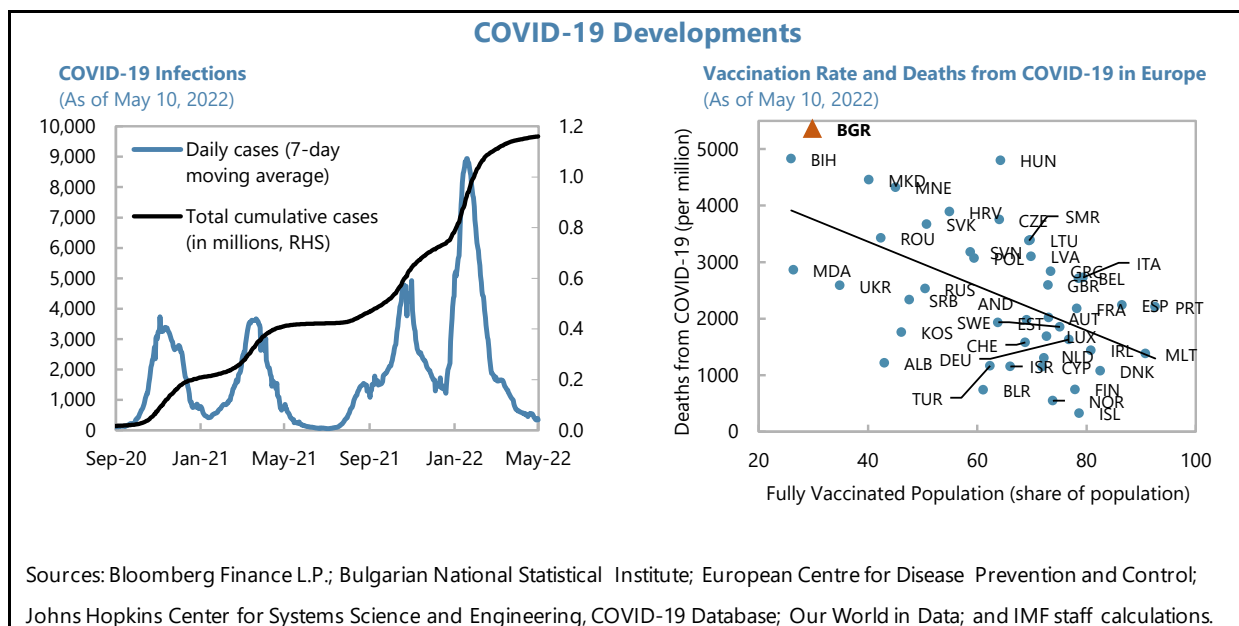


CONTEXT: A SUCCESSION OF SHOCKS

1. The health crisis from the pandemic has been severe. With one of the lowest vaccination rates in Europe, reflecting low demand rather than availability of vaccines, Bulgaria had as of mid-May 2022, the second highest cumulative death rate in the world. Considering the improving health indicators, in April 2022, the government lifted the “epidemiological emergency situation” that provided the legal basis for mobility restrictions and other COVID-related government measures.



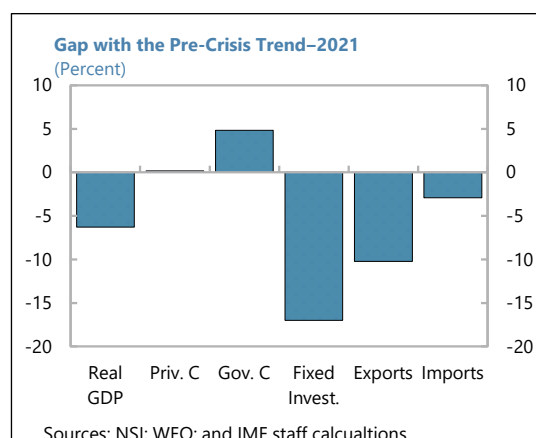
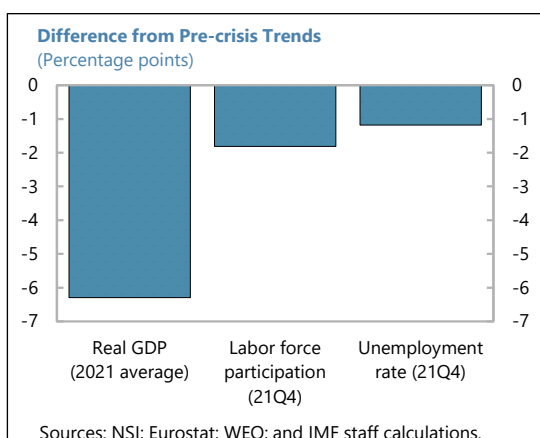
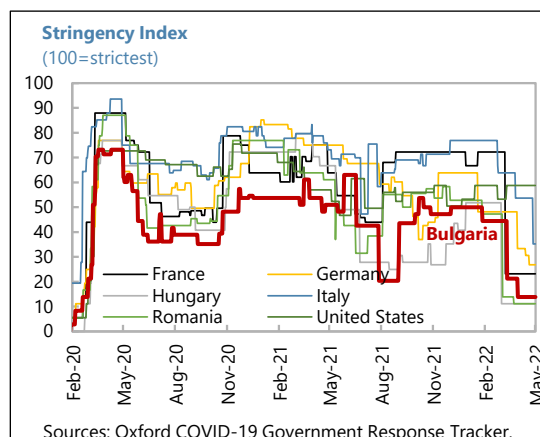
2. A political stalemate in 2021 created uncertainty and delayed policymaking. It took three parliamentary elections to form a government. With no parliament and only a caretaker government for most of the year, important policy decisions were delayed, such as the preparation of the Recovery and Resilience Plan (RRP), the 2022 budget, and the euro adoption changeover plan.

3. The war in Ukraine constitutes another severe shock. The war and related sanctions have significantly worsened the external environment facing the Bulgarian economy. On April 27, 2022, Russia suspended gas delivery to Bulgaria, but Bulgaria has been able so far to secure alternative supplies and avoid disruptions. On May 30, 2022, the EU decided to impose an embargo on most oil imported from Russia, but exempted Bulgaria until December 2024. The war affects the economy through multiple channels and further complicates already-difficult policy tradeoffs.

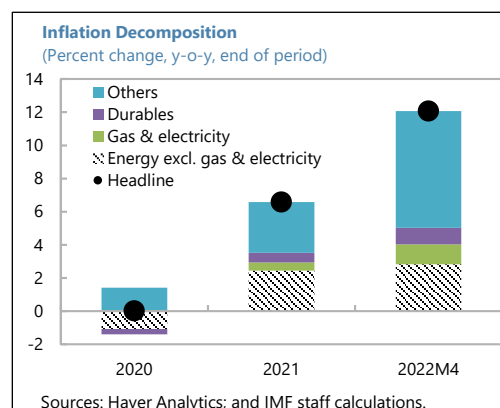
A RECOVERY BEFORE THE WAR

4. The recovery from the COVID-19 crisis was gaining momentum before the war. With mobility not as impaired as in other countries and strong policy support, growth rebounded in 2021 and reached 4.2 percent, following a 4.4 percent contraction in 2020. Consumption grew strongly, boosted by support measures, and buoyant wage growth (11.5 percent in 2021). However, investment declined due to the uncertain environment and low execution of public capital spending in the absence of a regular government (Figure 1). Real GDP reached its 2019Q4 level in 2021Q3 but remained

almost 6¼ percent below its pre-pandemic trend in 2021. Nevertheless, the unemployment rate (4.6 percent in 2021Q4) and total hours worked returned to the pre-crisis trend reflecting lower labor participation, and labor shortages reappeared. The recovery continued its momentum and growth was 1 percent Q/Q in 2022Q1.



5. External pressures and robust consumption have significantly increased inflation. The harmonized index of consumer prices (HICP) inflation reached 12.1 percent y-o-y in April 2022, while core HICP inflation rose to 6.0 percent, from a low of -0.1 percent in August 2021.¹ Inflation accelerated because of rising international commodity prices, which have ratcheted domestic producer price index inflation (49.8 percent y-o-y in April). Inflation has become broad-based, also reflecting the impact of global



¹ Core HICP is defined by staff as HICP excluding energy, food, alcohol and tobacco.

supply-chain disruptions, increases in unit labor costs, and robust domestic demand. To mitigate the impact of high energy prices on households, the government has frozen retail electricity, district heating, and water prices since December 2021.

6. The current account deficit widened modestly in 2021. The current account registered a deficit of 0.4 percent of GDP in 2021, down from 0.1 percent of GDP in 2020. The trade deficit widened sharply, reflecting a stronger recovery of imports than exports, offsetting the improvement in the net service surplus. Nonetheless, gross international reserves increased, partly due to the SDR allocation (equivalent to EUR 1.05bn) (Figure 2). Gross external debt declined in 2021 to 59 percent of GDP, as private debt fell. The external position in 2021 is assessed to be stronger than the level implied by medium-term fundamentals and desirable policies (Annex II).

7. The fiscal balance remained stable in 2021 despite increased support to address the pandemic. While the initial 2021 budget planned for COVID-related measures of about 2½ percent of GDP, they reached 5 percent of GDP. Nevertheless, the fiscal deficit on a cash basis remained broadly stable at 2.9 percent of GDP, 0.7 percentage points (pp) lower than targeted in the budget. This owed to a shortfall in investment (2 pp of GDP) that mainly reflected underspending in EU-funded projects (Figure 3). Revenue also rose as tax collection improved and the government received concession fees for an airport. Public debt increased by 0.5 pp of GDP but remained among the lowest in the EU at 23.8 percent of GDP (Annex I).

COVID-Related Fiscal Measures						
(In percent) 1/						
	2020	2021	2022	2020	2021	2022
	Distribution			Share of GDP		
Household support	30	49	36	1.0	2.4	0.5
Corporate support	7	9	20	0.2	0.4	0.3
Job retention scheme	26	14	18	0.8	0.7	0.3
Health	18	26	26	0.6	1.3	0.4
Capital increase of BDB 2/	18	-	-	0.6	-	-
Co-financing of EU programs	0	2	0	0.0	0.1	-
Total	100	100	100	3.2	5.0	1.5
Sources: Ministry of Finance and IMF Staff calculation.						
1/ Financed by the national budget.						
2/ The Bulgarian Development Bank (BDB) is a state owned bank. The capital increase is to finance the issuance of guarantees to commercial banks for the extension of corporate loans (71 percent) and for providing interest-free loans to employees on unpaid leave (29 percent).						

8. Prudential measures introduced at the onset of the pandemic were gradually phased out. The private debt moratorium that was extended until March 2021 (with payments deferred up to December 2021), in line with European Banking Authority's guidance, has now expired. The Bulgarian National Bank (BNB) required full capitalization of banks' 2019 and 2020 profits but has now removed all restrictions on dividends. It also discontinued the measure on the limit of banks' foreign exposures introduced in 2020, effective April 1st, 2022.²

² The measure had been assessed as a capital flow management measure and a macroprudential measure (CFM/MPM) in the [2020 Article IV report](#).

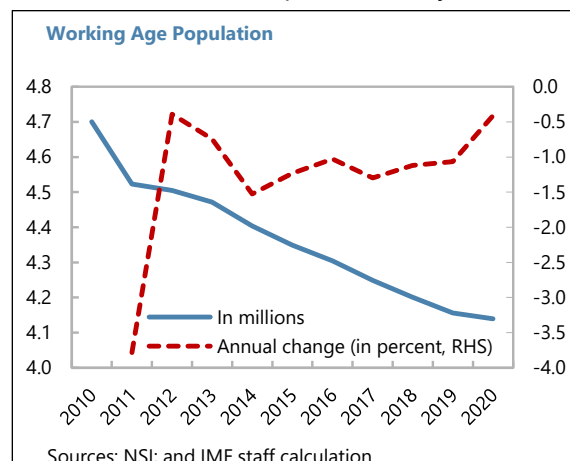
9. The impact of the pandemic on the banking sector has been modest so far. The nonperforming loans (NPL) ratio continued declining, reaching 5.1 percent in 2021Q3 from 6.6 percent in 2019Q4, although the private debt moratorium could have masked payment difficulties of some borrowers that may show with a delay. After declining in 2020, bank profitability is recovering with return on equity recovering to 8.7 percent in 2021Q3 from 5.2 percent in 2020. The banking sector overall remains well-capitalized and liquid (Figure 4). The war in Ukraine has had modest effects on financial conditions so far, with sovereign spreads widening by 39 basis points as of May 10, 2022, compared to three months ago.

10. The authorities are progressing toward the planned euro accession. After the banking union and ERM II in 2020, the authorities aim to join the euro in January 2024. The needed technical work by the authorities is underway. However, delays in preparing the changeover action plan, which the government adopted in May 2022, narrowed the window for the technical preparation by commercial banks.

