
Little is spent on activation and what is spent is not well targeted, often offering nearly full or full employment subsidies.	Reduce the subsidy share of wages in subsidised employment, in particular where they are at full or close to full subsidisation to avoid adverse incentives and create sustainable employment.

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2

Reinforcing the school system

Margit Molnar

Improving human capital is key to raising Bulgaria's productivity and creating high-quality jobs. Acquiring strong basic skills at school is vital to the skills of the workforce and the ability to adapt to meet the changing needs created by new technologies. Bulgaria has embarked on a major revamp of the education system, adopting a strategy with ambitious targets and aiming to address complicated challenges in a comprehensive way, including lifting the status of teachers, boosting spending on infrastructure and abolishing so-called "double shifts". However, the early tracking system and its resulting impact on segregation by social background need to be addressed to provide fair opportunities for all. While teachers' status is being raised with better benefits, more efforts are needed to raise their performance. Workplace-based training for students should be made a bigger part of the system to ensure the acquisition of practical skills. More efficient spending of public funds and greater involvement of business, alongside a well-enforced curriculum reform, would all work towards better education and labour market outcomes.

2.1. Bulgaria has set ambitious targets for education

Improving human capital is key to raising productivity in Bulgaria and creating high-quality jobs. Acquiring strong basic skills through the compulsory education system can play an important role not only in the skills of young people when they join the labour market but also their participation in higher education and the ability over their entire careers to upgrade their skill sets and to adapt to meet the constantly changing needs created by new technologies.

While enrollment in schooling has converged with OECD average, the quality of schooling is lagging behind, with a large share of students not mastering foundational competencies according to the OECD's PISA assessments. The pandemic amplified some of the adverse effects of the features inherent in the system, such as inequalities of opportunities and the traditionally low and decreasing take-up rate of adult learning opportunities, which made it more difficult to make up for the learning deficit caused by school closures (Zareva, 2024^[1]).

Bulgaria has accelerated efforts to reform the education system and shifted from incremental measures towards comprehensively revamping the system nearly a decade ago, aiming at addressing the structural deficiencies that had impeded the formation of high-quality human capital. New education strategies (Box 2.1) envisage a better performing education system that engages students, better meets the skills needs of the labour market, provides equal chances to all, and makes the teaching career attractive both in terms of material remuneration and professional development while providing necessary competencies.

Box 2.1. Medium-term education strategies

Bulgaria's National Development Programme 2030 encapsulates Bulgaria's ambitions for the school system by the end of this decade, putting education and skills in the first place among the 13 national priorities. The education and skills priority is being monitored through 13 indicators, which aim to reach or exceed the current EU average values by 2030 (Table 2.1).

Table 2.1. Bulgaria has ambitious targets to raise education outcomes by 2030

Indicators & sources	2018 outcome	2030 target	2018 EU average
Inclusiveness			
Pupils from age 4 to the starting age of compulsory education at primary level, % of the population of the corresponding age group, Eurostat	82.4	86.3	95.4
7-year-old pupils in primary education, % of corresponding age population, Eurostat	90.5	98	97.7
Share of population aged 30-34 with tertiary educational attainment, Eurostat	32.7 (2019)	40	41.3
Attractiveness and prestige of the teaching profession			
Classroom teachers working full-time and part-time in primary, lower-secondary and upper-secondary education, % of total active population, Eurostat	1.7	2	2.1
Share of secondary teachers who felt "very well prepared" to use of ICT for teaching, % OECD, TALIS	77.4	80	83.93
Share of secondary teachers who felt "very well prepared" for teaching in multicultural or multilingual setting, % OECD, TALIS	78.8	85	86.64
Classroom teachers less than 35 years, % of all teachers, Eurostat	11.4	32	20.1
Quality of education			
Share of 4th grade students' reading scores below intermediate benchmark, % PIRLS	17 (2016)	8	20 (2016)
Share of 4th grade students' mathematics scores below intermediate benchmark, TIMSS	29 (2019)	15	25 (2019)
Employment rate of recent graduates with a vocational upper-secondary or post-secondary non-tertiary education, Eurostat	68.6 (2019)	80	77.6 (2019)
Lifelong learning			
Relative share of young people (20-24 years of age) with at least upper-secondary, post-secondary non-tertiary and tertiary education, Eurostat	84.4 (2019)	92	83.9
Mean years of schooling UN, Human Development Index	11.8	14	-
Digitalisation and educational innovations			
Share of individuals (aged 16-74) achieving at least basic digital skills, EC, DESI	29 (2019)	37	57 (2019)

Source: National Development Programme BULGARIA 2030, <https://pris.government.bg/document/0bd84a28a708b4109c6333d0f4da7ca3>.

The key sector-level policy document that sets the vision and guides the country's education policies in the period 2021-2030 is the Strategic Framework for the Development of Education, Training and Learning (Council of Ministers, 2021^[1]). The Strategic Framework is in line with the Council of Europe's Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021-2030). The vision of the Strategic Framework will be pursued by focusing on nine priority areas: (i) early childhood development, (ii) competences and talents, (iii) motivated and creative teachers, (iv) united school communities and systemic work with parents, (v) effective involvement, lasting inclusion and educational integration, (vi) educational innovation, digital transformation and sustainable development, (vii) fulfilment in the professions of the present and the future, (viii) lifelong learning and (ix) effective management and participation in networks.

Source: National Development Programme BULGARIA 2030, <https://pris.government.bg/document/0bd84a28a708b4109c6333d0f4da7ca3> and other documents.

The Action Plan 2025-30 lists all the activities with specific amounts of spending under the nine priority areas, with each activity linked to an indicator and the indicator's current and target values are also shown (Ministry of Education and Science, 2025^[3]). For instance, under the competences and talents priority, the largest item in terms of funding with BGN 166.7 million (EUR 83.35 million) aims to create methodological action plans for developing key competences in 1400 schools, training 38 962 teachers to teach in a STEM environment and support 80 717 students in acquiring key competences by end-2027. The plans could be enhanced by focusing on additional indicators capturing outcomes that reflect the effectiveness of spending, for instance mastering the use of digital devices, and benchmarking could help to ensure efficient use of funds. Thus, while it is desirable to increase spending on education as long as returns increase, further spending should depend on reform outcomes, in particular progress in improving the teaching of strong foundational skills (functional literacy and numeracy). Moreover, building capacity to implement outcome targets and benchmarking is crucial.

However, several deficiencies of the system are not adequately addressed in the Strategic Framework and further reforms are needed. For tangible results, accountability and effective coordination are indispensable. A Consultative Council for coordination, management and monitoring of the implementation of the Strategic Framework was established in December 2024 with a Deputy Minister as Chairperson, highlighting the importance attached to it. Regular stocktaking and dissemination of results would help gain wider public support and commitment.

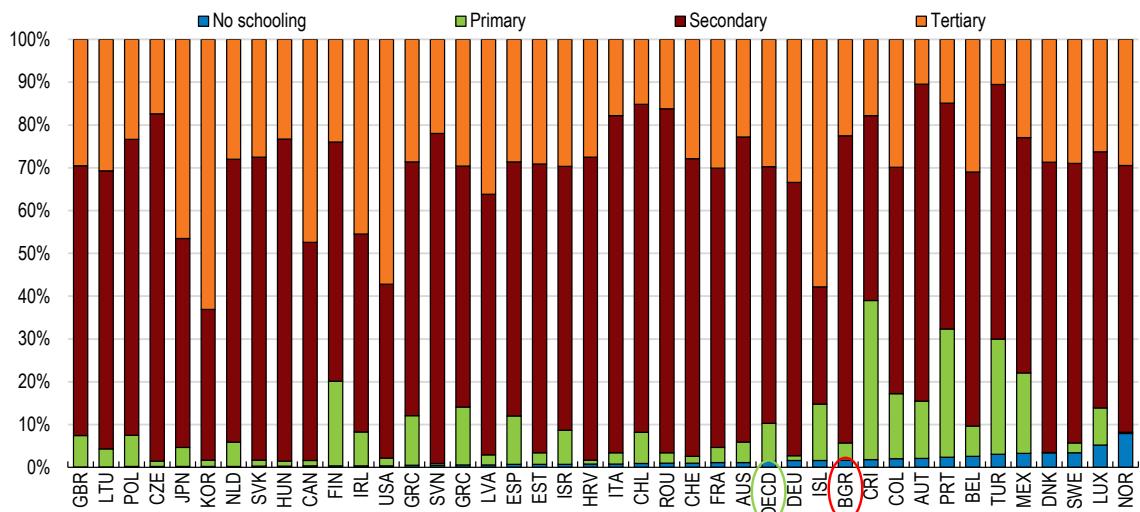
This chapter will first discuss Bulgaria's education outcomes, and possible links between outcomes and students' socio-economic background that may partly explain those outcomes; it then sets out key issues in the school system that need to be addressed in the Strategic Framework, including funding, the performance of teachers, curriculum reform, early tracking and vocational education.

2.2. Education outcomes are weak

Most people in Bulgaria have upper secondary-level education, though the share of people with lower educational attainment is also relatively high and those with tertiary education is relatively low (Figure 2.1). Moreover, 2-3% of the population has no schooling at all, which is above the OECD average. In the Visegrad-4 countries, for example, there are no people with no schooling. These data are for the labour force as whole and educational attainment among younger cohorts is higher, although issues remain. The improvement in attainment is due to a large extent to government policies that have successfully reduced dropout rates over the past decade (OECD, 2025^[2]). The outcome of the overall education system is not easy to assess as there are no internationally comparable data on the level of skills acquired as Bulgaria is not part of the OECD adult skills survey, the Programme for the International Assessment of Adult Competencies (PIAAC) that measures adult skills. Given the difference between current attainment and very weak outcomes in the past, a comprehensive survey of adult skills of the population could be very helpful in understanding the skills and training needs of the population.

Figure 2.1. Most people of working age only have a secondary degree

Highest educational attainment of 15-64 year olds, projections, 2025



Source: Barro, Robert and Jong-Wha Lee, 2013, "A New Data Set of Educational Attainment in the World, 1950-2010." *Journal of Development Economics*, vol 104, pp.184-198 updated and with projections at https://scholar.harvard.edu/barro/data_sets.

StatLink  <https://stat.link/le8upuq>

Building the foundations for strong basic skills starts early in life. Early childhood education and care in Bulgaria is compulsory for two years (from age 4 to 6) and net enrolment rates steeply increased to 89.3% in 2023, after making nursery and kindergarten education free of charge for all in 2022. While these rates are still below more advanced countries, the trend is promising, in particular for 3-5-year-olds. In contrast, for the age group below three years, enrolment rates remain low although, no standardised enrolment data are available (OECD, 2025^[3]). Given the currently low enrolment and needs for nursery-level institutions and teachers, capacity needs to be increased. In addition, alternative models could also be considered. For instance, in France, the so-called "assistante maternelle" model work wells, where someone takes care of a couple of children in their home. While such privately-provided services are not free, disadvantaged people could be provided vouchers or other compensation schemes could be considered. Efforts to make pre-school services more widely available will help narrowing disparities in education outcomes.

More importantly, increasing the quality of pre-school education can help ensure that children are ready for school. Instead of seeing it as a daycare facility where small children spend their time while their parents are working, kindergartens should be viewed as an important stage to invest in the formation of human capital. The expansion of availability, however, has not gone hand-in-hand with the upgrading of quality. Opportunities for parents to voice their demands and coaching them on the importance of doing so could lead to a greater supply of good-quality facilities countrywide (Volen, 2023^[4]). This could be done by parents' associations and through surveys, as in other countries. Enhanced coordination between the Ministry of Health, which manages the nursery sector, and the Ministry of Education and Science would make this important early stage more effective in preparing children for school (OECD, 2025^[2]).

The Bulgarian school system is quite unique with a large choice of schools specialising in not just vocational professions, but also various fields of arts, sciences or humanities (Box 2.2). Education in Bulgaria is compulsory up to the age of 16, so a minimum 12 years of education (including pre-school), which is slightly higher than the OECD average at 11 years. However, instruction time remains lower than the OECD average (OECD, 2025^[2]).

Box 2.2. The Bulgarian primary and secondary education system

Bulgarian schools can be administered by the state, municipalities and private or religious entities.

Compulsory school education begins at the age of 7 (Grade 1) and lasts until the age of 16 (Grade 10). However, most schools continue to offer education through to Grade 12, allowing students to complete their full secondary education.

Elementary education is divided into two parts: primary school (ages 7 to 11, grades 1-4) and middle school (ages 12 to 14, grades 5-7). Upon completion of Grade 7, students take the National External Assessment and must choose among different educational pathways, including:

- Profiled high schools with a focus on subjects like mathematics, foreign languages, humanities, sciences and others: grades 8-12 (ages 14 to 19)
- Vocational high schools, preparing students for careers in construction, tourism, commerce and banking and other fields: grades 8-12 (ages 14 to 19)
- Additionally, some schools offer continuous education from grades 1 to 10 (so-called integrated schools), while others provide full elementary and secondary education from grades 1 to 12. In the latter type of school, during the final two years (grades 11 and 12), students must choose a subject area to focus on.
- Specialised schools focus on specific domains such as sports, arts, culture, or religion.
- Sports schools start from grades 5, 6, 7 or 8, and operate under a specific regime that allows students to balance academic studies with training.
- Arts and culture schools accept students from grades 1 to 12; 5 to 7 or 8 to 12.
- Spiritual schools are established upon the request of religious denominations and are intended for students in grades 8 to 12.

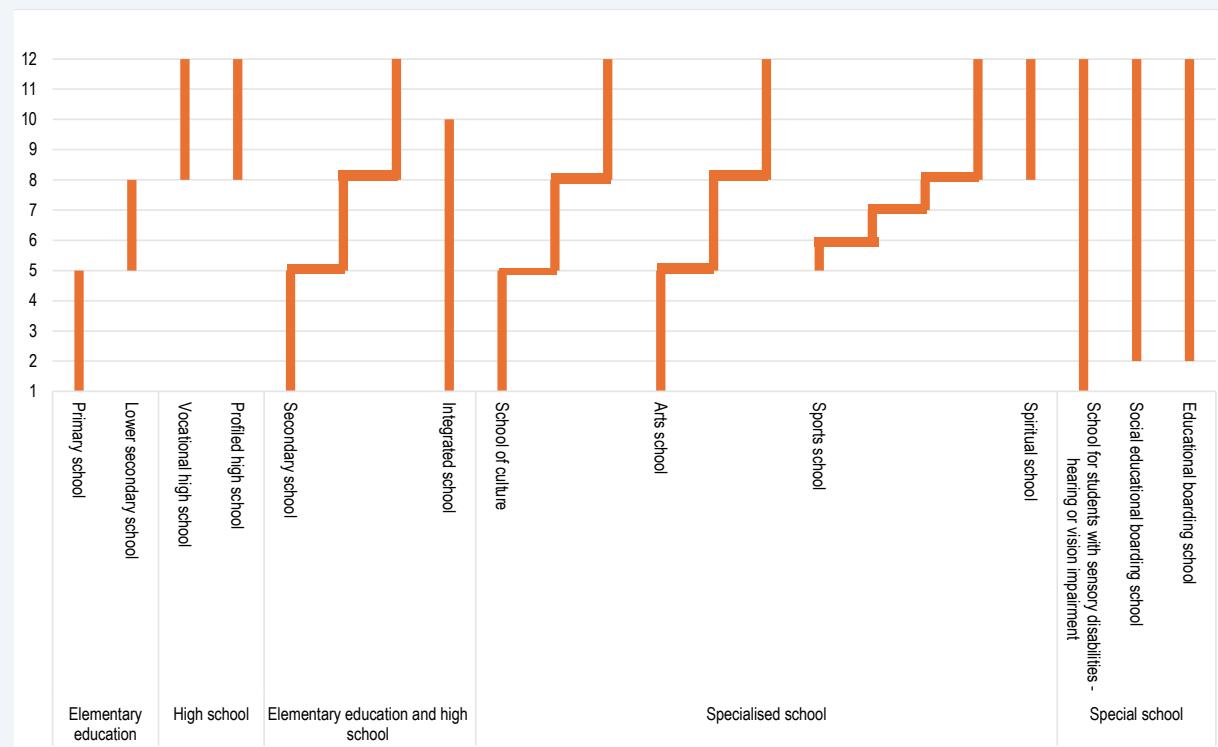
Furthermore, the Bulgarian education system includes community schools and protected schools. A community school brings together students from nearby villages or towns without their own schools and offers them education from grade 1 to 12. A protected school is one that cannot be shut down because doing so would seriously limit students' access to education in the area.

Three types of schools address special needs in Bulgaria: (i) schools for training and support of students with hearing or visual impairments (grades 1 to 12), (ii) boarding schools for minors who have committed antisocial acts or crimes (ages 8-18 up to three years) and (iii) social educational boarding schools for children who lack adequate family care, including those removed from parental supervision or those who have exhibited antisocial behaviour. In most cases, children are initially placed in these schools. If the issues persist, they may be transferred to the more restrictive boarding schools for further supervision (ages 8-18 up to three years).

Completion of grade 12 and passing the national "Matura" exams marks the end of secondary education and qualifies students to apply for admission to higher education institutions.

Figure 2.2. Many pathways lead to the “matura” exam at 18-years but need to be decided early

Primary and secondary school types



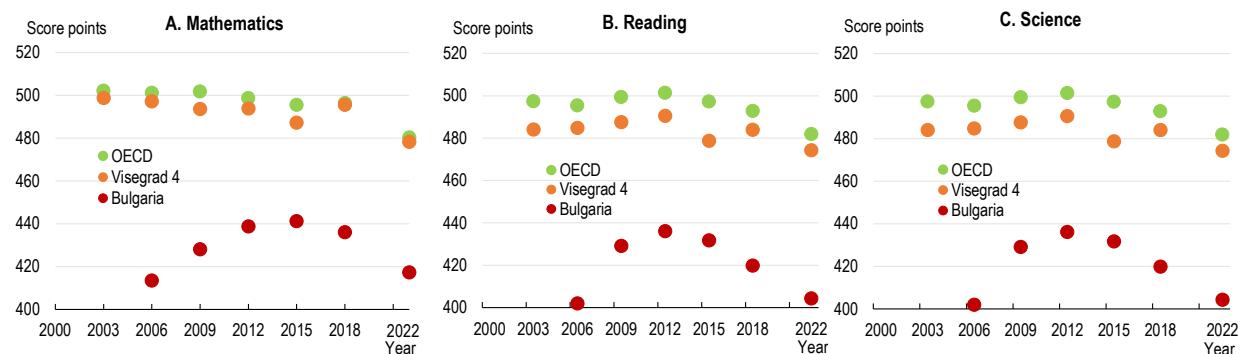
Source: OECD compilation.

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Student outcomes appear to be poor compared to most OECD countries. Available indicators show that the performance of Bulgarian students at the compulsory education level is below all European OECD members. PISA scores, which compare the skills of 15-year olds in math, reading and science, are low not only compared to the OECD average, but also the Visegrad-4 (Figure 2.3). The median score in mathematics is below the 10th percentile in the best performing countries. Moreover, following a rise until the early 2010s, scores in all three subject areas dropped back to mid-2000 levels in more recent years. The fact that scores dropped not only for low performers but also for high performers, suggests that there is a broader issue with the quality of education that goes beyond socio-economic factors. The outcomes also point to inefficiencies in the system as students' performance in math is poor not only relative to other countries, but also relative to the combined class and homework hours spent on studying the subject.

Figure 2.3. PISA scores lag far behind OECD and Visegrad-4 countries and fell in recent years

PISA scores in mathematics, reading and science



Note: The Visegrad-4 countries comprise Czechia, Hungary, Poland and Slovakia.

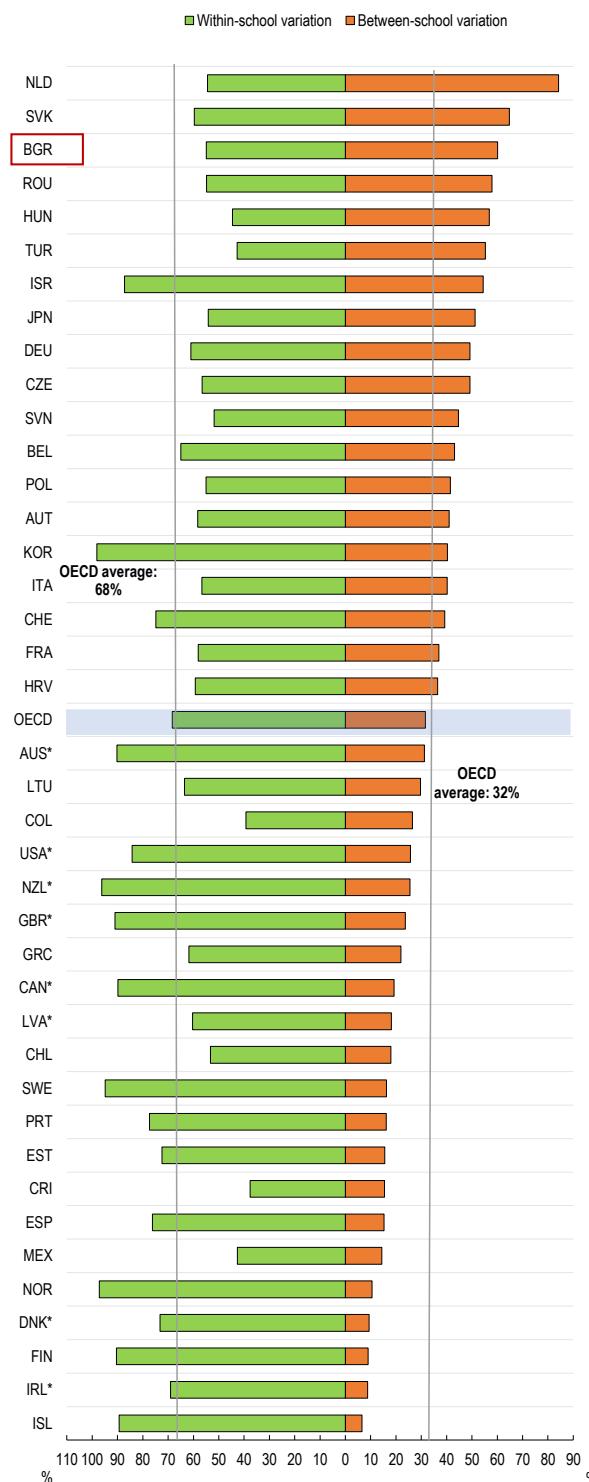
Source: OECD PISA 2022 database.

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Some of the poor overall performance is explained by social disadvantage and unequal performance across schools. While reforms like free kindergarten access, inclusive education efforts and the introduction of financing formula that consider disadvantage aim to improve equity, education quality remains low and uneven, and marginalised groups, including the Roma, still struggle to access inclusive, high-quality education. Such challenges are exacerbated in rural areas (OECD, 2021^[6]). New EU projects, including one on supporting vulnerable and marginalised communities with a budget of EUR 50 million launched in late 2025, will work towards greater inclusion of the Roma and other vulnerable groups. Teacher training and resources for disadvantaged schools are insufficient (even though vulnerable children get additional state funding), further entrenching disparities. Such disparities are manifest in the large between-school variation in PISA scores, which is nearly double the OECD average (Figure 2.4). Variation in student performance within schools, in contrast, is much smaller than the OECD average, explained by early tracking and streaming of children into different quality schools based on their perceived abilities or the 7th grade end-year external assessment test results. Due to difficulty to access good quality education for socially marginalised groups, the difference between advantaged and disadvantaged students is greater than in any OECD country except Colombia and is on par with Romania (Figure 2.5). Girls perform better than boys, reflecting a relatively equitable access to opportunities by girls and women in Bulgaria in international comparison (OECD, 2023^[6]).

Figure 2.4. Education outcomes vary a lot between schools

Math PISA scores



Note: * Caution is required when interpreting estimates because one or more PISA sampling standards were not met for Australia, Canada, Denmark, Ireland, Latvia, Netherlands, New Zealand, United Kingdom and United States.

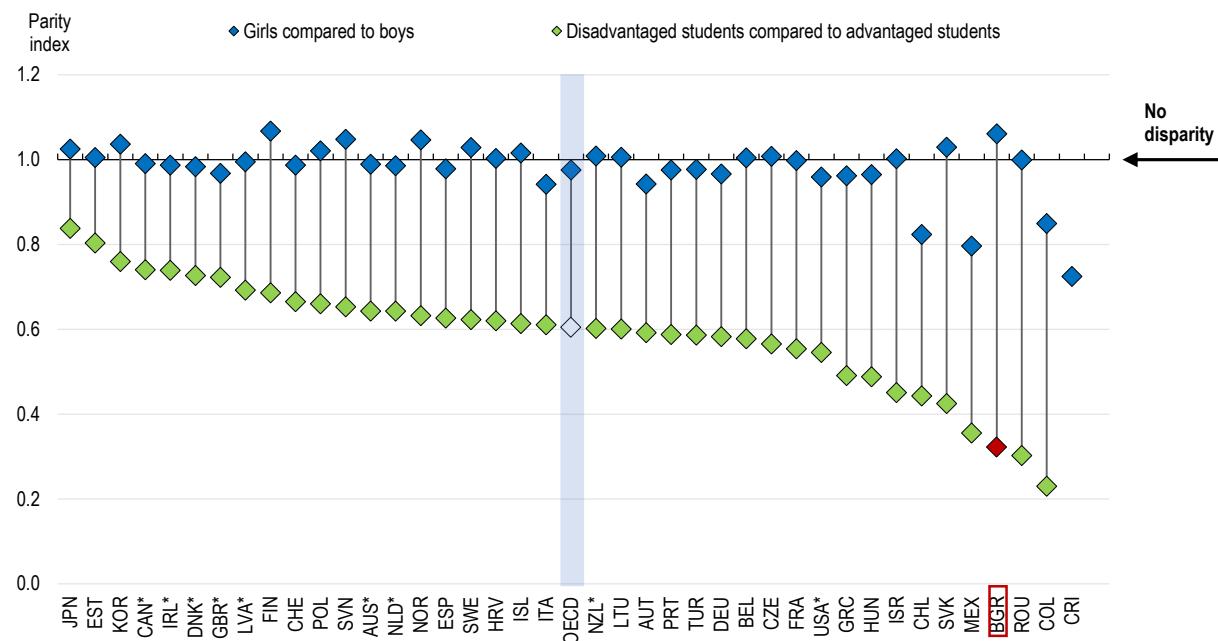
Source: OECD PISA 2022 database.

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Structural features of the school system, in particular early tracking, streaming and resulting segregation, coupled with inequality and socio-economic disadvantage perpetuate low performance and prevent students from moving up the social ladder. Indeed, PISA scores of low performers have fallen further in recent years and only 7.4% of disadvantaged students scored in the top quarter in mathematics in 2022, a lower share than in any OECD country except Czechia and Slovakia. The share of students below basic proficiency levels in the three PISA subjects is high and has been increasing. A major step towards providing equal opportunities to all is free access to textbooks and other learning materials to all starting from the 2024-25 school year. Furthermore, AI methods will be used to make education more inclusive and open.

Figure 2.5. The gap between advantaged and disadvantaged students' performance is large

Disparities in minimum achievement in mathematics (parity index), by gender and socio-economic background



Note: The OECD PISA indicator measures socio-economic background using a composite index called Economic, Social and Cultural Status, which captures multiple components of students' socio-economic contexts, including parental education and occupation, wealth proxies and other indicators.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met for Australia, Canada, Denmark, Ireland, Latvia, Netherlands, New Zealand, United Kingdom and United States.

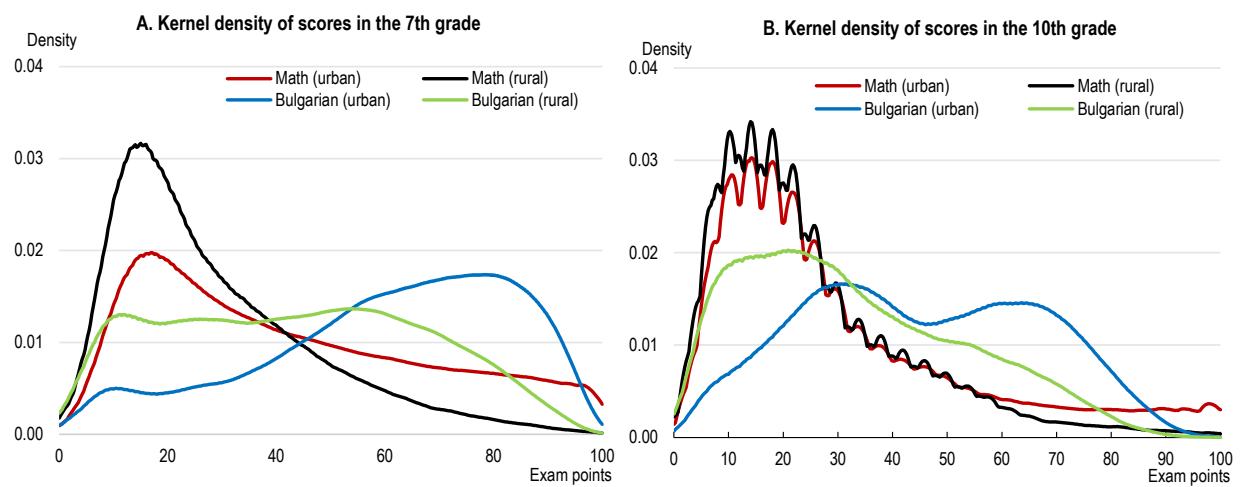
Source: OECD PISA 2022 database.

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Urban-rural differences in incomes and other dimensions contribute to unequal educational outcomes. Urban areas perform significantly better in the national external assessment in both compulsory subjects (mathematics and Bulgarian language and literature) and in both the 7th and 10th grades (Figure 2.6). Differences in scores are greater in the 7th grade in both math and Bulgarian, which could be explained by the fact students have a greater stake as the 7th grade scores determine admission to secondary education hence many prepare seriously for the assessment. Another explanation is that there are more schools in rural areas - which tend to be weaker performing - at the lower compared to the upper secondary level.

Figure 2.6. National external assessment scores are much higher in urban areas

Kernel density of scores in the 7th and 10th grade, respectively



Note: Panel A: 7th grade external assessment scores are for school years 2018-2019 to 2023-2024. For the purpose of comparison, 2016-2017 and 2017-2018 are excluded from the sample due to a different grading scale. Panel B: 10th grade external assessment scores are for school years 2020-2021 to 2023-2024. For the purpose of comparison, 2020-2021 is excluded from the sample due to a different grading scale.

Source: OECD calculations based on the Ministry of Education and Science database.

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OECD PISA test results reveal that poverty may be an important factor in subpar performance of disadvantaged students. According to PISA 2022, 12% of students skip meals on a daily basis as they cannot afford it. A further 22% skip meals at least once a week for the same reason, jointly making up a third of the student body. Providing nutritious school meals for free to vulnerable students as many OECD countries do would be a cost-effective way of addressing malnutrition and academic underperformance. While free meals are already provided in lower grades for all, it should continue for vulnerable children in higher grades to ensure that material deprivation does not prevent anyone from fully participating in classes and acquiring solid foundational skills.

A large majority of low performers' mother language is not Bulgarian, including those from the Roma and the Turkish minorities. They may be disadvantaged by their lack of adequate mastery of the Bulgarian language, as well as their socio-economic status. Bulgarian is the sole language of instruction in Bulgaria. The 2025-30 Action Plan explicitly focuses on raising the Bulgarian language standards of students whose native language is not Bulgarian. For children whose mother tongue is different from Bulgarian, this may be studied in the form of a free or a compulsory elective class from the 1st to the 12th grade, as well as activities supporting their social, emotional and cognitive development in their other language. Enhancing existing support to students whose mother tongue is not Bulgarian, including learning their own language, would facilitate the acquisition of basic skills and proficiency in the Bulgarian language. In many OECD countries, if there is demand, basic education can be conducted in the mother tongue for some groups, particularly early in their education to help them get up to speed and integrate. In Bulgaria, constitutional requirements require the use of the Bulgarian language as the language of instruction at school.

Growing use of digital devices appears to be a factor behind declining test scores. OECD PISA 2022 results indicate that 46% of Bulgarian students get distracted by the use of digital devices and another 40% by others using such devices during mathematics classes. This percentage is higher than in any OECD country except Chile. Many countries have banned digital devices at least during classes and others are considering going further in restricting access to devices for young people for non-pedagogical purposes. Experience suggests that school bans are more likely to be applied if decreed at national level, rather than left to the discretion of school authorities.

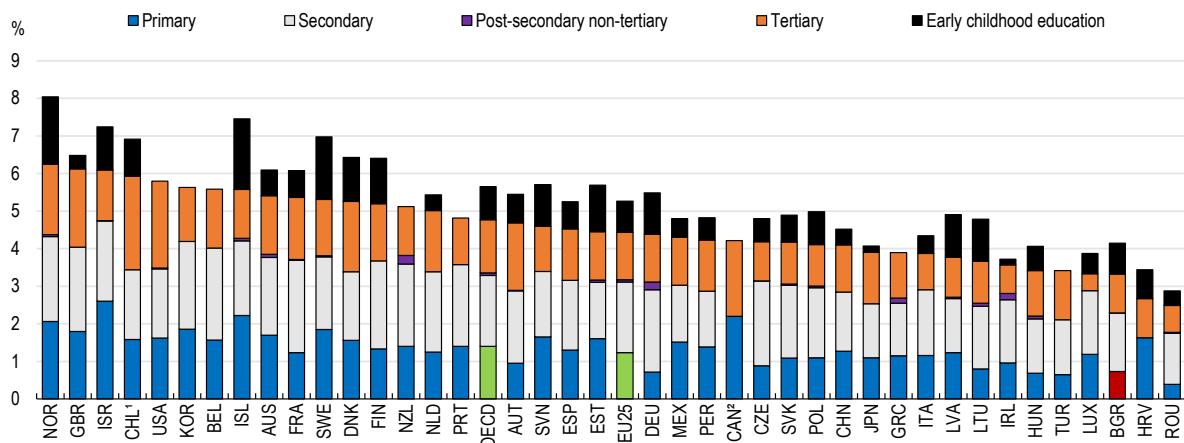
2.3. Funding for schools is being raised but from a low base

At around 4-5% of its GDP, Bulgaria spent less on education than most OECD countries in 2022, though more than Romania (Figure 2.7). The primary-secondary level's joint share at around 2.2% of GDP is similarly low in

international comparison, though on par with Hungary or Lithuania. With the full implementation of the salary raise for teachers, this share will be higher.

Figure 2.7. Education spending is relatively low

Public spending on education as percentage of GDP, 2022



Source: OECD Education at Glance database.

StatLink  <https://stat.link/pd70h2>

Schools are funded by the state, municipalities, or the private sector. In the 2023-24 school year for instance, available data show that almost two-thirds of 10th graders were studying in state-financed schools, nearly a third in municipal schools and less than 2% in private schools. Most state schools are funded by the Ministry of Education and Science, while the Ministry of Culture funds arts and culture schools, the Ministry of Youth and Sports sports schools and the Ministry of Justice part of the prison schools. The Technical University of Sofia funds a couple of vocational schools in Sofia city and district where teaching staff is coming from the University. Religious institutions initiate the establishment of spiritual schools, but they do not co-finance them as those are entirely funded by the Ministry of Education and Science. Sports schools can also be funded by municipalities.

Low levels of funding at the primary level have resulted in features such as the so-called “double-shift system” consisting of morning and afternoon shifts for different groups of students to overcome infrastructure (and occasionally also teaching resource) insufficiencies. This not only deprives those children affected from the same resources, but also adversely influences the daily cycle of children and reduced incentives to study. They are most common in densely populated areas, in cities like Sofia, Plovdiv, Burgas and Varna, where infrastructure could not catch up with the flood of people into those cities in search of work and in more rural shanty towns mostly populated by people belonging to ethnic minority groups. The double-shift system not only shortens instructional time per shift, but also limits access to shared facilities such as labs, libraries, gyms, limiting hands-on learning opportunities as well as extracurricular activities. Recognising its negative effects, the current reform strategy aims to abolish the double-shift system at the primary and secondary levels. Under the National Recovery and Resilient Plan and the Strategic Framework 2021-30, BGN 240 million (around EUR 120 million) is allocated over 2024-26 to upgrade and expand facilities and hire the teachers needed to abolish this system.

Infrastructure insufficiencies are particularly acute in high-end infrastructure and equipment (OECD, 2025^[1]). Only 12% of Bulgarian schools have coding laboratories compared to 35% on average in the EU, setting back the development of coding skills. A recent achievement is the Digital Backpack platform, which provides personalised learning resources and integrates external tools such as Google Classroom or Microsoft Teams. 40 000 tablets have been distributed to vulnerable students for distant learning, 4 000 classrooms have been equipped with interactive whiteboards and a key goal is to connect all schools to the internet. Due to complementarities, disbursement of funds for infrastructure and equipment purposes should be preceded by training of teachers to use those and accompanied by hiring the teachers and systems support staff.

2.4. Teachers' performance is key in shaping students' education outcomes

Teachers in Bulgaria appear well-qualified in terms of education, but the workforce is ageing, and efforts are needed to make the profession more dynamic and to attract new recruits. Teachers should translate the curriculum into engaging lessons, adapting content to meet diverse levels of preparedness and ambitions. Their tailored support is crucial to create equitable opportunities in education. They should apply methods to explain complex concepts, ignite students' curiosity and foster an environment conducive to thirst for new knowledge and skills. Their role extends beyond transmitting knowledge and skills as they also need to ensure discipline, provide emotional support and deal with personal and often even family issues of students. Indeed, acquiring skills to create a supportive learning environment and nurture trust in teacher-student relations is at least as important as technical skills as social-emotional intelligence is an increasingly important part of the skill set required in society. Moreover, teachers need to update their skills several times during their career to keep it up-to-date and be able to prepare generations of people for their first steps in society. Teachers can also play a key role in building strong relations with the community and involving parents in the learning process, both conducive to an inclusive environment and higher outcomes.

To support teachers to fulfill those tasks in an effective way, recent reforms aim at lifting the status of teachers, including by setting their starting salary at 125% of the national average salary level, waiving fees and providing scholarships for initial teacher education and mandating and funding continuous professional development. Once fully implemented, these measures will likely attract better performing students to the teacher career and in the medium-to long term lift the quality of education. Furthermore, this salary is increasing by 1% per year served and teachers can receive a bonus, which is roughly 2-4% of the school budget. Bonuses are linked to the annual performance evaluation and there is a 4-year appraisal, which is linked to career progression. In addition to an attractive salary package following recent reforms, teachers in Bulgaria have 56-58 days off annually with their teaching time lower than in OECD countries.

OECD TALIS 2024 (OECD, 2025^[5]) data indicate that for 44% of Bulgarian novice teachers (those with up to five years of experience), this profession was their first choice as a career, much lower than in most other countries with a sharp drop from 60% in 2018. Indeed, a large share (16%) of teachers in Bulgaria are second-career teachers, double the average of countries for which data are available. The greatest motivation for young people to choose the teaching profession is liking working with children (63%) and thinking that the profession suits their abilities (62%), both about ten percentage lower than in OECD countries. The desire to influence the next generation is similarly lower than in OECD countries and only a fifth of teachers are motivated by working against social disadvantage.

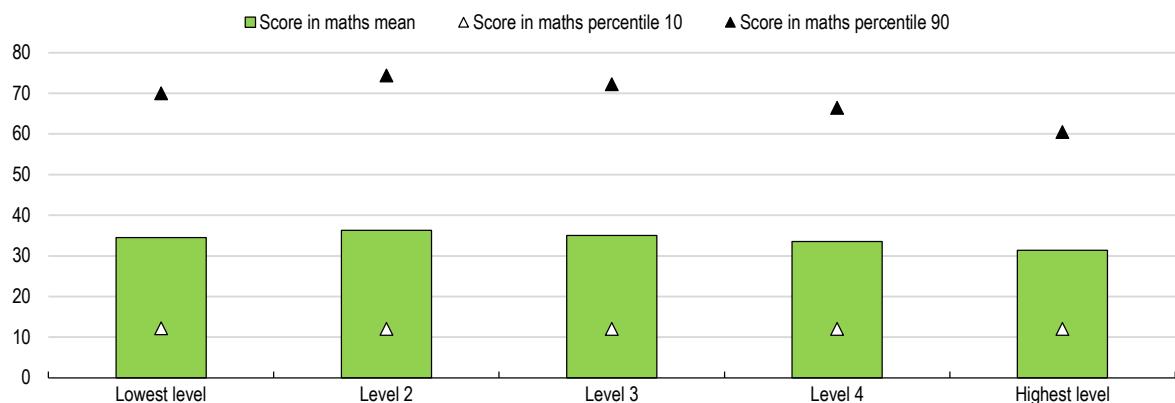
Most teachers enjoy relatively high job stability: only 9% of full-time staff have a fixed-term contract, a ten-percentage-point lower share than the OECD average, moreover it has increased relative to 2018. The share of fixed-term contracts, however, is higher for teachers working in environments with more economically disadvantaged students, those with language difficulties or with special needs. Only 6% of teachers work part-time, less than a third the OECD average. Part-timers appear to be less satisfied with their salaries. Dissatisfaction with salary is a major driver to change schools. Most teachers want to go to bigger schools and do not want to deal with socially disadvantaged children. In a teaching environment with socially disadvantaged children, stress levels are reported to be higher. Only 52.5% of teachers are exposed to mixed ability settings, much lower than in other countries. Teachers face the challenges of insufficient training of classroom discipline, classroom management as well as monitoring of students' development in teacher training courses. That might be behind why teachers do not feel confident in a mixed ability or a multicultural setting. All those courses that help teachers with their non-content-related skills should be strengthened at the teacher training level and students at such colleges should gain practical experience in dealing with children with mixed abilities (OECD, 2025^[2]). Reinforcing the teaching of student behaviour and classroom management, as well as monitoring of students' development and exposing teachers to practical experience in teacher training courses, would better prepare them for creating an inclusive learning environment. A much higher share of teachers thinks that they are valued by students than in OECD countries, and nearly all think that if students need extra assistance, the school provides it, also a significantly higher share than in most OECD countries.

A certain number of years of teacher experience and qualification appear to be associated with higher scores on the national external student assessment exams, especially in the top decile. However, the highest levels of qualifications, which require more years to obtain, are associated with lower scores (Figure 2.8). Instead of

diminishing returns to qualification, this probably reflects that a certain number of years of experience is needed for better performance, but teachers with the highest qualification, who by definition tend to be older, do not perform that well. New OECD research shows that the quality of teachers matters for student's education outcomes (Box 2.3): increasing teacher quality (measured by their impact on their students' scores controlling for other factors), that is moving a student to a class with a one standard deviation better teacher, results in 0.09 standard deviation higher scores in math in the 7th grade and 0.10 standard deviations higher in the 10th grade. For instance, moving a student from the teacher who is in the bottom 5th percentile of the quality distribution to another one at the top 5th percentile would raise the student's scores by 7 in math both in the 7th and 10th grades. Raising the quality of teachers through continuous training, career development opportunities as well as quality control (OECD, 2025^[2]) would help improve education outcomes in the long run. In the short run, allowing more students to benefit from the best teachers would help, including by rotating teachers across regions and in particular between urban and rural areas as is done in some OECD countries, or by making recorded videos available to all. A certain number of years of experience with disadvantaged students could be a prerequisite for career progression.

Figure 2.8. A certain experience and qualification of teachers may lift students' assessment scores

Math scores of 10th graders by qualification level of their teacher, means, 10th and 90th percentiles



Note: The lowest level is the starting level for teachers and a certain number of years of experience is needed before the second level.

Source: Compiled by OECD using Ministry of Education and Science data.

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Box 2.3. Improved performance of teachers could boost quality of education

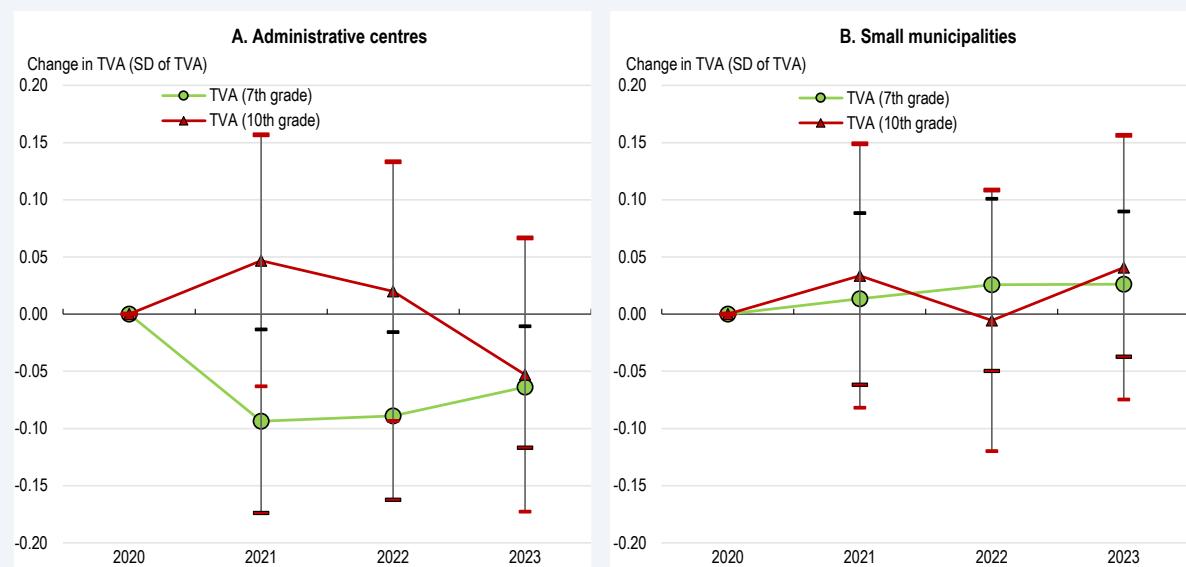
This Box provides new evidence based on Bulgarian student-teacher micro data on the drivers of the so-called teacher value-added – the causal effect of a teacher on their students' scores in standardised exams. Estimates of teacher value-added require the use of standardised exams, rather than continuous assessments, in order not to capture teacher-specific grading and assessment patterns. Due to the absence of repeated annual standardised exams in Bulgaria, teacher value added is measured using the methodology developed by (Tartova, 2023^[6]). The methodology leverages the fact that students take more than one standardised exam in the same year – in the case of Bulgaria, maths and Bulgarian – and the two exam scores jointly reflect the ability of a student that is common to the two subjects.

For instance, to compare the value added of two maths teachers, the method takes the average difference in the maths scores of the students of the two math teachers, after having differenced the individual score with the Bulgarian scores of the students, with the aim of accounting for the difference in math grades that is due to differences in the common ability of the students. To avoid that the average difference in score is capturing the difference in the average value added of the Bulgarian teachers of these students, comparison is only made within complete “networks” of teachers – the maths teachers need to be observed in a classroom with the same Bulgarian teacher, such that, by definition, the value added of the Bulgarian teacher is the same across the set of students of the two maths teachers.

This network-based approach produces unbiased value-added estimates, provided that students are assigned to teachers either randomly or based on their general ability rather than differences in subject-specific aptitude—namely, how much stronger they are in math compared to Bulgarian. To mitigate any remaining concerns when applying this method in the Bulgarian school context, the estimation incorporates controls for students' 4th-grade test scores along with other observable characteristics. Trends of estimated teacher value added reveal that they have been declining in administrative centres in both the 7th and 10th grades, while have somewhat increased in small towns. These opposing trends suggest that teacher quality can be a factor driving convergence as student scores are observed to be lower in smaller localities.

Figure 2.9. Teachers' performance deteriorated in big cities and improved in small ones

Standard deviation of teacher value added in administrative centres and small municipalities, respectively



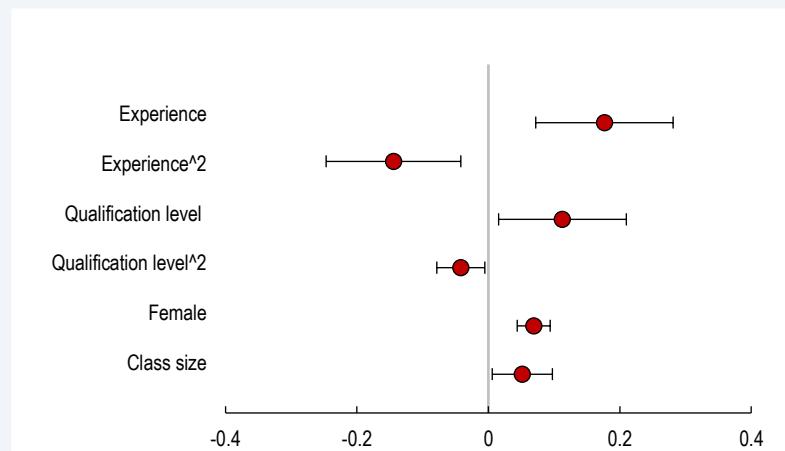
Source: OECD estimates based on Ministry of Education and Science data.

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Estimated teacher value added scores are highly correlated with experience, but this effect has diminishing returns (Figure 2.10), indicating that experience has a positive association with performance until a certain threshold and older teachers have lower performance. The same is true for qualification levels. Female teachers appear to perform slightly better. Larger class size also appears to have a positive association with teachers' performance.

Figure 2.10. Teachers with more experience and better qualifications perform better

Correlation coefficients between teacher value-added and observable teacher characteristics



Source: OECD estimates based on Ministry of Education and Science data. The red dots indicate the correlation coefficients, and the black ranges are the confidence intervals.

StatLink <https://stat.link/xz5r26>

While access to advanced infrastructure and technological equipment is a widespread issue hindering the use of technological tools in teaching and learning across the country, empirical research shows that in Bulgaria other factors such as teachers' technology skills and attitude towards embracing new technologies constitute even more important barriers (Schmitz et al., 2021^[7]). This highlights the need of nationwide training of skills and raising awareness and promoting adoption of technologies in tandem with rolling out the physical infrastructure. Teachers' work could also be supported by AI methods, in particular the generation of assessment tests by relying on AI to synthesise questions, answers and distractors according to a given textbook (Hjaltalin and Sigurdarson, 2024^[8]).

2.5. The curriculum is being modernised

The Bulgarian compulsory education curriculum is heavily based on rote learning with less emphasis on developing skills and development. It prioritises factual recall over critical thinking, creativity or problem solving. This is manifest in relatively low scores on reasoning and interpretation components in the math PISA scores. Most teaching is based on theoretical materials with few chances to get hands-on experience in labs or workshops. Coding is not widespread and training digital literacy is limited. Currently, support to teachers to develop curricula is offered on a fragmented basis by teacher training institutions without much oversight, unlike in some other countries like Finland or Lithuania, where there is extensive support at the national level (Catenazzi et al., 2025^[12]).

Several reforms have tried to improve the curriculum. Bulgaria's Pre-school and School Education Act of 2016 added key competencies, new learning standards and upgraded student assessment with start-of-year diagnostic tests and as well as qualitative marking (Guthrie et al., 2022^[13]). However, many of the new elements have been slow to be implemented and the training of teachers could not catch up with the needs of the new curriculum. In 2020, a Digital Education Plan was adopted, but the funds ran short of the needs and only 5% of the schools received the necessary equipment.

More recently, the Minister of Education and Science has launched plans to review the curriculum for lower secondary (Grades 5-7), which aim to further integrate key competencies and to reduce curriculum overload. This is being considered alongside changes to the assessment and examinations, which will be key to successful implementation given their strong backwash on teaching and learning, especially those of high-stakes exams. Schools will be free to allocate 20% of class time to local needs and new subjects, such as digital skills and AI basics, and financial literacy will be introduced. In addition, climate education will be integrated into science classes. To lift the level of foreign language skills, English will be introduced in Grade 1 and a second language in Grade 5. With the brand-new curriculum, teachers will need to participate in mandatory training in student-centered methods such as project-based learning, to upgrade their pedagogical skills.

Bulgaria is benefitting from technical and financial assistance through the EU Technical Support Instrument (TSI) (European Commission, 2024^[14]). The OECD will support the Ministry in reviewing the curriculum for grades 5 to 7 and the outcome is expected to be improved design and implementation of the new curriculum. The project is focusing on accompanying Bulgaria as it adapts the curricular framework, standards, and outcomes for subjects, and providing recommendations on developing resources for teachers, and building professional communities within schools. The project will run from September 2024 to February 2027. Furthermore, Bulgaria's recovery and resilience plan (RRP) is funding the establishment of STEM laboratories in more than 2 200 Bulgarian schools, which will upgrade learning in STEM subjects and facilitate the acquisition of digital skills.

The current reforms are promising but should be properly funded to deliver their promises. IT directors are being appointed, but there is a need to establish coding labs, make it part of the core curriculum and train the teachers so that they can teach it. Given the high average age of teachers, there may be limited room to retrain them to teach coding or AI. To make up for the shortage of specialised teachers, outside specialists could be more widely employed to teach specific subjects requiring high technical skills. Notwithstanding the recent increase in teachers' wages, given the opportunity costs for engineers or other professionals of teaching, they would need to be compensated. Alternatively, tertiary students could also teach technical skills at the compulsory education level part time.

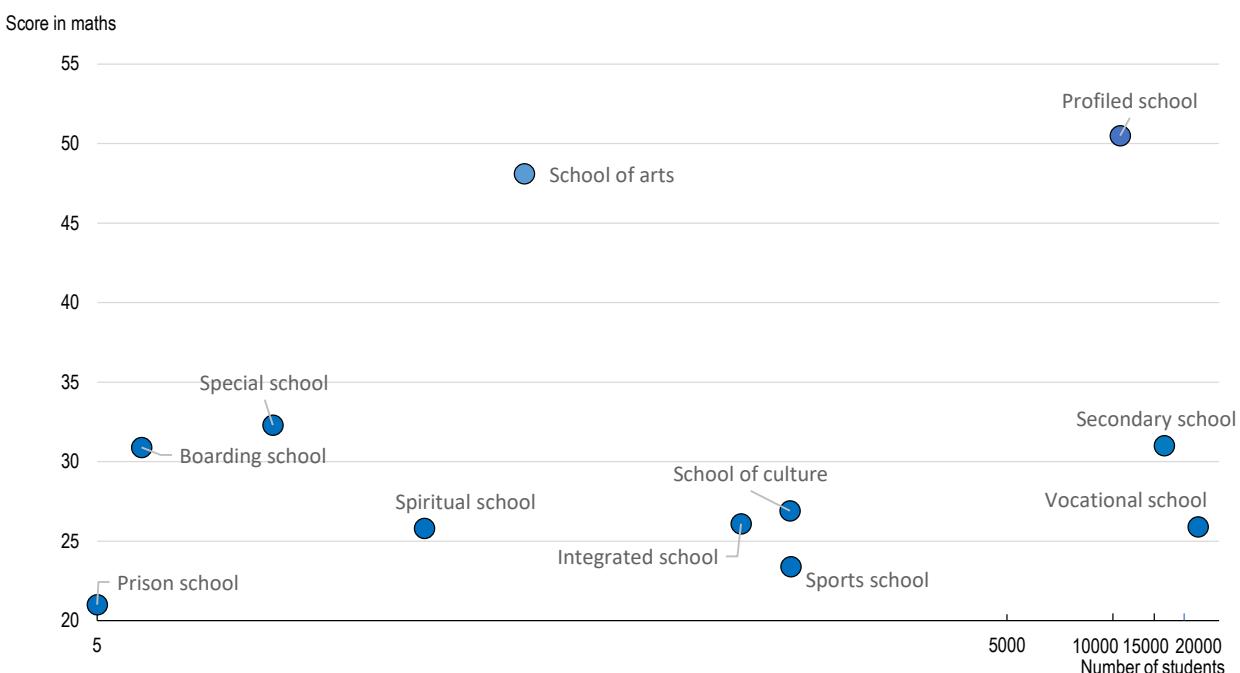
2.6. Early tracking leaves limited options to switch education paths

The decision at the end of the seventh grade (age 13 years) about what type of school a child will attend leads many pupils to being tracked into specialised schools with limited options to switch education pathways, as well as contributing to social segregation. Bulgarian students face an important decision of choosing their career at such a young age. They need to decide not only whether they want to follow the academic or the vocational path, but very often also, which particular area they envisage for their career. In Bulgaria, not only vocational schools are specialised into fields like automotive industry, healthcare or accounting, but some of the academic high schools, the so-called profiled high schools, are specialised in math, natural sciences, history, geography and foreign languages (one profile per school) and such specialisation needs to be decided at the end of the seventh grade. It is hard for students to switch to other tracks at a later stage.

The math scores of the national external assessment exam in the 10th grade vary greatly across school types (Figure 2.11). The average math score at around 50 is the highest in profiled high schools, though it is still not particularly high given the maximum of 100. At the other end, vocational schools where most 10th graders study have average scores roughly half of the profiled schools, on par with culture, spiritual and integrated schools (offering schooling from grade 1 to 10). The 12-year secondary schools with 31 scores on average perform only slightly better than vocational secondary schools and similarly to special schools for the hearing or vision disabled or boarding schools for those with disciplinary issues. In contrast, arts schools, even though have a different orientation, perform nearly as well as profiled high schools in math. The median scores are even lower for those schools where most students study, indicating a large gap between a few high performers and the majority of low performers.

Figure 2.11. Early tracking reinforces the performance divide

External assessment scores of 10th graders by school type



Note: X axis is with logarithmic scale for better visibility.

Source: Compiled by OECD using Ministry of Education and Science data.

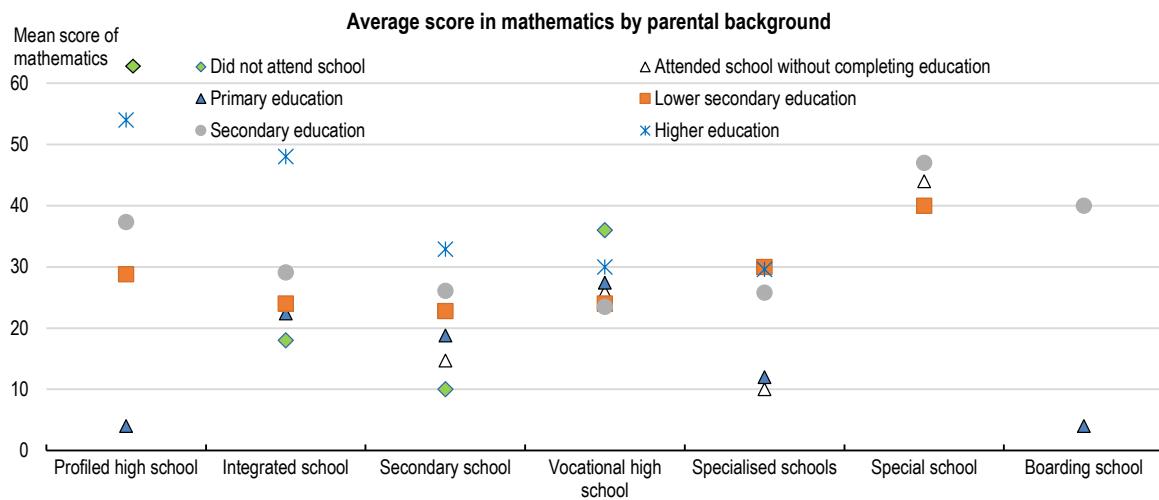
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In profiled high schools, even though students can get an in-depth education in the chosen field, early tracking and overloaded curricula prevent them from obtaining a broad-based general education and strong foundational skills that could serve as a strong base to build on at the next level. Some math and foreign language high schools are highly prestigious and highly competitive. Parents often take over the decision and tend to push their children towards those elite schools regardless of whether they have the abilities or an interest in those fields. The OECD recommended to focus the curriculum for grades 5-10 on mastering core competencies and introducing some choice, while grades 10-12 should focus on specialisation (OECD, 2025^[2]).

An extreme manifestation of tracking children into various educational paths is segregation, which is a long-standing issue in Bulgaria. Over 60% of Roma students attend segregated schools, i.e. where practically all students are Roma, often with fewer qualified teachers. This segregation is linked to systemic discrimination, poverty, and language barriers, resulting in stark achievement gaps. For instance, 70% of socio-economically disadvantaged students (many of whom are Roma) struggle with basic reading skills, compared to 25% of their advantaged peers. External assessment scores of 10th graders in math indicate that students from lower socio-economic backgrounds perform worse than those with highly educated parents (Figure 2.12). The difference between students whose parents have not received education or those who received only primary-level education is quite small. Scores of students with tertiary graduate parents are significantly higher. These features are common to profiled, integrated (grades 1-10) and secondary (grades 1-12) schools. However, in vocational schools, students with parents who did not attend school perform best, and also those with primary graduate parents do relatively well. This could be related to aspirations of these children to move upwards on the social ladder.

Figure 2.12. Students from lower socio-economic backgrounds are funnelled to less prestigious school types and perform worse

External assessment scores of 10th graders in math by school type and family background



Note: Pool of 10th graders over 2021/22, 2022/23 and 2023/24. Specialised schools in this chart refer to sports, arts, culture and spiritual schools.
 Source: Compiled by OECD using Ministry of Education and Science data.

StatLink  <https://stat.link/ri89q6>

Many students may not be ready at the age of 13-14 to decide what they want to do in life. As there are few opportunities to transfer to other schools later and schools tend to offer one programme, many people may get locked in pathways into which they do not fit their capacities and aspirations as they develop and many youths either have difficulty entering or exit early the labour force as a result. Bulgaria's early tracking system entrenches social stratification by channeling vulnerable students into lower-quality educational pathways. Such a system reinforces the already existing large socioeconomic inequalities in the education system as students from less advantaged backgrounds have less access to early enrichment, which in the end negatively affects their future opportunities. Early tracking also deprives low performing students from the positive peer effects of learning together with high performers (Guthrie et al., 2022^[13]). This early differentiation often directs students from disadvantaged backgrounds into vocational tracks, which are perceived as less academically rigorous and hence do not provide strong foundations for higher education or competitive careers. For example, vocational schools, which are predominantly state funded, mostly cater to students who may lack resources or support, perpetuating poverty.

The Strategic Framework for the Development of Education, Training and Learning 2021-30 addresses the issue of early tracking only in an indirect way, by promoting inclusion, modernising infrastructure and shifting towards competency-based learning. However, there is no explicit focus on delaying tracking and expanding general education. Addressing the early tracking and segregation issues requires systemic reforms to delay tracking, desegregate schools, enhance teacher training, and align vocational education with economic demands. Without such measures, the cycle of inequality will persist, undermining both individual potential and national development. The issue of early tracking and its undesirable consequences could be addressed by delaying the time of decision of one's career path by a couple of years to align it with other countries in the greater region, or by a more fundamental shift in the design of the school system. Keeping the door for tertiary education open for vocational school graduates and increasing the possibilities to switch pathways along the way would also help children choose a career that better fits their abilities and aspirations. This would also require an upgrade of the quality of general education in vocational schools.

Addressing the issue of segregation can only be done by targeted policies. For example, in Plovdiv, Roma children from Roma-majority parts of the city are transported to other schools in the city. Being exposed to higher quality teachers and classes, these Roma children benefit from positive peer learning effects. This practice should be extended to more areas. In smaller places, in addition to transporting children to nearby towns for a better

education, the best qualified and most skilled teachers could be rotated to disadvantaged areas, if feasible, by offering incentives or as a condition for career advancement.

2.7. The vocational education system is becoming more market-oriented

The vocational education and training (VET) system in Bulgaria faces several systemic weaknesses, largely tied to misalignment with labour market needs, lack of hands-on training, inferior materials and teaching resources, as well as an overall low reputation. While the system could make a strong contribution to improving skills, vocational schools are currently regarded as a last resort for underperforming and disadvantaged children (Figure 2.11). Vocational programmes, of which currently there are 18, often fail to align with market needs. For instance, a large share of the workforce is engaged in construction, architecture and engineering and demand is expected to remain robust in those sectors, but only slightly more than a third of vocational students choose those fields, leading to skill shortages, mismatch, unemployment and exit from the labour market.

Since the 2018-19 school year, the government has topped up the funding of vocational schools to reach the minimum standard needed to run the programmes even if the number of students is below the minimum level needed and the government is providing further funding for training both professions where shortages already exist or where they are predicted. Greater visibility and communication efforts and higher formal salaries would help attract young people to those professions. Vocational schools neither have the high-quality resources to prepare students for tertiary studies nor the workplace-based training that would equip them with the skills needed in the labour market in case they choose to take up a job after the matriculation exam. A more equitable distribution of high-quality teaching resources across schools, less overloaded curricula and incorporating workplace-based training as part of all vocational programmes would help to address those issues.

The curriculum for vocational education could be improved. First, students often enter these schools without basic skills such as numeracy or literacy, which undermines their performance. To address this issue, basic skills are being strengthened in tandem with teaching vocational skills. This programme has been in place for some years now, but the VET system still suffers from the lack of hands-on training. The National Programme Vocational Education and Training integrates industry partnerships to ensure vocational tracks provide relevant skills, reducing dropout rates and enhancing mobility. Furthermore, STEM Centers and Innovation Labs funded under NRSP aim to bridge gaps between vocational and academic pathways by fostering technical and digital literacy.

Vocational education and practical training, or dual education, is a key way of training young people for the labour market, however, despite growth in recent years, it is still not yet common practice in Bulgaria. The National Strategy for Small and Medium Enterprises 2021-27 expects to increase the number of enterprises providing workplace training opportunities (not limited to vocational students), which will allow increasing the share of students with marketable practical skills. To facilitate that process, an Information Database of the employers who hire and train apprentices will be established and regularly updated. The Strategy also envisaged funding support from national and EU sources for SMEs providing training opportunities for vocational students. While in some cases funding may be needed at the initial phase of establishment of such a collaboration, there is a risk that the system becomes too reliant on subsidies as seen in the cases of some subsidised training programmes and employment. In some OECD countries, tax incentives are provided for employers participating in vocational education, in Bulgaria, on the one hand, there is a risk of developing subsidy dependency and on the other, corporate taxes are already very low.

Table 2.2. Past OECD recommendations on vocational educations

Recommendation	Actions taken since the 2023 OECD Economic Survey
Intensify cooperation between local authorities and the private sector to extend workplace-based vocational training across the country. Involve businesses in the design of curricula.	The national strategy aims to encourage the provision of training places by the private sector but falls short of aiming to make it universal.
Consider workplace-based training opportunities when choosing a location for new VET schools and move remote VET schools geographically closer to workplaces offering training opportunities or organise transportation.	No action.

Table 2.3. Policy recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Meeting education-related targets in an effective and efficient way	
The education system is being revamped with a vision to reach the EU average on many indicators by 2030.	Additional increase in education spending should be conditioned on further reforms and meeting performance targets.
Creating an environment conducive to higher education outcomes	
Kindergartens have become free for all in 2022, but quality remains an issue.	Increase the supply of high-quality kindergartens by providing opportunities for parents to voice their demands and coaching them on the importance of doing so.
The education strategy takes a holistic approach to address multi-faceted issues such as double-shift schooling relating to systemic inequities tied to infrastructure deficits, but some issues remain.	Enhance existing support to students whose mother tongue is not Bulgarian, including learning their own language, to facilitate the acquisition of basic skills and proficiency in the Bulgarian language. Extend the provision of free school meals.
40% of students are distracted by their digital devices during math class and 42% by others using theirs.	Better enforce the prohibition of the use of personal digital devices at school for non-educational purposes.
Lifting teachers' performance	
Moving a student from the teacher who is in the bottom 5th percentile of the quality distribution to another one at the top 5th percentile would raise the student's scores by 7 in math both in the 7th and 10th grades.	Raise the quality of teachers by offering continuous training and career development opportunities and encourage rotation of good teachers to vulnerable areas.
A large share of teachers does not feel confident in a mixed-ability or multicultural setting.	Reinforce the teaching of class discipline, classroom management as well as monitoring of students' development and expose teachers to practical experience in teacher training courses.
Teachers' technology skills and attitude towards embracing new technologies constitute even more important barriers than the lack of infrastructure and equipment.	Raise awareness of new technologies and keep teachers up-to-date in skills needed to familiarise younger generations with those technologies.
Implementing the curriculum reform effectively	
The curriculum reform will embrace new technologies and require new skills hard to acquire by elder teachers.	To make up for the shortage of specialised teachers, consider employing outside specialists to teach specific subjects requiring high technical skills.
Delaying tracking	
The early tracking system entrenches social stratification by channeling vulnerable students into inferior educational pathways. Vocational education is still mostly classroom-based.	Initiate systemic reforms to delay tracking, desegregate schools and expand workplace-based training to all vocational students.
Strengthening vocational education	
Vocational schools are underfunded and have no access to the best teachers. There is a shortage of skilled professionals in some professions.	Distribute educational resources in a more equitable way. Allow market forces to attract students to professions with a shortage of skilled personnel and by raising awareness of such opportunities.
Many vocational schools are geographically distantly located from potential workplaces.	Consider workplace-based training opportunities when choosing where to locate VET schools so schools are geographically closer to workplaces offering training opportunities or organise transportation.

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3

Reducing carbon emissions in Bulgaria

Serdar Sengul

Bulgaria has reduced emissions by 55% since 1990, meeting the EU's 2030 target ahead of schedule, primarily due to reductions in sectors covered by the EU Emissions Trading System (ETS). However, emissions remain high, and Bulgaria is behind meeting the binding target of a 10% reduction in non-ETS sectors by 2030. Continued fossil fuel use in electricity generation, inefficient housing with solid fuel heating and reliance on road transport sustain high emissions. More action is needed to align with EU goals and achieve net zero by 2050, including replacing coal with renewables, while maintaining energy security, establishing price-based demand flexibility, decarbonising industrial energy use, shifting to lower emission vehicles and improving building insulation. Targeted support is needed for energy-poor households impacted by green transition to ensure a just and inclusive transition. Bulgaria has taken initial steps to address growing vulnerability to floods, heatwaves and droughts, but climate adaption measures need to be stepped up, including increasing insurance coverage.

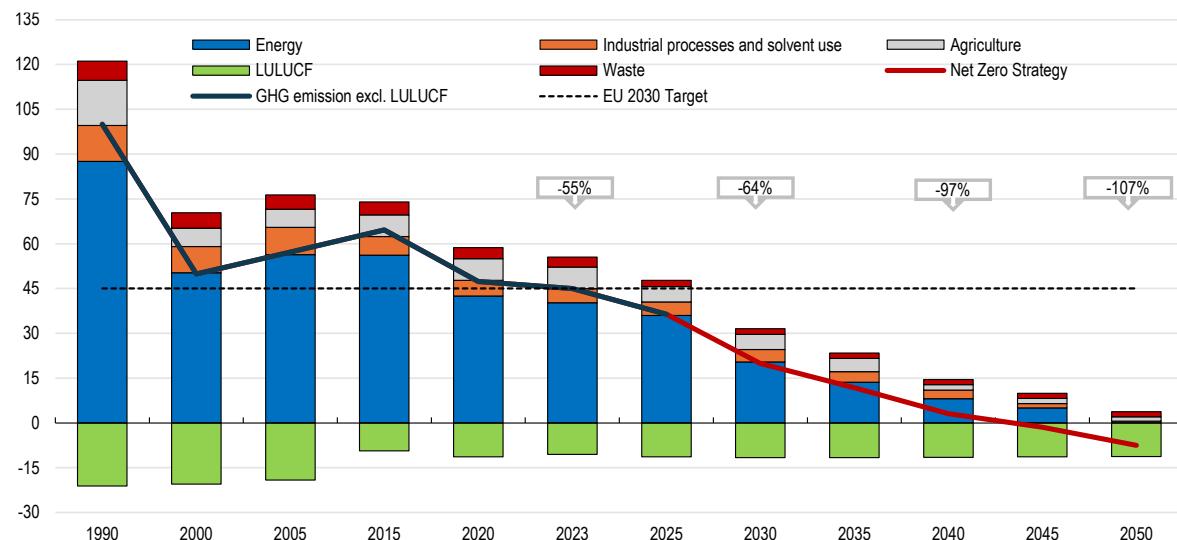
3.1. Emissions remain high and need to be reduced further

Bulgaria faces the challenge of reducing its greenhouse gas emissions (GHG), while continuing to catch up to income levels in higher income economies without compromising its energy security. Emissions have decoupled from economic growth over the past three decades. Despite the fall in emission intensity, emissions relative to GDP remained higher than in most OECD countries in 2023. Emissions peaked in 1980, but much of the emissions reduction occurred during the transition from a planned to a market economy in the 1990s.

Bulgaria reduced emissions by 55% between 1990 and 2023 and already meets the EU's target of 55% emissions decrease by 2030 compared to 1990 levels (Figure 3.1). A significant part of this reduction has been achieved in sectors covered under the EU emission trading system (ETS), where emissions fell by 43.4% between 1990 and 2023. In addition, Bulgaria faces a binding target of a 10% emission reduction by 2030 relative to 2005 in sectors not covered by the ETS, including the transport, agriculture, residential and waste sectors. Bulgaria is not on track to meet this target as total emissions from these sectors decreased only by 3% over 2005-2023. The implementation of ETS2 from 2027 should support this goal, but Bulgaria will need to implement additional measures to meet the target. The update of the draft Integrated National Energy and Climate Plan (INECP) published in January 2025 is welcome. The updated plan sets out a long-term net zero scenario with more ambitious targets for 2030. Given the progress so far, Bulgaria is likely to meet its more ambitious target by 2030. However, additional measures will be needed, and the plan will need to provide clearer description of these measures, to achieve climate neutrality by 2050 (Ministry of Energy, 2025^[1]).