CLOUDED OUTLOOK, HEIGHTENED UNCERTAINTY, AND DOWNSIDE RISKS

11. The war in Ukraine is dampening growth and exacerbating inflation. Higher commodity prices, lower external demand, and lower confidence are the main channels through which the war is impacting the economy (Box 1). Real GDP growth is tentatively projected to slow to 2¾ percent this year. Private consumption growth is expected to be significantly weaker than in 2021, as high inflation and a public wage freeze erode households' disposable income. Private investment will continue to be dampened by high uncertainty. However, growth will be underpinned by continued fiscal support and high public investment. Staff's projections assume that no new COVID-19 wave necessitates reintroducing mobility restrictions and that natural gas from Russia is fully replaced with alternative supplies (Box 2). High input and labor costs and a closing output gap are expected to continue pushing inflation. Year-on-year inflation is expected to peak over the summer before gradually abating, contingent on a decline in commodity prices. It would be above 12 percent on average this year and about 4 percent next year. Reflecting the broadening and stickiness of inflationary pressures, average core inflation would be above 8 percent this year and about 6 percent in 2023.

12. EU funds will support growth over the medium term, but demographic trends weigh on potential. Growth in the coming years will benefit from large public investment that is expected to also stimulate private investment. About two-third of public investment would be EU-funded, including by NGEU grants estimated to amount about 12 percent of 2019 GDP and that need to be utilized by 2026. In the longer run,



growth is expected to gradually decelerate to its potential of about 2¾ percent, reflecting long-term structural constraints including an ageing and declining population. Overall, staff projects that Bulgaria's real GDP could still be about 4 percent below pre-COVID trend by 2027, reflecting scarring from the succession of shocks that affected investment.

13. Uncertainty is high, and risks are tilted to the downside (Annex III). How the war and sanctions will unfold is highly uncertain. Their spillovers could affect trade, production, inflation, and financial stability more severely than assumed in staff's baseline projection. Furthermore, suspension of Russian gas deliveries to more EU countries could lead to an EU-wide gas supply shortage that would further depress activity and fuel inflation. With low COVID-19 vaccination, Bulgaria is especially at risk of renewed COVID-19 waves. Supply-chain disruptions and volatile commodity prices could disrupt production and exports more than assumed, entrenching inflation, and further eroding real incomes. There is also a risk that second-round impact of higher production costs on inflation be more persistent than assumed, which would increase both headline and core inflation. Higher energy prices may also increase credit risks, and a faster-than-assumed tightening of financing conditions would increase borrowing costs.

Authorities' Views

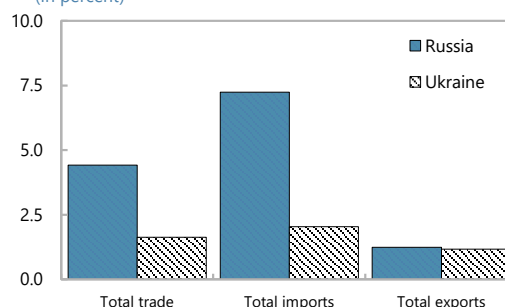
14. The authorities broadly agreed with the outlook and risks. They share staff's views on the main spillover channels of the war in Ukraine and that the outlook is highly uncertain. They are confident that Bulgaria can secure alternative gas supply to avoid shortages despite the suspension of deliveries by Gazprom. Their baseline inflation projections are close to staff's, but they are somewhat more pessimistic about growth in 2022, mostly reflecting a worse assessment of the impact of the war on external demand and terms of trade. They are concerned about possible severe tail risks, including to this season's harvest for most of Eastern Europe, or significant trade disruptions. They consider that growth in the medium term will be supported by EU-funded public investment alongside an ambitious domestic capital investment program.

Box 1. Bulgaria: Spillovers Channels from the War in Ukraine

The economic effects of the war are materializing primarily through higher commodity prices and lower trading partners' demand, while lower confidence will also affect investment. Energy dependence from Russia is a significant vulnerability that has been exposed by the recent gas shut-off. The financial sector is little exposed to Russia or Ukraine.

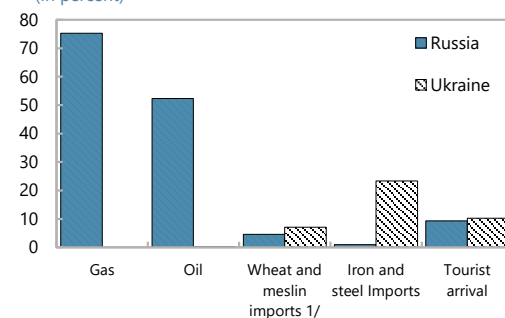
- The indirect impact on **trade** through lower external demand from Europe is expected to be more significant than the direct impact, as Bulgaria's exports to Russia and Ukraine are relatively small (0.6 percent of GDP each) while the EU accounts for two-thirds of Bulgaria's exports. However, Ukraine and Russia are key suppliers of specific commodities, such as grains or certain metals that Bulgaria's industry rely on.
- Bulgaria's **tourism** sector (3 percent of GDP before the COVID crisis) traditionally depended on Ukrainian and Russian visitors. It may also suffer if international tourists are deterred by the proximity to the war.
- Surging **commodity prices** have contributed 4.5 pp to inflation in the past 6 months, as food and energy account for more than a third of the HICP basket.
- Bulgaria's **energy dependence** from Russia is high. Before the war, it relied on Russia for three-quarter of its gas use and half of its oil/oil products use. Furthermore, Bulgaria imports all its nuclear fuel from Russia, although it has at this stage stocks worth several years of production. In all, Russia supplied 46 percent of Bulgaria's energy mix (24 percent excluding nuclear fuel).

Total Trade with Russia and Ukraine, 2021
(In percent)



Sources: Haver Analytics; and IMF staff calculations.

International Trade and Tourism, 2020
(In percent)



Sources: Eurostat; NSI; UN Comtrade; and IMF staff calculations. 1/ 2019

Box 1. Bulgaria: Spillovers Channels from the War in Ukraine (Concluded)

Energy Mix and Russia's Share

	Energy Mix ^{1/}	Share of Imports in Supply ^{2/}	Russia's Share in Imports	Russia's Share in Supply	Russia's Share in Energy Mix
	(A)	(B)	(C)	(D)=(B)x(C)	(E)=(A)x(D)
Nuclear	23.1	100.0	100.0	100.0	23.1
Natural gas	13.1	98.7	75.2	74.3	9.7
Oil and petroleum products	24.2	99.8	52.3	52.2	12.6
Solid fossil fuels (mainly coal)	28.2	7.6	85.4	6.5	1.8
Renewables and biofuels	13.3	0.0	...	0.0	0.0
Non-renewable waste	0.4	0.0	...	0.0	0.0
Heat	0.3	0.0	...	0.0	0.0
Electricity ^{3/}	-2.7	0.0	...	0.0	0.0

Sources: Eurostat; ComTrade; and IMF staff calculations and estimates.

1/ Share in total energy supply (Primary production + Recovered & Recycled products + Imports – Exports + Stock changes – International maritime bunkers – International aviation, 2019).

2/ Supply (primary production + recovered & recycled products + imports).

3/ Net exporter.

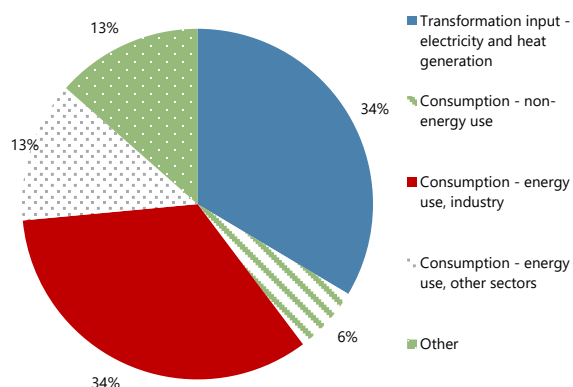
- The BNB estimates that Bulgarian resident banks' exposure to Russian borrowers is less than 0.5 percent of total credits. No Russian bank operates in Bulgaria. There has been no material withdrawal of funding from Bulgarian subsidiaries by parent banks exposed to Russia
- Russia and Ukraine each account for less than 2 percent of Bulgaria's outward **direct investment**, while they represent 5 percent and less than ½ percent of inward direct investment, respectively.
- **Portfolio investment** exposure (asset side) to Russia is small at less than ½ percent of total.
- The number of **refugees** rose through mid-May but has declined slightly since then. It remains lower than in countries bordering Ukraine. They were about 85,000 at end May 2022.
- Bulgaria implements the [sanctions imposed at the EU level](#) on Russia in response to Russia's invasion of Ukraine. The impact of the war and related sanctions on the global economy were discussed in the [April 2022 World Economic Outlook](#).

Box 2. Bulgaria: Risks of Gas or Oil Supply Disruptions

Bulgaria's dependence on oil and gas imports from Russia is high. Gas and oil/oil products represent 13 percent and 24 percent of Bulgaria's energy mix, respectively. Bulgaria imports 99 percent of these resources, of which 75 percent and 52 percent, respectively, from Russia (2020).

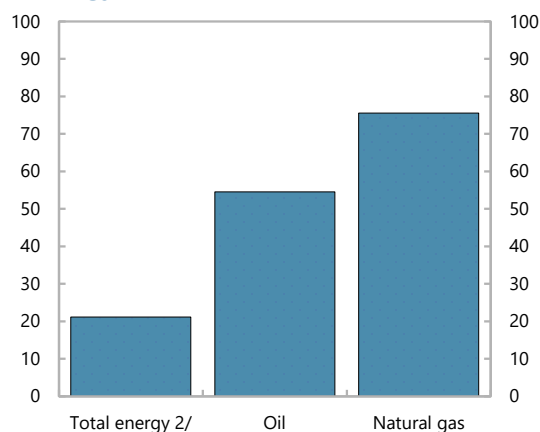
Risks to the supply of gas and oil are high. Staff's baseline projection assumes no disruption because, since Gazprom's suspended deliveries to Bulgaria, supplies have been provided from alternative sources including LNGs and Azeri gas through existing infrastructure via Greece and Turkey. In addition, a new interconnector with Greece with a capacity to carry more than Bulgaria's entire consumption is close to completion and expected to be operational in 2022H2. However, a wider suspension of Russian gas deliveries to more EU countries, including the largest consumers, could lead to an EU-wide gas supply shortage that could affect Bulgaria, even though Bulgaria's imports represent less than 1 percent of EU total gas imports. Furthermore, although Bulgaria was exempted until 2024 from the embargo on most oil imports from Russia that the EU adopted in May 2022, an escalation of sanctions or countersanctions that could eventually cut supply of Russian oil to the country. This could result in a shortage of crude oil as it is technically difficult to substitute all Russia's oil used in Bulgaria's only refinery in the short run.

Gas Consumption by Uses



Sources: Eurostat; and IMF staff calculations

Energy Dependence on Russia (percent)^{1/}



Sources: Eurostat; UN Comtrade; and IMF staff calculations.

1/ Share of Russia in energy imports times the ratio of net imports to gross domestic energy consumption.

2/ Crude and refined petroleum, gas, and coal.

Use of gas and oil is concentrated in selected sectors. District heating utility companies consume about a third of gas supply, while energy consumption by other industrial sectors accounts for another third. The remaining consumption is primarily for direct input to production (e.g., chemicals) and energy consumption by other sectors. Most of crude oil is used by the refinery, which is majority owned by a Russian oil company. Refined products are domestically consumed and exported.

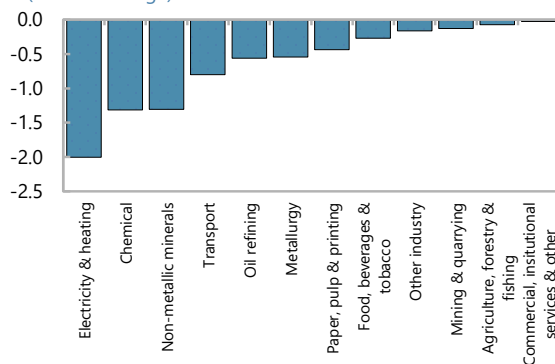
Staff's scenario analyses, based on partial equilibrium methodologies, illustrate that the potential near-term impact of supply disruptions of oil is greater than that of gas. Two methods use supply-use data and a three-stage forward-linkage model, or direct calculations from the energy balance, respectively. The estimates assume input substitution and therefore likely underestimate the expected impact, at least in the short run. These simulations also underestimate the ultimate GDP loss because they do not capture the full demand impact, for example resulting from lower external demand from EU partners and confidence effects, which may be sizable.