Figure 3.1. Bulgaria already meets the EU target of reducing emission by 55% by 2030

GHG emissions as percentage of 1990 levels



Note: LULUCF stands for Land Use, Land-Use Change, and Forestry. Bulgaria is projecting a 64% emission reduction by 2030, 97% by 2040 and 107% by 2050.

Source: Ministry of Energy (2025), Integrated Plan Energy and Climate, The Republic of Bulgaria (Updated).

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The largest share of emissions is produced by the energy industries, followed by the transport sector and industry. Direct emissions from the residential sector are a small share, but the sector's high share of final energy consumption needs attention. Fossil fuel use in electricity generation, high reliance on road transport and poorly insulated buildings with solid fuel heating (coal and firewood) are the main reasons for high GHG emissions.

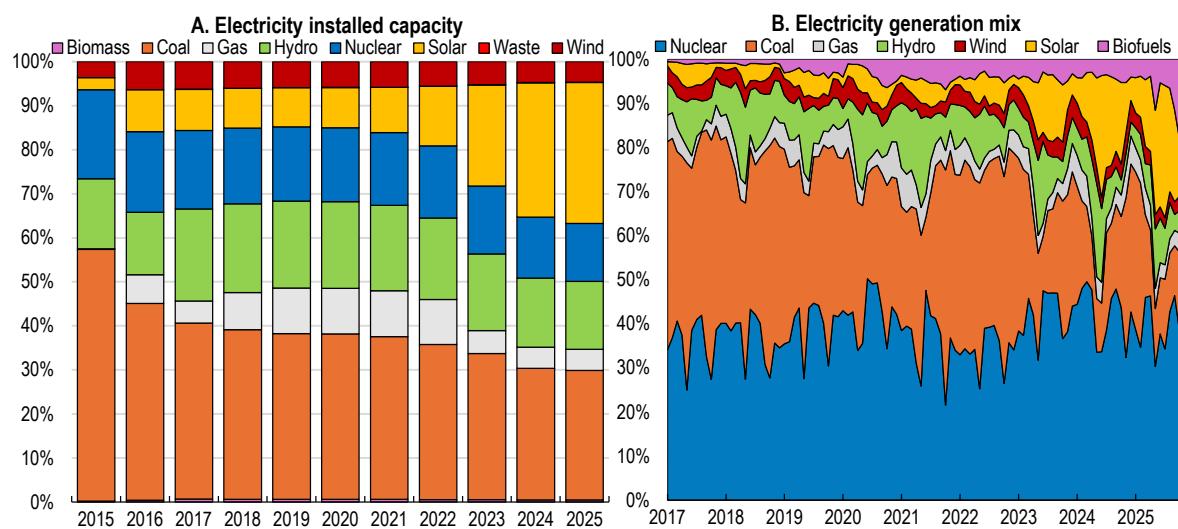
This chapter identifies a mix of policies that would support Bulgaria in lowering emissions. Domestic policies need to further facilitate the green transition, including: replacing coal with renewables in electricity generation without compromising energy security and while addressing the socio-economic impact of the transition (Section 3.2); decarbonisation of energy use in the industrial sector (Section 3.3); switching to lower-emission vehicles (Section 3.4); and improving the insulation of buildings and decarbonising heating (Section 3.5) with support measures for

energy-poor vulnerable households. Despite these mitigation efforts, global temperatures will continue to rise. Bulgaria will need to build resilience to the impacts of rising temperatures and more frequent extreme weather events with adaptation and insurance policies (Section 3.6).

3.2. Decarbonising electricity generation

Bulgaria decreased its reliance on fossil fuels in electricity generation significantly in recent years (Figure 3.2 Panel B). However, with abundant domestic coal supply and production at comparatively low cost in open-cast mines, the country has built significant dependency around it over the past decades. The electricity system is largely built around centralised coal-fired power stations in the coal producing regions of Stara Zagora, Kyustendil and Pernik. Efforts to reduce emissions in the electricity sector, while essential for achieving Bulgaria's net zero objectives by 2050, may increase tensions with energy security objectives without coordinated actions that ensure alternative energy supply, cross-border interconnections and system flexibility. Bulgaria's strategy focuses on gradually replacing coal with new and expanded electricity generation capacity, mostly photovoltaics (PV), wind and nuclear with a combined capacity of 2,400 MW. This will require a major overhaul in the power mix and upgrading the infrastructure, along with significant social and economic transformation for those areas historically dependent on the coal sector. The scale and urgency of these transformations require a full set of coordinated policies that ensures a smooth, sustainable and inclusive transition.

Figure 3.2. Coal still plays a critical role in power generation



Source: ENTSO-E and Eurostat - Net electricity generation by type of fuel.

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Nuclear power can contribute to improving energy security, and nuclear electricity production is more stable over time compared to intermittent renewables, while also being low-carbon, although concerns involve high-impact negative risks in case of severe nuclear accidents. It is important for nuclear projects, as well as any other energy project, to be underpinned by transparent and comprehensive life-cycle cost-benefit analyses that inter alia account for the cost of constructing power plants, storing nuclear waste and decommissioning disused power plants. The current nuclear power projects are in the planning phase and, in any case, have a long lead time and are not expected to be completed before 2035. In the near term, Bulgaria will rely more on renewable energy sources. The intermittent nature of renewable energy sources creates a gap between installed capacity and actual electricity generation (Figure 3.2). This utilisation gap, in addition to system flexibility required (e.g. storage, aggregators, flexible contracts, balancing services, interconnection with other countries) poses risks to supply adequacy, particularly during peak demand or low-generation periods. Bulgaria, having been a traditional electricity exporter in the region, already became a net importer in 2024.

3.2.1. A detailed coal phase out strategy is needed

Bulgaria's coal phase out strategy permits unrestricted operation of coal-fired power plants until the 2038 non-binding deadline. However, this approach is increasingly misaligned with climate objectives. High carbon prices, reaching EUR 84 per ton of carbon dioxide equivalent in 2025, have reduced the profitability of coal power generation, leading to early plant retirements. Nearly half of coal plants have either been retired or mothballed already, leaving business in the supply chain and employees unprepared. Despite market pressure for closures, the remaining coal plants, averaging 41 years in age, have another 15 years of lifetime. The Climate Neutrality Roadmap, adopted in 2024, foresees decommissioning 36% of 2024 coal power installed capacity by 2026, and keeping around 20% of 2024 capacity until 2035 as a strategic reserve to meet the needs for system stability, while recent amendments to the Climate Change Mitigation Act introduced a combined emissions limit to coal-fired power plants. To ensure an orderly and socially equitable transition in line with these objectives, Bulgaria should implement plans to phase out coal and develop a detailed plan for the closure of coal plants that ensures energy security and stability of supply, including a reserve capacity for ancillary services. This should include a timeline for closures, a reserve of coal power generation to compensate for supply imbalances, investment in renewable energy infrastructure, targeted support for economic diversification, and workforce training programmes. Clear policy signals will provide certainty for operators and investors, while mitigating the socioeconomic impacts on affected regions.

Nearly all of coal production (98%) is used domestically in electricity and heat generation with little export capacity. The closure of coal plants is likely to have direct impact on business and people in its supply chain, including a large, vacated mining area (2 190 hectares), stranded assets in coal plants and an estimate of around 32 000 jobs (Ministry of Energy, 2023[2]). To ensure an orderly phase-out, the plans could introduce compensation mechanisms that provide clear price signals for operators to scheduled exit the market or for conversion. Competitive bidding schemes, such as auction-based shutdown or conversion premiums, as was done in Germany, can ensure transparency, fiscal efficiency, and emission reductions. Applying a similar model could achieve the emissions reductions targets in the energy sector and can be financed with provisions from the Just Transition Funds (JTF). Conversion of coal-fired power plants into renewable energy generation and storage systems, as currently being implemented by AES Bulgaria, can limit assets being stranded, recoup some of the remaining value and allow the community to maintain a source of jobs and taxes. Such conversions could be prioritised for permitting but may require high upfront investments. A cost-benefit analysis will be essential to determine economic feasibility.

Government support will be needed to minimise employment and income losses from the coal phase-out, especially in Stara Zagora, Pernik and Kyustendil, where coal mines and plants are most concentrated. The government has taken initial steps, including a survey to map the skills of the employees and trainings for qualification and retraining in the 12 enterprises operating in the energy sector. Meanwhile, labour unions are negotiating with the government for an early retirement plan for those working in the mines and power plants. However, further efforts are likely to be needed to ensure a smooth and inclusive transition. As highlighted by the previous Economic Survey, the unemployment insurance net replacement rate is high by international standards, but with short coverage duration, ranging from 4 to 12 months depending on past contributions, reducing its effectiveness. Furthermore, once benefits expire, individuals must wait six months before qualifying for social assistance, creating a protection gap for many displaced workers. As a first step, the government could ensure that existing safety nets, such as unemployment insurance, support all employed people that will be affected by the transition. The Coal Workforce Transition Program in Canada provided a bridge to re-employment for up to 75% of earnings for 45 weeks or until full-time employment, whichever happens first. Implementing the same programme would cost up to EUR 156 million (0.2% GDP), which could be funded under JTF provisions. Bulgaria should also focus ongoing active labour market measures on job placement and retraining policies needed in these regions based on the survey results to prevent exiting the labour market and support the development of new industries.

3.2.2. Demand flexibility requires strengthening domestic price signals

In Bulgaria, regulated retail prices (Box 3.1) and business subsidies continue to distort market signals that are critical for efficient energy use and demand-side flexibility. Wholesale prices were among the highest in the EU, but both regulated household prices and subsidised business electricity prices were among the lowest in 2024 (Figure 3.3). This disconnect weakens incentives for consumers to reduce or shift electricity use, in particular, during peak

demand, while weakening business incentives to transition to energy efficient production technologies. In addition, windfall taxes on energy generators' and energy traders' revenues have been used to finance subsidies via the Electricity System Security Fund (ESSF), which undermines energy generators' investment incentives for much needed renewables. Regulated tariffs for households and industrial subsidies should be removed to align retail and wholesale prices with the market and enable price-based demand response mechanism that will achieve energy efficiency and emissions reduction while reducing supply imbalances risks. Bulgaria should ensure that electricity market liberalisation is accompanied by targeted support for vulnerable households to ensure affordability, for example either by direct compensation or significantly reduced prices, alongside public awareness campaigns to promote demand-side flexibility and energy-saving behaviour.

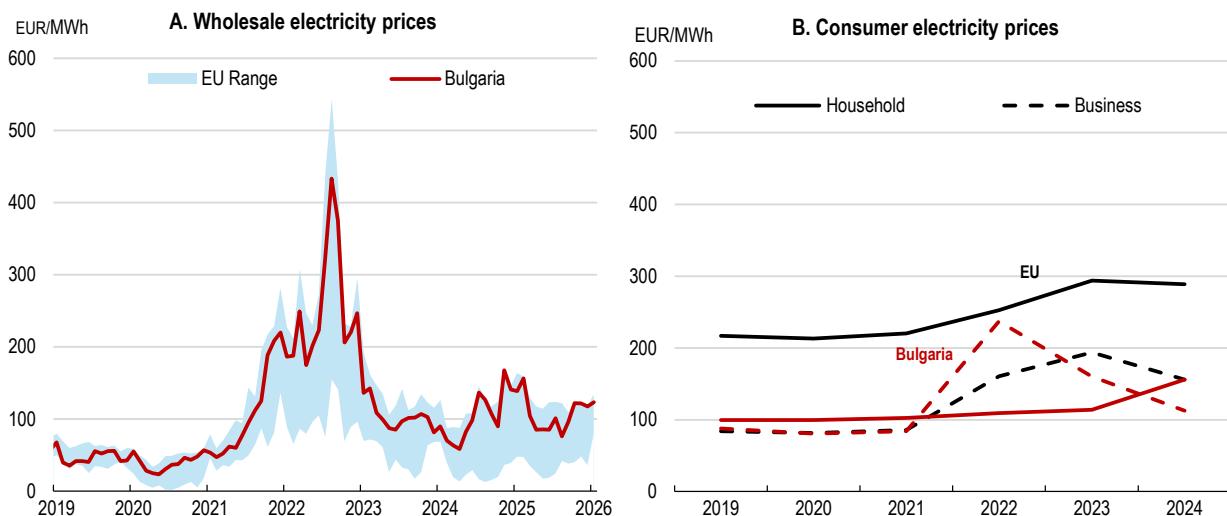
Box 3.1. Household electricity price setting in Bulgaria

Bulgaria's electricity market operates under a dual structure, combining a liberalised wholesale market with a regulated retail market for households. At the core of the regulated segment is the state-owned enterprise, National Electric Company (NEK), acting as the sole provider to designated end-suppliers and central buyer. The wholesale segment of the regulated market was liberalised on 1st July 2025. Designated end-suppliers will now buy electricity at competitive prices from the market through auctions.

The liberalisation of the retail segment of regulated market, however, has been postponed indefinitely by the parliament in May 2025. In the new scheme, the Electricity System Security Fund (ESSF) will compensate the difference between market prices and regulated household electricity prices, set by the Electricity and Water Regulatory Council, directly to the end-suppliers. Household electricity prices will be set annually, and the market price for compensation will be calculated as the monthly weighted average prices on the day-ahead market for the quantities purchased. The ESSF is financed through a 5% tax rate applied on the turnover of electricity producers and operators, and revenues from the sale of carbon emission allowances. Bulgaria has committed to undertaking preparatory measures for the liberalisation of the retail electricity market under the Recovery and Resilience Plan, including setting up and maintaining an information system of energy-poor and energy-vulnerable households and designing measures for energy-poor and energy-vulnerable households.

Source: OECD Compilation.

Figure 3.3. Consumer electricity prices are disconnected from market prices



Source: EMBER and Eurostat.

StatLink  <https://stat.link/qsikep>

An important component of an effective demand response is dynamic pricing contracts, such as time-of-use or real-time pricing, combined with smart metering (see (OECD, 2025 (Forthcoming)[3])). Together, they allow consumers to monitor usage, respond to price changes, and reduce consumption during peak times. Bulgaria has been working

to deploy smart meters under EU funded projects, but implementation has been delayed, and penetration remained below 1% in 2023, the lowest in the EU (ACER, 2024^[4]). Introducing dynamic pricing contracts and accelerating the rollout of smart meters after the liberalisation could enable efficient price-based demand responses and emissions reductions. Consumer participation in clean energy markets also remains constrained. Rooftop solar generation and renewable energy communities can contribute to local flexibility and reduce system emissions, but current regulatory requirements impose significant barriers. Households must contract directly with electricity traders to sell excess electricity, disincentivising participation and limiting decentralised generation, and licencing and registration are not tailored to small size of renewable energy communities. Bulgaria should simplify these procedures and allow automatic compensation at market prices to enable more households participate in decarbonisation efforts.

3.2.3. Reducing administrative burdens would boost renewable investment

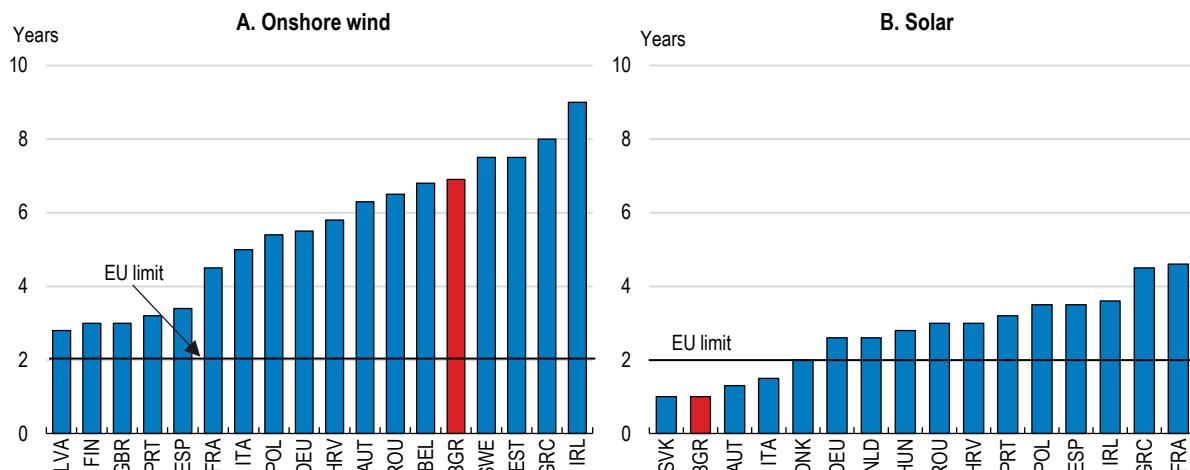
Accelerating deployment of renewable energy generation capacity is crucial to meet the projected increase in electricity demand while reducing emissions without compromising energy security. Bulgaria has an EU renewable energy generation target of 35% of final energy consumption and the electricity sector has a target of 49% of gross final consumption of electricity by 2030. Bulgaria is on track to meet both targets as the share of renewable sources in installed electricity capacity increased to 50%, and projects in the pipeline are expected to increase this share to 75% by 2030 (Electricity System Operator, 2025^[5]). However, due to intermittent nature of renewable energy sources, installed capacity does not always generate electricity at the same rate.

The current interest in and pace of renewable energy investment are encouraging but this momentum should be maintained until sufficient resources to replace coal power are in place, especially for offshore wind, where facilities are yet to be installed despite the country's rich potential. Progress has been hampered by the shelving of a dedicated Offshore Renewable Energy Law after its first reading in Parliament in 2022. This law, together with Marine Spatial Planning, should be developed to unlock offshore wind plant development. More broadly, the government has largely supported renewable energy installations through Recovery and Resilience Funds (RRF), as well as through price incentives such as feed-in tariffs and feed-in premiums. While these support schemes provide incentives to private investors, their fiscal cost will increase with the expansion of renewable energy generation. A less costly alternative to consider could be contracts for differences (CfDs) via competitive auctions. These contracts can offer a stable and predictable revenue framework for investors by guaranteeing a fixed "strike price" for electricity, where differences relative to this price are exchanged between the government and generators. Power Purchase Agreements should also be utilised more extensively to encourage investment in utility-scale renewable energy as they provide long-term revenue certainty and thus support market-based deployment.

An important challenge to faster renewable energy deployment is the lengthy and complex administrative procedures linked to construction permits, land-use procedures and grid connection permits. As in many other countries, long permit procedures impede the deployment of renewables. While the time needed to get a permit is one year for PV installations and is under the two-year limit set by the EU Renewable Energy Directive, it takes around nearly 7 years for onshore wind (Figure 3.4).

Figure 3.4. Lengthy permit processes are slowing deployment of wind energy

Permitting times, years



Note: The EU limit of 2 years is stated in the Renewable Energy Directive (2018/2001) as amended by Directive 2023/2413. Data only available for the countries presented in the Figure.

Source: OECD calculations based on European Commission (2022), “Technical support for RES policy development and implementation”, Simplification of permission and administrative procedures for RES installations (RES simplify).

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Recent measures lowering regulatory barriers for renewable energy generators below 20MW and expediting the licencing procedures are welcome, but more policy action is needed. Despite the establishment of administrative centres (one-stop shops), the application process remains scattered and requires numerous permits from different authorities. Digitalising the one-stop shops and permit procedures similar to the digital one-stop-shop in Portugal (RAU), including a “silence is consent” mechanism, would ease the administrative burden for investors. This could also serve as a single repository to track projects in the pipeline for all stakeholders and plan accordingly. The requirement to establish a separate construction right with a notarial deed creates unnecessary complexity and could be incorporated into lease agreements. The Constitutional Court annulled provisions that allowed agrivoltaics on high-fertile land without changing the land-use rights. Regulatory barriers to agrivoltaics need to be removed. The procedures for land-use changes for agriculture can take up to two years and should be simplified. Exemptions for low-fertile land under five hectares are not effective for large scale utility investments. These could be aligned with investor needs as in Romania, where low-fertile agricultural lands are allowed to be used up to 50 hectares (OECD, 2024^[7]). Grid connection procedures are another complexity for investors as they are required to apply to the electricity transmission operator (ESO) three times at different stages of the project. Allowing for grid connection under one application, in parallel to other authorisations, as in Austria, can help speed up the overall permit-granting process. Moreover, Bulgaria should make grid connection queue management more efficient. Currently, grid connection is operated on a partial first-come, first-served basis with a guarantee fee of BGN 50 000 to discourage speculative applications. But the early imposition of the fee in the project development cycle risks deterring legitimate investors. Moving to a first-ready, first-served basis – or based on their social and system value – can help ensure that limited grid capacity is used more efficiently to support timely and impactful deployment (OECD, 2025 (Forthcoming)^[3]). A standardised and transparent cost methodology would also provide more clarity to investors for financial planning.

3.2.4. Transmission grid and cross-border interconnections need to be expanded

Bulgaria’s electricity transmission infrastructure and cross-border connections need to expand significantly to support the fast transition to renewable energy. According to the Electricity System Operator (ESO), the growing share of intermittent renewable generation could necessitate both curtailment and higher imports to ensure system stability under different demand scenarios (Electricity System Operator, 2025^[5]). Expanding the domestic transmission network and cross-border interconnections would reduce the risk of curtailment and increase supply

availability from neighbouring countries. However, grid expansion plans are not up to speed with renewable installations. This risks underutilisation of clean energy investment as well as energy security, especially if the coal phase out is not carefully timed. The ESO's most recent Ten-Year Development Plan estimates that renewable energy installations will nearly double by 2034 (Electricity System Operator, 2025^[5]). Renewable energy facilities are usually geographically distributed and are not always where the spare grid capacity is, requiring significant investment and planning to expand the grid at the pace of new renewable installations. A more proactive grid expansion planning is needed, which could identify and prioritise "renewable acceleration areas" based on the earlier investment intentions declared to the ESO and start development early on with the profits made through network charges. Integrating these areas to current grid mapping would provide more clarity to future investors on available locations for investments and help coordinating grid development plans with future installations. Similar approaches have been implemented in countries such as Australia, South Africa, and the United States, where designated zones have streamlined grid investment and project permitting.

Strengthening cross-border electricity infrastructure is also essential to maintain system balance and reduce curtailment. Bulgaria is part of the South-East Europe Capacity Calculation Regions (CCRs), together with Greece, Romania and several Western Balkan countries. Market coupling in this region allows Bulgaria to benefit from more efficient electricity trading and improved security of supply, especially during both peak and low demand periods. However, the widening price gaps between the South-East Europe and CORE CCRs during the summer of 2024 highlighted the limited cross-border capacity available for trade. While Bulgaria has already met the EU interconnection target of 15% of installed capacity, there is more scope to expand interconnection network. The commissioning of Nea Santa interconnector between Greece and Bulgaria in 2023, as well as the implementation of the Project of Carmen with Romania will expand current cross-border inter-connection capacity further while allowing cross-border TSO-TSO cooperation and data-sharing (Electricity System Operator, 2025^[5]). The ESO also plans to expand cross border network with other countries and by 2.5 times in total by 2030. The combined expansion of domestic transmission infrastructure and cross-border interconnection will be important for integrating growing shares of renewable energy and meeting rising electricity demand while maintaining a resilient and flexible grid.

3.2.5. Bulgaria is expanding its energy storage and balancing capacity

The intermittent nature of renewable energy generation and higher cross-border trade will also increase the need for ancillary services, such as inertia, frequency and voltage control, as well as real time balancing services to maintain grid stability and security of supply. Bulgaria joined the EU's PICASSO balancing platform for frequency restoration in February 2025, which will allow the country to procure balancing energy in real-time at internationally competitive prices. In addition, a new 15-minute settlement period with a single pricing model in the domestic balancing market will improve market price signals and help reduce imbalances. Fragmentation of balancing groups limits the netting of imbalances and increased exposure to high marginal prices for shortages, as observed during the summer of 2024. Higher balancing costs can lift wholesale electricity prices, widening the gap with the regulated prices consumers face and increasing the fiscal burden. The recent introduction of aggregators into the balancing market is welcome and should enable demand response while providing flexible supply by aggregating small-scale and distributed resources such as renewable energy communities, rooftop solar generation, and local battery storage systems. However, there is currently only one aggregator in the market. Bulgaria should promote participation of more aggregators in the balancing market, which can improve market flexibility and encourage more small-scale producer participation.

Energy storage systems are essential in providing ancillary and balancing services. The partial rehabilitation of the Chiara Pumped Storage Plant in 2024 restored 25% of capacity, and ongoing efforts aim to return the remaining three turbines to operation by 2026, eventually restoring the plant's full capacity. In the longer term, two new pumped storage hydropower plants are planned at Batak and Dospat, adding two times more dispatchable capacity and supporting voltage and frequency regulation (Ministry of Energy, 2025^[1]). However, both projects face delays and are only expected to become operational by 2035 and 2040, respectively. To meet more immediate system needs, battery energy storage systems are gaining importance. The government has approved around more than seven times Bulgaria's projected need of Battery Energy Storage Systems in the INECP by 2030 (Ministry of Energy, 2025^[1]) as part of the EU-funded national infrastructure for storage of renewable energy (RESTORE) project. However, deployment faces challenges related to permitting and grid connection. Timely approval processes will

be critical to meet the March 2026 Recovery and Resilience Facility (RRF) deadline and to prevent bottlenecks in bringing this capacity on stream. In addition, despite their flexibility and short-term value, lithium-ion BESS technologies present limitations. Usable capacity is generally around 80% of rated capacity, with efficiency losses at high discharge rates and an average degradation rate of about 1% per year under daily cycling. Given these technical limitations, uncertainty around electricity price volatility can lead investors to demand shorter payback periods, potentially leading to early obsolescence and increasing system costs. Ensuring long-term grid stability therefore requires a balanced approach that supports both short-duration BESS deployment and medium and long-duration storage such as pumped hydropower.

3.3. Reducing emissions in the industrial sector

Direct emissions from the industrial sector are among the highest in the EU and account for 15% of the total, split equally between energy use in manufacturing industries and construction, and industrial processes and products use. Emissions in this sector have declined by 75-80% since 1990 given the restructuring of the industrial sector during the transition to a market economy. While emissions from industrial sectors are covered by the EU-ETS, and rising carbon prices under the EU ETS will continue to encourage emission reductions in these sectors, certain industries have increased their emissions over this period, in particular refined petroleum, cement production, construction and chemical sectors.

Bulgarian industry will face competitive pressures from higher carbon prices and energy efficiency compliance requirements. Mandatory audits every five years and a legal requirement to implement prescribed energy-saving measures for industrial enterprises with annual energy consumption exceeding 3 000 MWh are the key policy tools to reduce emissions in this sector. To avoid increasing carbon costs, Bulgarian industry could decarbonise its energy consumption proactively by investing in renewable energy generators for self-consumption. Bulgaria has also put forward legislation for that purpose and provided financial support to promote on-site renewable energy generation, particularly solar photovoltaic energy and battery storage facilities (Ministry of Energy, 2025^[1]). This is welcome as renewable energy generation for self-consumption can accelerate the green transition while reducing the need for large-scale renewable energy facilities and grid expansion to connect them.

While decarbonising energy consumption is essential for reducing emissions, it alone will not be sufficient, particularly in those sectors where emissions are a core part of a production process. The cement sector, which accounts for 24% of Bulgaria's industrial CO₂ emissions, is a key example. Carbon capture utilisation and storage (CCUS) technologies can be an alternative for reducing emissions in these sectors. Regulations on CO₂ storage in the subsurface were adopted in 2012 and established the responsibilities of operators in storage. The country also has a number of storage options, notably, the Pleven saline aquifer (Concensus, 2022^[8]). Despite the technical potential, there are currently only two projects under implementation. One major barrier is that carbon capture technologies are typically more expensive than purchasing emission allowances (Malz, Oei and Herpich, 2025^[9]). However, with the planned phase-out of free allowances and rising carbon prices, CCUS can become increasingly cost competitive. To capitalise on this shift, Bulgaria should proactively develop a long-term strategy for carbon capture. Early planning will provide the industry with the policy signal needed to invest and adapt, while helping to avoid a more costly adjustment to rising carbon prices.

3.4. Reducing emissions from the transport sector

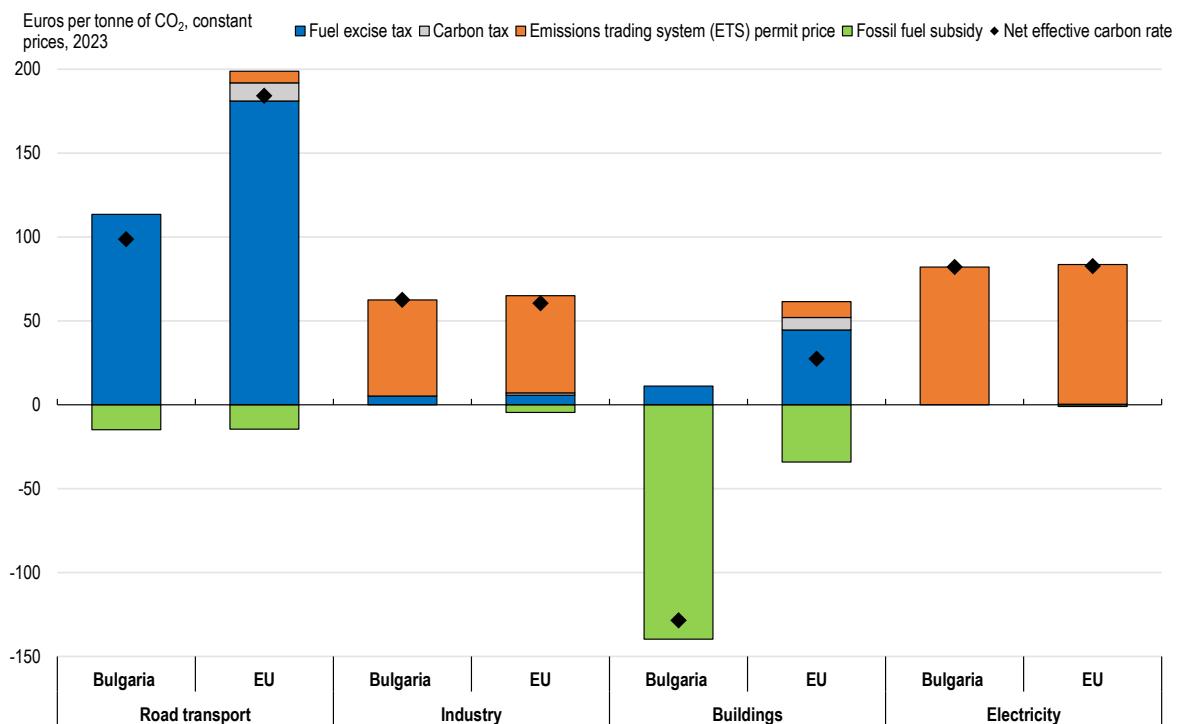
GHG emissions from the transport sector accounted for 23% of GHG emissions in 2023 and have increased more than in any other sector over the past two decades. The increase reflects largely a growing and ageing vehicle fleet, an increasing share of road transport, especially by passenger cars, and underdeveloped road and railway infrastructure. Bulgaria should reform current fuel and car taxation to allow for a transition to low-emission vehicles. This should be complemented with sustainable urban mobility measures to facilitate public transport use, and improvement of its road and railway infrastructure.

Fuel taxation lags OECD best practices. Bulgaria has the second lowest petrol and diesel taxes among EU countries (TFE, 2024^[10]), and the equivalent effective carbon rate is significantly below the EU average (Figure 3.5). There is

more scope to increase fuel excise taxes. While discussions on the EU Energy Taxation Directive to set tax rates based on the energy content and environmental performance of fuels are ongoing, Bulgaria should not wait for the EU reform. Tax on diesel should at least be aligned to the tax on petrol, if not higher, to reflect the emission content. Bulgaria should gradually raise fuel duties in line with the EU reform. Aligning diesel and petrol taxes with the EU average could generate additional revenues of around 0.2% of GDP.

Figure 3.5. The effective carbon rates in road transport remains low due to low excise duties

Weighted average of effective carbon rates across sectors in Bulgaria and EU

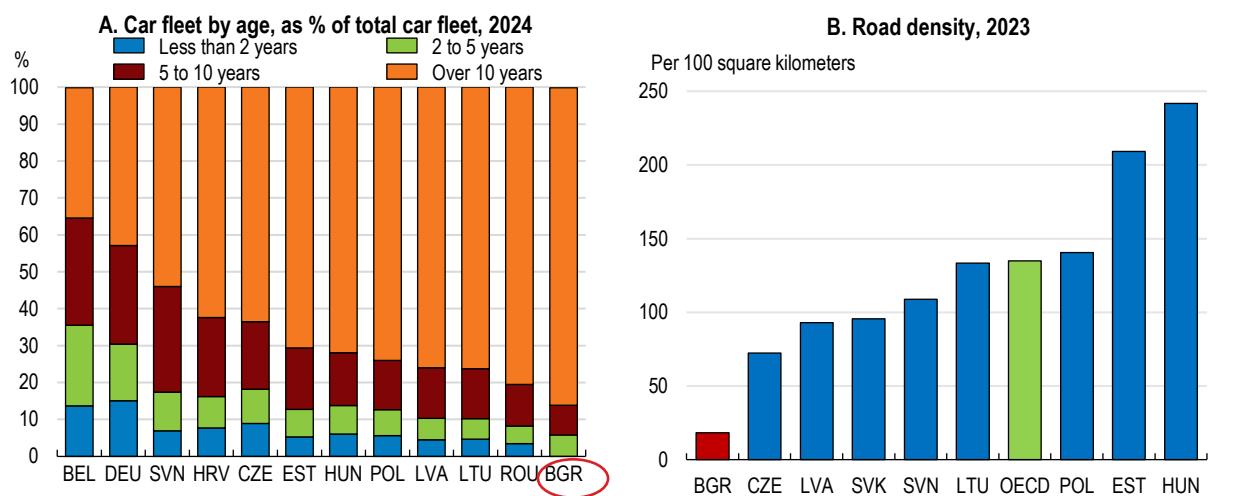


Source: OECD Pricing Greenhouse Gas Emissions 2024.

StatLink <https://stat.link/ydi6vz>

Bulgaria's car fleet is growing fast while around 75% of cars are 15 years or older (Figure 3.6 Panel A), indicating many emissions intensive vehicles. High average ages reflect low incomes and a strong reliance on second-hand vehicles imported from other European countries. A progressive vehicle tax regime increasing with the level of emissions and scrapping schemes for older polluting vehicles should be implemented to incentivise a faster switch to lower emission vehicles. The 2018 amendments introduced two components formula for the determination of vehicle tax amount: environmental and property, together incentivising both low-emission and old vehicles. The environment component includes a correction coefficient rightly providing relief for vehicles that comply with environmental standards of "Euro 4" and higher. However, the coefficient that reflects the age of the vehicle in the property component reduces the tax amount as the vehicle gets older. For example, holding the environmental category and engine power criteria constant, a 20-year-old vehicle is taxed at only half the rate of one that is less than five years old (see calculator (Bulgaria Information Services, 2020^[11])). This design encourages continued imports of older second-hand cars and weakens incentives to replace polluting vehicles. In order to accelerate the switch, the current vehicle taxation could be rebalanced with a higher tax for the registration of high-emitting cars. Experience from the US, Germany and France shows that such schemes, if well-designed, can effectively lower emissions (OECD/ITF, 2011^[12]).

Figure 3.6. The car fleet is old and expanding, while road infrastructure remains underdeveloped



Note: For panel A, data correspond to 2023 for Belgium and Poland.

Source: Eurostat; Registered Car database, Republic of Bulgaria Ministry of Interior; OECD Transport performance indicators.

StatLink  <https://stat.link/lny179>

Activity in the electric/hybrid vehicle market nearly doubled over 2022-2024, the share of electric/hybrid vehicles remained at only 7% of new passenger cars sold. Widespread adoption of electric vehicles could be difficult in Bulgaria due to affordability, range anxiety and lack of charging-point network. The density of charging stations remains among the lowest in the European Union with only 1 624 charging points (0.2 per 1 000 habitants) at the end of 2023 (ACEA, 2024^[33]). Most infrastructure is privately funded, and the planned Cohesion Fund investments in 160 additional charging stations will not be sufficient to drive widespread adoption. The government's 2022 draft law on electric mobility, targeting 10 000 charging stations by 2026, remains pending and should be implemented as a priority.

Mobility by public transport decreased by around 40% during the pandemic and recovered very little. Public transport systems are underutilised and dominated by buses with a modal share four times higher than rail. Ensuring efficient and speedy investment in public transport, including rail, will be an important incentive for shifting passenger transport as disincentives for personal car use increase. The increase in the cost of fuels with the implementation of ETS2 may initiate a return to public transport in urban areas but more proactive policy actions with sustainable urban mobility solutions will be needed to reduce urban transport emissions. Only 20 out of 295 municipalities have so far developed their Sustainable Urban Mobility Plans in Bulgaria (European Commission, 2024^[13]). Several initiatives launched in the capital, Sofia, including expansion of cycling infrastructure by three times, introducing on-demand green public transport and extension of the metro network, could be extended to other large urban areas, such as Plovdiv and Varna. Low-emission zones in major urban areas, as in Sofia, would restrict access to polluting cars especially during peak hours and can encourage a shift to public transport. Local governments could also consider introducing congestion charges, as in London and Milan. When integrated with accessible public transport connections from areas outside the congestion zones, this can provide additional incentives to reduce car use within city centres.

Bulgaria's inland freight transport has shifted towards road, increasing from 48% in 2005 to 65% in 2023 with an ageing vehicle fleet, of which 40% is over 10 years old. While road freight remains dominant, it has declined by 10% since 2019—the largest drop in the EU—highlighting both structural weaknesses and opportunities for modal shift. In contrast, inland waterway transport accounts for nearly 18% of freight, benefiting from the Danube corridor's efficiency and low emissions. Bulgaria plans to double the share of rail (20%) in inland freight transport by 2050 and is working to develop a network of intermodal terminals and logistic centres, and to upgrade the connecting railway infrastructure to existing port and railroad terminals, starting with Sofia and northern Bulgaria by 2030 as part of the EU's Transport Connectivity programme (Ministry of Energy, 2025^[1]).

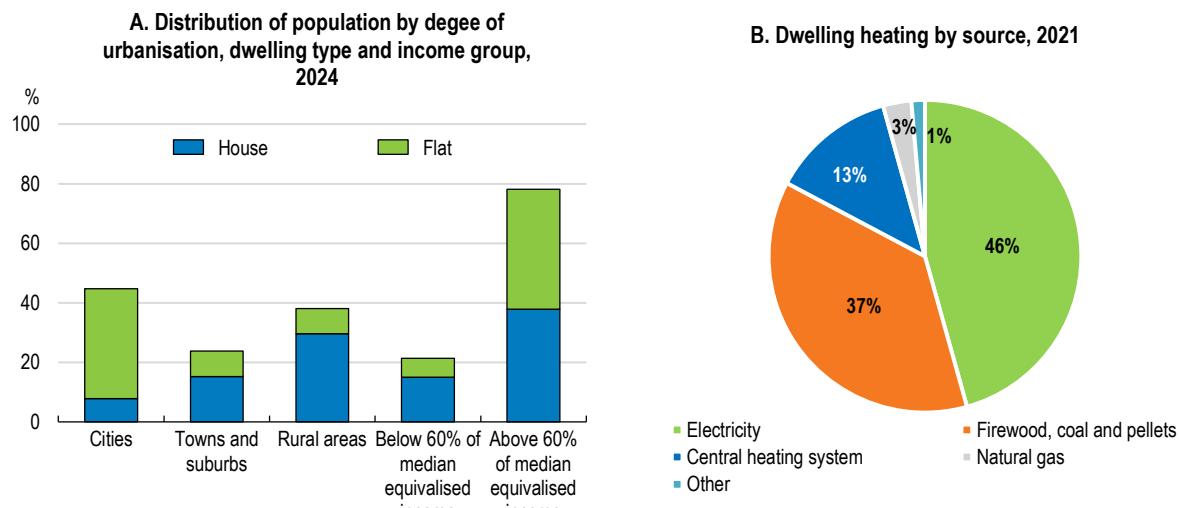
Achieving this goal requires major improvements in transport infrastructure. Road density in Bulgaria is very low compared to peer and OECD countries (Figure 3.6 Panel B). Road networks remain sparse and poorly connected, particularly in rural areas. Nearly 60% of roads are single-lane third class roads, resulting in extended transport times and higher emissions. Rail infrastructure, despite being 75% electrified, is largely single-track and outdated, leading to slow speeds, long travel times, and limited reliability (Ministry of Transport, 2017^[14]). These conditions undermine the competitiveness of rail freight and public transport. EU-supported investments in modernising both road and rail infrastructure, rolling stock, and intermodal hubs are underway (Ministry of Energy, 2025^[1]). However, infrastructure upgrades should be complemented by demand-side measures, including emissions linked annual road tax promoting the switch to rail or inland waterways where possible to curb emissions. Bulgaria has still not implemented the Eurovignette Directive, mandating countries to adjust road tolls for heavy and light duty vehicles based on energy efficiency and emissions. Bulgaria should implement this without delay.

3.5. Making the residential sector less energy- and carbon- intensive

Bulgaria's housing stock is poorly insulated and needs to be upgraded to improve energy efficiency. Buildings with poor energy performance (energy consumption classes E, F and G) comprise 91% of non-renovated buildings (Ministry of Finance, 2023^[15]). The government aims to renovate around one fourth of the residential building stock by 2030 and three times that by 2050. The recent regulatory requirements for new buildings to meet "near zero-energy use" that came into force on 1 January 2024 (Ministry of Energy, 2025^[1]) is a positive step forward but most, existing homes are energy-intensive and require renovations. The National Programme for the Energy Efficiency of Multi-Family Residential Buildings (NEEMEZ) is expected to contribute significantly, covering up to 75% of the 2030 target by 2026. Support measures have so far been concentrated on renovating multifamily buildings, leaving behind many single houses of lower-income families.

A key challenge—particularly in multi-family buildings—is the transition from NEEMEZ's current 100% grant model to a co-financing approach that requires greater homeowner participation. While many countries cap public subsidies at a fixed amount or percentage (Hoeller et al., 2023^[16]), such a model may face significant implementation barriers in Bulgaria. Renovations in apartment blocks require agreement from at least two-thirds of owners, which can be unachievable given the high upfront costs. Lowering voting requirements to a simple majority, as has been done in Austria and Lithuania, could expedite decision making but may leave low-income households in financial difficulty against their will. In addition, the current subsidy programmes for multi-apartment blocks ultimately favour urban dwellers, leaving single-family houses (around half of dwellings) largely unsupported (Ministry of Energy, 2025^[1]). In Bulgaria, 15% of the population are below 60% of median income and live in houses, largely in rural areas, compared to 6.4% living in flats (Figure 3.7 Panel A). In transitioning to a co-financing model, while reducing grant support to financially able homes, Bulgaria should replace grants with loans based on income level and target support to energy-poor household in both multi-family buildings and single-family houses. The upcoming Social Climate Fund from the receipts of ETS2 revenues will be purposed specifically to support energy-poor households. In the first instance, households (around 320 000 homes) who have already applied and been approved for heating allowance could be targeted. These households are in extreme fuel poverty. The Ministry of Labour and Social Policy designed measures to support vulnerable households with energy-efficient cooking as well as heating and cooling appliances. Bulgaria could also consider providing renovation vouchers instead of direct income support, for example for replacing windows and replacing heating appliances, to be used with pre-approved service providers.

Figure 3.7. A significant share of the population is below 60% median income and live in houses



Source: Eurostat, NSI 2021 Population Census.

StatLink  <https://stat.link/6m7cp5>

Renovation efforts largely focus on housing insulation, but decarbonisation of heating systems is equally important for reducing emissions in the residential sector. Measures are being taken to raise the cost of housing-related emissions and to support the retrofitting of heating systems and increase energy efficiency. Based on EU policy, fossil fuels in the residential sector should be phased out by 2040 and existing buildings should meet zero-emissions standards by 2050. The expansion of the EU-ETS 2 to heating fuels in 2027 will increase the cost of carbon-based energy. Bulgaria has achieved a shift from burning wood and coal towards electricity use in dwelling heating: almost half of occupied dwellings (46%) were heated with electricity in 2021 up from 29% in 2011, while reliance on wood and coal has declined from 54% to 37%, with the remaining households relying on district heating and cooling systems (Figure 3.7 Panel B) (Ministry of Energy, 2025^[1]). However, the use of coal and wood-based inefficient stoves in homes persists, generating emissions as well as indoor air pollution. To support transition, the government provided a number of support programmes under EU funds, especially for energy poor households, for retrofitting heating systems with rooftop solar heating or electricity installations, however information about the programme implementation is limited (Ministry of Energy, 2025^[1]). These programmes are welcoming and should be continued as they support the green transition in the residential sector in Bulgaria.

3.6. Insurance against extreme climate events is very low

Bulgaria is increasingly vulnerable to floods, heatwaves and droughts. Floods and droughts have become increasingly frequent and severe, placing Bulgaria among the most vulnerable countries in Europe. The drought impacted area was among the highest three countries in Europe in 2023 (European Environment Agency, 2024^[17]). A peak was reached in 2023 when nearly the entire country suffered from a severe drought (Data Commons, 2024^[18]). Annual average temperatures are projected to increase more than 1.8 degrees relative to the average between 1960 and 1990, indicating prolonged impact from droughts and potential wildfires (Ministry of Environment and Water, 2019^[19]). Wildfires burned an annual average of over 1% of total area in Bulgaria between 2006 and 2023. Flash floods account for 77% of all flooding events, with most occurring in summer due to intense rainfall and reduced soil absorption capacity. These events caused significant damage to infrastructure, agriculture, and ecosystems, further exacerbating water resource management challenges. Between 1980 and 2023, climate-related extreme weather events caused EUR 5.2 billion in economic losses, (European Environment Agency, 2024^[20]). National Climate Change Action Plan projects that annual average economic growth will be reduced by more than 1.5% in a scenario where temperatures rise by 2 degrees by 2050. More importantly, these extreme climate events caused 265 deaths per 100 000 citizens since 2004.

Bulgaria has taken initial steps to build national resilience to climate-related risks, including the adoption of a national adaptation plan and a 2030 adaptation strategy. The Recovery and Resilience Plan includes important reforms and investments aimed at strengthening disaster preparedness, such as early warning systems for forest fires, floodplain management to prevent erosion and floods, and broader flood disaster prevention infrastructure. The country's water management system is under strain, with the highest rate of water loss in the EU (over 60%) due to deteriorating public infrastructure. Enhancing the resilience of existing infrastructure to extreme weather events, alongside stricter enforcement of restrictions on new construction in flood-risk areas and improved emergency response systems, will help reduce climate-related vulnerabilities. Insurance markets can also play a crucial role by signalling risk through pricing and providing incentives for households, businesses, and governments to invest in preventive measures. However, Bulgaria's insurance coverage against catastrophic risks remains extremely limited. Currently, only 8.8% of dwellings are insured against flood risk, and overall coverage of climate-related risks accounts for just 2% of all insurance contracts, among the lowest rates in the EU (EIOPA, 2024^[21]). Insurance uptake remains voluntary, and coverage is largely driven by mortgage requirements, which mandate insurance for the mortgaged property, including for natural disasters. Expanding insurance protection is essential to help manage the financial impacts of climate change and increase household and business resilience. Bulgaria could consider introducing mandatory or incentivised private insurance schemes for natural disasters, potentially backed by public support for catastrophic losses. One approach could involve mandating minimum property insurance coverage for all residential properties, with premiums linked to the tax valuation of the property. Lessons can be drawn from other European models: for example, Germany integrates climate risk into mandatory building certification, while Switzerland require building insurance against natural catastrophes in most cantons, provided by either public or private insurers (OECD, 2021^[22]).

Table 3.1. Past OECD recommendations on energy transition and actions taken

Recommendation	Action Taken
Complete an overarching strategy for the climate transition, building on the Strategic Vision for the Sustainable Development of the Electricity Sector, and ensure it is consistent with the public investment strategy, with a roadmap and policies to achieve zero net emissions.	In the updated National Energy and Climate Plan, Bulgaria sets out long-term net-zero scenarios with a road map, targets, policies and investment programmes.
Delink land ownership rights of the property where small-scale renewable energy generators are planned as long as long-term lease is secured. Introduce a scheme where producers can sell any self-generated unused electricity to the supplier through the grid.	No action. A separate right to build still needs to be established on leased land. No action.
Expand grid capacity to avoid constraints with the expansion of renewables generation.	More action needed. Current grid expansion plans fall short of renewable energy investment intentions.
Gradually increase environmental taxes for sectors outside of the EU Emissions Trading System (ETS), including excise taxes on fuels, and align these carbon prices with the ETS-price, while protecting poorer households and preserving security of energy supplies.	No action. The EU wide ETS2 will be implemented.
Prepare a plan for the transformation of coal mining regions ensuring that low-skilled workers are retrained, high-skilled ones stay, land is rehabilitated, and new industries are attracted.	More action needed. In addition to Just Transition Plans, a number of projects on mapping skills, retraining and land rehabilitation are ongoing but a comprehensive road map for involved stakeholders is missing.

Table 3.2. Recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Decarbonising electricity production and industry	
Bulgaria remains heavily reliant on coal power generation and lacks a detailed coal-phase out strategy.	Implement the plans to phase-out coal and develop detailed closure plans while ensuring energy security and leaving a reserve power generation for ancillary services.
Investment in renewable energy generation needs to expand more to replace coal power without risking energy security.	Develop and implement plans for economic and social transformation in coal affected regions in anticipation of coal plant closures.
Regulated tariffs and prolonged business subsidies distort market signal critical for efficient energy use and demand-side flexibility.	Consider improving the regulatory framework to encourage more and faster renewable deployment including contract-for-difference schemes and long-term power purchasing agreements.
Lengthy and complex permit procedures slow down renewable energy installations.	Introduce a dedicated framework for offshore renewable energy together with Marine Spatial Planning to accelerate deployment.
Insufficient transmission network to connect intermittent renewable generation distributed across the country can risk system balance.	Complete electricity market liberalisation while ensuring energy vulnerable households are supported.
Phase-out of conventional coal power generations will risk grid flexibility and require ancillary services such as voltage and frequency control.	Accelerate smart meter rollout to facilitate dynamic-price contracts.
Decarbonisation policies in the industrial sector	
The industrial sector faces challenges from rising ETS prices	Streamline and digitalise permit procedures in a digital one-stop-shop..
CCUS technologies will become cost competitive and help capture emissions that cannot be eliminated with decarbonisation measures.	Accelerate expanding domestic transmission network with a more proactive planning prioritising “renewable acceleration areas”.
Reducing emission from the transport sector	
The vehicle fleet is old and polluting despite the relief provided to low-emission vehicles within the current vehicle tax system, while Bulgaria has the second lowest petrol and diesel tax among EU countries.	Continue developing energy storage facilities and a balancing market.
Public transport has decreased by around 40% and is largely based on buses.	Continue with support programmes for the construction of renewable energy systems for own consumption.
Making the residential sector less energy- and carbon- intensive	
The building stock is old and poorly insulated.	Develop a long-term strategy for carbon capture to provide incentives to invest and adapt in CCUS technologies.
Widespread burning of firewood in inefficient stoves increases emissions and indoor air pollution.	Gradually raise fuel duties taking into account incomes and rebalance the current vehicle tax system with a higher tax for high-emission cars and accelerate development of charging infrastructure.
Climate adaptation	
Invest in and expand public transport, including rail, and increase its urban usage with sustainable urban mobility measures.	Invest in and expand public transport, including rail, and increase its urban usage with sustainable urban mobility measures.
The building stock is old and poorly insulated.	Accelerate building renovations with a switch to co-financing model and prioritise support for energy vulnerable households.
Continue with grant supports to energy-poor households for replacing solid fuel heating systems with rooftop solar systems.	Continue with grant supports to energy-poor households for replacing solid fuel heating systems with rooftop solar systems.
Climate adaptation	
Bulgaria faces increased vulnerability to heatwaves and floods while insurance coverage for extreme climate events is among the lowest in the EU.	Enhance preparedness for extreme weather events by increasing the resilience of public infrastructure, enforce restrictions on new construction in flood-risk areas and promote risk-informed spatial planning.

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4

Boosting business sector productivity to accelerate convergence

Margit Molnar

Serdar Sengul

Bulgaria has successfully liberalised its economy and integrated into global value chains, creating jobs and raising incomes. However, businesses face long-standing challenges of low productivity and subdued private investment. Only a small share of foreign investment has been channelled to manufacturing, which itself has a relatively small share in the economy, and activity focusses mostly on low value-added segments of global value chains. Bulgaria needs to improve firm performance and support reallocation away from lower value-added to higher value-added activities. This requires making Bulgaria more attractive as a destination for FDI, easing financing constraints, upgrading the skills of the workforce and infrastructure, boosting competition in some sectors, developing more effective supports for innovation and supporting the adoption of new technologies, reducing barriers for start-ups and developing easier ways for firms to exit, and tackling corruption more effectively.

4.1. Business sector productivity is key to raising growth

Bulgaria has successfully liberalised its economy and integrated into global value chains, creating jobs and raising incomes. However, business activities remain focused on downstream segments of production with low value added that require limited skills, albeit with a gradual shift towards medium-tech industries in recent years. Despite rapid capital inflows, low public and domestic private investment have slowed the accumulation of the necessary physical capital. Weaknesses in the education system have slowed the accumulation of skills and human capital needed for long-term growth (see Chapter 2). As a catching-up economy, Bulgaria has achieved sustained growth and capital deepening, benefiting from the diffusion of know-how. Bulgaria's long-standing challenges remain the relatively low level of productivity of business sector productivity, and subdued private investment.

With wages rapidly catching up, higher value-added activities need to be developed to sustain and improve productivity gains in the business sector in the longer run. This requires higher investment, including more foreign direct investment; raising the value added of activities in global value chains; lowering inefficiencies related to informality and corruption-imposed transaction costs; and speeding up licensing and other administrative processes. Bulgaria needs to ensure a sufficient supply of people with the skills demanded by the market. Those measures will be the key to stepping up convergence and avoiding the middle income trap whose risks loom large in many countries including Bulgaria (Győrffy, 2021^[1]).

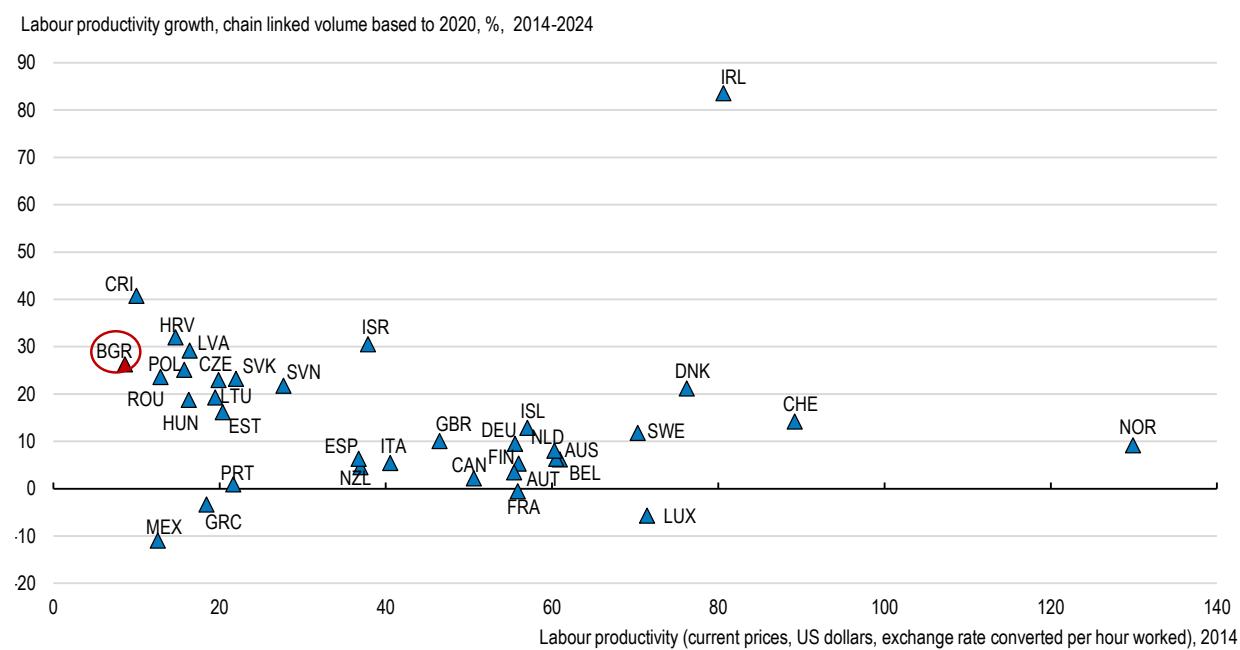
This chapter, after presentation of new OECD evidence on productivity developments in Bulgarian industries, explores the major ingredients to raise productivity growth, including increasing investment, better integration into global value chains, skills, improving the business environment, strengthening competition, nurturing innovation and fighting corruption.

4.2. Bulgaria's large productivity gap suggests ample room for catching up

Bulgaria's income differential with the most advanced economies is largely explained by its lagging productivity, although there is still room to increase labour utilisation given that a significant part of the population is inactive (see Chapter 1). Business sector labour productivity (excluding finance and real estate) is well below the OECD average and below regional peers (Figure 4.1), though it increased by 26% over 2014-2024, an average annual rate of 2.4%, above the OECD average but below the performance of some regional peers.

Figure 4.1. Both the level and growth of business economy labour productivity have been relatively weak

Labour productivity in 2014 and its cumulative growth over 2014-24



Note: For data availability and comparability reasons, labour productivity here is calculated as gross value added (in USD) per million hours worked. The growth rate of labour productivity is calculated using the chain linked volumes of gross value added (in USD). The values refer to the business economy, excluding the financial and real estate sectors.

Source: OECD National Accounts database.

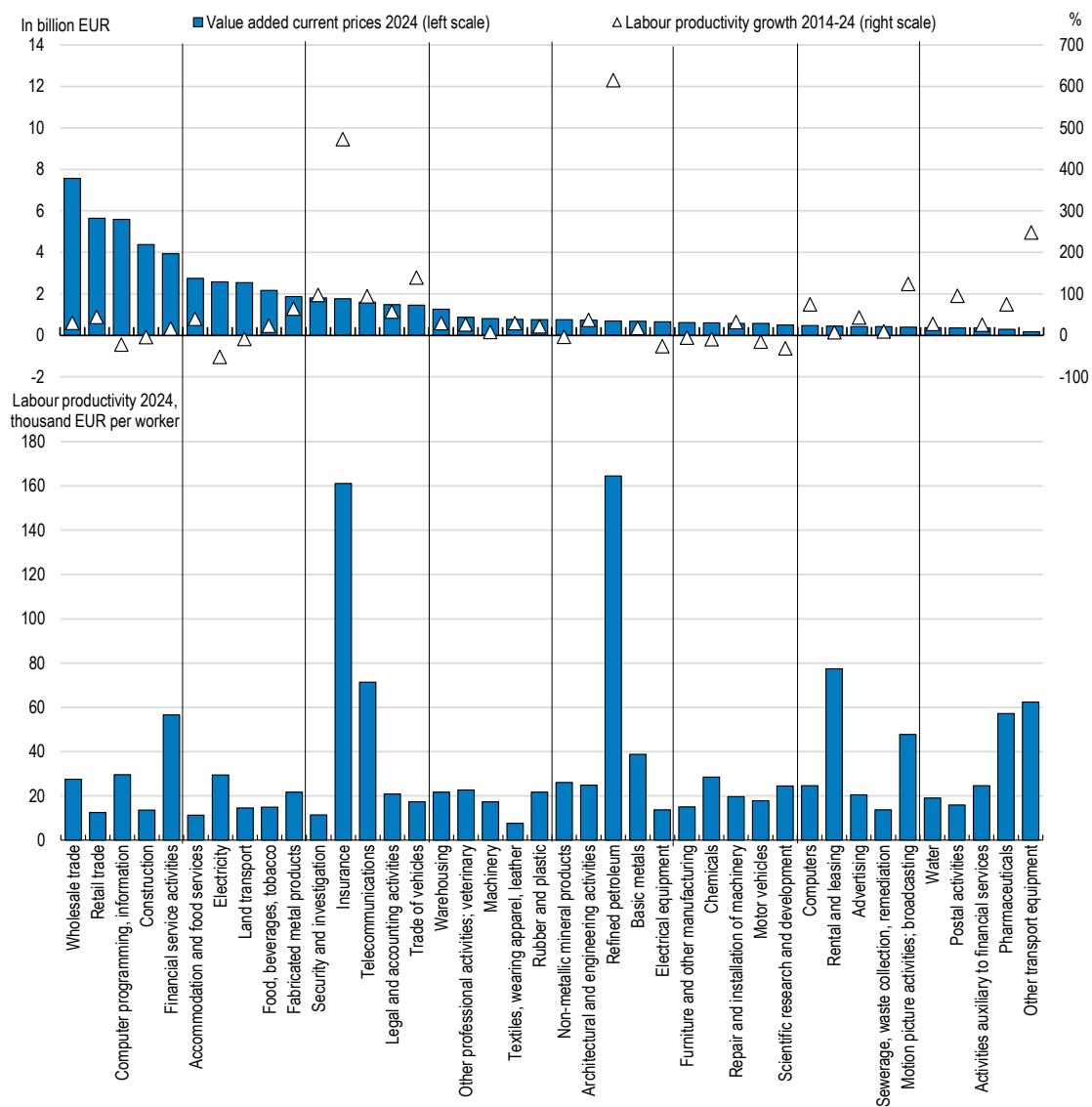
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At the industry level, several industries nearly doubled their labour productivity levels over the past decade, including a few manufacturing industries such as pharmaceuticals and computers, while petroleum refinery increased seven times, each of which has only a small share in total value added (Figure 4.2). In contrast, the five largest industries by value added, all in the services sector, registered modest or negative labour productivity growth over the same period.

Productivity levels in Bulgaria remain far below high-performing EU countries across many sectors. In several manufacturing industries, labour productivity is hovering around 20-50% of the French level (Figure 4.3), which is taken as a benchmark given its relatively strong performance and the availability of comparable data. This analysis is based on new estimates of productivity constructed by the OECD for this Economic Survey using firm-level micro data provided by Bulgaria's National Statistical Institute. Productivity comparisons between countries at sectoral level need to be interpreted with caution given the lack of comparable deflators for value-added. Compared to other countries, in wearing apparel manufacturing, for instance, labour productivity levels are lower than those in Czechia, Estonia, Hungary, Poland and Romania. In contrast, in machinery and equipment manufacturing Bulgarian firms are only slightly less productive than in Hungary, Poland or Romania. However, productivity in Bulgaria's computer programming sectors, which accounts for around 8% of business sector value-added, is around 50-90% of France's level, similar to Poland and slightly higher than Estonia and Hungary.

Figure 4.2. The largest sectors registered low or negative labour productivity growth

Size of industry measured in value added in 2024, cumulative growth of labour productivity over 2014-24 and labour productivity level in 2024



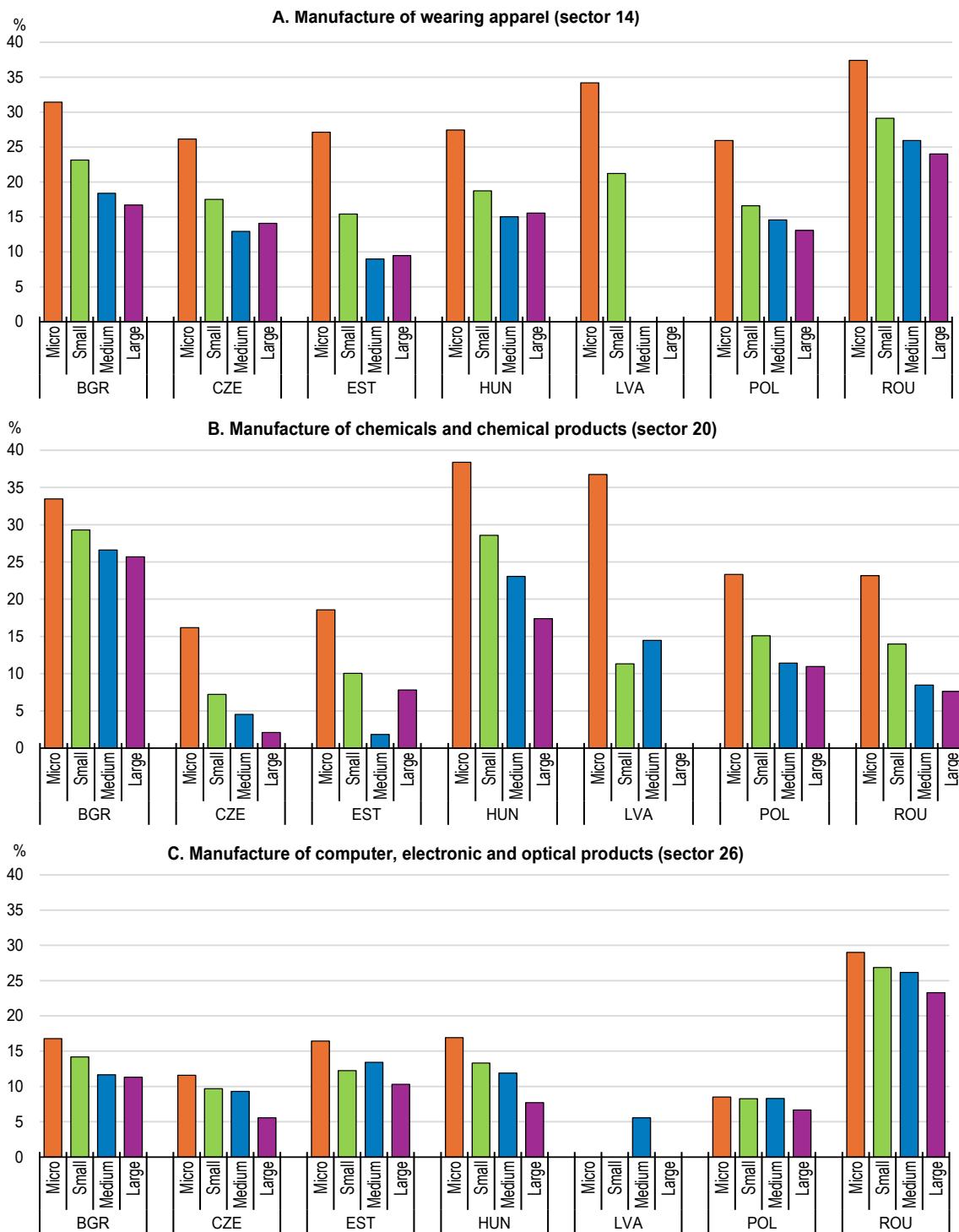
Note: Labour productivity growth is in real terms. The following sectors are not included in the chart for better legibility: employment activities, printing, paper, wood and cork, air transport, travel agency, publishing and water transport. All those have smaller value added than the smallest in the chart. The real estate sector is not included either due to insufficient information to assess its productivity.

Source: OECD calculations based on the Eurostat database.

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Figure 4.3. Productivity gaps are larger in the apparel and chemicals industries than in peers

Percentage of TFP gap relative to France, 2021



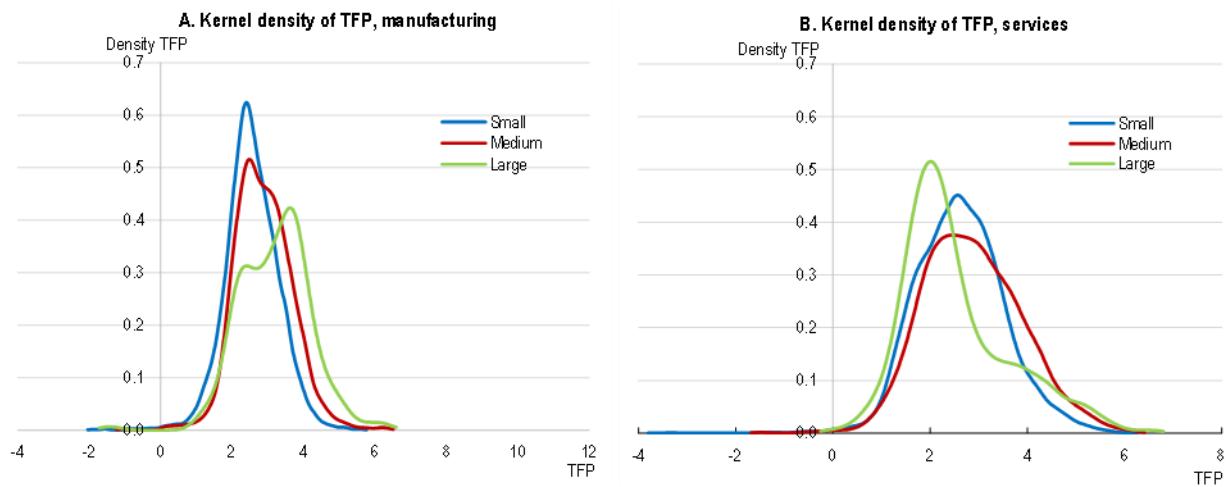
Note: The bars indicate the percentage of TFP of the median firm compared to France in 2021. Bars are displayed if at least 10 firm observations are available. TFP is estimated using the Wooldridge method.

Source: OECD estimates based on the ORBIS database.

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As in other countries, there are significant productivity differences across firms. Productivity tends to be highest in larger firms and lagging in small firms. Firms are on average smaller than in more advanced European economies, with around one-third of the workforce employed in firms with fewer than 10 employees. In terms of the productivity gap with France, this is disproportionately large for micro firms. Total factor productivity (TFP), (which reflects the efficiency with which the factors of production are combined) growth accounted for a somewhat larger part of business economy (without real estate) labour productivity growth than capital deepening. Based on micro data made available by the National Statistical Institute of Bulgaria for the Economic Survey, TFP appears to be higher in services than in manufacturing (Figure 4.4). When comparing TFP across firm sizes within manufacturing and services industries (excluding finance and real estate), large manufacturing firms appear to have smaller productivity gap than large services firms.

Figure 4.4. Large firms are more productive, especially in manufacturing, 2023



Note: TFP is in logarithmic form and is based on the Wooldridge estimation method.

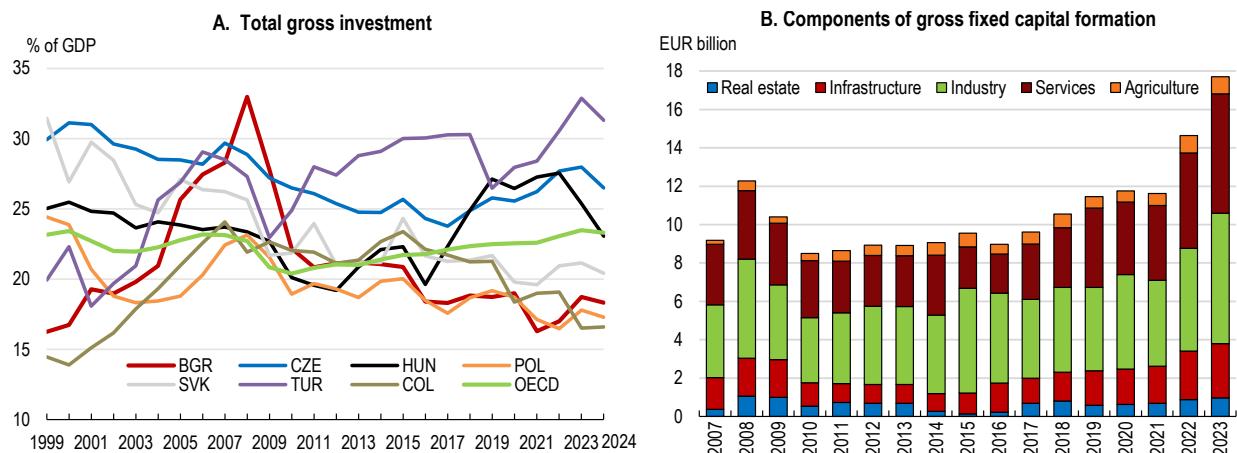
Source: OECD estimations based on the National Statistics Institution database.

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4.3. Higher investment is needed to lift productivity

Bulgaria's overall investment rate, at 17-19% of GDP over the past decade, is relatively low (Figure 4.5), even though its low capital stock would warrant higher investment rates (Figure 4.6). The investment rate is 4-5 percentage points lower than the OECD average and 8-9 percentage points below high-investment Visegrad countries, such as Czechia or Hungary. The growth of investment has been weak throughout most of the past decade, though it picked up slightly in 2022-23 (Figure 4.5). Within this relatively low level of aggregate investment, the share of real estate investment is increasing rapidly alongside business investment, both in industry and services. The share of business investment in Bulgaria at over 70% is higher than in most comparator countries.