Box 2. Bulgaria: Risks of Gas or Oil Supply Disruptions (Concluded)

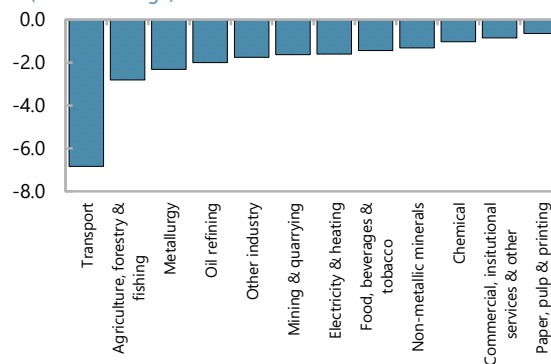
- Bulgaria's gas storage as of mid-May was estimated to be sufficient to sustain consumption for 1½ months. Should supply disruption last longer, an illustrative scenario in which Bulgaria suffers a reduction of supply of about one fifth for a year would translate in a GDP decline of about 1 percent.
- The heating sector would be the most severely affected by the gas shortage as district heating companies currently operate largely on gas. Chemical, non-metallic minerals, transport, oil refining, and metal processing would be also affected reflecting their gas-usage intensity. Together these sectors account for about 13½ percent of gross value added of intermediate consumption output (2014 data).
- Under an illustrative scenario of a 20 percent decline in oil supply, the forward-linkage model suggests an impact on GDP of about -6 percent per year. Transport, agriculture, forestry and fishing, and metallurgy would be the most affected sectors. These sectors accounts for some 12 percent of gross value added of intermediate consumption output.

Sectoral Impact of Gas and Oil Supply Shortages (Three-Stage Forward Linkage Model)

20 Percent Decline in Gas Supply to Bulgaria
(Percent change)



20 Percent Decline in Oil Supply to Bulgaria
(Percent change)



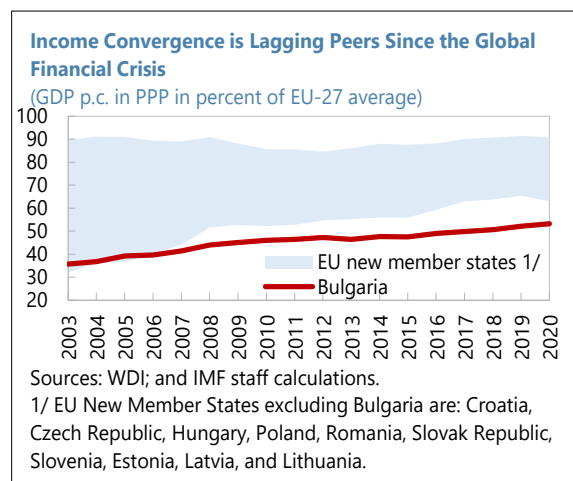
Source: IMF staff calculations.

POLICY DISCUSSIONS

15. The authorities face significant challenges.

In the short term, with limited scope for action by the central bank given the currency board arrangement, fiscal policy needs to continue providing adequate health and economic support, respond to demands resulting from the war, and plan for the unknown, while avoiding adding to inflationary pressures. In the longer term, policies need to increase productivity, raise living standards, reduce inequalities, and support the green transition.

Bulgaria is the poorest EU member state, and its development needs are large. Income convergence has been lagging other EU newer member states since the global financial crisis. In 2020, GDP per capita at PPP was about half of the EU average.



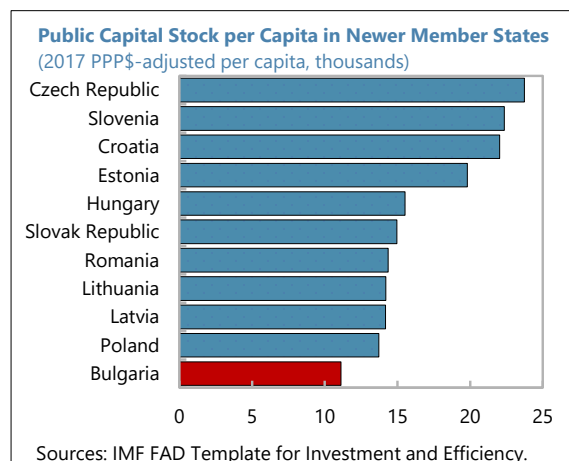
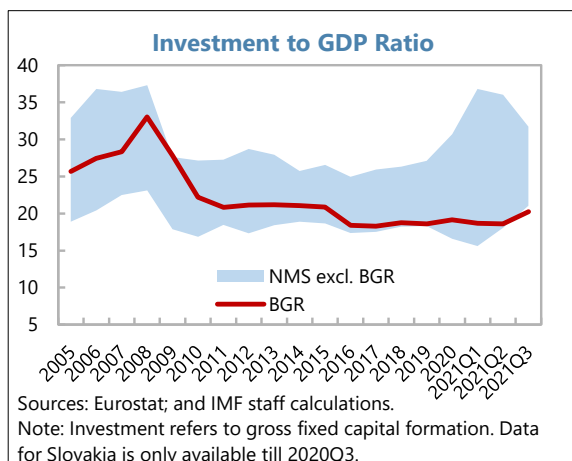
A. Providing Fiscal Support while Avoiding Adding to Inflationary Pressures

16. The 2022 fiscal stance in the approved budget entails a broadly stable cyclically-adjusted balance. Despite a 3½ percent of GDP reduction in COVID-related measures and a planned nominal wage bill freeze, the budget adopted in February targets an increase in the overall cash deficit from 2.9 percent of GDP in 2021 to 4.1 percent of GDP, driven by a doubling of public investment in nominal terms. Because of higher projected revenue and nominal GDP than assumed in the budget, staff project the fiscal deficit at just below 3 percent of GDP. The cyclically-adjusted balance would remain broadly stable at about 2½ percent of GDP. With fiscal sustainability not a concern, this strikes a reasonable balance between supporting the recovery, which is still incomplete and faces strong headwinds from the war spillovers, and not fueling further inflationary pressures considering the tight labor market.

17. The government intends to revise its 2022 budget mid-year. The revision will need to be approached flexibly both in terms of fiscal stance and composition. Given uncertainties, new needs and priorities may emerge and risks (e.g., related to the pandemic or the impact of the war) may materialize. These may warrant reprioritization and, possibly, a looser fiscal stance than currently planned if the impact of the war on growth is more severe than anticipated, which the low debt level would provide space for.

18. The composition of spending will need to be reviewed when the 2022 budget is revised.

- The reorientation of spending toward more **investment** is warranted to boost potential growth given the relatively low public capital stock. However, the magnitude of the increase from last year that is planned in the initial budget (2.5 pp of GDP) may run against absorption constraints. New projects may need to be phased-in more gradually.



- Conversely, the nominal freeze of the **wage bill** embedded in the current budget is no longer desirable with inflation running high. More broadly, wage policy should be informed by a comprehensive review of public wages: wage increases provided helpful demand support in 2021, but they were unevenly applied and may have distorted the wage structure. Furthermore, although the public sector enjoys a wage premium over the private sector close to 9 percent (controlling for education and experience), wages are uncompetitive in some key sectors, such as education and health.
- At the same time, the revised budget will need to account for the **spillovers from the war**. The government needs to provide for refugees, although their number will probably remain lower than in countries bordering Ukraine. It may also face the need for additional spending to ensure food security (e.g., through purchases of wheat). Importantly, to plan for unforeseen spending, the revised budget will likely need to increase its contingency reserve, which currently amounts to only 0.2 percent of GDP.
- With the labor shortages reappearing, the government's intention to phase out the "60/40" **job retention scheme**, which played a key role during the COVID-19 crisis, is appropriate as this scheme is no longer needed. Ending it will also facilitate the reallocation of resources post-COVID.

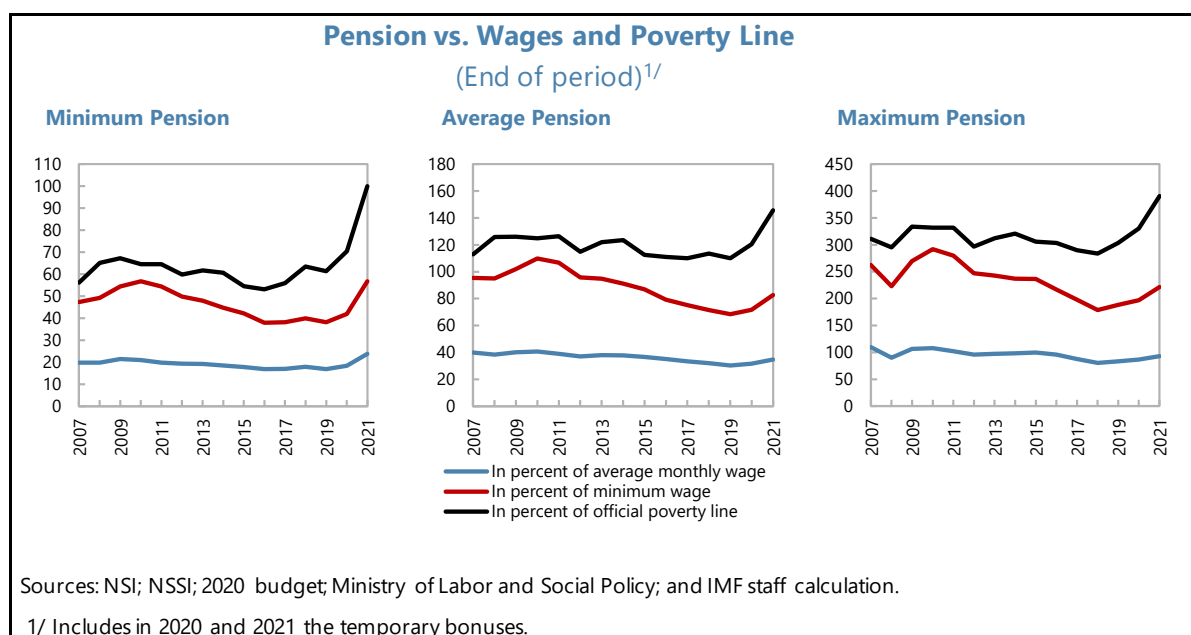
19. Electricity subsidies to companies and temporary retail price caps have helped cushion the impact of high prices but are a distortive support mechanism. They have not had a direct fiscal impact as they have been financed by state-owned enterprises (SOEs) using exceptional profits made from electricity generation as selling prices have recently been well-above production costs, especially for nuclear power plants. The authorities estimate the monthly cost of subsidies provided to businesses at about 0.2 percent of GDP. This support should be adjusted by gradually shifting these existing mechanisms to direct support to households who need it, building on the

existing means-tested social protection programs such as the heating allowance. While this would preserve energy affordability, it would be fairer, limit price distortions, and incentivize energy savings and efficiency. Better targeting would also help reduce the fiscal cost of the support, be it explicit or implicit through lower dividends and profit taxes from SOEs. Eventually, the support should be gradually phased out, as conditions allow.

20. Ad-hoc pension increases have supported pensioners but weigh on the financial position of the pension system. Pension increases and ad-hoc supplementary pension payments have helped support the income of pensioners during the pandemic, but their cost is further weighing on a pension system already structurally in deficit. A holistic review of the system would help design reforms that would ensure both its sustainability and adequate pension levels, as old-age poverty is widespread.

Increase in Pensions (In Percent, End of Period)		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Minimum pension 1/	without bonus 2/	0	0	6.6	3.4	3.0	1.9	2.5	23.9	3.8	5.7	13.9	48.0
	with bonus 2/											36.7	63.3
Average pension	without bonus 2/	1.3	2.2	0.7	18.3	3.3	4.0	2.4	5.9	3.8	7.3	14.6	25.2
	with bonus 2/											26.5	36.0
Maximum pension	without bonus 2/	0	0	0	10.0	9.1	8.3	0	0	0	31.9	0	25.0
	with bonus 2/											4.2	29.6

Sources: NSSI and IMF staff calculation.
 1/ For 2021: the minimum old age pension is BGN 300 up to 24 December (20 percent increase compared to end 2020) and BGN 370 from 25 to 31 December (48 percent increase compared to end 2020).
 2/ Lump sum pension supplement for all pensioners amounting to BGN 50 from August 2020 to September 2021 and to BGN 120 in from October to December 2021.

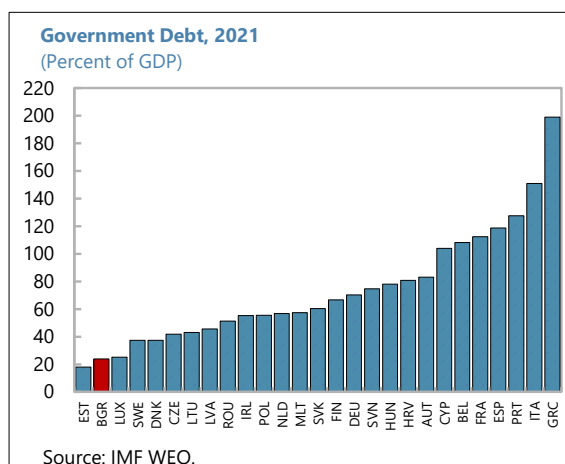


Authorities' Views

21. The authorities broadly shared staff's views on how to adjust the 2022 budget. At this stage, they do not expect that they will need to review the fiscal deficit target. They agree that some expenditures, including investment related to delayed domestically- and EU-funded projects and programs, may be reassessed compared to the initial budget, and that wage policy may need to account for rising inflation. They see some scope to provide wage increases with limited impact on the total wage bill solely by rationalizing employment, including through shared services across ministries. The coalition is evaluating various options to continue mitigating the impact of inflation on households and the economy. The government also intends to reform the pension system alongside the 2022 revised budget to better align pensions with contributions. If necessary, an additional social assistance would ensure that pensioners' income remains above the official poverty line. The authorities are ensuring that refugees are cared for, with support from the EU and other partners.

B. Expanding Fiscal Space to Foster Higher and More Inclusive Growth

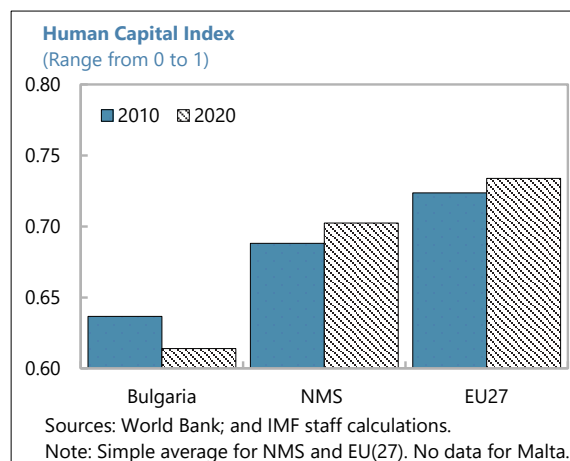
22. The authorities plan a gradual fiscal consolidation over the medium term. Based on the spending plans embedded in the medium-term budget framework published in April, staff project the cash deficit to steadily decrease to 1.3 percent in 2025. Although Bulgaria's social and investment needs are significant and public debt is low, fiscal prudence is advisable considering the strain that demographic pressures will gradually impose on public finances, the currency board arrangement, and the need to preserve buffers considering high uncertainty. Subpar efficiency of spending and low taxation represents important sources of fiscal space that should be tapped as a priority to address long-term needs within the planned fiscal trajectory even after NGEU funds end.



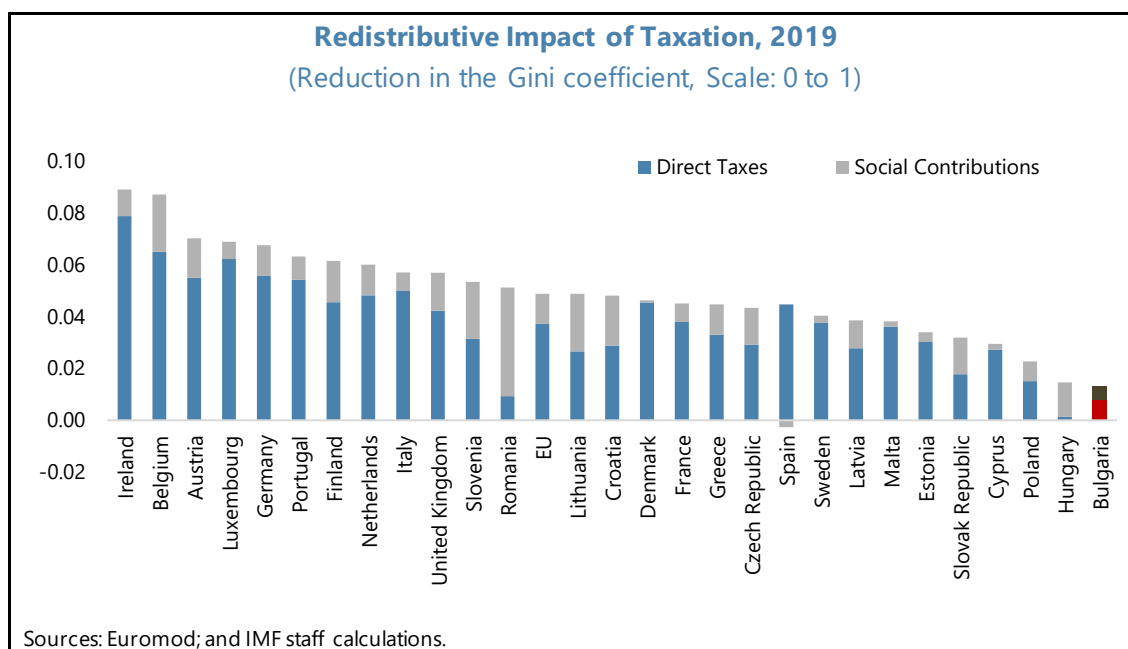
23. Improving the efficiency of public spending could create significant space to foster more inclusive growth (Box 3). Efficiency gains are potentially large in key areas:

- Improving **public investment management** and governance, in particular projects planning, procurement, and ex post audits, (see also ¶25) would free resources to finance maintenance, further develop infrastructure, and reduce vulnerabilities to corruption. It would also help strengthen the capacity to absorb EU funds.

- Reforms in **social spending** (social protection, education, and health) would boost human capital. Low and inefficient social spending tend to lead to outcomes that are often weaker than peers. Reviewing the level, targeting, and composition of social spending could help reduce income inequality and move toward more equality of opportunity. Increasing the efficiency of education spending would help harness its potential to reduce inequalities, while reforms to improve public health services delivery are also needed.



24. Reforming taxation could help increase revenue and reduce inequality. A review of the taxation system, including the low flat corporate (CIT) and personal income tax (PIT) rates (10 percent each), could generate needed additional revenue, as more efficient spending alone is unlikely to be sufficient to meet investment and social needs. Furthermore, reforming the PIT could help reduce inequalities through greater redistribution. The low tax rates also limit space to use taxation to incentivize the pursuit of the government's objectives, for instance through tax credits for R&D or green spending. The temporary reduction in VAT rates on some items introduced mid-2020 as COVID-19 support measure was extended until end-2022. This measure is untargeted, regressive, and unnecessary.

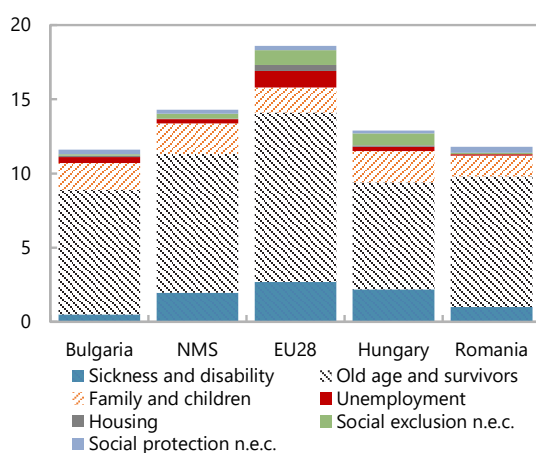


Box 3. Bulgaria: Strengthening the Efficiency of Public Expenditure

Efficiency gains could be large in public spending on physical and human capital. Reforms to that effect could help foster higher and more inclusive growth.^{1/}

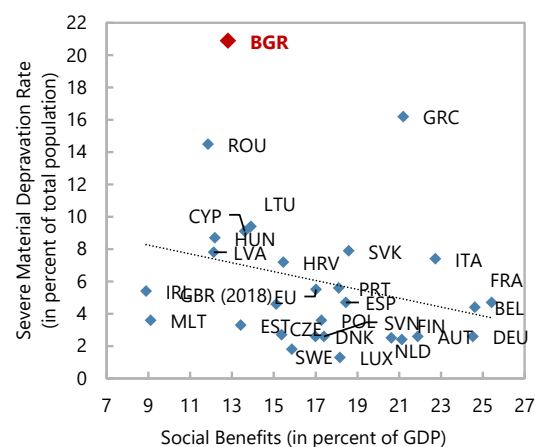
- *Public Investment.* Bulgaria's level of public investment has been broadly comparable to peers, but its infrastructure quality is perceived to be lower and there is a notable efficiency gap. Staff estimates that Bulgaria could achieve the same public investment outcome with 1.8 percent of GDP less spending. Efficiency could be gained by (i) establishing a standard methodology for determining maintenance needs and cost, to prevent the deterioration of existing infrastructure, and (ii) strengthening public investment management through better multi-years spending forecast, clear selection criteria for major projects, strengthened public procurement procedures and practices, and established procedures for ex-post reviews of projects (2018 PIMA).
- *Social protection.* Low and inefficient social protection spending leads to outcomes that are weaker than peers in terms of providing adequate income to persons in need, delivering protection against various social risks, and reducing income inequality. If Bulgaria's social protection spending was as efficient as that of the best EU performers, staff estimates that income inequality would be 23 percent lower and poverty level (measured by severe material deprivation) more than 10 percentage points lower. Key reforms in this area include reducing the fragmentation of the delivery of social spending and improving the means-testing of social programs. The saving could be used to broaden the scope of social protection and ensure the adequacy of social benefits levels.

Composition of Social Protection Spending, 2019 (Percent of GDP)



Source: Eurostat.

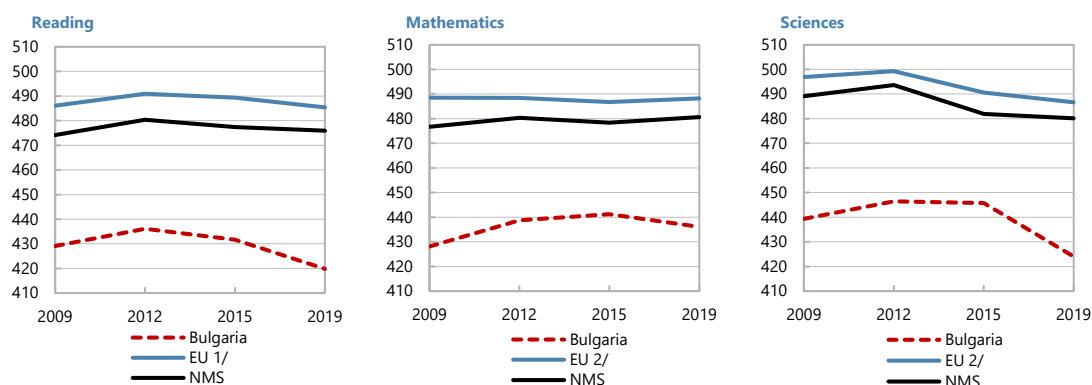
Severe Material Deprivation and Social Benefits, 2019



- *Education.* Though public spending on education is in line with Bulgaria's income level, a more efficient use of resources could improve educational outcomes (measured by the PISA score) by 11 percent, narrowing the gap with European peers. Reforms are needed to increase funding for research in tertiary education; foster lifelong learning; update the curricula to reduce skill-mismatches; and better support disadvantaged students and reducing their isolation.

Box 3. Bulgaria: Strengthening the Efficiency of Public Expenditure (Concluded)

Evolution of Mean PISA Scores, 2009-19



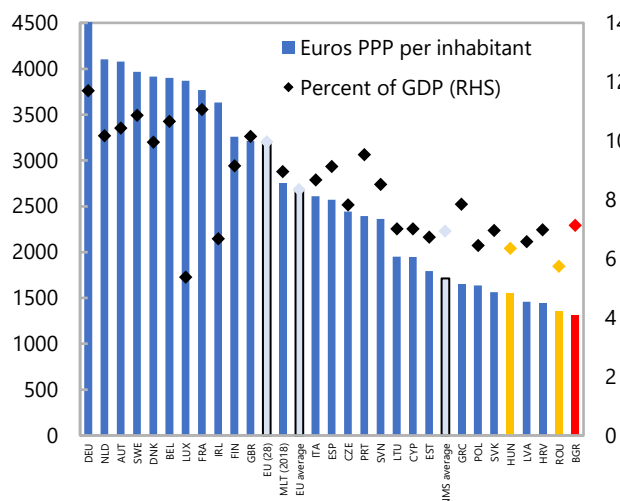
Sources: OECD; and IMF staff calculation.

1/ Excludes Austria, Cyprus, Malta, and Spain due to data limitations.

2/ Excludes Austria, Cyprus, and Malta due to data limitations.

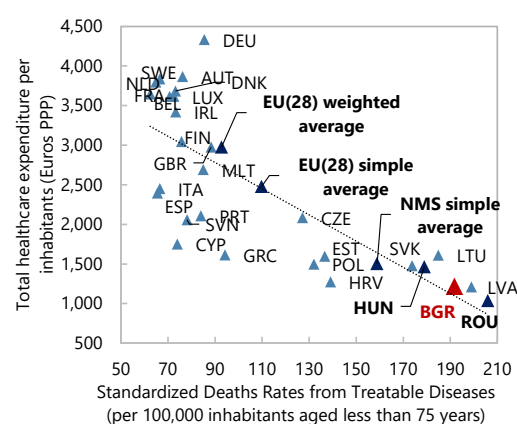
- **Health.** More efficient spending could increase the healthy life expectancy by about 6 years. In line with OECD and EC's advice, reforms could focus on reducing reliance on hospitals, extending outpatient and ambulatory care, reinforcing prevention, reducing the number of people without health insurance, reforming the price-setting mechanism of medicines, and promoting generics.