Figure 4.5. The overall gross investment rate is relatively low, and its growth is weak

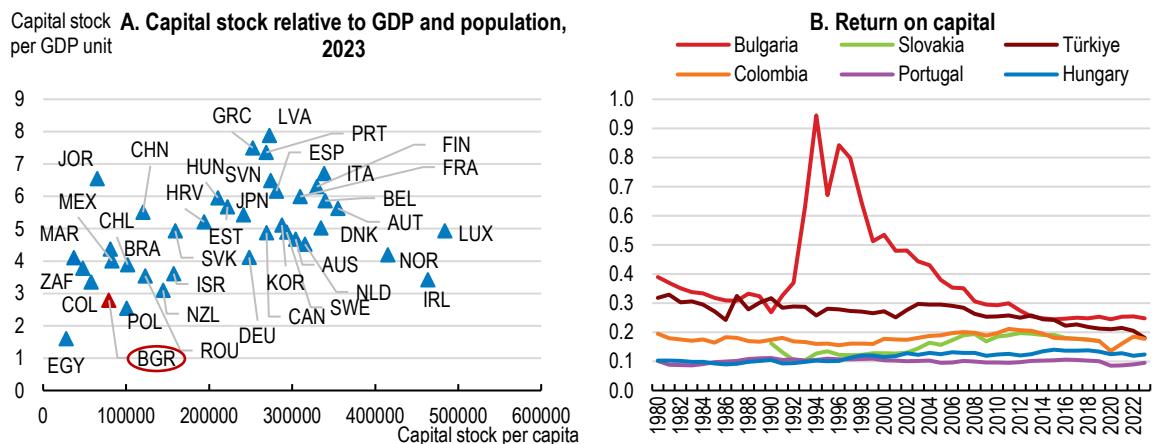


Source: OECD Economic Outlook 118 and OECD National Accounts at a Glance databases.

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Bulgaria's capital stock is low compared to OECD and other EU economies both per capita and relative to GDP. Over time, the capital stock needs to expand to increase capital per worker and productivity. With capital relatively scarce, the return on capital has been above 20% over the past decade, well above most OECD countries (Figure 4.6) and similar to Türkiye's level.

Figure 4.6. The capital stock is low, but the rate of return on capital is high



Note: Capital stock at constant 2021 national prices (in million 2021 USD). Real GDP at constant 2021 national prices (in million 2021 USD).
Source: Penn World Table, version 11.0., World Bank WDI and FRED.

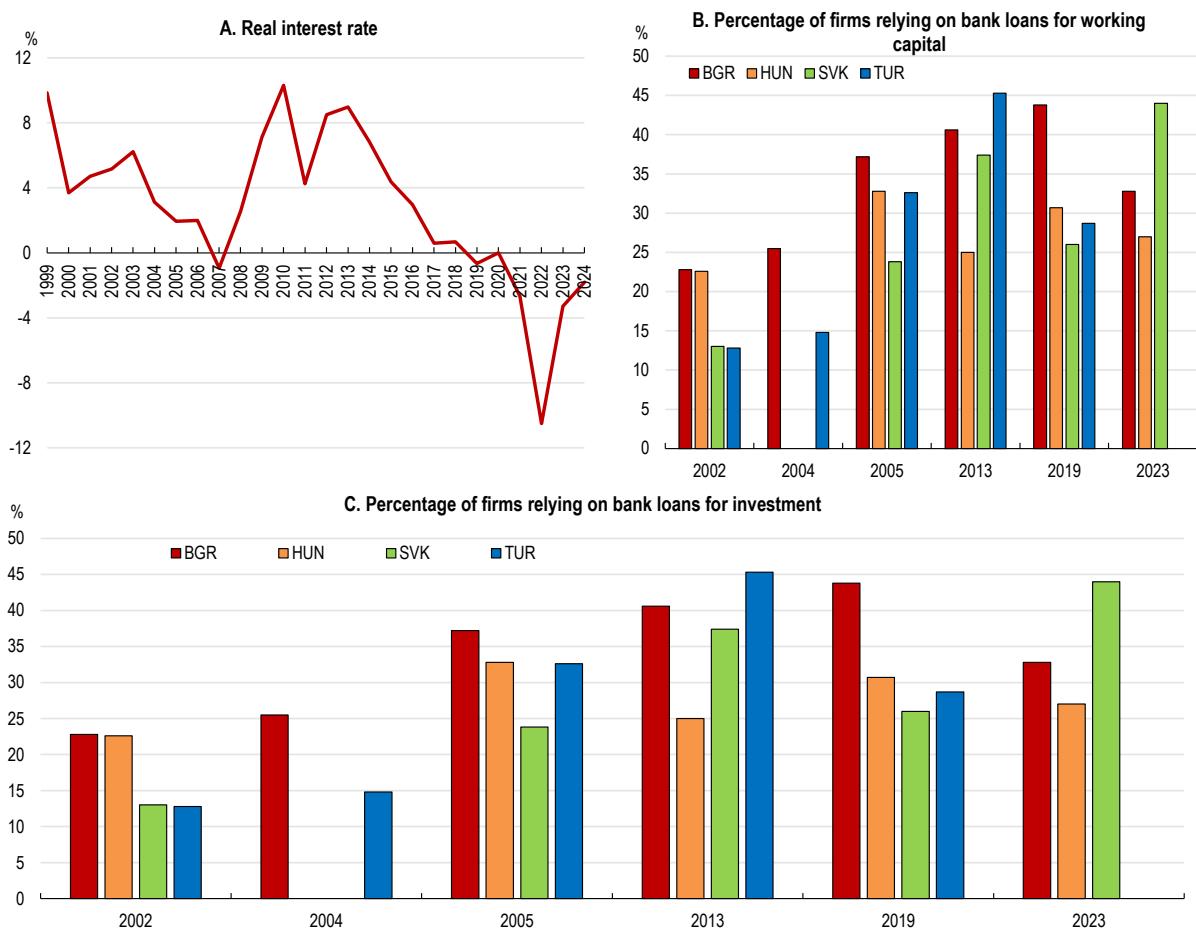
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4.3.1. The availability and use of bank finance could be more developed

As in many OECD economies, the investment rate continued to fall over the past decade despite the marked decline in real interest rates (OECD, 2025^[2]). Nevertheless, Bulgarian firms seem to face particular challenges in accessing financing for investment. A smaller share of firms in Bulgaria borrows from banks for investment or working capital purposes than before (Figure 4.7). This partly reflects robust profits in recent years, which allowed for the financing of investment and short-term working capital needs from retained earnings. Indeed, in 2022, Bulgarian firms recorded unprecedented profit growth, partly due to inflation, but also due to subsidies. The 2025 EIB Investment Survey confirms a high share of internal financing of investment at 71%, higher than the EU average and relatively high even by the standards of the region. Notwithstanding these recent cyclical developments, Bulgarian firms traditionally rely on the banking sector for funds and many face challenges to have access to bank lending. Indeed,

the low share of bank loans in financing investment is related to access conditions to bank loans. The Survey confirms that 10% of firms are rejected for credit, among the highest in the region. The survey suggests that around 14% of firms are constrained in their access to finance, well above the region's average. A large share of firms finds the cost of external financing too high. This may be explained by the low share of firms with concessional loans, those with lower-interest rates or longer-term loans, in Bulgaria, at around 20%. According to the World Bank Enterprise Survey database, the share of firms borrowing from banks is not very different from firms in some other countries in the region, but lower than in many OECD countries.

Figure 4.7. Real interest rates are historically low, but few firms borrow



Note: Panel A: real interest rate is the lending rate adjusted by the GDP deflator.

Source: World Bank World Development Indicators and World Bank Enterprise Survey database.

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Lending is collateral-based, relying mostly on real estate. To boost bankability of firms with machines, equipment and other non-real estate assets, an online registry could be established with access by all lenders where collateralised machinery could be traced as in Morocco. This would improve the pledgeability of these assets and thereby reduce risks for lenders and costs for borrowers. For services firms, which typically have fewer fixed assets that can be collateralised, collateralising intellectual property rights could ease access to financing. A legal framework is needed to make that possible. While bank lending is likely to remain the major source of financing for the near future, alternative financing sources, such as the equity market and venture capital, need to be developed over time to ease access for firms with viable projects.

4.3.2. State-owned firms need greater certainty and better governance

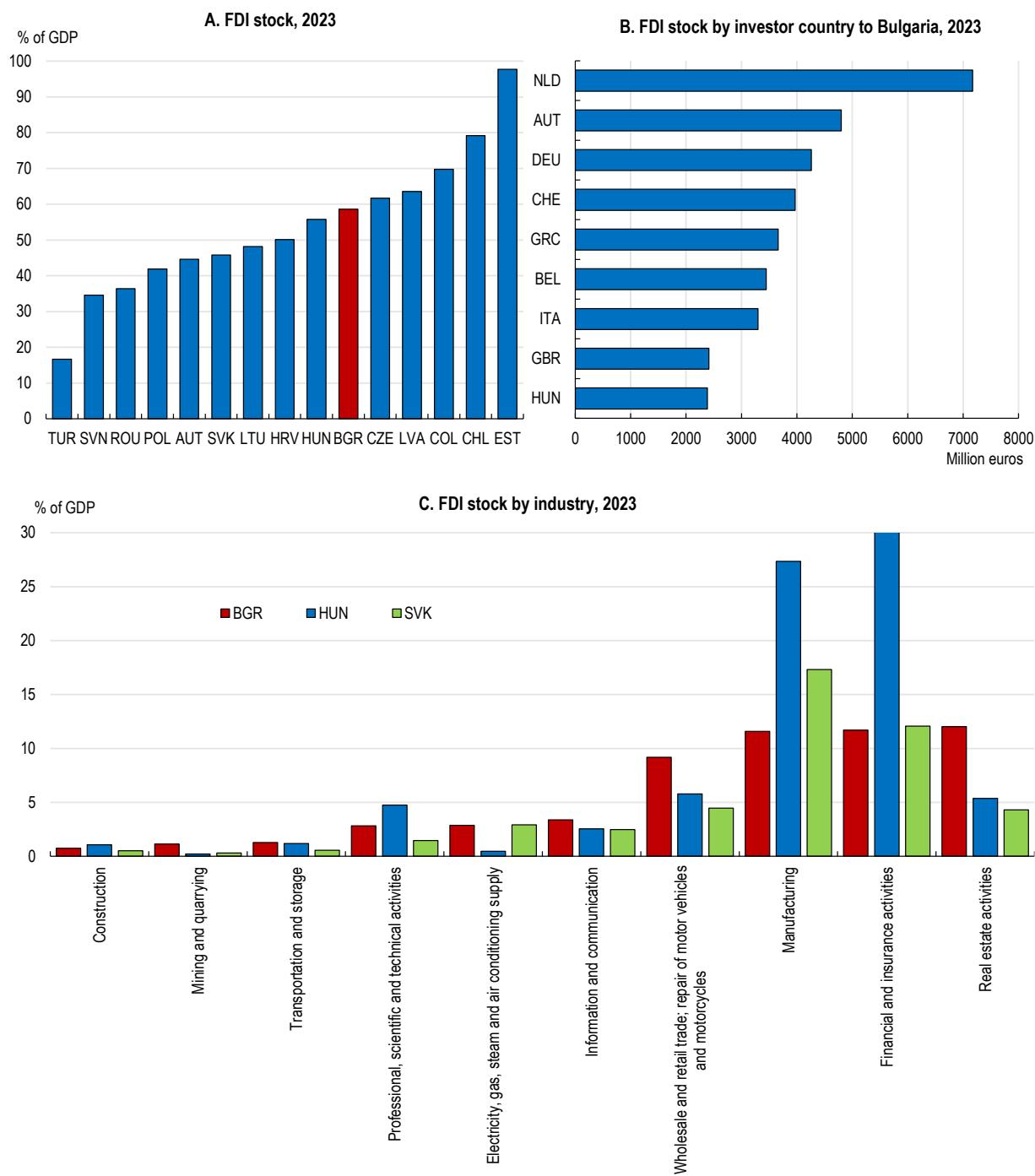
Given their size and role in capital-intensive industries, state-owned enterprises (SOEs) play an important role in overall business investment. Uncertainty of dividend policies of state-owned enterprises is an additional factor

compounding the issue of low investment in Bulgaria. The 265 SOEs in 2025 account for 5% of total value added, quite high in international comparison although this includes some activities like healthcare provision as well as key industrial firms notably in the energy sector. How much of their dividends SOEs have to submit to the state budget is determined every year by the Council of Ministers. In 2023 and 2024, this percentage was 100%, leaving no room for reinvestment of profits. Even though they have the possibility to discuss their investment intentions and plans with their respective line ministries, the unpredictability of dividend submissions to the state as their ultimate owner makes it difficult for managers to plan investment, produce profits and in general, to operate as commercial entities. Greater predictability of dividend policies would allow more investment and more profits for this important segment of the private sector. More generally, there is scope to strengthen the oversight and governance of SOEs to hold them to higher standards of performance, which could lead to efficient investment decisions, in line with the OECD Principles of Corporate Governance of State-Owned Enterprises (OECD, 2023^[3]). Currently CEOs are selected from serving board members and in the case of some SOEs, are appointed by line ministries. As the 2023 OECD Economic Survey discussed, the appointment process of management of SOEs needs to be more transparent, merit based and open to external candidates (OECD, 2023^[1]; OECD, 2026^[2]).

4.3.3. More foreign investment would help raise productivity

Bulgaria has received significant foreign investment, although this has tended to go into services activities, including finance and retail and wholesale trade. At nearly 60%, Bulgaria has managed to attract roughly the same volume of FDI relative to its GDP as Czechia or Hungary and much more than Poland, Romania or Slovakia (Figure 4.8). All the ten largest investors are European countries, although the ultimate owner in some cases is in a third country. What makes Bulgaria unique is that the largest recipient sectors are real estate (mostly residential property) and finance, with 20% each, roughly the same as the share of the entire manufacturing sector (the share of manufacturing has slowly been increasing, nearly 2 percentages over the past decade or so). In contrast, some other countries like Hungary or Slovakia attracted significantly more manufacturing investment relative to their GDPs. In 2023, 16% of overall fixed asset investment was made by majority foreign-invested firms, highlighting the importance of foreign companies in capital formation. Foreign investment is concentrated in the Sofia-Plovdiv region, with much less going to the Southeastern and South-Central regions. Attracting more FDI in high value-added sectors would help to raise overall productivity and create high-quality jobs, while generating spillovers through interconnectedness with domestic suppliers, transfer of technology and management knowhow. Indeed, foreign-owned firms have higher TFP in both manufacturing and service industries (Figure 4.9).

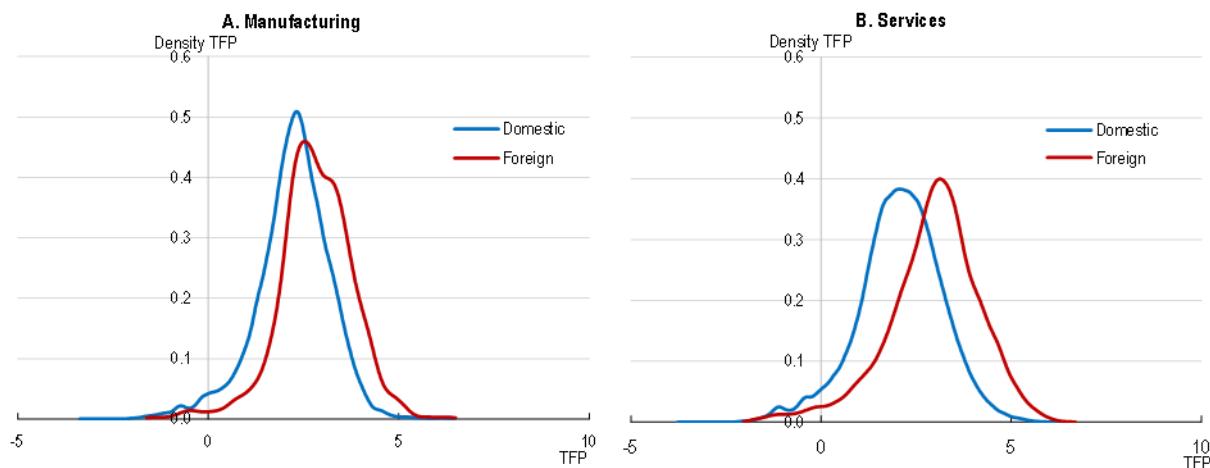
Figure 4.8. The FDI stock is sizable and mostly European, but is skewed to services



Source: IMF CDIS and Eurostat databases.

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Figure 4.9. Foreign firms are more productive in both manufacturing and services, 2023



Note: TFP is in logarithmic form and is based on the Wooldridge estimation method.

Source: OECD estimations based on the National Statistics Institution database.

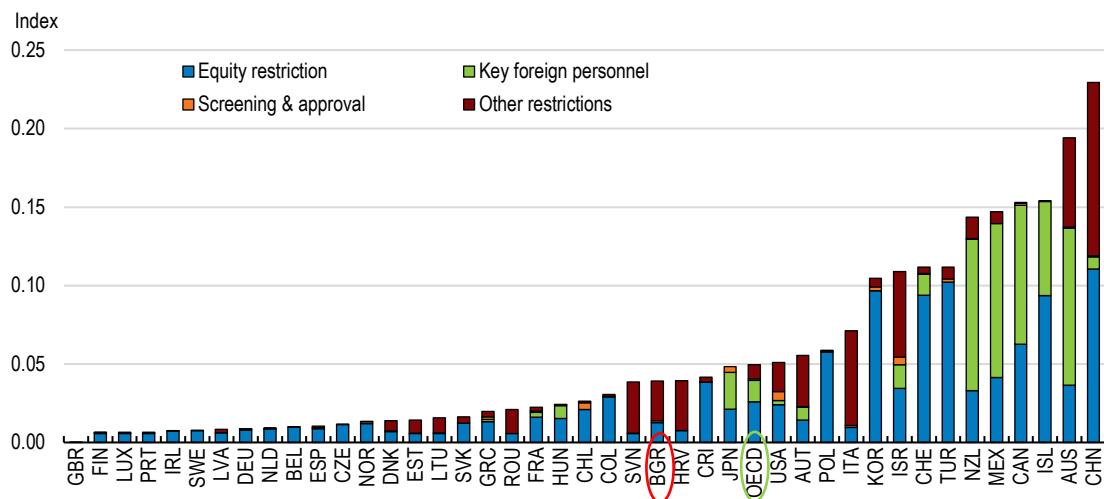
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Regulatory restrictions on FDI are lower in Bulgaria than in the average OECD country, but higher than in most Visegrad-4 countries and similar to Slovenia and Croatia, as shown by the OECD FDI Restrictiveness Indicators (Figure 4.10). Restrictions are highest in the “other” category, which covers restrictions on access to land and real estate for business purposes, prohibition of establishment of branches for real estate and some financial services, such as trusts, funds and fund management activities and reciprocity requirements for foreign investors (this latter for instance, in the insurance industry, where non-EU/EEA country insurers can establish a branch conditional of similar possibilities in their countries). These restrictions impose additional costs and may deter foreign investment. These restrictions account for 65% of all restrictions on FDI in Bulgaria and cover all sectors. These types of restrictions are common in some countries in the narrower region, such as Romania, Croatia or Slovenia, but are non-existent or much less common in the Visegrad-4 countries and other EU and OECD countries. Limits on foreign equity account for another third of all FDI restrictions. Unlike the “other” category, equity restrictions are sector specific: these affect some manufacturing industries, such as food and wood and paper, and a few services, such as air transport, storage and other auxiliary activities and legal services. In food, paper, wood, printing, furniture and the “other manufacturing” categories, for instance, no foreign equity is allowed in greenfield investment, inhibiting efficiency-enhancing competition through new entry. In legal services, no foreign equity involvement is allowed. Restrictions on key foreign personnel are limited to water and air transport, storage and auxiliary activities. Equity restrictions show up in specific sectors, and are tighter than in peer countries, in particular in legal services (Figure 4.11).

Restrictions on FDI should be eased to facilitate investment and foreign participation in the economy. Empirical research shows that the size of the shadow economy has a negative effect on FDI inflows in Bulgaria, just like in Croatia or Romania (Bayar et al., 2020^[3]). The OECD Indicators do not capture recent screening measures introduced in March 2024, linked to the transposition of EU Regulation 2019/452 (FDI Screening Regulation) into Bulgarian law (amending the Investment Promotion Act) with some domestic modifications, including the broadening of the scope of the concept of foreign investor and foreign investment. Foreign investors include EU seated entities that are directly or indirectly controlled by non-EU individuals or by a non-EU seated legal entity, including due to a contractual agreement or internal rules as well as EU-seated entities that make an investment for the benefit of a non-EU entity. Such a definition may restrict potential investment and should be applied only in case of national security concerns to avoid deterring potential investors from outside the European Union.

Figure 4.10. FDI restrictions are higher than in most OECD countries and concentrated in conduct-type discrimination

FDI Regulatory Restrictiveness Index, 2024

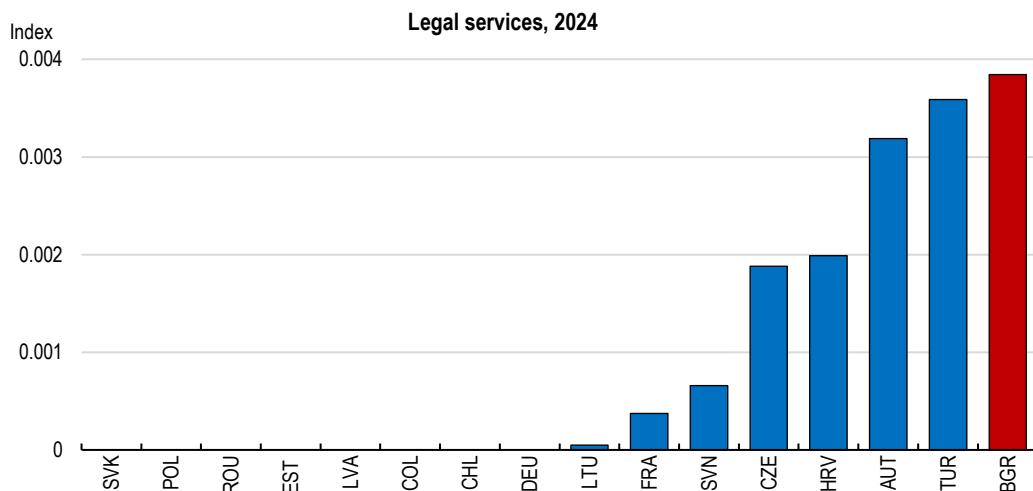


Note: Values between 0-1 with higher values indicating greater restrictiveness.

Source: OECD FDI Restrictiveness Indicators database.

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Figure 4.11. Equity restrictions on FDI are higher in some areas than in countries in Bulgaria's greater region



Note: Values between 0-1 with higher values indicating greater restrictiveness.

Source: OECD FDI Restrictiveness Indicators database.

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Grant schemes and investment incentives are being introduced for both domestic and foreign investors. Since 2023, certified projects can benefit from fast-track procedures (30% reduction in time), access to real estate without tender for certified projects and co-financing of training costs. A more recent measure is the refund of social security contributions (18.92% of salaries) for an entire year in big cities and for two years in smaller towns after one year of operation. Only greenfield investments or reinvested earnings can benefit from investment incentives. Such incentives should be carefully evaluated as they imply foregone revenues for the budget and in some cases may not bring in investment in addition to what have been invested without the subsidies. Moreover, further cash subsidies are being planned. When designing subsidies, they should be well-targeted to areas where they lead to additional

productive investment that contributes to broader objectives and meet cost-benefit criteria and should not have an adverse impact on competition. The Invest Bulgaria Agency should be strengthened substantially and its capacity increased to provide a more effective mechanism for attracting FDI investors on a large scale and its efforts should focus on strategic sectors of the economy aligned to the overall objectives for development as Ireland have done through the Industrial Development Agency (IDA). The aim should be for the Agency to play a key role in developing the productive base of the economy working closely with the business sector and other actors. It should release timely data on committed and realised investment and provide transparent overview of all supports, including regional policies, to provide better information to investors.

4.3.4. Industrial parks are a central part of the strategy to encourage new activities

The 2021 Law on Industrial Parks aims to encourage investment in high value added and emerging industries by creating special areas where investment conditions are more favourable. This is the first law not only defining what constitutes an industrial park and classifying them into different types (Box 4.1), but also providing a framework for their operation, including the system of incentives. Industrial parks have to be at least 300 000 square kilometres and are registered with the Ministry of Economy and Industry. All industrial parks registered benefit from accelerated administrative procedures. Previously existing industrial parks can join the registry and benefit from the same privileges as long as they meet the criteria. The 2004 Investment Promotion Act was the first to define the spatial status of industrial zones and did not provide for incentives. The Investment Promotion Act was amended on 27 May 2025 introducing thresholds for industrial parks, zones, technology parks and warehouses, respectively, to be called “priority” projects. Such priority parks and zones can now benefit from not only accelerated administrative procedures (as before), but also cash grant and refund of social security contributions.

A major incentive for both foreign and domestic investors to set up shop in an industrial park is the exemption from corporate income tax on reinvested profits (up to 100% of their value) in municipalities with an unemployment rate at least 25% above the national average. In 2023, 97 taxpayers benefited from this measure across 57 municipalities, with an average exemption rate of 77.4%. Another key benefit is immediate access to basic utilities, such as electricity or water, which would take over a year to obtain should they set up shop outside of industrial parks. Locating in an industrial park also avoids a delay of a year or two if there is a need for change of land use. Local technical and administrative service fees applicable to industrial parks are determined individually by each municipal council and may vary significantly across municipalities. So can subsidies for land in the case of priority projects. These could boost competition among municipalities for attracting new investment, in particular in industries without cluster effects as they are less constrained in their choice of location. Such fees and land subsidies should be published on a single website in a transparent way.

Industrial parks benefit from strategic national and European initiatives aimed at promoting investment and reducing regional disparities. A key driver of this effort is the EU-funded “AttractInvestinBG” initiative, part of Bulgaria’s National Recovery and Resilience Plan (NRRP). With a total budget of BGN 212.5 million, the programme supports infrastructure development and investment promotion in industrial parks, with a strong focus on Northern Bulgaria, where 11 projects have been selected, jointly receiving BGN 206.5 million (Box 4.1 and Figure 4.12).

The Ministry of Economy and Industry’s 2024–2028 Plan for Industrial Parks (Ministry of Economy and Industry, 2024^[5]) complements these efforts through several targeted measures, including: creating a centralised digital platform for investments; simplifying administrative procedure and unifying data on available industrial locations; funding for priority industrial zones to upgrade infrastructure and improve competitiveness; tax relief for investors; and support for low-carbon and green economy initiatives in industrial development. More specifically, administrative simplification means halving the handling time for various procedures, such as approval of a cadastral map and registers (between 6 and 12 months), approval of a detailed development plan adjustment to the municipality’s general plan if required (between 6 and 12 months), approval of investment projects and building permits for specific constructions within the park and authorisation for use and commissioning of these constructions. There are plans to create a website for bringing administrative procedures online and indicating available space in industrial parks on a real-time basis. Proposed tax relief comprises the possibility to apply for reduced tax burden during the first three years of the project. In addition, accelerated depreciation and investment tax credit are also being considered to accelerate technology transfer and attract high-tech activities.

The Ministry of Economy and Industry does not compile data on key statistics such as investment, production or employment in industrial/technology zones/parks and such information is available only sporadically and not on a comparable or timely basis. The compilation of such statistics becomes more important as government investment, tax expenditures and other costs related to those areas increase and is necessary for transparency and evaluation. A complementary set of useful statistics could be the Foreign Affiliate Trade Statistics (FATS), which are compiled by many OECD countries and could be compared with locally collected data on the activities of MNEs in Bulgaria. The lack of data makes it difficult to evaluate the success of the industrial parks strategy, including the number of jobs and the amount of activity within the parks. As well as publishing more data, the entire strategy of industrial parks should be evaluated against the initial goals and the implementation costs.

Box 4.1. Industrial parks are reviving

Under the Law on Industrial Parks enacted in 2021, an industrial park is defined as a distinct area located within one or more municipalities, where developmental, technical, and organisational conditions are provided for production activities. The Act recognises three types of industrial parks: (i) general industrial parks (Type A) with no sectoral specialisation, (ii) specialised industrial parks (Type B) focusing on a single industry and (iii) high-tech specialised parks (Type C) dedicated to high-tech industries. Industrial parks can be operated by the state or municipalities, foreign or domestic entities or a mix of state/municipal/private investors, including foreign.

Industrial parks replace the former mix of industrial/technology zones, though many of those are taking up the name of “park” and are registering with the Ministry of Economy and Industry to benefit from the same privileges. Economic zones can encompass several industrial zones/parks.

Following the 2004 Investment Promotion Act, to support the development of industrial infrastructure, the National Company for Industrial Zones (NCIZ), was established in 2009 under the Ministry of Economy and Industry. NCIZ plays a key role in constructing, developing, and managing industrial zones and technology parks at the state level. It currently manages seven operational industrial parks in Sofia, Burgas, Vidin, Ruse, Svilengrad, Stara Zagora, and Varna, with five more in the pipeline.

Industrial Park Sofia-Bozhurishte, managed by NCIZ and located just outside the capital, accommodates a wide range of activities including organic farming, light industry, public services, new technologies, and recreational facilities, offering both rental properties and strategic logistics access. The park has attracted over 40 companies from Germany, Denmark, Greece, Türkiye and Switzerland, with over BGN 610 million in total investments and it has created more than 2 000 jobs. Among the flagship projects is JYSK's largest distribution centre in Southeast Europe, while Behr-Hella Thermocontrol, a German automotive supplier, has invested over BGN 75 million in a production and R&D centre specialising in control panels for automotive air conditioning systems.

As part of its development concept for industrial parks and zones for 2024-2028, the Ministry of Economy and Industry promotes the accelerated development of industrial parks through public-private partnerships (PPPs). These partnerships typically involve the state, represented by NCIZ, or local municipalities, working in collaboration with private investors, both domestic and international. A notable example of a successful PPP is the Trakia Economic Zone (TEZ), developed through cooperation between the Municipality of Plovdiv, eight neighbouring municipalities, and two private industrial clusters. TEZ comprises six industrial zones and hosts more than 180 companies employing over 30 000 people. It offers a total area of 7.5 million m², with 3.2 million m² currently occupied. The total investment in the zone exceeds BGN 4 billion. TEZ provides a range of infrastructure solutions, from Build-to-Suit to Full-Service industrial infrastructure, suited for various industries including automotive, logistics, trade, and distribution. The development of TEZ began in 1996 with the creation of the Maritsa Industrial Zone, which attracted foreign investors such as Ferrero, Liebherr, Schneider Electric, and DB Schenker. The zone is now recognised for its focus on engineering, electronics, and logistics.

Figure 4.12. Industrial parks are concentrated in the Sofia-Plovdiv axis



Source: OECD compilation.

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4.3.5. Investing to improve connectivity and benefit from Schengen membership

Investing to improve the logistics infrastructure is essential to strengthen Bulgaria's connection to regional and global supply networks. Bulgaria's low ranking in the World Bank's 2023 Logistics Performance Index (LPI) relative to OECD countries points to considerable scope for improvement, not only in physical infrastructure but also in logistics service quality. There remain significant challenges in connectivity both within Bulgaria and with neighbouring countries. Improving land transport infrastructure and connectivity is critical for Bulgaria's deeper integration into global value chains, particularly now that it is a full member of the Schengen area and land border controls with neighbouring EU countries have been removed (Box 4.2). As part of the EU's Transport Connectivity programme, Bulgaria is prioritising the development of a national network of intermodal terminals and logistics centres. Upgrades to railway links connecting these facilities to major ports and existing rail infrastructure are already underway, with initial efforts focused on Sofia and northern regions by 2030 (Ministry of Energy, 2025^[6]). Stronger logistics systems not only reduce wait times, inventory costs, and transport-related losses but can also help offset Bulgaria's diminishing labour cost advantages as wages rise (Arvis, Shepherd and Duval, 2013^[7]).

Box 4.2. Economic benefits of joining the Schengen Area

Bulgaria's accession to the Schengen area by air and sea on 31 March 2024, followed by land borders on 31 December 2024, marks an important milestone in the country's integration into the European Union. The removal of border controls grants unrestricted access to travellers and can have wide-ranging economic benefits on business operations and tourism with easier movement of people and goods.

The removal of checks on persons at the EU's internal borders, travel documents and the vehicles are expected to eliminate important bottlenecks that caused long waiting times for truck drivers, commuters and tourists. Systematic checks on vehicles, travel documents, and cargo led to substantial delays: average waiting times for freight transport reached 4 hours at the border with Greece and 16 hours at the border with Romania. Passenger

cars and buses faced average waiting times of about 1 hour at the Greek border and 40 minutes at the Romanian border. These delays significantly reduced the efficiency of cross-border flows, added economic costs, and hindered the competitiveness of businesses dependent on timely deliveries.

With smoother border crossings, businesses can better implement just-in-time delivery models and decentralised production processes, helping reduce personnel costs and inventory levels. This is likely to influence supply chain structures, foreign direct investment patterns, multinational enterprises' location decisions, and overall price competitiveness.

The removal of border controls can also provide a boost to Bulgaria's tourism sector. The reduction in crossing times can encourage more short trips and day visits, particularly benefiting destinations near the borders. This is likely to translate into higher visitor numbers and increased economic value for the tourism sector. Additionally, Bulgaria's integration into the Schengen visa regime supports the hospitality industry further. The Schengen visa system ensures uniform visa issuance and mutual recognition among member states, enabling third-country nationals with a visa from one Schengen country to travel freely across the entire area. This could lead to a rise in the number of foreign visitors from outside the EU who already hold a valid Schengen visa. Finally, the removal of internal border controls can have a positive impact on job mobility for cross-border commuters. Reduced commuting times will make it easier for workers to access employment opportunities in neighbouring regions, supporting economic integration and labour market flexibility in border areas.

Table 4.1 presents the economic and fiscal impacts of these channels estimated by Economic Research Institute at the Bulgarian Academy of Sciences.

Table 4.1. Economic impact of Bulgaria joining the Schengen area

Sector	Economic channel	Economic impact (% GDP)	Fiscal impact (% GDP)
Road Freight Transport	Higher goods trade	0.4	0.1
	Time and energy savings for road freight transport	0.3	
Passenger Transport and Tourism	Higher tourism	0.1	0.01
	Time and energy savings for passengers by road and air	0.02	
Total		0.8	0.1

Source: (BertelsmannStiftung, 2016^[8]; European Parliament, 2016^[9]; France Stratégie, 2016^[10]; Economic Research Institute at the Bulgarian Academy of Sciences, Sofia, Bulgaria et al., 2024^[11])

4.4. Moving up in value chains is key to raising productivity and competitiveness

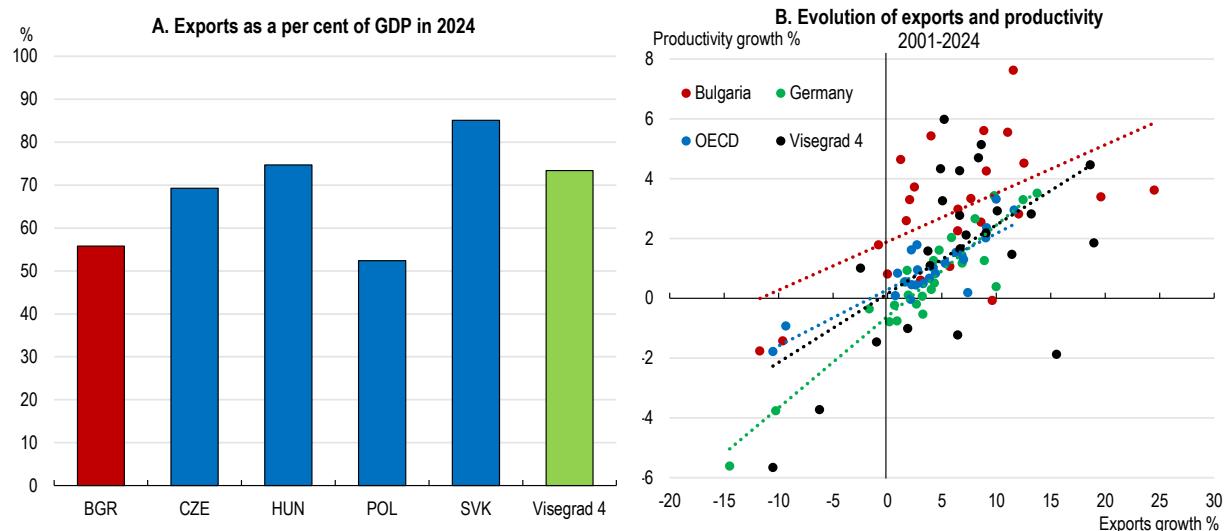
4.4.1. Production needs to shift towards medium and high-tech products

Since joining the EU in 2007, Bulgaria has benefitted from higher trade and productivity. Exports grew notably from 52% to 70% of GDP over 2007-2022, before moderating to 56% in 2024 after the pandemic and energy crisis. Nevertheless, Bulgaria remains less open than some regional peers (Figure 4.13 Panel A). Higher exporting activity can lead to productivity growth through a number of channels, including greater competition in export markets leading to product or process innovation; knowledge spillovers from interactions with foreign clients (learning-by-exporting); and increased market access that enables economies of scale and product and partner diversification (Dalgıç, Fazlıoğlu and Gasiorek, 2021^[4]; Atkin, Khandelwal and Osman, 2017^[5]). Over time in different countries, increasing exports are associated with productivity growth (Figure 4.13 Panel B).