Total Health Expenditure in the EU, 2019



Sources: Eurostat; and IMF staff calculations.

Health Expenditure and Avoidable Mortality in the EU, 2017



Sources: Eurostat; and IMF staff calculations.

1/ See "Strengthening Public Expenditure efficiency: Investment and Social Spending in Bulgaria," J.J. Hallaert and K. Primus, WP/22/100.

Authorities' Views

25. The authorities concur with staff that there is scope to improve the efficiency of public spending, but do not intend to reform the current flat tax system. They welcomed staff's concrete suggestions to strengthen the efficiency of public investment and social spending. They indicated that public investment, health, and education are the three main pillars of the 2022 budget. Efforts are ongoing to improve the cost-effectiveness of the health care system and access to health services and medicine, ensure equal access to quality education (including by making kindergarten free of charge as of April 1, 2022), improve the qualification of pedagogical specialists, and digitalize education. The authorities consider that the flat corporate and personal income taxes have served Bulgaria well. They are concerned that higher personal income taxation might disincentivize labor supply and reduce tax compliance. However, in accordance with EU legislation, effective in 2023, they will apply a surcharge to large multinational companies to increase their total CIT rate to 15 percent, following the OECD-led agreement on global minimum taxation.

C. Guarding Against Financial Sector Risks

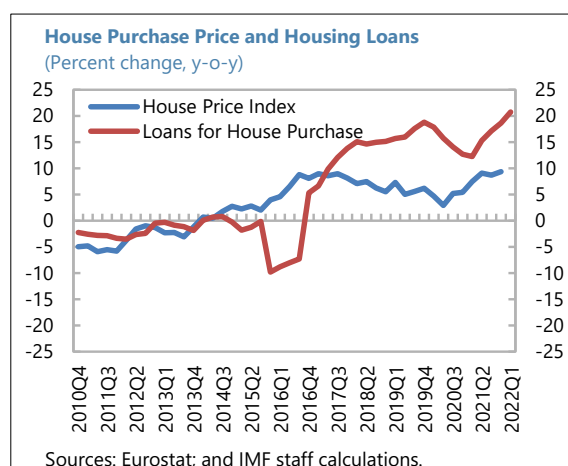
26. Despite recent measures, credit risk could increase, including due to spillovers from the war. During the pandemic, macroprudential measures provided banks room to manage a possible deterioration of loan quality without limiting credit flows, while broader measures supported borrowers' repayment capacity.

Nominal credit to households is now growing at a rapid pace, driven by housing mortgages. To prevent the buildup of new risks, the BNB appropriately announced gradual increases in the countercyclical capital buffers (CCCB), up to

1.5 percent in 2023 from 0.5 percent currently. Possible further increases will need to consider the strength of the recovery to ensure that credit to corporates remains sufficiently available to support private investment. The introduction of borrower-based measures could also be considered if signs of overheating in the real estate market were to emerge. Supervisors should continue to ensure that banks monitor asset quality for possible deterioration and proactively resolve NPLs, as credit risks may rise with the lagged impact of withdrawing COVID-19 related support, the impact of surging commodity prices and supply-chain disruptions on corporates, rising interest rates, or the emergence of imbalances in the housing market.

Authorities' Views

27. The authorities are committed to a supervisory approach that ensures that banks maintain strong capital positions and proactively manage risks. Bank supervisors noted no evidence so far of cliff effects from the expiration of the private debt moratorium, reflecting banks'



prudent approach. The authorities explained that they lifted the ban on dividends, including from 2021 profits, and discontinued the limit of banks' foreign exposures as they assessed that banks would preserve sufficient capital to maintain credit flows and absorb a possible deterioration in asset quality. At the same time, they saw the need to preempt a buildup of credit risks as the interest cycle could have a detrimental effect on credit quality. They considered that CCCB provide banks with an adequate tool to manage rising risks under the BNB's conservative policy in implementing capital rules. They are not considering introducing borrower-based macroprudential tools that they see as having implementation challenges, being of limited efficiency, and distorting incentives.

D. Structural Reforms for a More Competitive, Inclusive, and Green Economy

28. Structural reforms should accelerate to raise growth and enable the needed economic transformation. Investment and reforms supported by the EU funds can play a crucial role in this regard. Bulgaria's recovery and resilience plan (RRP) plan aims to strengthen the judicial and business environment, increase investment in digital infrastructure and in education, and accelerate the decarbonization of the energy sector (Box 4).

Box 4. Bulgaria: National Recovery and Resilience Plan

Bulgaria's [National Recovery and Resilience Plan](#) was approved by the European Council in May 2022. The RRP is a strategic document needed for EU member states to access EU's Recovery and Resilience Facility (RRF), which supports reforms and investments that facilitate economic recovery from the COVID-19 crisis and promote the green and digital transition. Its approval gives Bulgaria access to an estimated EUR 6.3bn in grants (10 percent of GDP) over 2022–26 (amount subject to revision, based on GDP growth data for 2020–21). Bulgaria decided not to request any of the EUR 4.5 bn (7 percent of GDP) loans that it is also eligible for under the RRF, focusing on the absorption of the large amount of grants. The RRP comprises four pillars:

Innovative Bulgaria (25.3 percent of the RRP) will seek to boost competitiveness and transformation into a knowledge-based economy through interventions in education, digital skills, science, innovation, and technologies.

Green Bulgaria (41.9 percent) will focus on ensuring sustainable economic growth through accelerated adoption of renewables for power generation and promotion of energy efficiency and sustainable transport.

Connected Bulgaria (18.3 percent) will aim to raise competitiveness and promote sustainable regional development through enhancement of transport and digital connectivity as well as support for development based on local specificities.

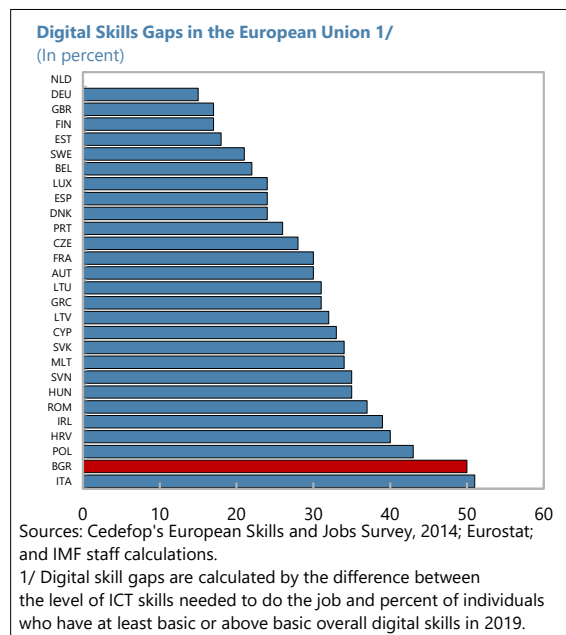
Fair Bulgaria (14.6 percent) targets disadvantaged people to achieve a more inclusive growth through effective and efficient public institutions.

29. The authorities intend to implement several judicial reforms aimed at fighting corruption and effective implementation will be critical for their success. These include reforming the office of the Prosecutor General and the Supreme Judicial Council, and establishing an anti-corruption commission with investigative powers and a commission for assets recovery. Parliament adopted a law to close specialized anti-corruption courts, which the government

deemed ineffective. Improving the effectiveness of the judiciary and judicial independence, together with strengthening the anti-corruption legal framework, can indeed play a vital role in raising ethical standards, enhancing the rule of law, and promoting a more inclusive economy. This will require a clear strategy and timeline to implement the sequence of reforms and substantial resources. It will be important to ensure effective coordination between the planned new anti-corruption institutions, a smooth transition from one structure to another to ensure no case is left unaddressed, and transparency in the anti-corruption efforts to build trust in the integrity of the public sector. Reforms to continue aligning governance and oversight of state-owned enterprises with OECD guidelines, in line with the law on public enterprises adopted in 2019, are also important.

30. Continued efforts to improve the anti-money laundering and combating the financing of terrorism (AML/CFT) framework will help strengthen financial sector stability and integrity. To this end, addressing issues arising from the forthcoming MONEYVAL assessment will be crucial. Furthermore, publishing the beneficial ownership information of public procurement contracts and ex-post audits of pandemic-related spending will have a positive impact on the prevention of money laundering. Bulgaria's recent termination of the citizenship-by-investment program is welcome, but the residency-by-investment scheme and the potential for financial integrity risks remains.

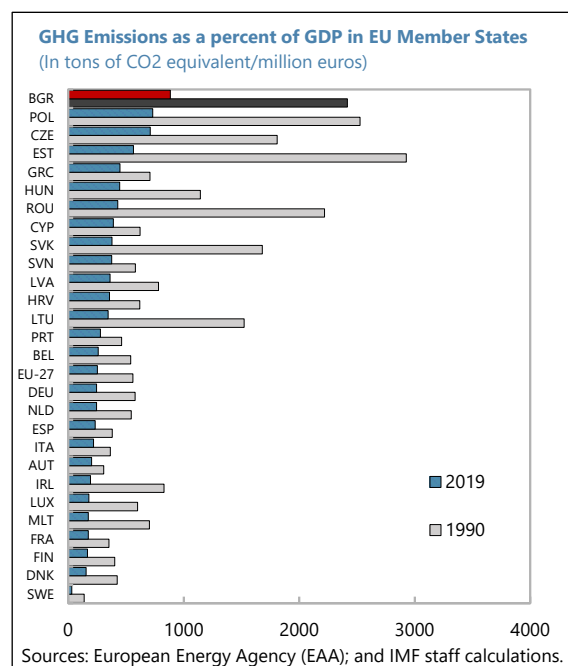
31. Efforts to harness digital technologies will help raise economic potential and support income convergence (Annex IV). There is ample scope to accelerate digital transformation as the country lags EU peers in many dimensions of the digital economy. Bridging digital skill gaps, investing in digital infrastructure, and promoting an ecosystem of digital start-ups are key priorities to improve the integration of digital technologies in firms' business models and, thereby, productivity. The authorities' broad reform agenda in these areas is underway, building on EU-wide initiatives such as the Digital Decade Compass. Bulgaria is also actively participating in the EU's efforts to strengthen the oversight of digital payments.



32. Energy policy needs to balance near- and medium-term needs.³ The focus on green transition is appropriate as, despite significant progress, Bulgaria still emits more greenhouse gas (GHG) emissions than all other EU member countries when compared to the size of the economy. This is because the economy is skewed towards energy-intensive sectors, electricity generation

³ See also accompanying Selected Issue Paper.

heavily relies on coal, and buildings and the transport sector remain energy inefficient. Since Russia's invasion of Ukraine, ensuring energy security through alternative supplies has also become an immediate priority. The authorities' decarbonization strategy focuses on gradually shifting electricity production away from coal to low-carbon sources, including nuclear and renewables, and increasing buildings and transport efficiency. Investment plans in renewables and energy efficiency, to be largely financed through the NGEU funds, are welcome and should be accelerated to the extent possible, as these will help simultaneously improve energy security and reduce GHG emissions. Once energy prices recede, maintaining incentives for energy saving, investment in renewables, and reduction of coal use through price-based mechanism and fiscal tools should be considered, while protecting vulnerable households.



Authorities' Views

33. Improving governance and fighting corruption is a key priority of the authorities.

They considered that moving away from specialized anti-corruption courts will improve the efficiency of the judiciary. They are committed to further strengthening the AML/CFT framework and stand ready to follow up on assessments of the forthcoming MONEYVAL report. They noted that SOEs reforms would continue, and audits of COVID-19 related spending would be undertaken.

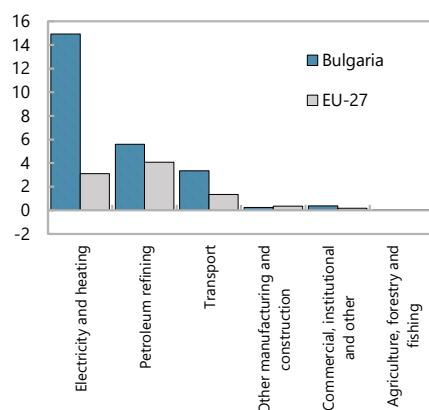
34. The authorities are committed to accelerating digitalization and the green transition.

With support from NGEU funds, they intend to accelerate efforts to digitalize the economy, especially fostering e-government and increasing digital skills. They also aim to strengthen bridges between academia and businesses to boost innovation. They are confident that the planned electricity sector reforms and investment in renewables and battery storage financed by NGEU, along with envisaged decarbonization reforms, will lead to a further substantial decrease in GHG emissions in the medium term. The authorities also noted that regulatory reforms and NGEU financing will help improve energy efficiency in the transportation sector and residential and nonresidential buildings. They saw the need to protect vulnerable households when prices are gradually liberalized, based on a definition of "energy poverty" to be introduced, but saw little room for tax tools to provide energy saving incentives because of already low overall taxation.

Figure 1. Bulgaria and EU-27: GHG Emissions by Sectors and Electricity Production by Sources of Energy

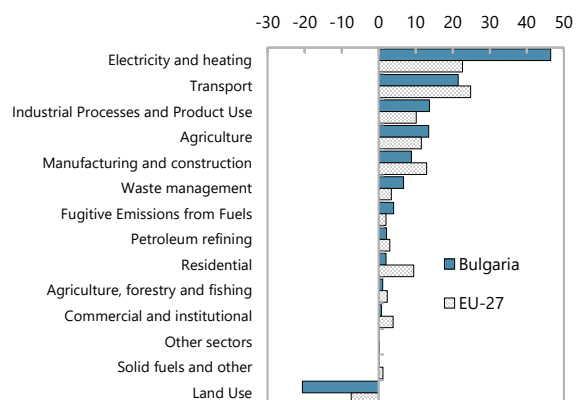
GHG Emission Intensity per Gross Value Added by Sectors, 2019

(Kilotons of CO₂ equivalent/million euros)



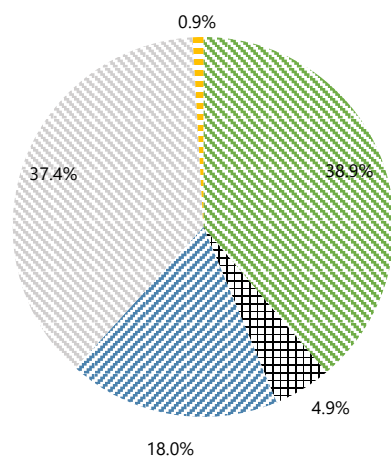
Share of Sectors in Total GHG Emission, 2019

(Percent)

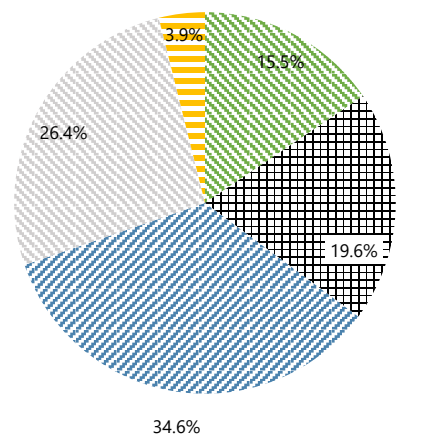


Electricity Production by Sources of Energy, 2019

Bulgaria



EU



Solid Fossil Fuels
 Nuclear Heat
 Natural Gas
 Other

Renewables and Biofuels

Sources: Eurostat; and IMF staff calculations.

STAFF APPRAISAL

35. The war in Ukraine has clouded the outlook, heightened uncertainty, and increased downside risks. While the economic recovery from the COVID-19 crisis was gaining momentum, the war is dampening growth and accelerating inflation. High energy dependence from Russia is a significant vulnerability. With events unfolding rapidly, uncertainty is high. Key risks include stronger spillovers from the war, including disruptions in energy supply, a resurgence of COVID-19, protracted supply-chain disruptions, and faster-than-anticipated tightening of global financing conditions.

36. Fiscal policy needs to be flexible given the large uncertainty. The 2022 budget adopted in February strikes a reasonable balance between supporting the recovery, which is still incomplete and faces strong headwinds from the war, and not fueling inflation further. The planned mid-year budget revision should be approached flexibly as new needs and priorities may emerge, warranting further reprioritization of spending and, if activity disappoints significantly, possibly also a looser fiscal stance.

37. A review of the composition of public spending is needed already this year. The budget reorientation of spending toward more public investment is welcome. However, the magnitude of the planned increase may run against absorption capacity and requires phasing in new projects more gradually. Conversely, the nominal freeze of the wage bill is no longer desirable with inflation running high. The mid-year budget revision should also account for new needs emerging from the war, such as supporting refugees. To help the economy and the population cope with high energy prices, existing subsidies to companies and price caps should be gradually shifted to direct support to vulnerable households. Also, the reduction in VAT rates should be discontinued, as the measure is regressive and no longer needed.

38. The planned medium-term fiscal consolidation is broadly appropriate and should be accompanied by expenditure and revenue-management reforms. An aging and shrinking population, the currency board arrangement, and the need to preserve buffers considering the uncertain external environment call for fiscal prudence. Fiscal space to address long-term social and investment needs could be expanded by increasing the efficiency of public spending and reviewing taxation to increase revenue and redistribution. These reforms would enhance physical and human capital and foster higher and more inclusive growth. Furthermore, a holistic review of the pension system would help design reforms that target both its sustainability and an adequate level of pensions.

39. The authorities need to continue watching for possible increases in credit risk. Macroprudential measures during the pandemic strengthened banks' balance sheet and helped maintain credit flows. Also, considering the accelerating credit growth to households, the authorities have recently rightly tightened macroprudential policy. Overall, the banking sector remains well capitalized and liquid, and the financial sector has very little direct exposure to Russia or Ukraine. Therefore, systemic risks appear low. However, credit risk may rise because of the

impact of surging commodity prices and supply-chain disruptions on corporates, rising interest rates, the lagged impact of withdrawing COVID-19 related support, or an emergence of imbalances in the housing market. Hence, the authorities should continue to monitor asset quality and ensure that banks proactively manage risks and maintain strong capital positions.

40. Accelerating structural reforms is crucial to raise living standards and promote more a competitive, inclusive, and green economy. With the euro area accession in sight, policies that help foster income convergence with EU partners are even more important. The government's focus on strengthening governance and fighting corruption is welcome. Steadfast efforts to improve the effectiveness of the judicial and anticorruption systems are essential to strengthen the rule of law. Ongoing efforts to harness digital technologies and foster innovation are needed to raise productivity. The effective implementation of planned investment in renewables and energy efficiency will strengthen energy security and reduce carbon footprints. When energy prices decline, incentives for green transition could usefully be supported by price-based mechanism and fiscal tools. NGEU funds have a key role to play to support efforts in these areas.

41. It is recommended that the next Article IV consultation be held on the standard 12-month cycle.

Proposed Decision

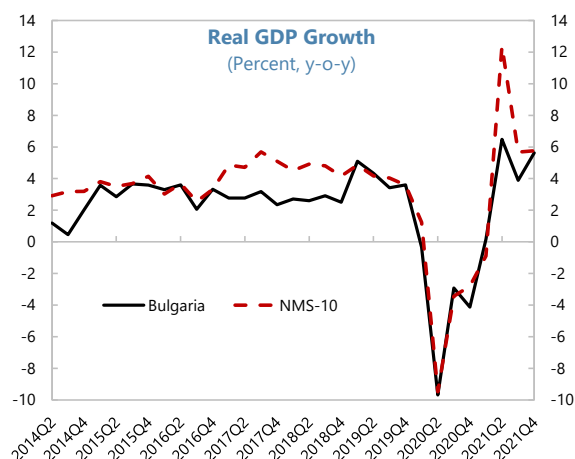
The following decision, which may be adapted by a majority of votes cast, is proposed in adoption by the Executive Board.

The Executive Board endorses the thrust of the staff appraisal in the report for the 2022 Article IV Consultation with Bulgaria (SM/22/125, 06/3/22).

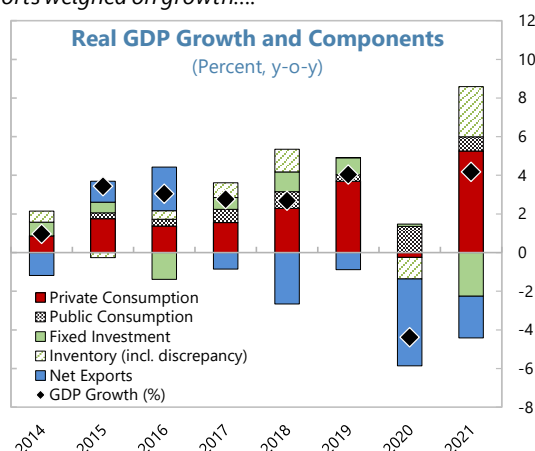
It is expected the next Article IV Consultation with Bulgaria will take place on the standard 12-month cycle.

Figure 2. Bulgaria: Real Sector Developments

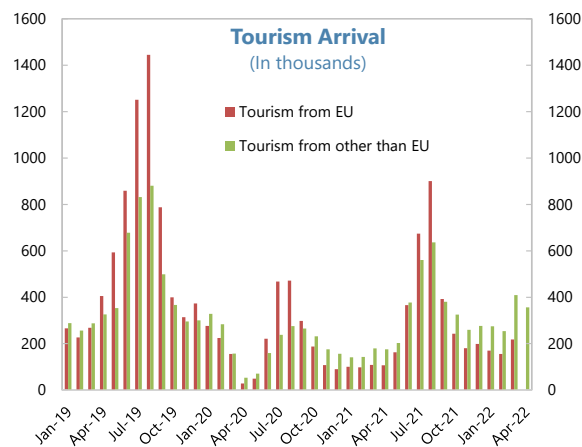
Real GDP growth rebounded in 2021.



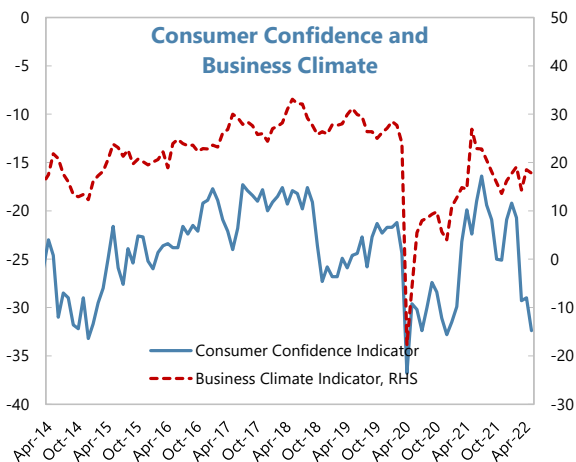
Private consumption was strong, but investment and net exports weighed on growth....



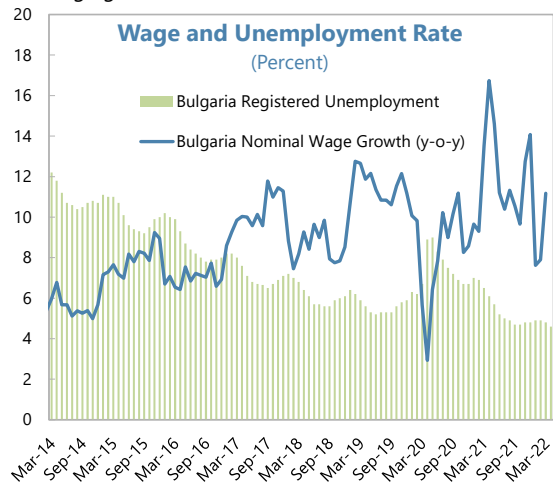
...as tourism arrival have only partially recovered ...



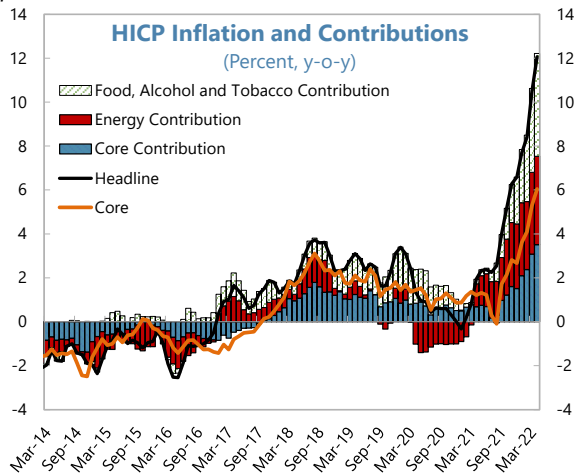
...and business confidence has remained subdued.



The unemployment rate is below its pre-pandemic level and wage growth remains brisk.



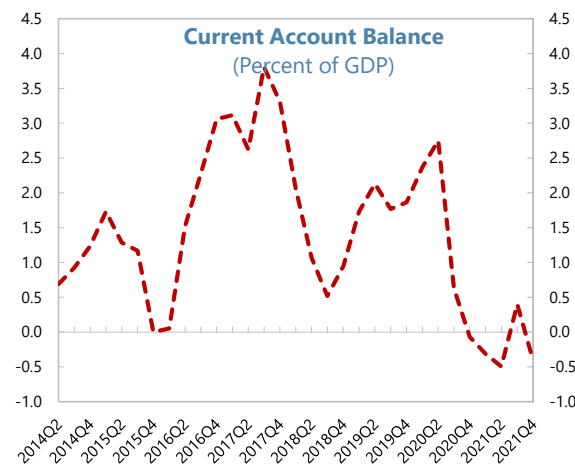
Inflation has been accelerating sharply with higher energy prices and labor costs.