Bulgaria's exports comprise more goods (41% of GDP) than services (15% of GDP). About two-thirds of goods exports are destined for the EU with Germany, Romania, Italy and Greece being the most important destinations while services exports are largely destined to Germany, the United Kingdom, the United States, and Türkiye concentrated in travel, transport, information and communication, and business services. Over 2000-2024, Bulgaria deepened trade relationships with existing partners, most notably Germany and Romania, each increasing 3

percentage points in exports as a share of GDP, while the country has broadened its export basket and expanded to 21 new destinations. Over the same period, Bulgaria's revealed comparative advantage (RCA), which is a measure of the number of products where a country has a high export share in world markets, improved. The number of products with RCA (at the 6-digit HS classification level) rose from 1 032 in 2000 to 1 172 in 2023 (Figure 4.14 Panel A), despite some erosion of competitiveness in the aftermath of the energy crisis and rising input costs.

Figure 4.13. Export growth is associated with productivity growth



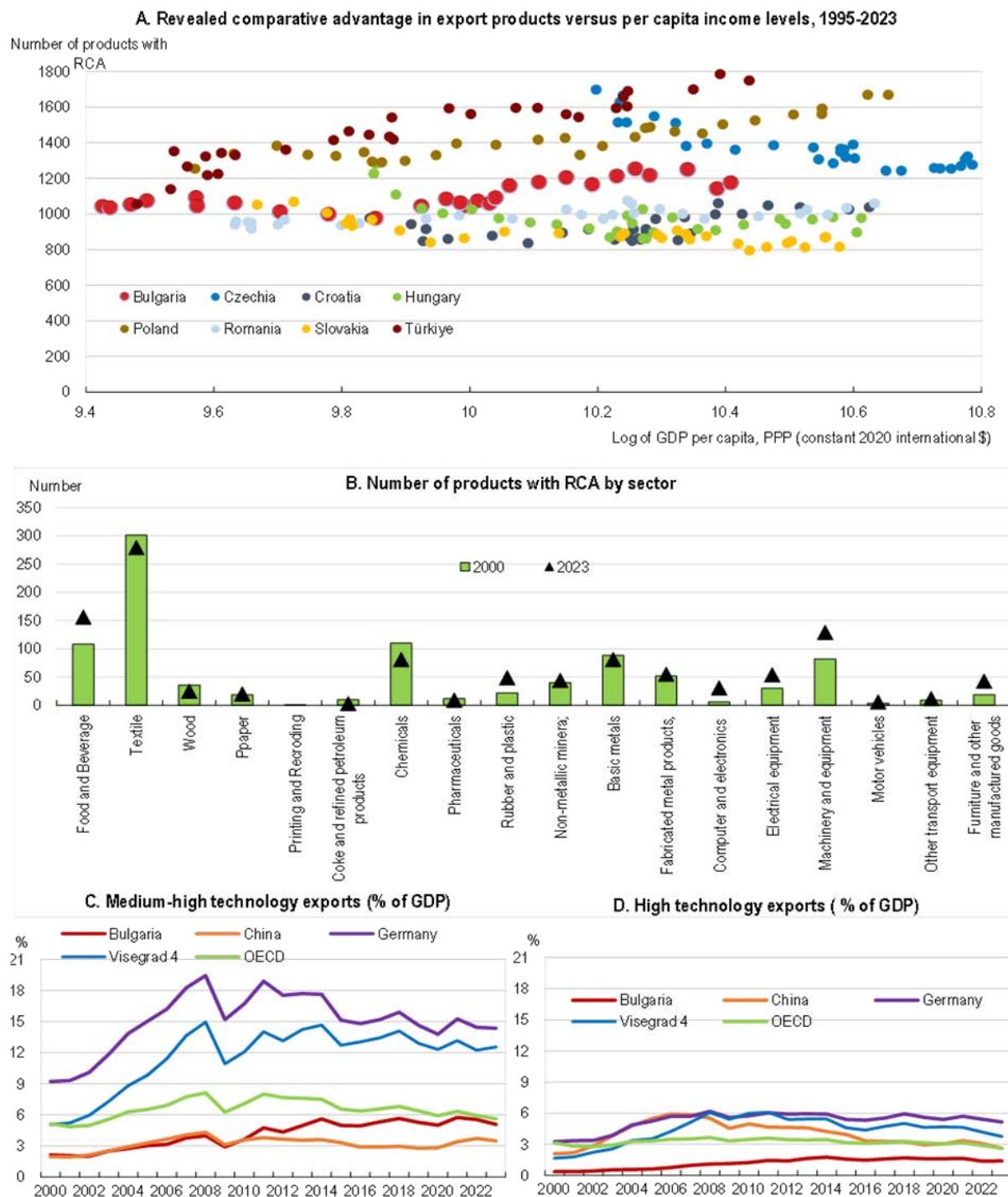
Note: Panel B shows the evolution of annual labour productivity growth and export growth between 2001 and 2024, and correlation between labour productivity growth and export growth for each year.

Source: OECD calculations based on OECD National Accounts.

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Bulgaria has increased the sophistication of its goods export basket, signalling progress in raising economic complexity. Comparative advantages are slowly shifting from low-tech sectors, such as textile and base metals, toward medium and high-tech industries, including electrical and machinery equipment as well as computer and electronics (Figure 4.14 Panel B). As a result, medium-high tech products increased their shares in GDP (Figure 4.14 Panel C and Panel D). This is encouraging and indicates that Bulgaria's manufacturing sector is gradually improving its technological and operational capabilities required to meet international demand in higher technology goods at competitive prices. However, there is more scope for a transition to production of high and medium-technology products. The number of products with RCA in high and medium-tech products remains very low and, despite the progress in increasing their share in GDP, they remain below regional peers (Figure 4.14 Panel A). The progress until 2013 has largely stalled. Participation in supply chains of MNEs producing higher technology products as well as upgrading within the GVCs where they have comparative advantages would facilitate this transition.

Figure 4.14. Goods exports are shifting to more sophisticated sectors but still lag peer countries



Note: Panel A and B: A sector with revealed comparative advantage for a given product higher than one ($RCA > 1$) is inferred to be a competitive producer and exporter of that product relative to a country producing and exporting that good at or below the world average. Panel C and D: The definitions are based on R&D intensity and can be found at https://www.oecd-ilibrary.org/science-and-technology/oecd-taxonomy-of-economic-activities-based-on-r-d-intensity_5jlv73sqqp8r-en.

Source: Panel A and B: Calculations are based on the OECD Balanced International Merchandise Trade Dataset (BIMTS). The BIMTS dataset is a complete, consistent and balanced merchandise trade matrix, covering around 200 reporters and partners and over 5 500 products at the HS 6-digit level, disseminated both according to the HS 2017 and the CPA v.2 classifications. Panel C and D: OECD Bilateral Trade in goods by end-use (BTiGE) database.

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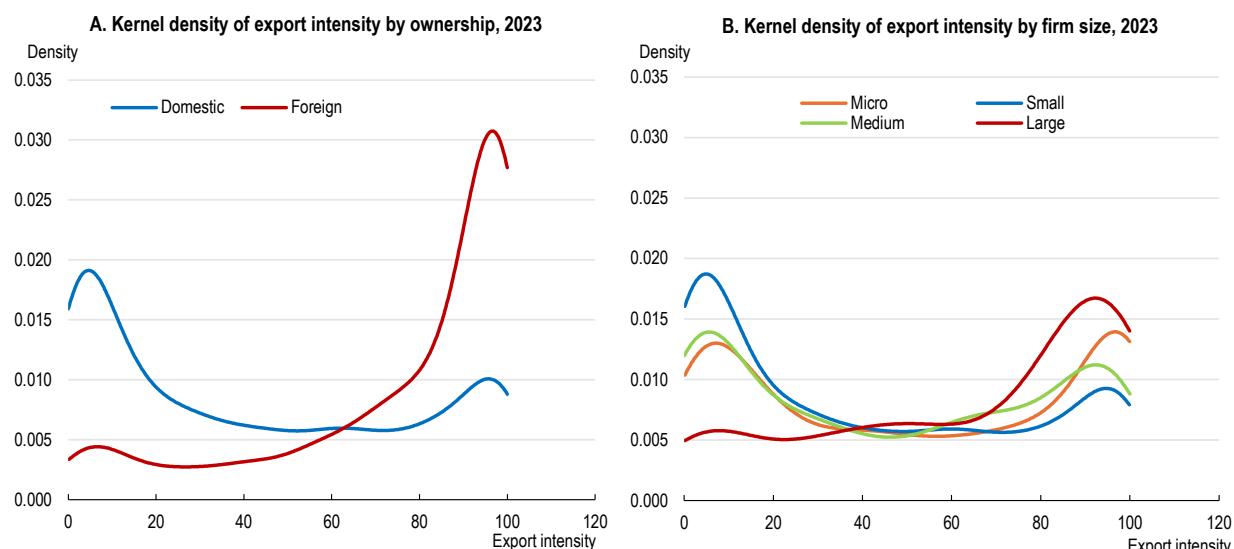
4.4.2. Deepening GVC integration requires upgrading firm capabilities

Over the past two decades, Bulgaria's integration into global value chains (GVCs) has been a key driver of its export performance. In the early 2000s, foreign direct investment (FDI) flowed strongly into manufacturing sectors, accounting for half of total net FDI inflows and facilitating access to export markets and Bulgaria's integration into GVCs. However, this early momentum has not been sustained. Net FDI inflows have declined markedly, from around 30% of GDP in 2000 to just 5% in 2024. This slowdown has been accompanied by a stagnation in Bulgaria's GVC participation, with backward linkages (foreign value added in gross exports) broadly around 35% and forward linkages (domestic value added in foreign exports) remaining flat at 18%. This suggests that while Bulgaria remains integrated into GVCs, its role has not meaningfully deepened or moved toward higher-value activities over the recent past.

Foreign-controlled manufacturing firms have been a key driver of the country's GVC integration. Their exports comprise a large share of their output and are responsible for nearly half of Bulgaria's exports (Figure 4.15), particularly in high- and medium-tech sectors such as electronics, machinery, and automotive components, indicating these firms facilitate technology transfer, skill development and access to international markets. Many large firms export the majority of their output, and export intensity gradually decreases with firms size, while export intensity in micro and SME businesses is split between firms that export a large share of their output and others that are largely focused on domestic markets (Figure 4.15).

Figure 4.15. Foreign-owned and large manufacturing firms have higher export intensity

Kernel density of export intensity by ownership and firm size in 2023, respectively



Note: Panel A compares the distribution of export intensity by ownership type while panel B does the same by firm size. Micro firms: up to 9 employees; Small firms: 10-49 employees; Medium firms: 50-249 employees; Large firms: 250 and more employees.

Source: OECD calculations based on National Statistical Institute Business Statistics Database.

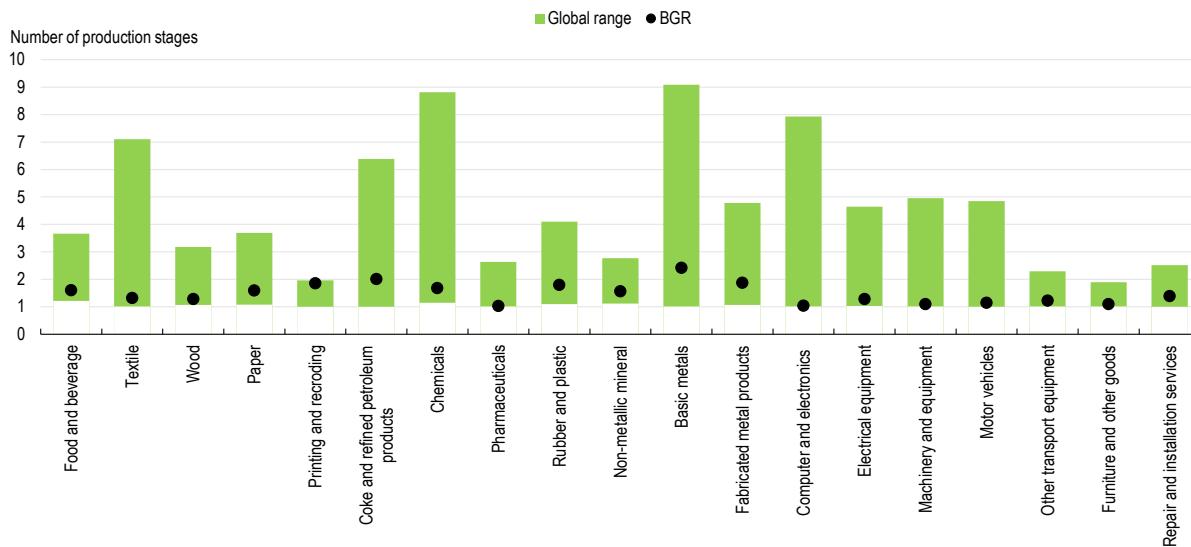
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A closer look at Bulgaria's GVC integration reveals that Bulgarian manufacturing is consistently positioned at low value-added segments of production (Figure 4.16). Figure 4.16 compares the average distance of an industry's output from final use in terms of the number of stages of production across countries (Antràs et al., 2012^[7]). A high index indicates higher upstream production away from final demand. Accordingly, Bulgaria's manufacturing activities are largely located near the end of the value chain, which are often specialised in low value-added modular assembly and routine processing. These are typically labour-intensive activities, characterised by relatively standardised tasks and low technology intensity, and highly susceptible to cost-based competition. While Bulgaria maintains the lowest labour costs within the EU, unit labour costs (ULCs) have tripled since EU accession, surpassing cost growth in other EU competitor countries. The cost advantage that once positioned the country competitively is now gradually eroding and diminishing the country's competitiveness. In order to maintain competitiveness and

transition to more upstream and higher value-added production, Bulgarian manufacturing firms will need to build scale and upgrade their technological, operational and managerial capabilities required for product sophistication and quality that meets the needs of MNEs.

Figure 4.16. Bulgaria's manufacturing is positioned consistently at final stages of GVCs (2019)

Number of production stages an industry's output needs to go through before it reaches final demand



Note: Upstreamness index ranges from a minimum 1 to a maximum of 9, ranking the position of industries relative to their distances from final demand compared to the same industry in other countries. The average industry therefore enters the production process roughly one stage before the final use. Global Range includes the European Union, Norway, Switzerland, United Kingdom, Türkiye, Russia, South Africa, Canada, United States, Mexico, Argentina, Brazil, China, Japan, South Korea, India, Indonesia, Saudi Arabia, Australia, rest of the world. Due to lack of data after the pandemic and energy shock, the analysis is based on 2019 data.

Source: OECD calculations based on the FIGARO 2019 input-output tables, Eurostat (2024) using methodology in Antràs, P. et al. (2012), "Measuring the Upstreamness of Production and Trade Flows".

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A coherent and targeted industrial strategy focused on GVC participation and upgrading is essential to identify and develop solutions for the needs of the manufacturing sector. The government has recently started developing a National Industrial Strategy for Manufacturing and Mining, but this is only due for publication in the second half of 2026. The strategy will include measures to streamline regulations for net-zero and critical raw material projects, accelerate the green and digital transitions, support high-tech industries (e.g. mechatronics and medical equipment) and expand industrial infrastructure, including industrial parks. This is a welcome first step. The strategy should also include measures that will enable building domestic firms' capabilities and scale while reflecting the structure of the manufacturing sector and be tailored to the specific needs of micro and small firms. While there are currently many government strategies and initiatives on specific issues supported by various government agencies and departments, including the efforts around industrial parks, there is a lack of an overall coordinated approach across the government prioritising and aligning efforts to develop higher value-added activities. The future National Industrial Strategy should play a role in filling this gap, but will need a high level of coordination and buy in.

Special support measures and programs, such as supplier development programs, could be considered as these have been deployed in other countries to facilitate spillovers that can ensure domestic firms meet the technological, operational and product quality standards expected by MNEs, and over time help build scale and boost the productivity of domestic suppliers. Well-designed supplier development programs can also reduce search and coordination costs for MNEs. For example, the Czech Supplier Development Program with MNE involvement provided diagnostics and tailored training to 200 domestic firms and achieved around 15-20% productivity increase. Half of the suppliers reported that over time they increased the complexity and/or value added of the products they supply to MNEs operating in the country, and 60% started supplying MNEs operating domestically and abroad while MNEs increased sales and employment growth with higher local sourcing (World Bank, 2019^[9]).

4.4.3. Support for the internationalisation of micro and SME firms should be developed further

The limited internationalisation of micro firms and SMEs further constrains value chain integration. Many SMEs report difficulties in exporting due to lack of information on foreign markets, insufficient access to trade fairs, and challenges in connecting with foreign partners (Georgieva, 2020^[10]). Two consecutive surveys conducted by the Bulgarian SME Promotion Agency (BSMEPA) in April and November 2024 suggest that 16% of SMEs report the lack of sufficient export credit as the biggest obstacle to the internationalisation of SMEs (Bulgarian SME Promotion Agency, 2024^[11]). The support measures most often cited by companies as effective are technical advice, participation in business events, and targeted training, particularly in EU programmes and projects, exports and entry into foreign markets, and digitalisation. In response, Bulgaria has introduced a National Strategy for SMEs and implemented EU-funded programmes aimed at strengthening competitiveness, driving digital and technological transformation, and increasing export capacity. The National SME Strategy, in particular, focuses on measures for specialisation in high- and medium-high-technology manufacturing, as well as in knowledge-intensive services. SMEs in these sectors jointly accounted for 29.2% of the value added, slightly below the EU average of 32%. However, these programmes largely prioritise already exporting and productive SMEs with limited outreach to domestic-oriented or “new-to-export” SMEs, some of which may be highly innovative or possess strong export potential but lack international experience (Nigohosyan, Vassileva and Vutsova, 2025^[12]). Expanding eligibility criteria to include indicators like innovation capacity and export readiness, rather than past export performance, could increase outreach. A broader support programme that focuses on regions or sectors could also be considered. For example, Brazil’s Local Productive Clusters (LPCs) program focused on boosting export competitiveness SMEs based on clusters, those operating in the same sector and region, rather than past performance. The initiative provides targeted assistance in areas such as technology adoption, quality improvement, management training, and market access, often through partnerships with local institutions and business associations. The programme helped firms achieve a 22% increase in average productivity with the share of exporting firms increasing from 5% to 15%. Over 60% of firms reported introducing new or improved products or processes (World Bank, 2019^[9]). EU-funded programmes supporting accelerators and business incubators in digital innovation hubs, as well as SME development and growth in the northeast are steps in the right direction and could be further expanded.

Outside targeted support programmes, there should be an ongoing support for internationalisation of SMEs and building their capabilities required for higher value-added production. The BSMEPA organises and supports participation in international fairs and exhibitions and provided applicant firms online trainings to expand markets to foreign countries. There is a need for more proactive consultancy and advisory services to stimulate demand as SMEs might be financially constrained to afford consultancy services in product certification, operational and managerial efficiency or market access. The BSMEPA could be given the capacity to implement advanced, modular training programmes, like Portugal’s Internationalisation Academy, to equip SMEs with practical tools for entering foreign markets, product and process innovation, diversifying exports, and managing trade risks. BSMEPA, which houses Bulgaria’s National Contact Point for Responsible Business Conduct (RBC), is also well placed to support SMEs to observe RBC principles and standards in their activities, including the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (OECD, 2023^[21]). Useful lessons can be drawn from countries like Poland, where the Polish Agency for Enterprise Development (PARP) offers consulting and financial support not only for product and process innovation but also for digital adoption, supported by extensive funding and managed in a close partnership with the business sector.

4.4.4. Encouraging more knowledge intensive activities would help boost higher value-added exports

Bulgaria needs to integrate knowledge intensive higher value-added activities, such as research and development (R&D), information and communication (ICT), and design into production processes to capture greater value added and upgrade its value chain participation. These services can play a key role in achieving this by increasing product differentiation and enabling customisation. Yet, progress in this direction has been limited. Bulgaria's ICT sector is relatively sizable with a share of value added (8.2% in 2023), higher than many regional peers and the EU. However, the sector exhibits a significant productivity gap to Germany (measured in TFP in 2021) and the gap is nearly twice as wide as in Czechia and Hungary. Achieving higher productivity in these services would typically require advanced technological capabilities, access to skilled human capital, and innovation ecosystems. In Bulgaria, these elements remain underdeveloped, resulting in limited value-added generation and limiting the sector's ability to deliver high-value services that are internationally competitive and can be embedded in manufacturing exports. As a result, the contribution of ICT services to Bulgaria's export profile remains low. Domestic value-added content of ICT services in gross exports is just 3.9%, far behind countries like Latvia (10.2%), Estonia (8.3%), and Romania (8.5%) in 2022.

The government has taken active steps to position Bulgaria as a regional innovation hub and is advancing initiatives like Institute for Computer Science, Artificial Intelligence and Technology (INSAIT), the EU Chips Joint Undertaking, and the AI supercomputing facility BRAIN++. In particular, Bulgaria was granted EUR 90 million of EU funding to host one of the six new artificial intelligence factories of the European Union, which will build infrastructure with specialised systems optimised for artificial intelligence. This is welcome and more of these investments should be pursued as they create opportunities to leapfrog into advanced technological capabilities and achieve rapid productivity gains. When integrated into production processes or bundled with goods, these services can improve product differentiation, increase competitiveness and allow for higher value-added appropriation.

4.5. Skill shortages are a major constraint to business expansion

Skills shortages present a critical constraint to investment, GVC integration and higher productivity performance in Bulgaria. The European Investment Bank's 2025 Investment Survey highlights skills shortages as the top barrier to investing, cited by 86% of firms respectively. Over three quarters of Bulgarian industrial firms report difficulties in finding the right workforce, and over half identify insufficient qualification as the primary issue. The Labour Needs Survey by the Employment Agency underscores the severity of the mismatch: it estimates that industry requires higher-educated specialists equivalent of around 1% of employment over the next 3-5 years, with the largest shortages in electronics and automation and mechanical engineering while nearly twice as many mid-skilled specialists are required, particularly in production technologies in textiles and mechanical engineering in metallurgy (EA, 2024^[13]). These shortages cut across both high- and low-tech sectors.

Human capital is underdeveloped, among OECD countries only Mexico and Colombia rank lower than Bulgaria in the Human Capital Index and Bulgaria ranks 47th in the 2025 Global Talent Competitiveness Index. Vocational and technical skills (43th) and lifelong learning (114th) are particularly weak (INSEAD, 2025^[14]). Personal and social competences (28.2%), followed by mathematical competences (12.7%) and language literacy (11%), were reported as the most sought-after competences by Bulgarian firms. Bulgaria is not part of the OECD's PIACC assessment of adult skills, but PISA scores measuring the performance of 15–16-year-olds underlines that basic literacy and numeracy skills are low among Bulgarian students, pointing to persistent weaknesses in the education system (see Chapter 2). A 1% increase in the human capital stock - measured as a cohort-weighted average of historical PISA scores for the working age population and the corresponding mean years of schooling - is estimated to increase Bulgaria's productivity by 2.5% in the long run (Andrews, Égert and de la Maisonneuve, 2024^[14]).

Despite the need for upskilling and addressing labour shortages, participation in adult education and training in the past 12 months is very low in Bulgaria, with around 3.3% of 25–64-year-olds taking part in adult learning programmes in 2024 (Eurostat, 2025^[15]), the lowest share in the EU and five times lower than the share in Croatia. Insufficient adult learning presents a growing challenge for the Bulgarian labour market as demographic trends and emigration risk exacerbating existing labour shortages (OECD, 2023^[16]). While the government provides several training programmes as part of the Centre for Human Resources Development and Regional Initiatives as well as

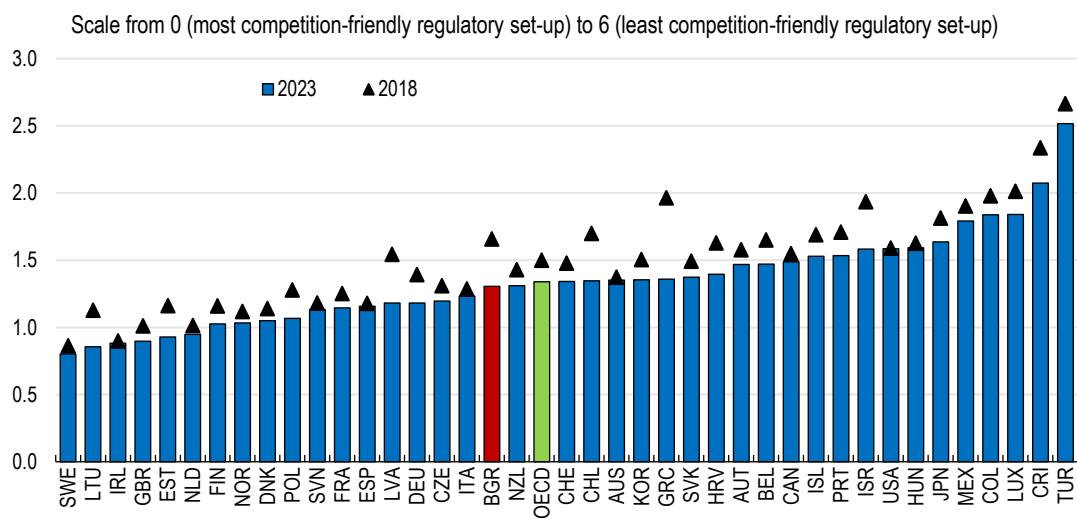
the EU's Human Resource Development Programme of 2021-2027 and the National Recovery and Resilience Plan, overall both the supply and demand side of adult learning remain weak as only 43% of firms plan to provide on-the-job training, while broader participation is hampered by weak motivation among adults due to the perception that such learning is neither necessary nor useful (OECD, 2025^[17]). A wide range of training is planned under the 2025 National Plan for Employment Action for employed and unemployed people in 2025 to acquire professional qualifications and key competencies in line with the requests from employers, in particular digital skills (MLSP, 2025^[18]). As recommended in the OECD Skills Strategy for Bulgaria (OECD, 2023^[16]), policy efforts should continue to facilitate and encourage both supply of and demand for adult learning participation. Offered courses should equip people with marketable skills and need to be effectively advertised. A good example is the Polish Agency for Enterprise Development (PARP), which designs curricula for adult training courses that provide marketable skills jointly with the business sector and academia. Bulgaria could also follow a similar setup where all stakeholders participate in the design of training programmes.

Return migration and immigration could help alleviate workforce shortages. Net emigration has contributed to population decline for decades due to higher wages and better living conditions abroad and Bulgaria's EU membership in 2007 has considerably facilitated the access of workers to other EU labour markets (OECD, 2023^[1]). Bulgaria could also fill the vacancies by skilled migration. 23% of Bulgarian manufacturing firms report a willingness to hire foreign nationals to close the skills gap, but few skilled migrants enter the country. The main channel for high-skilled migration to Bulgaria is the EU Blue Card. However, Bulgaria issued only 705 new Blue Cards in 2023, which is the 8th largest number among EU countries but remains small. Although there are no quotas or labour market tests for third-country migrants, a firm-level cap remains at 20% of a firm's employment for Single Permit holders for non-EU nationals (35% for SMEs) (OECD, 2025^[17]). Given Bulgaria's high levels of emigration in the recent past and low rates of skilled immigration, a more strategic approach to talent attraction and retention is needed as recommended in the OECD Skills Strategy Bulgaria (OECD, 2023^[16]). This includes developing an online platform aimed at Bulgarian professionals abroad and international talent, articulating the benefits of and a positive vision for return emigration and skilled migration. Integrated support services including job-matching platforms, qualification recognition assistance, and guidance on housing, healthcare, education and taxation could also be made available. Removal of the firm-level cap on the share of third-country nationals could also be considered.

4.6. Improving the business environment would support investment and growth

Bulgaria's overall regulatory framework is around the OECD average in terms of its competition friendly stance and has improved since 2018, but some areas of the economy would benefit from lowering barriers further. The OECD's Product Market Regulation (PMR) indicators (Figure 4.17), which assess the alignment of a country's regulatory framework with international best practices, suggest that Bulgaria's regulation of product markets is broadly favorable to competition, with the overall restrictiveness close to the OECD average and similar to Chile and New Zealand (OECD, 2024^[19]). Nevertheless, Bulgaria still lags behind the best-performing countries. Registration and licensing procedures, together with limited digitalisation of administrative services, remain among the most significant administrative burdens for Bulgarian businesses. The European Commission's proposed fourth Simplification Omnibus package is expected to reduce such burdens by 25% overall, and by 35% for SMEs, and should help addressing administrative burdens linked to EU regulations.

Figure 4.17. Bulgaria's regulatory set-up is slightly more competitive than the OECD average, but lags the best performers



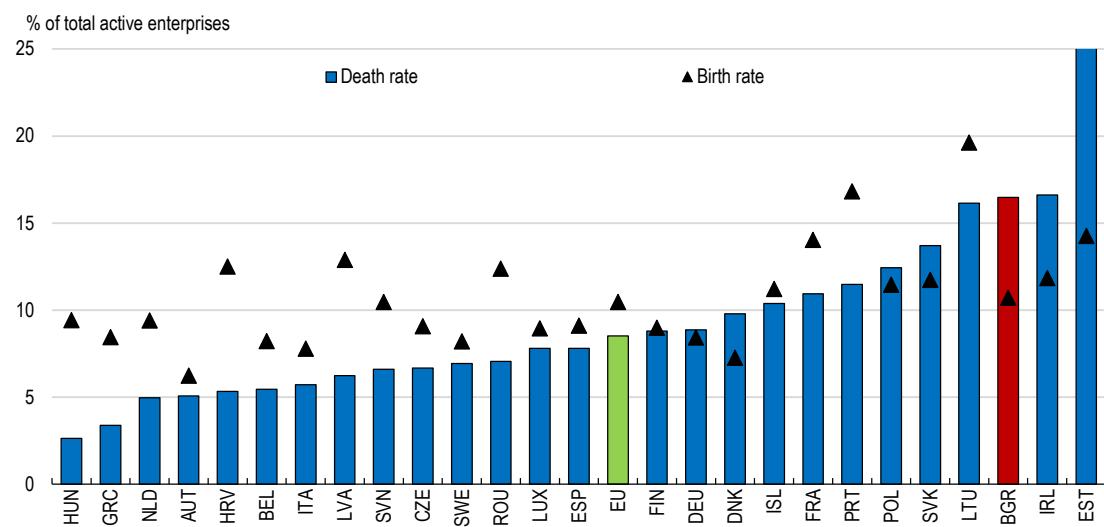
Source: OECD Product Market Regulation database.

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Bulgaria's regulatory environment for trade in services is relatively open, with a Services Trade Restrictiveness Index (STRI) score slightly below the OECD average and lower than most countries in the STRI sample. Bulgaria's regulatory environment for services has been relatively stable for the past decade. Distribution and telecommunications services are the least restrictive, while legal services and air transport face the highest barriers. Broader restrictions on foreign participation in services trade, followed by restrictions on movement of people, in practice, hamper services trade and FDI. In particular, Bulgaria has the highest restrictions on foreign entry in legal services after Poland among countries for which the index is available. Reducing these barriers could help boost competition, attract foreign investment, and increase the contribution of services trade to economic growth.

Figure 4.18. Firm exit rates are higher than most OECD countries

Enterprise births and deaths divided by active enterprises, 2023



Source: Eurostat

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The performance of businesses and the ability of the economy to reallocate resources to the best-performing firms and activities would be enhanced by an environment that make it easier to do business in terms of entry, growth and exit. Dynamic entry and exit are part of the efficiency-enhancing process of creative destruction and productivity. Bulgaria has one of the highest enterprise death rates in the EU, third only to Estonia, while enterprise birth rates are above the EU average in 2023, reflecting relatively healthy business dynamism with more business closing than opening (Figure 4.18).

4.6.1. Easing entry and licencing procedures could bring about productivity gains

Administrative requirements for starting a limited liability company remain more onerous than in most OECD countries, and Bulgaria ranks among the worst performing OECD countries. Recent digitisation of submitting application forms and relevant documents for business registration, as well as obtaining a VAT number (separate from VAT registration), should help to expedite the overall process. The remaining requirements, however, continue to be burdensome and lengthy. Some of these requirements could be streamlined, such as the requirement to register commercial activity of enterprises with local authorities. New businesses currently must engage with up to six separate public entities for registration, a process that takes around 13 days without VAT registration and up to 25 days with it. These inefficiencies can be further compounded by a fragmented licensing and permit system. Starting up a firm needs to be fast, predictable and at a little cost. The government should take stock of the existing licenses and permits and reduce their number at both the national and sub-national levels. Bulgaria should also consolidate registration procedures through a unified digital one-stop shop. This platform could offer comprehensive guidance on licensing requirements and enable online application and submission of documents. Introducing a “silence is consent” rule can accelerate approvals and reduce bureaucratic delays.

Despite these difficulties, there is a very large number of registered companies compared to the size of the population or the economy. As pointed out in the previous Economic Survey, this is driven by financial incentives to register a firm to access VAT refunds on personal purchases (OECD, 2023^[29]).

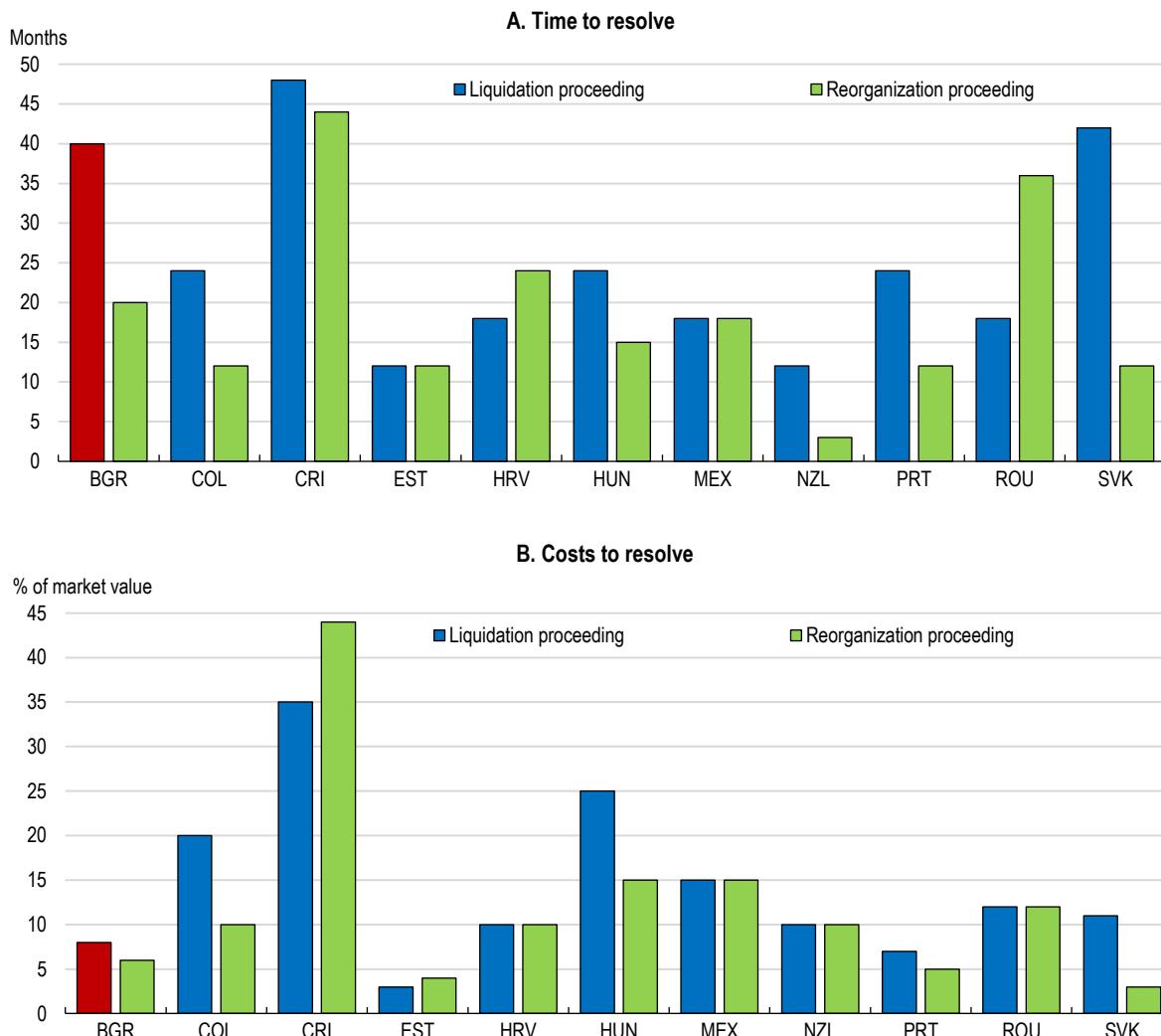
4.6.2. Recent reforms have reduced the risk of ‘zombie’ firms

Important progress has been made in creating better conditions for firms to exit, reducing the risk of zombie firms. Bulgaria aligned its insolvency regime with EU standards in 2023, which should enable weak firms to exit more easily and facilitate the efficient reallocation of resources. Bulgaria should complement these reforms by introducing a formal out-of-court pre-insolvency regime that can facilitate dispute resolution between debtors and creditors and achieve judicial efficiency on in-court insolvency proceedings by freeing up judges.