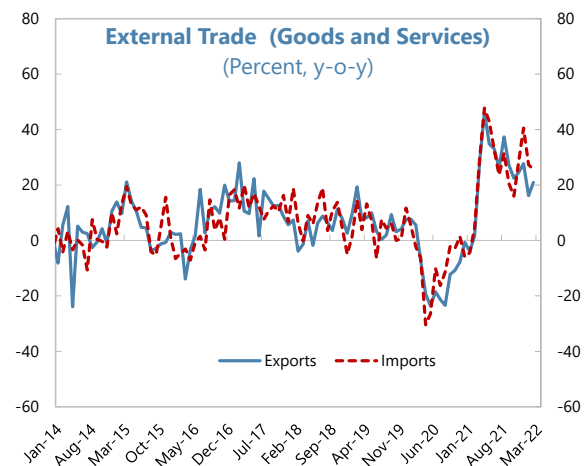
Sources: Haver Analytics; National authorities; and IMF staff calculations.

Figure 3. Bulgaria: External Sector Developments

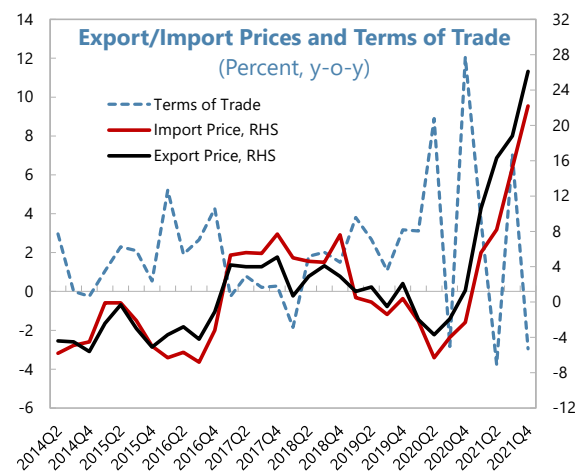
The current account deficit slightly widened in 2021.



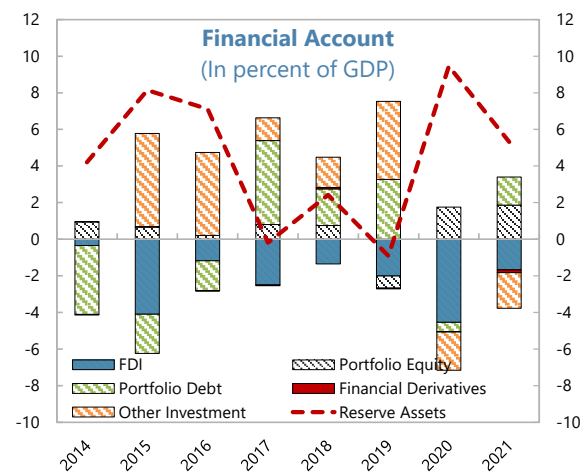
Exports and imports rebounded sharply...



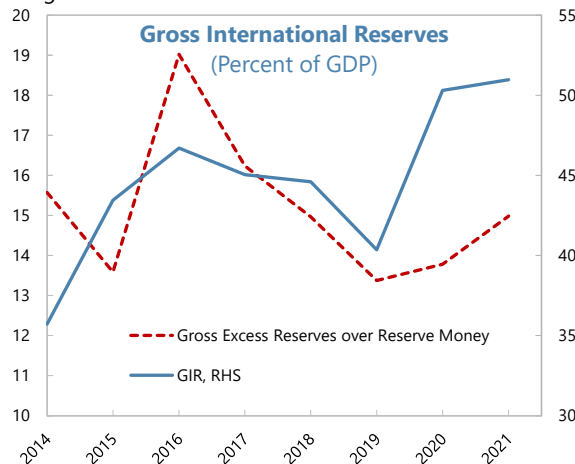
...among significant volatility of terms of trade.



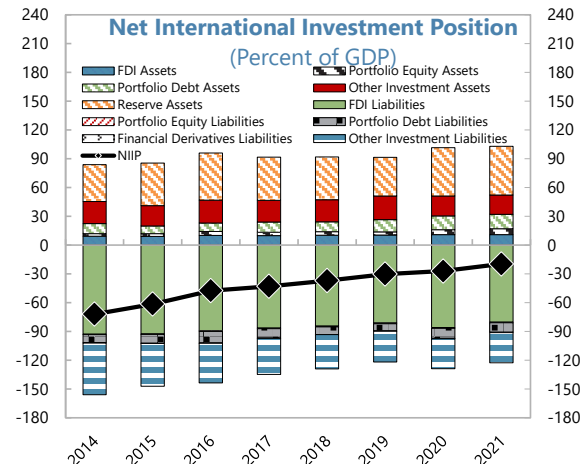
Financial account flows normalized after the 2020 shock.



Gross international reserves increased, partly reflecting the general SDR allocation...



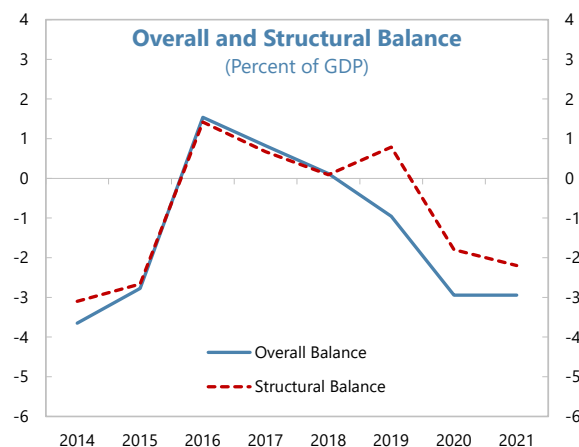
...and the NIIP continued to improve.



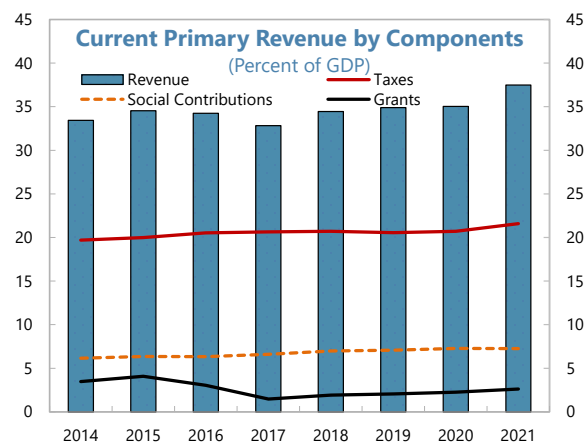
Sources: BNB; Haver; and IMF staff estimates.

Figure 4. Bulgaria: Fiscal Developments

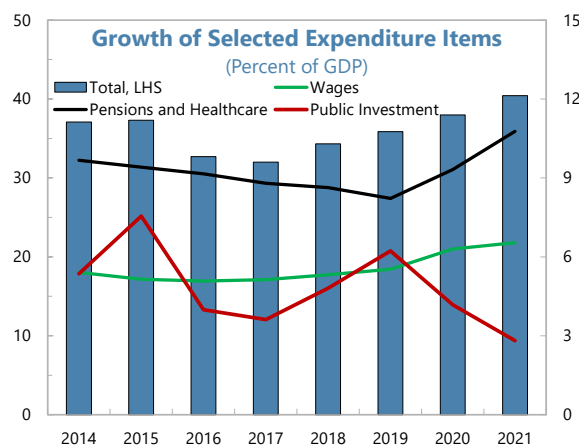
The fiscal balance was broadly unchanged in 2021...



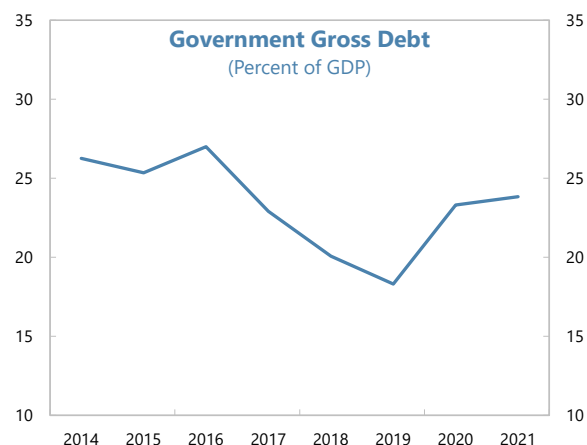
...as higher revenue...



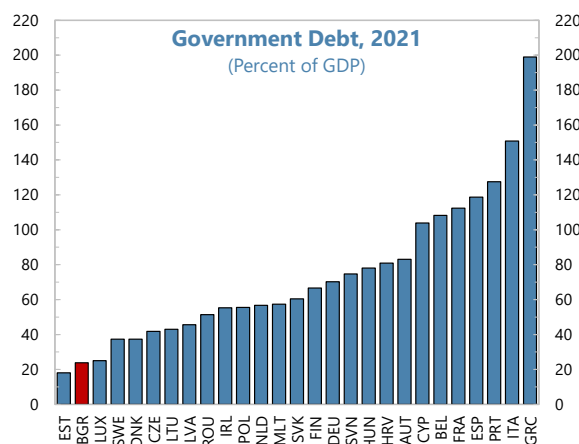
...offset the increase in expenditure.



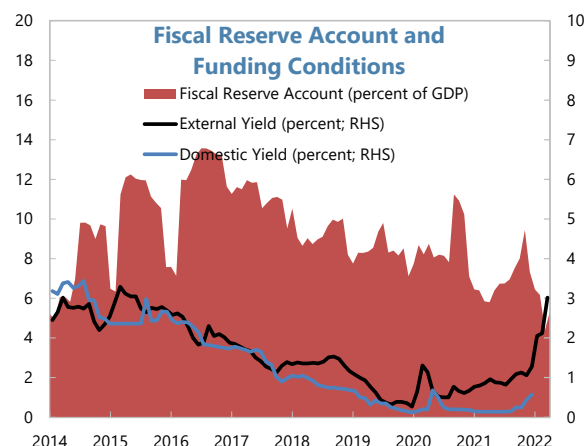
Public debt, although rising...



...continues to be among the lowest in the EU.



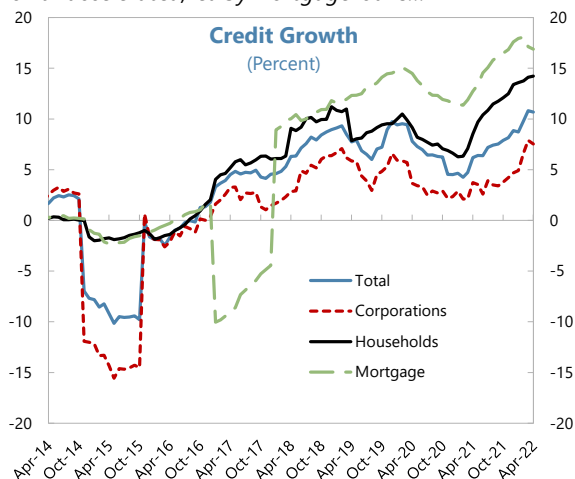
The fiscal reserve increased in 2021.



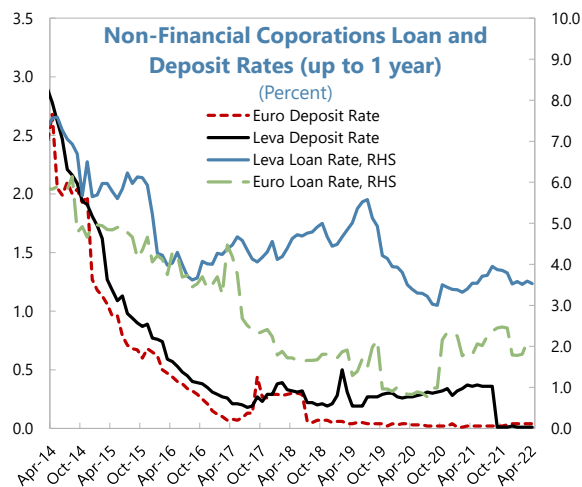
Sources: Bloomberg Finance L.P.; Bulgarian authorities; Eurostat; and IMF staff estimates.

Figure 5. Bulgaria: Monetary and Financial Sector Developments

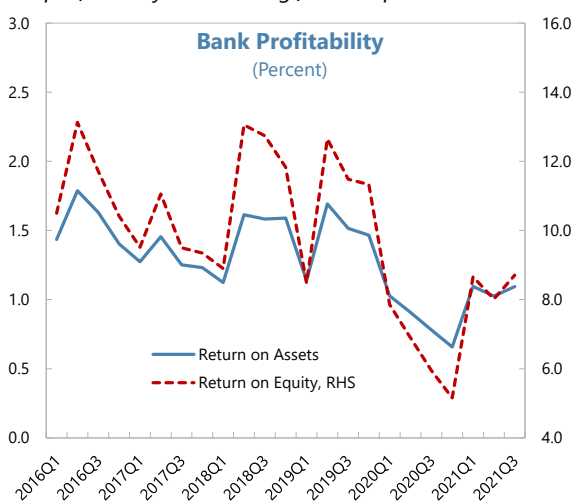
Following a slowdown at the onset of the pandemic, credit growth accelerated, led by mortgage loans...