Exit of unviable firms is needed as prolonged survival of low productivity firms constrains capital and labour reallocation, crowding out more dynamic and productive enterprises (Adalet McGowan, Andrews and Millot, 2017^[31]). Bulgaria had one of the most restrictive insolvency and cumbersome restructuring regimes across OECD and partner countries in 2022 (OECD, 2023^[1]) with insolvency procedures typically lasting around 40 months and costs reaching 8% of the market value of the company while restructuring procedures taking 20 months and costing 6% of firm value (Figure 4.19) (World Bank, 2024^[20]). However, 2023 reforms to align its insolvency framework with EU standards in 2023 have streamlined insolvency and restructuring proceedings that prevented firm exit and led to stranded assets. These reforms should facilitate unproductive firms to exit the market, but the implementation will be key. Recent changes, such as the possibility of selling assets electronically for firms in insolvency, can facilitate the reallocation of stranded assets, increase transparency, reduce costs of proceedings and improve credit recovery rates. An accelerated liquidation procedure for dormant firms with no outstanding obligations will halve the process from 6 months once it will start to be implemented after the completion of required digital infrastructure. These reforms have the potential to reduce court backlogs and the number of persistently inactive firms. Cost-effective insolvency proceedings facilitate inefficient firm exit and embolden greater entrepreneurial activity and new firm creation.

Figure 4.19. Prior to recent reforms, in-court insolvency and restructuring proceedings were lengthy and costly

Time and cost of liquidation and reorganisation proceedings, 2024



Note: In Panel A, the time to resolve liquidation proceedings is presented in calendar months from the date of filing until the payment of some or all the money owed to creditors, and the time to resolve the proceedings is from the date of filing until the approval of the reorganisation plan. In Panel B, the overall cost of the proceedings (costs incurred by both the creditors and the borrower) is recorded as a percentage of the value of the defined company and includes court fees, attorney fees, and insolvency/restructuring representative fees, in addition to other fees (auctioneer, accountant, and other miscellaneous fees).

Source: World Bank Business Ready Database.

StatLink  <https://stat.link/09hdnv>

The new early warning tools, such as a free online self-assessment system, and a longer window (12 months) for identifying financial distress can encourage earlier engagement with restructuring options and avoid formal insolvency. The recently introduced "stay on assets" mechanism, which prevents creditor enforcement actions for up to four months (extendable to twelve months with court approval), can offer firms valuable time to restructure. However, it must be carefully managed to avoid delaying liquidations and impairing creditor recovery to allow productive reallocation.

Bulgaria's formal pre-insolvency regime requires the supervision of a court or an administrative authority. However, voluntary negotiations between debtors and creditors, facilitated by a neutral mediator under the Mediation Law, can serve as an out-of-court restructuring option for firms in financial difficulty. This mechanism can allow parties to settle obligations, adjust payment terms, or reorganise debts before formal insolvency. Any agreement reached

through mediation has the legal force of a court settlement and must be approved by the relevant district court. As in many OECD countries, expanding access to non-judicial mechanisms in commercial matters alleviate pressure on the judiciary and expedite case resolution as excessive court involvement in insolvency proceedings can lead to bottlenecks. Bulgaria should encourage more use of mediation as an out-of-court pre-insolvency procedures to reduce costs and free up judges for other matters.

Bulgaria could also introduce a simplified specialised regime dedicated to SMEs that would allow faster liquidation and restructuring without increasing the workload in the court system. Many firms in Bulgaria are SMEs or smaller businesses, which usually lack the resources to meet the conditions for conducting lengthy and costly successful insolvency or restructuring. The Bulgarian SME Promotion Agency (BSMEPA) provides a system of early warning tools such as a web-based electronic self-assessment information system of the likelihood of bankruptcy, general guidelines and advice for preventive measures as well as specialised consulting services in business management, accounting, finance and law to facilitate stabilisation procedures for SMEs. A simplified dedicated regime specific to SMEs could have shorter timelines and fewer formal requirements to allow for time- and cost-efficient reorganisation of SME debtors and creditors with simplified preparation of the restructuring/insolvency plan and lower thresholds for the approval of these plans.

Table 4.2. Past OECD recommendations on entry & exit barriers and actions taken

Recommendation	Action Taken
Take stock of the existing licenses and permits and reduce their number at both the national and sub-national levels.	No action taken.
Establish a one-stop shop for setting up businesses and reduce the costs.	No action taken.
Introduce a simplified procedure for the liquidation of SMEs.	No action taken.
Make sure that secured creditors' claims are not crammed down by those of the unsecured.	Secured creditors have priority over unsecured creditors under the Commercial Law.

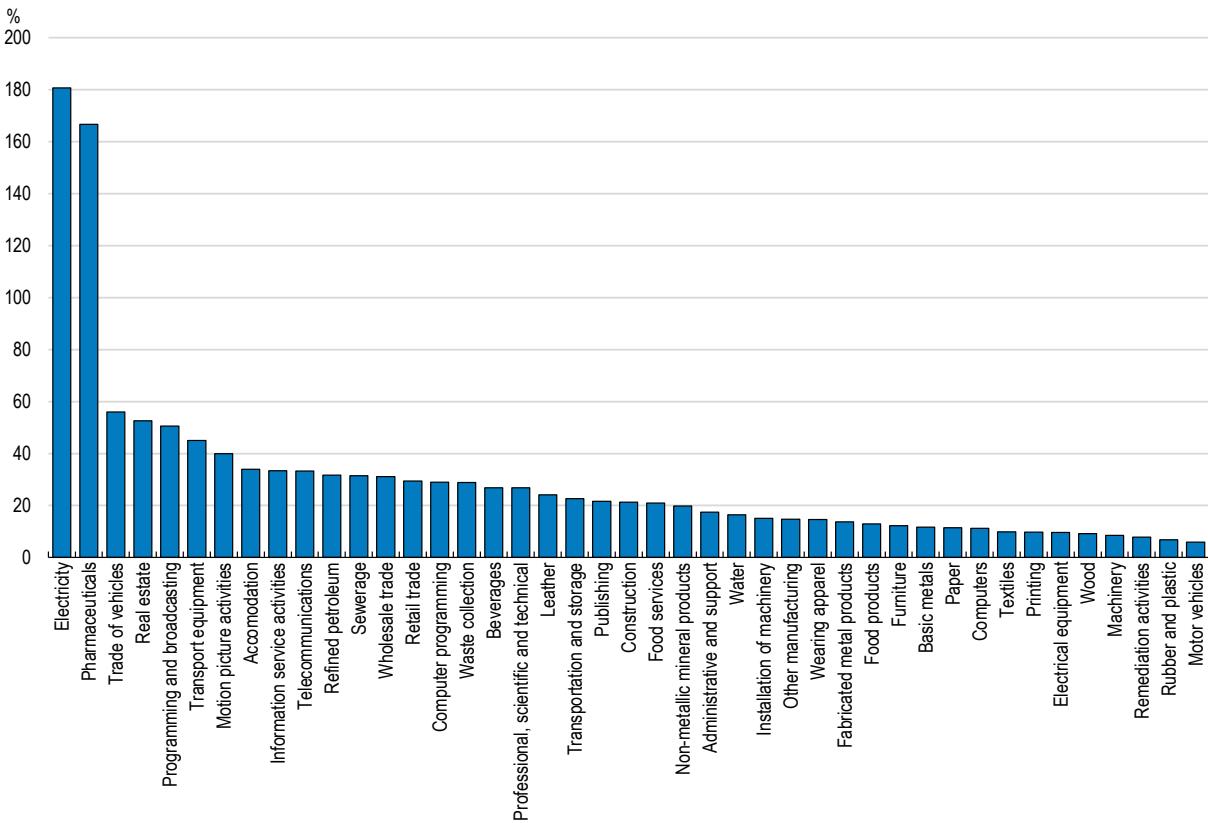
4.7. Greater competition would boost efficiency

Competition is conducive to lower prices for consumers, a better allocation of resources and can encourage firms to innovate. Stronger competition can have powerful effects on productivity in countries farther away from the technological frontier, reflecting stronger incentives to adopt new processes and technologies.

Price markups measure the difference between the prices and the marginal cost of producing a product, with higher markups pointing to lower competitive pressures/lower competition in a certain sector. New OECD estimates suggest that competitive pressures could be stronger in some manufacturing industries in Bulgaria, and even more so in services industries. Markups are very high in utilities, a few manufacturing industries such as pharmaceuticals and transport equipment, as well as a large number of service industries such as utilities, trade of vehicles, accommodation and commerce (Figure 4.20). In some services industries, such as trade of vehicles and general retail trade markups are higher, but these industries should also be facing markets with stiff competition, therefore should have thin margins.

Figure 4.20. Estimated markups are high in several services industries and some manufacturing

Average markups over 2012-2021



Note: Estimated markups are margins over average costs. The chemicals sector is excluded due to data issues and tobacco manufacturing to its nature.

Source: OECD estimations based on the ORBIS database.

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4.7.1. Market structure and business practices suggest that competitive forces could be strengthened

Bulgaria is a relatively small market with a diversified industry and the legacy of state dominance. While the state has exited from most sectors, the share of state-owned enterprises is relatively high. Network industries remain vertically integrated and dominated by incumbents (including state-owned firms). In the energy sector, public enterprises control generation, transmission and distribution. The largest holding company, Bulgarian Energy Holding, maintains a structure with coal and nuclear generators, transmission and distribution, notwithstanding the emergence of private competitors in the generation segment. Currently ongoing projects, such as the Greece-Central Europe gas corridor, envisage integrated infrastructure development involving interconnectors and gas storage. The mining sector is vertically integrated with extraction, processing and exports under the same firms. The integration of generation and storage of renewables, notably grid-scale battery storage and hybrid (e.g. solar-wind) projects has also been promoted under the Recovery and Resilience Plan. The wholesale oil sector, where the largest producer owns the pipelines and storage facilities has led to competition issues. Where technically and economically feasible, more competitive market structures should be encouraged through appropriate legal frameworks, regulation and competition policy enforcement.

Public procurement can be a powerful force for boosting competition and encouraging industry to upgrade. The public procurement market has longstanding competition issues with 21% of contracts being directly awarded and 37% having a single bidder. The high appeal rate (5-10% of all decisions) suggests issues with the process. In the

case of a single bidder, the procurer has the option to consult the Commission for any anti-competitive behaviour. To go one step further, competition analysis could be imposed on processes with a single bidder outcome in a random manner, but more frequently than current practice. While it may boost the administrative burden of the Commission, the threat of investigation may also deter anti-competitive behaviour.

4.7.2. The Commission on Protection of Competition has shed light on widespread impediments to competition

Sectoral inquiries by the Commission on Protection of Competition have highlighted competition issues in a large number of sectors, including sunflower oil and wheat flower, gasoline and diesel insurance and banking, e-commerce, electricity and district heating. Many of these sectors have high estimated markups. Inquiries have in several cases been triggered by sharp price increases, as was the case for sunflower oil, wheat flower, eggs and cheese. The Commission has also identified and sanctioned several horizontal agreements in recent years. Most common among horizontal agreements are bid-rigging cartels that have been found in construction equipment, landscaping services and work footwear. Bid-rigging investigations are high priority for the Commission, which has received OECD support and training in this area. The Commission is currently carrying out data collection and analysis in sectoral analysis proceedings in the pharmaceutical, fast-moving food, and electronic equipment collection and recycling sectors.

The Commission on Protection of Competition plays an active role in identifying and tackling anti-competitive practices and makes recommendations to address impediments to effective competition, including tools that enhance transparency such as the creation of a register of grain traders or making the application process by farmers for financial aid more efficient. Many of those have materialised and now contribute to greater competition in markets. The Commission played an active advocacy role in highlighting the risks of a proposed law that would have required large retailers to source some amount of certain products from domestic producers, highlighting its adverse effects, such as creating a geographical barrier to the free movement of goods and the risk of market exit. The Commission is active in enforcement activities. Most notably, it identified abuse of dominant position in the oil and fuel storage markets (Decisions 184.16.02.2023 and 332/04.04.2023) and imposed sanctions that jointly reach over a hundred million euros. However, both decisions are being appealed before the Administrative Court.

Bulgaria's framework and institutions safeguarding competition are relatively strong not only because of the prompt adoption of EU regulations, but also because of long tradition of preventing and fighting anticompetitive practices dating back prior to EU entry. It has, however, sometimes proved difficult to achieve successful enforcement actions against powerful players or sectors. The Commission's independence could be strengthened by changing the appointments process: currently, each parliamentary party promotes its candidates for positions at the Commission for Protection of Competition. To reinforce the governance, members of the Commission should be chosen strictly based on professional competence and independently of political parties. The October 2025 amendment of the Law on the Protection of Competition (that came into effect on 7 November) requires documents and/or recommendations substantiating the professional qualities of the candidates, including their expertise in the area of legal protection of competition, public procurement or concessions, or in economics. The amendment also requires staggering the appointment of the members of the Commission, which will start in the next round. Greater emphasis needs to be put on training and data collection as well as introducing new methods such as AI tools for detecting competitive behaviour, which will need a greater budget stated in the amendment. Historically, the Supreme Administrative Court (SAC) has overturned some CPC decisions due to insufficient evidence. For instance, in cases involving the vegetable oil and milk sectors, the SAC found that the CPC had not adequately substantiated claims of price-fixing, indicating potential inconsistencies in enforcement standards. The penalties imposed for anti-competitive behaviour in Bulgaria can sometimes be relatively low compared to the damage caused by the violations and decision-making be slow. This may reduce the deterrent effect of the fines, making firms less likely to change their practices. Higher fines could be a stronger deterrent.

4.8. Innovation and the adoption of new technologies need to improve

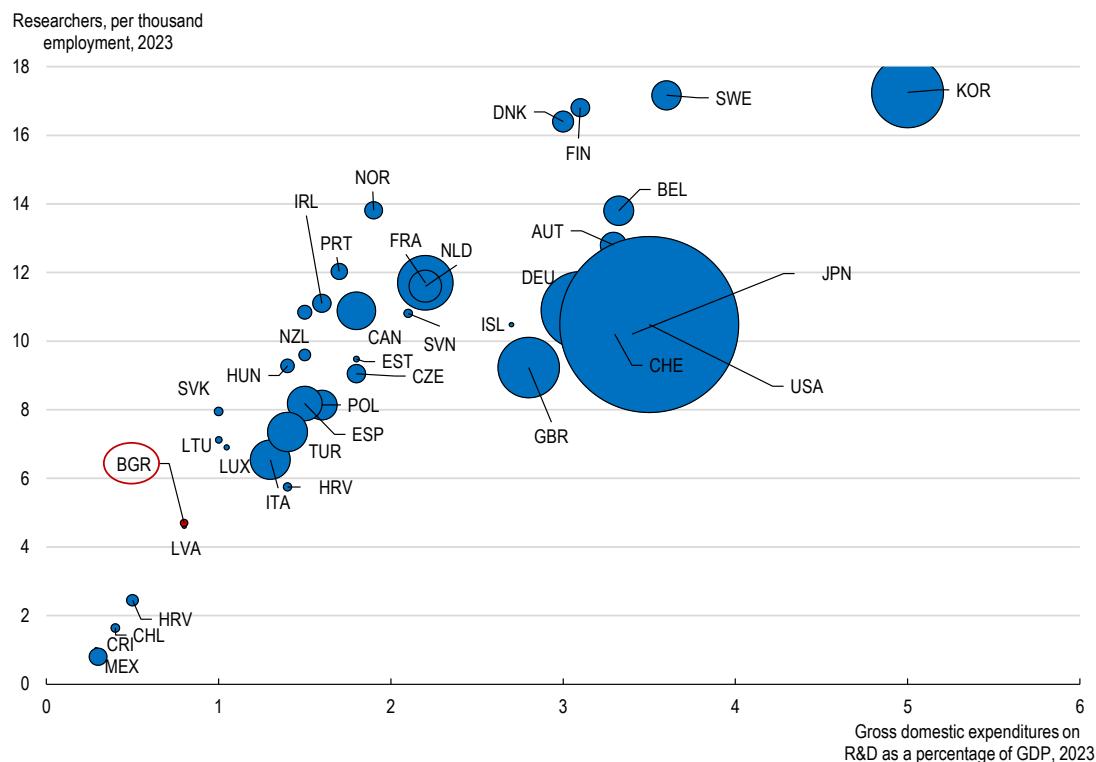
Innovation and the adoption of more advanced technologies and working practices, including digitalisation, are key to raising the productivity of Bulgarian firms. Diffusion of technology and practices and their adoption are particularly important for catching-up economies.

4.8.1. Innovation spending needs to increase

Bulgaria's spending on R&D at 0.79% of GDP in 2023 is far behind most OECD countries. Moreover, 42% of that is financed from abroad, mostly from the European Union: 31% comes from the business sector and only 26% originates from the public sector (0.23% of GDP). Heavy reliance on EU funds needs to be complemented by stronger national efforts. Modest R&D spending is coupled with a low number of researchers

Figure 4.21). Relative to total employment, there are fewer researchers than in the Visegrad-4 countries, but more than in Romania or some OECD countries like Chile, Costa Rica and Mexico. Only around 35 000 worked in research in 2023 and in full-time equivalent terms their number would be much lower as many have other responsibilities such as teaching. As in most areas of economic activity, women are well represented, making up half of all researchers. Half of all R&D personnel work in the business sector, half of that in large firms, while only 10% work in micro-firms. The government employs roughly a third of R&D personnel in full-time equivalent terms, though universities employ more people, but most of them on a part-time basis. Nearly 40% of the total R&D personnel work in engineering and technology, nearly 20% each in medical and health services and natural sciences and around 10% each in social sciences and agriculture and veterinary sciences and fewer in humanities. Large youth emigration, especially of highly skilled people, aggravates the shortage of potential researchers. Benefiting from research outputs should be guaranteed across all institutions and not left at the discretion of the institution as it is less transparent and may disincentivise explorative research and incentivise young researchers to leave for other countries.

Figure 4.21. Overall R&D spending is low and there are few researchers



Source: OECD Science and Technology Indicators database.

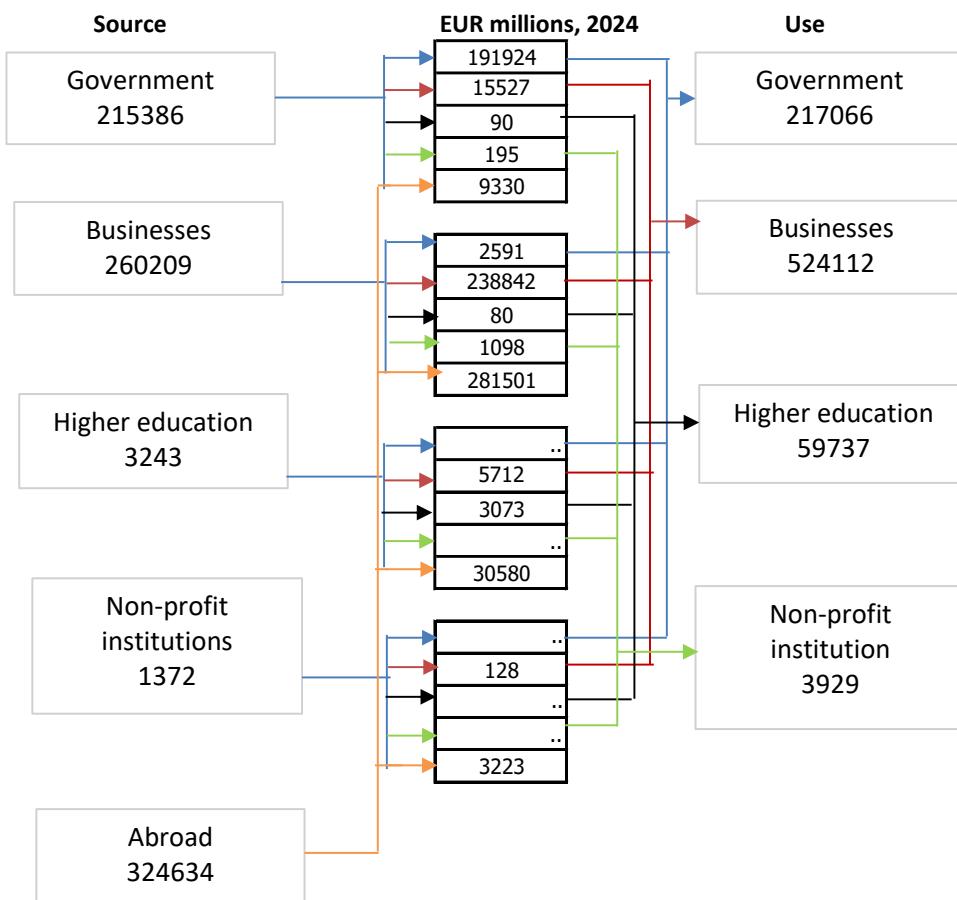
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Most government research spending is directed to general advancement of knowledge (basic research), undertaken mostly at universities or government institutes without a specific target outcome and with freedom for researchers and potentially a wide use of the obtained knowledge. The high share of basic research in the total may be related to the overall low size of government R&D in Bulgaria and fixed costs, although relative to GDP basic research is also far below OECD norms. Public R&D spending should increase to create potential spillover effects to overall innovation activities. As a first step, spending on basic research could be doubled over time to reach half of the OECD average. Furthermore, public research spending is scattered around a large number of institutions making it difficult to coordinate, thereby reducing effectiveness and potential contribution to productivity growth.

Business R&D is small in international comparison (Figure 4.22), but it has a proven impact on overall innovation activities in the country (Domazet et al., 2023[21]). Unusually compared to OECD countries, Bulgaria does not use tax incentives to boost R&D spending and innovation. Corporate tax rates at 10% create limited scope to incentivise innovation through the tax system, although some low-tax OECD countries such as Hungary or Ireland also use this measure to foster innovation. Bulgaria should develop a system of business R&D supports like most countries, including a solid system of evaluation to monitor the impact. That could be done by designing a system combining tax incentives and direct supports with eligibility carefully designed to support areas with higher returns and spillovers and aiming to encourage innovation. An advisory council on research and innovation is envisaged as laid down in the 2024 Research and Innovation Act (part of reforms under the Recovery and Resilience Facility), which will strengthen links between academia and businesses.

Figure 4.22. Most research spending is by the business sector and originates from abroad

Sources and uses of R&D funds



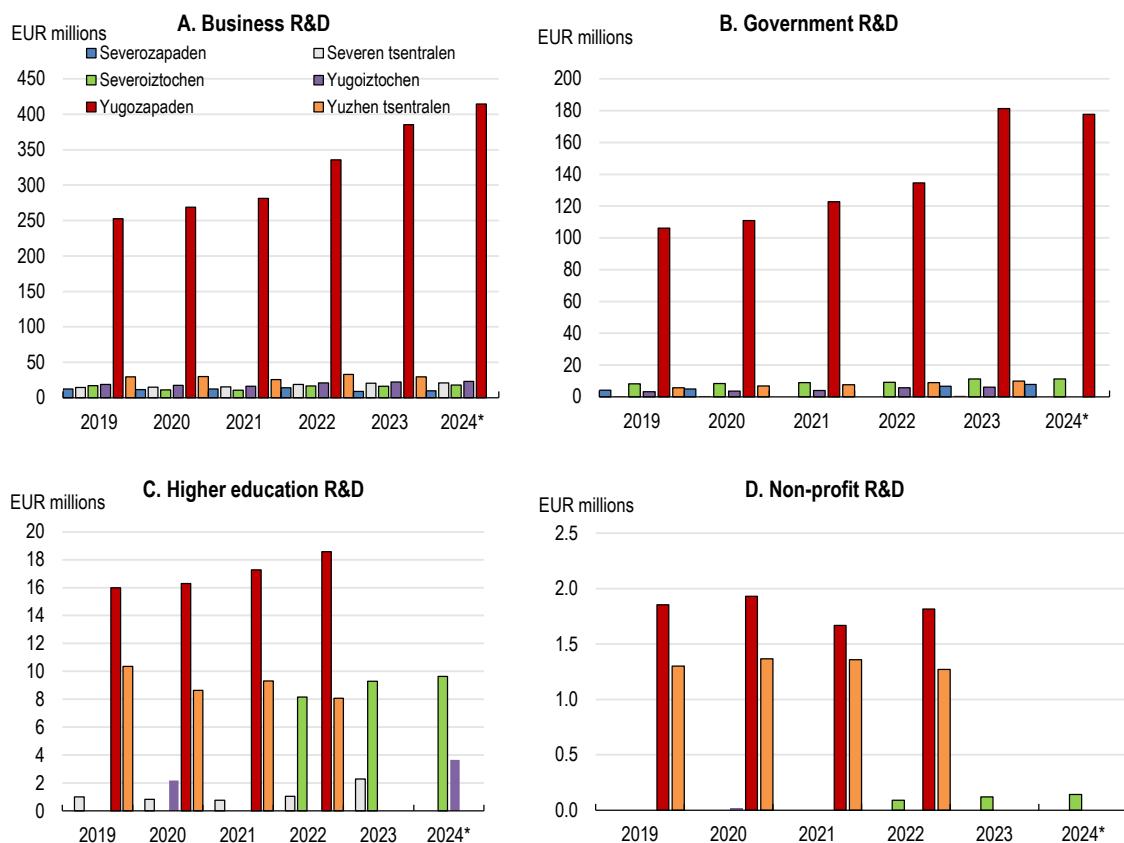
Source: OECD compilation based on National Statistical Institute data.

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The Yugozapaden (Southwestern) region, where Sofia is located, accounts disproportionately for R&D (Figure 4.23). Businesses and the government spend most of their research funds in that region. Greater efforts to encourage innovation in other areas, including Yuzhen tsentralen (South Central) region where Plovdiv is located, and develop innovation clusters in these areas should be considered.

Figure 4.23. The region where Sofia is located gets most of R&D spending

Intramural R&D spending in EUR millions



Note: Preliminary data for 2024. Higher education and non-profit spending on R&D in the Yugozapaden and Yuzhen tsentralen regions are not available for 2023 and 2024.

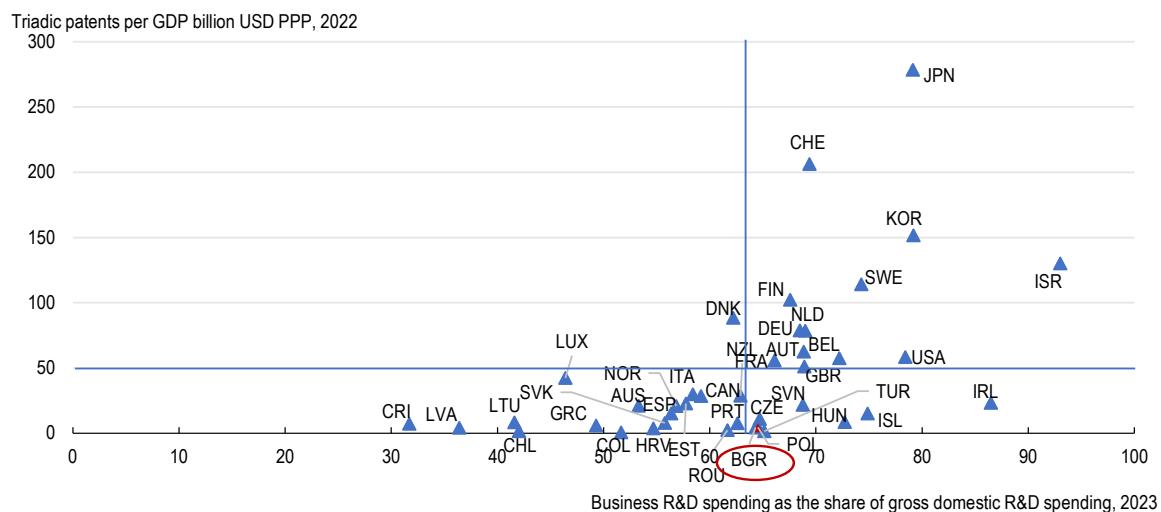
Source: National Statistical Institute.

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4.8.2. More business sector innovation would help lifting productivity growth

Bulgaria's performance in terms of standard indicators of innovation outputs, such as patents and trademark applications per million people, is similar to regional peers, but lags behind OECD countries. In particular, there are very few triadic patents applicable internationally (Figure 4.24). To increase the number of high-quality patents international collaborative research in frontier areas could potentially be one of the target areas of subsidies for business R&D. Bulgaria, alongside Poland and Romania, record the lowest performance in collaborative research, despite improvements in recent years (European Commission, 2024^[34]). The lack of a regional cluster like the German-led Central European manufacturing cluster contributes to fewer knowledge interactions and weaker innovation performance (Strelkov, Hirzalla and Samokhvalov, 2024^[22]).

Figure 4.24. Low business R&D investment leads to very few triadic patents

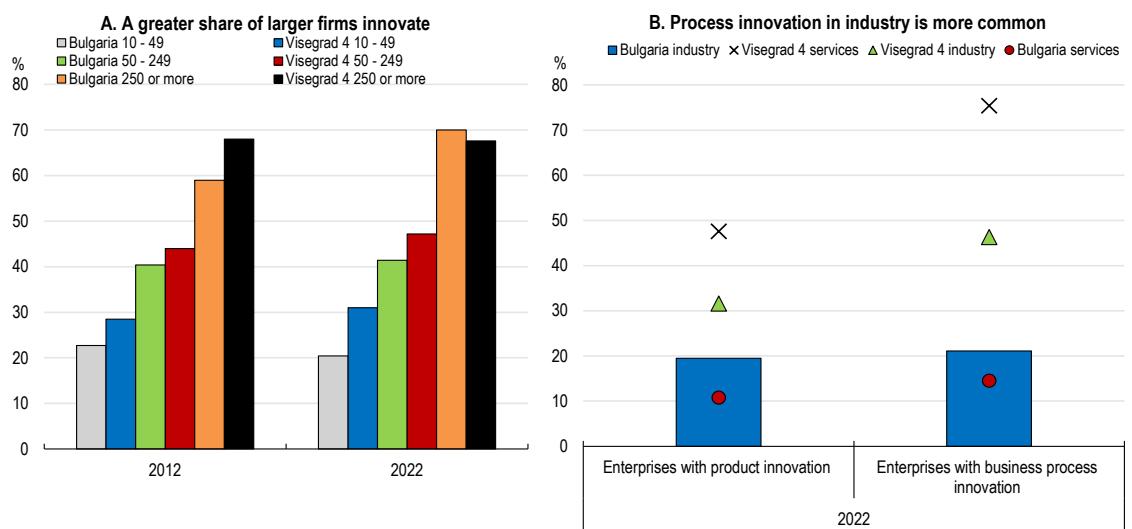


Source: OECD Science and Technology Indicators database.

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Innovation, however, goes far beyond patents and trademarks as firms innovate products and processes even though they do not always register those as intellectual property rights. With this broader measure, only slightly more than a quarter of firms engaged in any kind of innovation activity in 2022, roughly the same as ten years before, though in 2020, this share reached a third (Figure 4.25). This average, however, masks the significant differences across firms of different sizes with 40% of the large firms and 20% of small firms innovating in 2022. Process innovation is more common compared to product innovation across all years for which data are available (2018-22) and manufacturing and other industrial firms tend to innovate more than those in services. This is in sharp contrast to Visegrad-4 countries, where the share of innovators is higher in services, in particular in process innovation. These gaps highlight services as a potential focus area as there is ample room for innovation.

Figure 4.25. Larger firms in industry innovate more and focus more on processes than products



Source: National Statistical Institute database.

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The innovation ecosystem in Bulgaria boasts some notable strengths, which it should better exploit, and faces a number of challenges to address. Bulgaria has very competitive labour costs and a pool of IT specialists, as well as reliable and affordable internet services in international comparison. The country is a beneficiary of EU funds and

innovation programmes, such as Horizon Europe and support from the European Institute of Technology. Start-ups, in particular in IT, fintech, biotech and deep tech, are burgeoning and a number of incubators and accelerators, such as Innovation Starter, Eleven Ventures, Launchub Ventures, have emerged to support them. Data on the commercialisation of patents are not collected, reflecting the low attention paid to putting the outputs of innovative activities to commercial use, but should be collected and tracked.

Private investment in venture capital is very low and startups mostly rely on EU funds, limiting scalability and predictability. Venture capital is still in its infancy, though is developing dynamically. By 2024, Bulgaria ranked 37th in the Global Startup Ecosystem Index and 23rd in Europe, becoming the leader in Southeastern Europe. Venture capital funds manage EUR 500 million in capital and their emergence is linked to the establishment of the Fund of Funds, which allocates EU funds and national co-financing through various financing instruments. There have also been significant changes in the legal landscape to facilitate innovation. In August 2023, the Commercial Act was amended to introduce a new type of entity, the variable capital company, which combines the flexibility of limited liability companies and features of joint-stock companies. As the technical infrastructure for the actual registration of variable capital companies was introduced only in December 2024, it is too early to assess their development. This structure is ideal for companies with fewer than 50 employees and annual turnover or assets below BGN 4 million (EUR 2 million).

4.8.3. Take up of digital services needs to increase beyond the ICT sector

New technologies, such as cloud computing, software to automate supplier- and customer relations, online platforms and AI, offer a vast potential to boost the productivity of businesses. While Bulgaria already has a relatively strong ICT sector, digital take-up needs to be accelerated beyond the ICT sector to have an economy-wide impact. Bulgaria fares very well on digital regulations. It has been swift to adopt regulations on emerging technologies and in terms of network access it also performs well.

Bulgaria has a well-developed regulatory framework for eGovernment, including laws on electronic signature, electronic identification, data protection and access to information. The Bulgarian government regularly updates its digitisation strategies to align its legislation with European standards and practices. It has launched an advanced open data platform (opendata.government.bg), which provides free access to data held by public institutions.

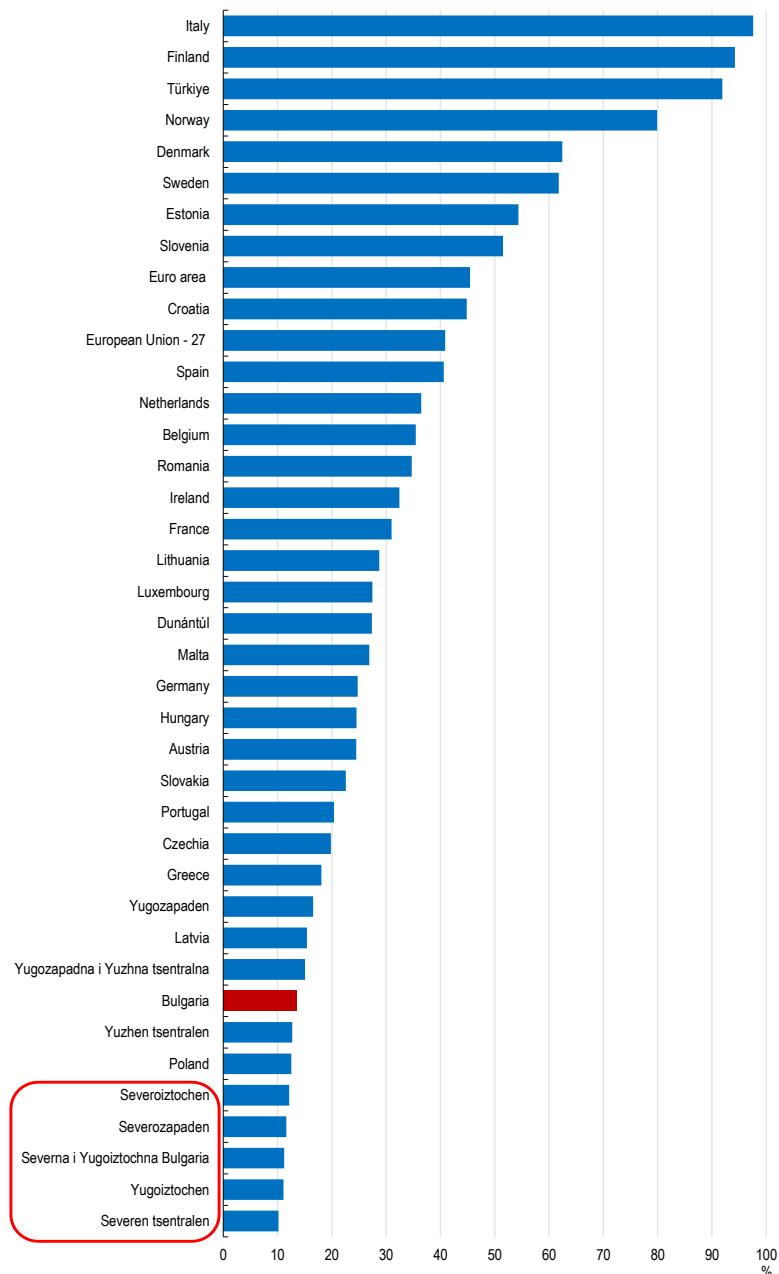
Most Bulgarian firms with at least 10 employees have access to broadband (95%), which compares to 97% in OECD countries. The average, however, masks differences among firms of different sizes, for instance, in the medium category, more Bulgarian firms are connected than in the average OECD country. Firms in the wholesale sector are particularly well connected to the internet. The speed of internet connection, however, appears slower than in most OECD countries, with a lower share of firms having high-speed connection with 1 Gbps or above at 7.7% of firms, a similar share to Czechia's but only a half of Hungary's.

Use of digital services appears to be lower than in many OECD countries. Only slightly more than half of businesses have a home page, lower than in any OECD country, though on par with Romania. Nearly 14% of firms have a website allowing for online ordering, reservation or booking (e.g. shopping cart), similar to the shares in Latvia or Poland, but lower than in most OECD countries. 15% of firms receive orders over networks, 10 percentage points lower than the OECD average, only slightly lower than in Poland, Slovakia or Türkiye. Only 13.5% of firms (employing at least 10 people in the manufacturing, electricity, gas, steam and air conditioning, water supply and construction sectors) were sending e-Invoices suitable for automated processing in 2023, this share varying between 10-17% depending on the region. In comparison with other countries and regions, even the best performing Bulgarian regions rank very low, though on par with Latvia and Poland in 2023 (Figure 4.26). 78% of Bulgarian enterprises still send paper invoices. Furthermore, few firms purchase iCloud services, for instance in the retail sector only 15%, compared with 36% in Croatia and 55% in Estonia. Only 22% firms use business software such as the Enterprise Resource Planning (ERP), roughly half the OECD average but on a par with Romania. The situation is similar with the Customer Relationship Management (CRM) software with half of the user share of that in the Visegrad-4 countries.

Studies of potential gain related to embracing existing technologies by the business sector illustrate that cloud computing and ERP software adoption each adds an average of 1% productivity increase when implemented in isolation (Gal et al., 2019^[23]). Furthermore, a 10-percentage point increase in the adoption of CRM is associated with a 1.7% increase in productivity in an average EU firm. However, the productivity-enhancing impact of digital

technologies do not act in isolation but are mutually reinforcing and the combined gain can be considerably higher than the sum of each. This and the low current level of adoption suggest that there are considerable potential gains stemming from digital adoption in Bulgaria. While most enterprises are small and the fixed costs of adopting business software may be too high, joint adoption with the coordination of business associations could be considered. In Poland, the Polish Agency for Enterprise Development (PARP) has recently added digitalisation to its portfolio of measures supporting innovation, training and competitiveness of the enterprise sector. The corresponding agency in Bulgaria, the Bulgarian Small and Medium Enterprises Promotion Agency, could similarly play a leading role in lifting digital uptake among enterprises.

Figure 4.26. Few enterprises use e-Invoicing suitable for automated processing, 2023



Note: Firms employing at least 10 people in the manufacturing, electricity, gas, steam and air conditioning, water supply and construction sectors.
 Source: Eurostat.

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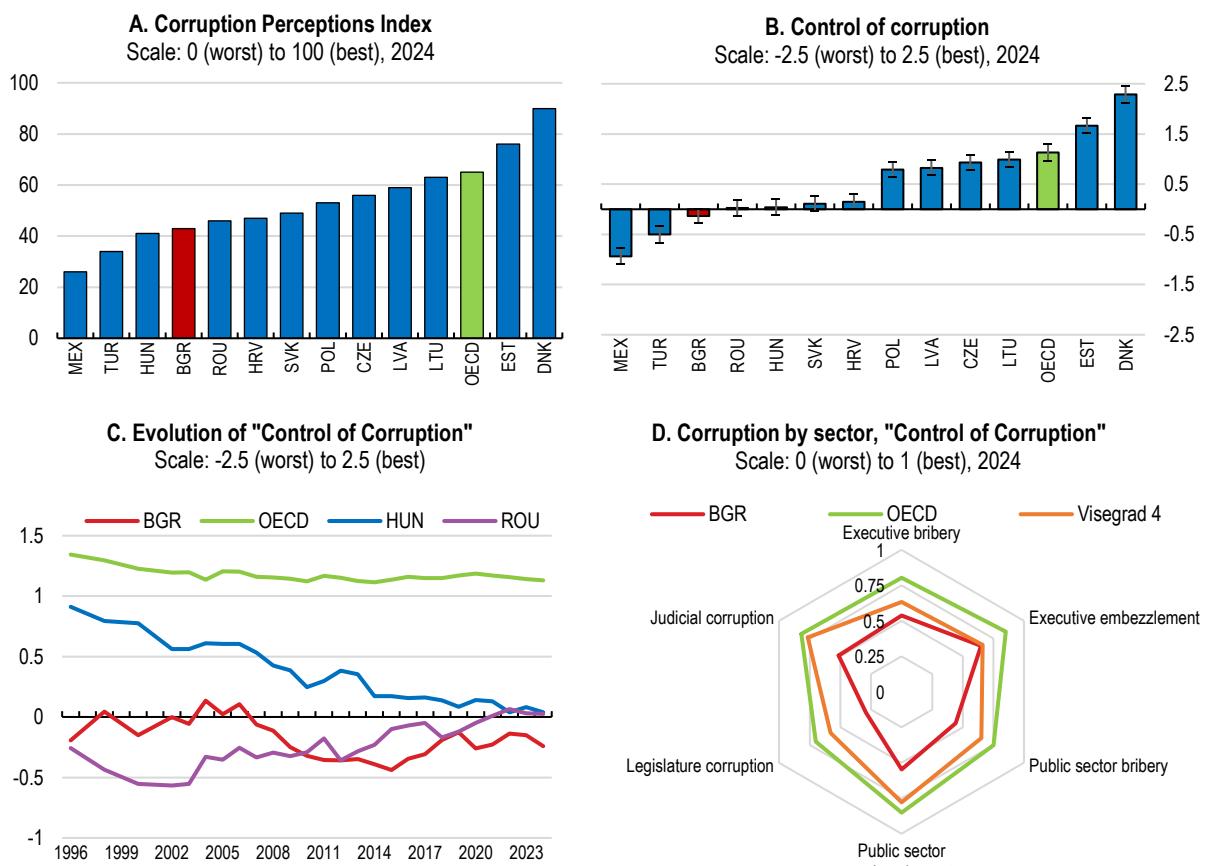
4.9. Corruption reduces competition and complicates business conditions

4.9.1. Corruption complicates the business environment

Perceptions of corruption remain high in Bulgaria as measured by the Transparency International's indicator (Figure 4.27). The sectoral components of the Control of Corruption index suggest that legislature corruption continues to be the most serious form of corruption, as in many OECD countries, followed by public sector bribery. Corruption is not only perceived but also experienced in daily life. According to the Eurobarometer survey, 32% of Bulgarians report being affected by corruption in their daily life, and 12% experienced it directly in the year before the survey (European Commission, 2025^[1]). Bribery and the use of connections are often seen as the easiest way to obtain certain public services by Bulgarian businesses (European Commission, 2025^[2]) and businesses' involvement in bribe giving more than doubled between 2018 (11%) and 2023 (27%) (SELDI, 2024^[3]). Perception of corruption has not changed since the last Economic Survey (OECD, 2023^[4]). Public confidence in anti-corruption efforts is also weakening as 67% of individuals believed that corruption cannot be substantially reduced, up from 60% in 2014. Bulgaria must strengthen public integrity and rebuild trust in institutions. Reducing corruption to the level of the Visegrad4 countries (which is still well above the OECD average) by 2035 and maintaining it at that level till 2060 would result in a 4.3% increase in per capita GDP ten years after the reforms and 11.3% by 2060.

Establishing a coherent public integrity framework is key to addressing the full complexity of corruption. In recent years, Bulgaria has taken steps to strengthen its anti-corruption and integrity system. The division of the Commission for Anti-Corruption and Illegal Assets Forfeiture into the new Commission for Anti-Corruption (CAC) as an independent public body for the prevention and counteraction of corruption, and a separate Commission for Illegal Assets Forfeiture (CIAF) for the forfeiture of illegally acquired assets equips them with stronger mandate and clearer responsibilities. The CAC is at the heart of measures to reduce corruption. Its conflict-of-interest checks have been extended to 16 700 public officials and associated individuals and a new bill submitted in July 2025 proposes to expand the scope even further. With its stronger mandate, the CAC identified 26 cases of conflict-of-interest in 2024, some involving high-ranking officials, and imposed financial penalties and asset forfeitures totalling BGN 478 897 (Commission for Anti-Corruption, 2024^[27]). However, these changes have left the public integrity system even more fragmented, with multiple actors and many areas still lacking systemic oversight as highlighted in the previous Economic Survey (OECD, 2023^[1]). In addition, key anti-corruption actors such as the CAC and Prosecutor General's Office are not represented in the overseeing body, National Council for Anti-Corruption Policies (NCAP). Bulgaria could include these institutions in the NCAP and clarify monitoring, evaluation and reporting arrangements (Box 4.3).

Figure 4.27. Corruption is perceived as high



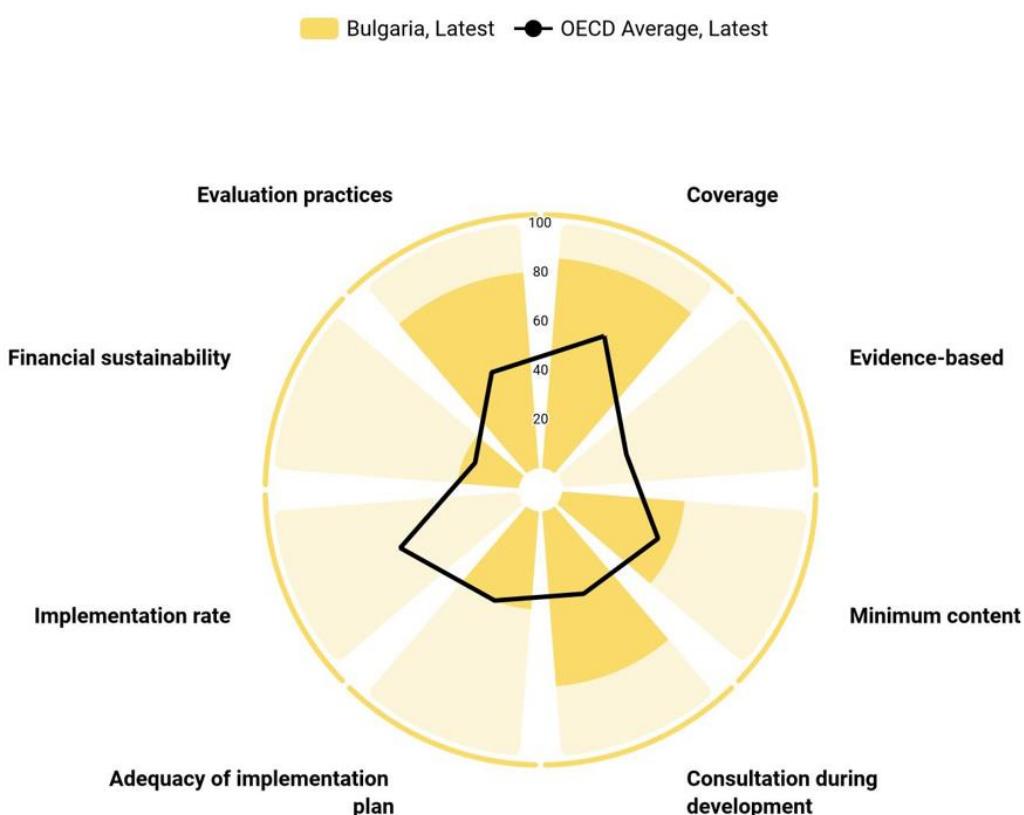
Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.

Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Project, V-Dem Dataset v12.

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Box 4.3. Bulgaria's anti-corruption and integrity framework

Bulgaria has made progress in developing a strategic approach aimed at combating corruption and enhancing public integrity, in particular through the 2021-2027 National Strategy for Preventing and Combating Corruption (NSPCC). As assessed by the OECD Public Integrity Indicators (PIIs) (Figure 4.28), the strategy has a wide coverage of strategic objectives focused on mitigating public integrity risks. Nevertheless, critical gaps hampering effective implementation are identified in the institutional framework for the implementation of the strategy. While the National Council for Anti-Corruption Policies (NCAP) is the inter-institutional mechanism responsible for overseeing the implementation of the strategy, key institutional actors with primary responsibility are currently not represented, including the Commission for Anti-Corruption (CAC) and the Prosecutor General's Office. This affects these key actors' ability to contribute to the development and implementation of anti-corruption and integrity policies, as well as the impact of those policies. Moreover, the NCAP has been largely inactive in recent years due to a period of prolonged political instability in Bulgaria.

Figure 4.28. Bulgaria's strategic framework compared to the OECD average

Note: "Coverage of strategic framework" refers to the fields addressed by public integrity strategies adopted at the level of government, including human resource management, public financial management and public procurement. "Evidence-based problem analysis and use of diagnostic tools" concerns the data sources used for strategy development. "Minimum content in public integrity strategies" evaluates whether the strategy contains a situation analysis and outcome-level indicators. "Inclusiveness and transparency of intergovernmental and public consultations" measures the extent to which public integrity strategies are developed in an inclusive and transparent manner. "Adequacy of implementation structures and reporting" reviews the structure and functions to implement the strategy and its action plan. "Implementation of activities" refers to the implementation rate of activities related to strategic objectives. "Financial sustainability" concerns estimate for financial expenditures of activities. "Transparency of evaluation practices and use in decision-making" assesses the evaluation reports of strategies.

How to read: Bulgaria fulfils 86% of OECD criteria in the coverage of anti-corruption strategic framework, compared to an OECD average of 58%. No data were provided on the implementation of activities.

Source: (OECD, 2025^[28]) based on data validated by the Government of Bulgaria.

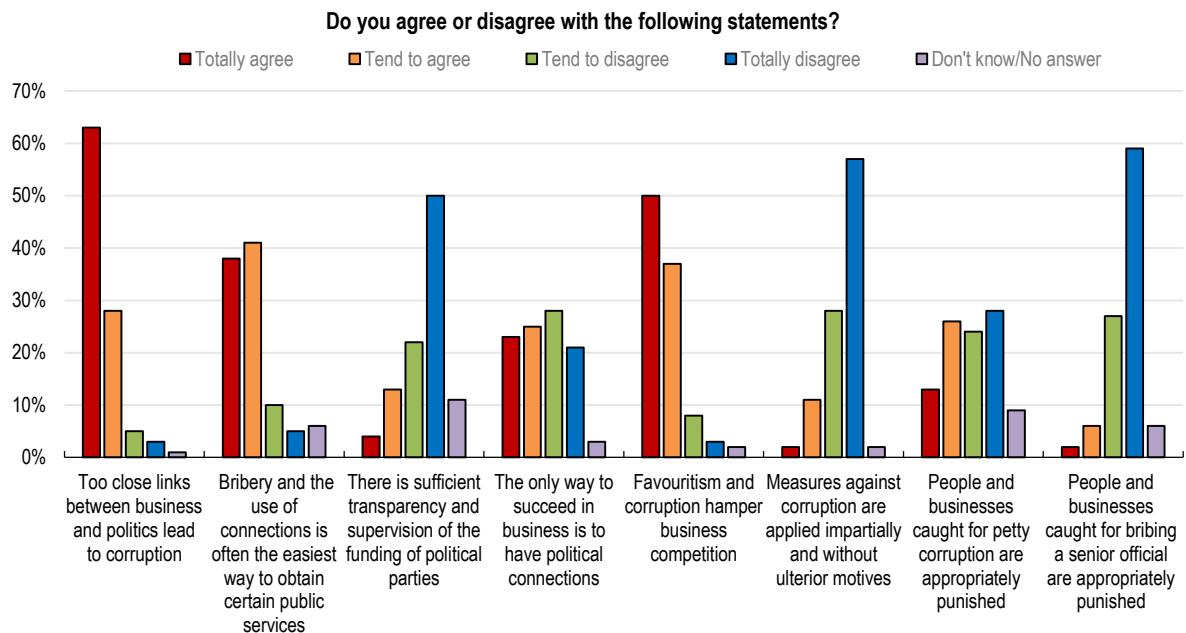
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The lack of clear monitoring, evaluation and reporting arrangements further hampers the strategy's effective implementation. These arrangements ensure that implementing actors can be held accountable for what has been achieved, and how efficiently. Due to these limitations, Bulgaria is unable to track the implementation of the NSPCC, while no monitoring reports have been published since 2022.

Source: (OECD, 2025^[41]; GRECO, 2024^[42]).

Bulgaria has recently stepped up its legislative efforts to align aspects of its anti-corruption framework with OECD standards, including provisions on bribery of foreign officials, measures against the financing of terrorism, and anti-money laundering. Despite improving efforts, public trust in public sector integrity and the effectiveness of anti-corruption efforts remains low. Most business believe that anti-corruption measures are not applied impartially and are often driven by ulterior motives (Figure 4.29).

Figure 4.29. Clientelism and political party financing are the most common channels of state capture



Note: Eurobarometer survey conducted between 27/01-28/02/2025 among 512 Bulgarian firms.

Source: European Commission (2025), Citizens' attitudes towards corruption in the EU in 2025.

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4.9.2. Political party financing and lack of high-level corruption prosecutions remain concern

Fighting against corruption must address the structural conditions that allow capture of public policy making by private business interests, often referred as “state capture”. In Bulgaria, state capture is frequently linked to clientelism and political party financing. 48% of Bulgarian businesses perceive that funding political parties in exchange for public contracts or policy influence is widespread, followed by kickbacks (365) and nepotism within public institutions (31%) (European Commission, 2025^[25]). Such practices compromise accountability, reduce the quality and fairness of public services, increase transaction costs and hinder productivity growth by distorting competition. The absence of a formalised framework governing interactions between business and political actors in Bulgaria reinforces these structural vulnerabilities that enable opaque and indirect forms of corruption. Unlike direct financial transactions, these influence mechanisms are often rooted in informal exchanges such as favours, access and privileged relationships, which are more difficult to detect and regulate. Safeguarding public integrity alongside transparency and accountability in political party financing are crucial for preventing undue influence of private over public interest.

Political financing regulations in Bulgaria ban contributions from foreign states, domestic and foreign enterprises, as well as anonymous donations, and are broadly in line with OECD countries. However, the removal of limits on individual donations to political parties in 2019 introduced loopholes that can be leveraged to establish undue influence of private over public interest. Furthermore, Bulgaria’s Elections Code does not address third-party spending, for example, by limiting it to a ceiling, and thereby leaves space for non-transparent influence by individuals on behalf of private business interests. In Bulgaria, third-party campaigning manifests through unregulated social media activities, the influence of fringe actors, allegations of vote-buying, and the use of unofficial funds. For example, in October 2024, the Ministry of Interior announced that over 250 tip-offs had been received concerning vote buying and illegal campaigning (Vodena, 2024^[29]). To further strengthen the rules around political and campaign finance, Bulgaria could regulate third-party spending in electoral campaigns in line with

practices in other OECD countries, for example by limiting third-party spending to a ceiling and public declaration (see Table 4.3 for examples from select OECD countries). Complementary reforms to mitigate undue private business influence and enhance public sector integrity also include the regulation of lobbying and the management of revolving door risks. In a positive step, the Ministry of Justice (MoJ) has drafted a lobbying regulation (GRECO, 2024^[30]; European Commission, 2023^[31]), currently pending submission to the parliament. In addition, the 2023 Countering Corruption Act introduced a one-year cooling-off period for individuals previously involved in managing public procurement, and for senior public officials transitioning into sectors they previously regulated to mitigate revolving door risks (European Commission, 2024^[32]).

Table 4.3. Third party campaigning regulations in OECD countries

	Definition	Regulation
Australia	<p>"Third parties": a person or entity (other than a political entity or a member of the House of Representatives or the Senate) incurring electoral expenditure that is more than the disclosure threshold during a financial year; but below the amount that would require registration as a 'political campaigner'.</p> <p>"Political campaigners": (a) a person or entity whose electoral expenditure is AUD 500 000 or more during a financial year, or any one of the previous three financial years; (b) or is AUD 100 000 or more during that financial year, and electoral expenditure during the previous financial year was at least two-thirds of the revenue of the person or entity for that year.</p>	A 'third party' must provide an annual report to the Australian Electoral Commission by 17 November each year and comply with restrictions on foreign donations. Political campaigners must register through an 'Application for Registration as a Political Campaigner'.
Canada	A third party is a person or group seeking to participate in (or influence) elections but not as a political party, electoral district association, nomination contestant or candidate.	For general elections, a third party cannot make donations totalling more than CAD 350 000 on partisan activity, election advertising, and election survey expenses. No more than CAD 3 000 of the maximum amount must be incurred to promote or oppose the election of one or more candidates in a given electoral district.
United Kingdom	"Third party" means individuals and organisations that campaign in the run-up to elections but do not stand as political parties or candidates.	Spending limit of GBP 10 000 for England and GBP 5 000 for Scotland, Wales and Northern Ireland. Non-party campaigners are made public on the UK Electoral Commission website.

Source: (OECD/PRI, 2022^[47]).

Bulgaria has taken important steps to build a legal and institutional framework to combat corruption, including amendments to the Criminal Code and the creation of specialised anti-corruption bodies. However, inconsistent enforcement and limited prosecutorial outcomes continue to undermine public trust in the judiciary and the overall credibility of anti-corruption efforts (OECD, 2023^[33]). According to the 2024 EU Justice Scoreboard, Bulgaria ranks the lowest in the EU on perceived judicial independence, with half of citizens citing political and economic interference as key concerns (European Commission, 2025^[34]). These perceptions are linked to structural weaknesses in prosecutorial independence and accountability. In 2023, Bulgaria introduced key reforms, amending the Criminal Code and the Judicial System Act to allow judicial review of prosecutorial decisions not initiating investigations, and to establish clearer accountability for the Prosecutor General and their deputies (OECD, 2023^[33]). The 2023 constitutional reform further curtailed the Prosecutor General's influence by removing their hierarchical control over all administrative heads and prosecutors and abolished the specialised criminal courts and prosecutors' offices (State Gazette, 2022^[35]).

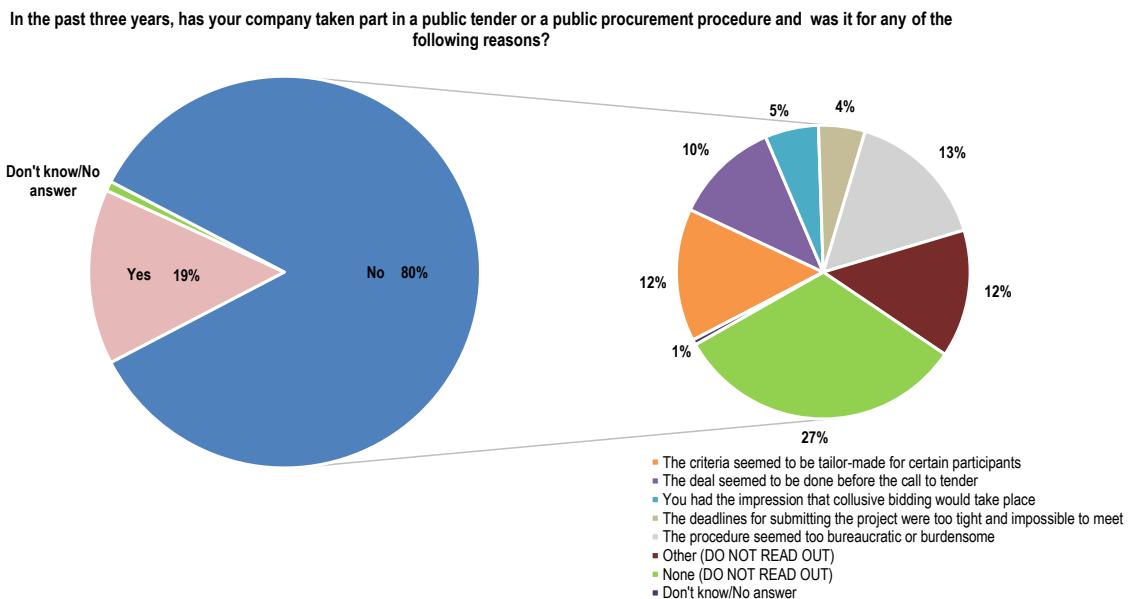
Nonetheless, a robust track-record of prosecutions and final judgements in high level cases remains to be established. Of the total 277 pre-trial proceedings of high-level officials in 2023, only 10 resulted in indictments, while 22 were terminated and 6 were suspended. Multiple institutional bottlenecks lead to the lack of enforcement, such as insufficient resources in the prosecution service, lack of expertise, and guidance and training impeding the effective prosecution of cases (OECD, 2024^[36]; European Parliament, 2023^[37]). Moreover, GRECO and Bulgarian authorities highlight that initiating formal pre-trial proceedings require extensive factual evidence and proof of all legal elements of the crime, including intent and specific purpose. As a result, most of such referrals are rejected and law enforcement authorities are instructed to gather more information, which results in delays and loss of efforts (Council of Europe, 2022^[38]). To address these shortcomings and further strengthen the effectiveness of corruption prosecutions, Bulgaria could introduce standardised guidance and specialised training on pre-trial investigations of corruption-related offences for prosecutors and investigating magistrates. Bulgaria should

continue to strengthen institutional capacity and effectively enforce anti-corruption legislation, ensuring a track record of high-level corruption prosecutions.

4.9.3. Corruption risks in public procurement weaken competition and productivity

Public procurement in Bulgaria accounts for around 11.4% of GDP and is considered a high-risk area for corruption and undue private business influence (Fazekas, Poltoratskaia and Tóth, 2023^[39]). The decentralised public procurement system, compromising over 5 102 contracting authorities, and frequent regulatory amendments (17 times since 2016) undermine the transparency and openness of the procurement market, and leaving it vulnerable to opaque forms of corruption. For example, 37% of contracts were allocated through single bidding while 16% of contracts were granted via negotiated closed procedures in 2024. Firms with political connections were systematically favoured over non-connected firms, often repeatedly partnering with the same buyers in procurement contracts awarded through negotiated closed procedures or single bidding (Fazekas, Poltoratskaia and Tóth, 2023^[39]). At the same time, most Bulgarian firms report that they have not taken part in a public procurement procedure due to opaque and excluding practices in the tendering process such tailor-made procurement criteria or impossible to meet tight deadlines (Figure 4.30). These practices not only reduce value for money and efficiency in public spending but also create a business environment where corruption is perceived as a prerequisite for market access, discourage innovation and investment, and lead to inefficient resource allocation limiting productivity growth. In Bulgaria, politically connected firms were found to be 18 to 32% more likely to win public procurement contracts due to their preferential access to uncompetitive tenders, reducing total factor productivity growth by 8% from a growth rate of 1.63% to 1.5% between 2010-2019 (Fazekas et al., 2025^[40]).

Figure 4.30. Politically connected companies systematically benefit from public procurement



Note: Eurobarometer survey conducted between 27/01-28/02/2025 among 512 Bulgarian firms.

Source: European Commission (2025), Business attitudes towards corruption in the EU.

StatLink  <https://stat.link/1prknw>

Bulgaria has taken initial steps to improve transparency in public procurement, including the launch of a mandatory centralised e-procurement platform in 2020. However, further measures are needed to enhance accountability and ensure a level playing field among firms. The new key milestone introduced under the National Recovery Resilience Plan that obliges contracting authorities to public procurement plans in the centralised automated information system is a step in right direction. To increase transparency further in tendering processes in a decentralised system, Bulgaria could consolidate publishing calls for bids and awarding at the central/subnational level and conducting evaluations with the use of the best price-quality ratio (BPQR) criteria while contracting authorities focus on preparing the scope and specification of contracts. This can bring more control over the tendering process and limit

the use of single-bid or direct awarding. In addition to making them transparent, all proposed transactions involving significant amounts of public money or public assets should be subject to corruption review through in-depth network analysis across public employees and recipients to detect unlawful behaviour beyond standard conflict of interest checks (OECD, 2023^[1]). Reducing corruption in public procurement also requires robust *ex ante* and *ex post* control mechanisms. Bulgaria strengthened the public procurement control system in 2023 following the amendments to the Public Procurement Acts with additional safeguards, particularly for high-value or complex tenders such as *ex-ante* controls by the Public Procurement Agency (PPA) for tenders exceeding BGN 5 million for early identification of potential irregularities. Nevertheless, enforcement responsibilities lie primarily with the Financial Inspection Agency (FIA), which identified 765 violations across 2 165 contracts in 2024, including discriminatory criteria, unequal treatment, and unlawful contract amendments. Of these, 115 cases were referred for prosecution, with most violations linked to municipalities, state-owned enterprises, and other public entities. Similarly, the NAO referred three cases in 2024, although details of its audit findings remain undisclosed. The high-risk nature of public procurement is further underscored by the growing caseload of the European Public Prosecutor's Office (EPPO), which opened 97 new investigations in 2024 involving an estimated EUR 487.7 million, bringing total open cases to 254 and potential financial losses to EUR 1.1 billion. While nearly half of these cases concern EU fund misuse outside procurement, 29% are directly linked to public procurement irregularities (European Public Prosecutor's Office, 2025^[41]).

Table 4.4. Past OECD recommendations on corruption and actions taken

Recommendation	Action Taken
Continue designing and adopting effective measures to rein in corruption.	Ongoing.
Extend the authority of bodies to detect and investigate corruption to cover the entire economy.	More action needed.
Regulate lobbying.	A draft law on lobbying activities is pending public consultation.
Implement the proposals related to investigation of the Chief Prosecutor and the judicial review of refusal to start investigation.	2023 reforms introduced a mechanism for the accountability and criminal liability of the Prosecutor General and their deputies.
Make all proposed transactions involving significant amounts of public money or public assets subject to conflict of interest checks.	No action.
Enhance transparency and checks and balances and implement the recently adopted whistle-blower legislation to facilitate the detection and reporting of corruption cases.	The Whistleblower Protection Act has been adopted on 04 May 2023.
Develop a code of ethics particularly for senior officials; institutionalise integrity at the agency level and increase the effectiveness of the asset declaration system.	The Standing Commission on Ethics, appointed on 20 June 2024, made responsible for offering ethical guidance and organising training.

Table 4.5. Policy recommendations to raise business sector productivity

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Boosting investment	
Investment incentives so far have been limited to accelerated or simplified procedures but now cash incentives are being introduced. Industrial parks are central in the government strategy to attract investment.	Target cash incentives for investment based on cost-benefit criteria and competition considerations and regularly evaluate their effectiveness. Evaluate public money spent on industrial parks.
Lending is collateral based, which is mostly real estate.	Establish an online collateral registry where they could be traced to boost bankability of firms with non-real estate fixed assets. Consider accepting intellectual property as collateral and design the legal framework for it.
CEOs are selected from board members and in the case of some enterprises, appointed by controlling line ministries. Dividend policies for SOEs are unpredictable and make it difficult for managers to plan investment. FDI could play a more important role in developing high-value added activities and generating spillovers to domestic firms.	Establish a merit-based, competitive process that is open to external candidates for the selection of CEOs of all public enterprises and a predictable dividend policy to allow more investment and more profits. Increase capacity of the Invest Bulgaria Agency and undertake a comprehensive review of incentives to foster FDI.
Restrictions on FDI remain higher than in the Visegrad-4 countries and many other OECD countries. Restrictions on foreign equity holdings, as well as on foreign personnel in industries like food or wood and paper, constrain foreign investment.	Ease restrictions on FDI, such as access to land and real estate for business purposes, incorporation requirements, limits on foreign management and reciprocity requirements for foreign investors. Ease restrictions on foreign equity holdings and on foreign personnel.
Local technical and administrative fees for industrial parks are determined at the discretion of municipalities. There are no data on key statistics such as investment, production or employment in industrial/technology zones/parks.	Publish fees imposed by all municipalities and land subsidies in a single web page for greater transparency. Compile statistics on industrial zones/parks and conduct cost-benefit analysis of the use of public funds for industrial parks.
Upgrading skills	
Skill shortages are ranked first among challenges businesses face.	Increase participation in adult learning by designing courses that help acquire marketable skills and attracting skilled immigration and return emigration through integrated support services.
Upgrading in global value chains	
Transport infrastructure and logistics quality are cited among the top barriers to trade, limiting deeper GVC integration.	Continue with upgrading road and railway infrastructure, including intermodal connections.
The Bulgarian manufacturing sector is dominated by micro and small firms with limited scope for high value-added production and exports.	Support micro firms and SMEs with a focus on regional and sectoral clusters, to build scale and capabilities required for integration into higher value-added segments of global value chains.
Strengthening competition	
Monopolies in production and vertical integration are relatively widespread and can impair competition.	Where technically and economically feasible, create conditions for competition in various industry segments.
Direct awards and single bidders are common in public procurement.	Consider imposing random competition checks on processes with direct award or a single bidder outcome.
The Commission on Protection of Competition plays an active role but has achieved few successful prosecutions.	Strengthen the independence of the Commission on Protection of Competition by continuing providing the needed budget and implementing the hiring of members on professional grounds and staggering the appointment of members.
A lack of evidence of infringement is a typical outcome of competition investigations.	Enhance data collection and training and accelerate the adoption of new tools for better detection and evidence gathering of anti-competitive behaviour.
Fines for anti-competitive behaviour have been low and often issued with a delay.	Increase deterrence by applying higher fines in cases of competition breaches and accelerate issuance of decisions.
Spurring innovation	
Low public R&D spending on research risks under provision of this public good and foregoing positive spillover effects. Business R&D is low and there are no explicit supports.	Increase public R&D spending and developing incentives for business R&D targeted to areas with the highest returns subject to rigorous assessment and evaluation.
Schemes for researchers to benefit from the commercialisation of their innovation outputs are decided by their institute. It is unknown to what extent patents and other innovation outputs are commercialised.	Set up a transparent system for researchers to benefit from commercialisation of research outputs. Collect data on the commercialisation of innovation outputs to enhance cost efficiency.
Most enterprises are small and fixed costs of digital solutions are high.	Coordinate joint purchase of efficiency-enhancing digital business solutions and consider the involvement of business associations.

Spurring business dynamism	
Administrative requirements for starting a business, licensing and connecting to basic utilities remain burdensome.	Simplify entry, licensing and utility connection procedures and consolidate application processes in a digital one-stop shop.
Bulgaria lacks a formal insolvency and restructuring procedures dedicated to SMEs	Promote the use of mediation for out-of-court pre-insolvency restructuring procedures and introduce simplified insolvency and restructuring procedures specifically for SMEs.
Fighting corruption	
The fight against corruption is progressing with reinforcing of anti-corruption agencies, but policy gaps remain in anti-bribery and integrity in public life.	Conduct in-depth analysis of all transactions involving significant amounts of public resources to detect potential unlawful personal gain. Continue to strengthen institutional capacity to detect unlawful behaviour and effectively enforce anti-corruption legislation, ensuring a track record of high-level corruption prosecutions, while raising public awareness and engagement in anti-corruption efforts.
Key institutional actors with primary responsibility for anti-corruption and integrity are currently not represented in National Council for Anti-Corruption Policies (NACP).	Strengthen the institutional framework by representing all relevant stakeholders in the NCAP and clarify monitoring, evaluation and reporting arrangements.
Limits to individual donation to political parties are removed and third-party spending in election campaigns is not regulated.	Regulate third-party spending in electoral campaigns.
High rate of single bidding and the use of negotiated closed procedures risk contract awarding to connected firms.	Consolidate tendering process and increase the use of the best price-quality ratio (BPQR) criteria.

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Bulgaria's income has continued to converge to the OECD advanced economies, but the productivity gap remains large. Growth has been supported by robust consumption, private and public, underpinned by steady wage increases. Fiscal discipline has resulted in low public debt but pressures on the fiscal balance are mounting and front-loaded consolidation is warranted. In the longer term, Bulgaria needs to address fiscal pressures from defense spending, the green transition and ageing. Bulgaria joined the euro area in 2026, implying that the onus to decrease short-term inflationary pressures is on fiscal policy. Investment has long been lagging behind peer countries. Productivity needs to be boosted by improving the business environment and removing obstacles to setting up a business, more effective supports to enter international markets and innovation, boosting competition and stepping up the fight against corruption. Education outcomes are weak. Major education reforms to raise outcomes are ongoing and reforms in further areas needed. Delaying tracking, rotating good teachers to disadvantaged areas and providing workplace-based training would help. Greenhouse gas emissions have declined but remain high. A clearer plan for coal phase out, reforms to vehicle taxation and accelerating grid investments would help achieve further reductions while maintaining energy security.

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