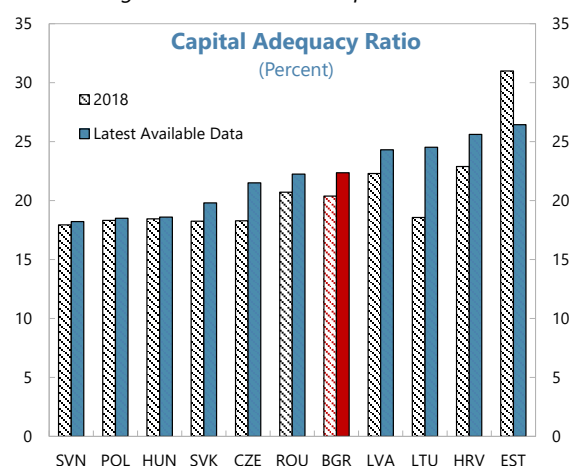
...as loan interest rates remain low.



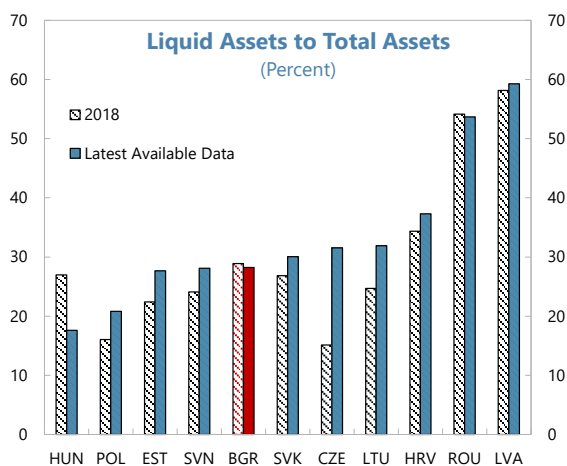
Bank profitability is recovering from the pandemic shock.



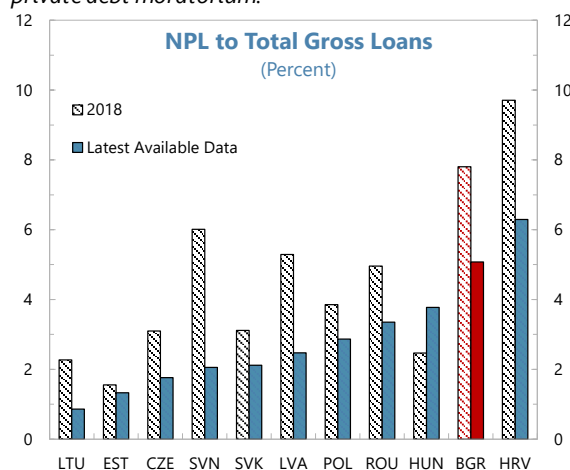
The banking sector remains well capitalized overall...



...and liquid.



NPLs have declined so far despite the expiration of the private debt moratorium.



Sources: BNB; Haver; and IMF FSI.

Table 1. Bulgaria: Selected Economic Indicators, 2018–27

(Annual percentage change, Unless Otherwise Indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections									
Real GDP	2.7	4.0	-4.4	4.2	2.8	4.0	4.1	2.9	2.8	2.8
Real domestic demand	5.5	4.9	0.1	6.0	3.6	4.5	4.3	4.3	1.1	2.0
Public consumption	5.4	2.0	8.3	4.0	6.2	-7.8	-3.5	-3.8	2.7	2.0
Private consumption	3.7	6.0	-0.4	8.0	2.6	3.2	4.6	4.3	3.7	3.1
Gross capital formation	10.9	4.1	-5.0	2.0	4.5	19.5	8.8	9.1	-6.3	-1.0
Private investment	-2.3	3.6	6.7	-5.5	-1.7	4.6	9.7	8.4	7.1	5.2
Public investment 1/	36.8	7.2	-16.6	-30.5	37.1	89.8	11.3	14.4	-33.0	-19.6
Stock building 2/	1.2	0.0	-1.2	2.7	0.1	0.0	0.0	0.0	0.0	0.0
Net exports 2/	-2.7	-0.9	-4.5	-2.2	-1.1	-0.9	-0.7	-1.9	1.6	0.7
Exports of goods and services	1.7	4.0	-12.1	9.9	3.9	4.5	4.1	3.9	3.7	3.5
Imports of goods and services	5.8	5.2	-5.4	12.2	5.0	5.1	4.5	5.9	1.1	2.2
Resource utilization										
Potential GDP	3.0	4.1	-1.4	2.3	2.0	3.8	3.5	3.1	2.9	2.8
Output gap (percent of potential GDP)	0.1	0.2	-3.1	-1.2	-0.5	-0.2	0.3	0.0	0.0	0.0
Unemployment rate (percent of labor force)	5.3	4.3	5.2	5.3	5.1	4.7	4.4	4.2	4.2	4.2
Price										
GDP deflator	4.2	5.2	4.2	6.2	13.9	4.1	1.9	2.3	2.1	2.2
Consumer price index (HICP, average)	2.6	2.5	1.2	2.8	12.2	4.1	1.8	2.0	2.0	2.0
Consumer price index (HICP, end of period)	2.3	3.1	0.0	6.6	11.6	1.6	2.0	2.0	2.0	2.0
Core consumer price index (HICP, average)	2.1	1.8	1.2	1.4	8.2	6.1	2.9	2.0	2.0	2.0
Core consumer price index (HICP, end of period)	2.1	1.8	0.9	2.7	10.2	4.0	2.0	2.0	2.0	2.0
Fiscal indicators (percent of GDP)										
General government net lending/borrowing (cash basis)	0.1	-1.0	-2.9	-2.9	-2.8	-2.2	-1.6	-1.3	-0.1	0.3
General government primary balance	0.7	-0.4	-2.4	-2.5	-2.4	-1.7	-1.0	-0.6	0.6	1.0
Cyclically adjusted overall balance (percent of potential GDP)	0.1	-1.0	-1.7	-2.4	-2.6	-2.1	-1.7	-1.3	-0.1	0.3
General government gross debt	20.1	18.3	23.3	23.8	23.1	25.5	27.3	29.1	28.1	26.8
Monetary aggregates										
Broad money	8.8	9.9	10.9	10.7	16.6	8.4	7.8	7.1	6.8	6.9
Domestic private credit	8.9	9.7	4.5	8.8	15.8	11.3	8.9	6.6	6.3	6.4
Exchange rates regime										
Leva per U.S. dollar (end of period)	1.7	1.8	1.6	1.7	...	...	...	...	...	...
Nominal effective rate	3.3	-0.1	2.8	1.6	...	...	...	...	...	...
External sector (percent of GDP)										
Current account balance	0.9	1.9	-0.1	-0.4	-1.3	-1.2	-1.3	-3.3	-1.3	-0.1
o/w: Merchandise trade balance	-4.8	-4.7	-3.2	-4.9	-6.1	-6.4	-6.3	-7.4	-5.8	-5.0
Net international investment position	-37.0	-30.2	-27.1	-19.7	-16.3	-13.9	-12.2	-13.2	-12.0	-10.2
Gross external debt	66.1	61.3	64.9	61.8	54.9	54.6	54.8	56.7	55.5	54.1

Sources: Bulgarian authorities; World Development Indicators; and IMF staff estimates.

1/ Includes the delivery of fighter planes in 2025.

2/ Contribution to GDP growth.

Table 2. Bulgaria: Macroeconomic Framework, 2018–27
(Annual percentage change, Unless Otherwise Indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections									
GDP and prices										
Real GDP	2.7	4.0	-4.4	4.2	2.8	4.0	4.1	2.9	2.8	2.8
Real GDP per working age population	4.1	5.4	-3.2	5.0	3.7	4.9	4.9	3.7	3.6	3.7
Real GDP per capita	3.4	4.8	-3.9	5.4	3.4	4.7	4.7	3.5	3.4	3.5
Real domestic demand	5.5	4.9	0.1	6.0	3.6	4.5	4.3	4.3	1.1	2.0
Of which: private	3.7	6.0	-0.4	8.0	2.6	3.2	4.6	4.3	3.7	3.1
GDP deflator	4.2	5.2	4.2	6.2	13.9	4.1	1.9	2.3	2.1	2.2
Consumer price index (HICP, average)	2.6	2.5	1.2	2.8	12.2	4.1	1.8	2.0	2.0	2.0
Nominal wages	10.5	10.6	9.7	11.5	17.0	10.9	9.2	8.5	8.4	9.5
Real effective exchange rate, CPI based	3.3	0.5	...	...	...	...	...	...	...	...
Monetary aggregates (percent change)										
Broad money	8.8	9.9	10.9	10.7	16.6	8.4	7.8	7.1	6.8	6.9
Domestic private credit	8.9	9.7	4.5	8.8	15.8	11.3	8.9	6.6	6.3	6.4
Saving and investment (percent of GDP)										
Gross national saving	22.2	22.9	20.3	19.2	19.1	22.1	23.0	22.4	22.2	22.4
Government	4.9	4.7	1.2	-0.1	2.4	4.8	5.1	4.7	4.9	4.6
Private	17.2	18.1	19.0	19.3	16.6	17.4	18.0	17.8	17.3	17.8
Gross domestic investment	21.2	21.0	20.3	19.6	20.4	23.3	24.3	25.7	23.4	22.5
Government	4.8	4.9	4.2	2.8	3.7	6.8	7.2	8.0	5.2	4.1
Private	16.4	16.1	16.2	16.7	16.7	16.6	17.1	17.7	18.2	18.5
General government (percent of GDP)										
Revenue	34.4	34.9	35.0	37.5	36.5	37.3	36.8	35.5	35.9	35.7
Tax revenue (including social security contributions)	27.7	27.6	28.0	28.8	28.1	28.1	28.1	28.1	28.1	28.1
Non-Tax revenue	4.8	5.2	4.8	6.0	5.1	5.1	5.1	5.1	5.1	5.1
Grants	1.9	2.0	2.2	2.6	3.3	4.1	3.6	2.4	2.7	2.5
Expenditure	34.3	35.9	38.0	40.4	39.4	39.5	38.4	36.9	36.0	35.3
Balance (net lending/borrowing on cash basis)	0.1	-1.0	-2.9	-2.9	-2.8	-2.2	-1.6	-1.3	-0.1	0.3
Cyclically adjusted overall balance (percent of potential GDP)	0.1	-1.0	-1.7	-2.4	-2.6	-2.1	-1.7	-1.3	-0.1	0.3
Balance of payments (percent of GDP)										
Current account	0.9	1.9	-0.1	-0.4	-1.3	-1.2	-1.3	-3.3	-1.3	-0.1
Trade balance	-4.8	-4.7	-3.2	-4.9	-6.1	-6.4	-6.3	-7.4	-5.8	-5.0
Services balance	7.3	8.0	5.0	6.6	7.1	6.9	6.8	6.9	6.9	7.0
Primary income balance	-4.8	-4.2	-3.5	-3.3	-3.2	-3.2	-3.2	-3.2	-3.1	-3.1
Secondary income balance	3.2	2.9	1.5	1.1	0.9	1.5	1.4	0.4	0.7	1.0
Capital account	1.1	1.4	1.5	0.7	1.8	2.2	2.2	1.6	1.7	1.3
Financial account	3.1	4.8	-5.4	-0.4	1.4	0.3	1.2	1.6	1.7	1.8
Of which: Foreign direct investment	-1.3	-2.0	-4.5	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7
Memorandum items:										
Gross international reserves (billions of euros)	25.1	24.8	30.9	34.5	33.8	34.4	34.1	31.0	29.8	29.2
Short-term external debt (percent of GDP) 1/	10.7	10.3	9.9	10.2	8.6	7.6	6.7	6.1	5.3	4.4
Export volume (goods, percent change)	0.1	3.2	-4.4	6.3	3.9	4.5	4.1	3.9	3.7	3.5
Import volume (goods, percent change)	7.5	5.3	-3.0	11.6	3.5	3.7	3.1	2.2	2.2	2.2
Terms of trade (percent change)	0.6	1.9	4.2	2.6	-0.3	-0.1	0.3	0.3	0.2	0.2
Output gap (percent of potential GDP)	0.1	0.2	-3.1	-1.2	-0.5	-0.2	0.3	0.0	0.0	0.0
Nominal GDP (billions of leva)	110.0	120.4	120.0	132.7	155.4	168.4	178.6	188.0	197.3	207.3
Nominal GDP (billions of euros)	56.2	61.6	61.3	67.9	79.5	86.1	91.3	96.1	100.9	106.0

Sources: Bulgarian authorities; and IMF staff estimates.

1/ At original maturity.

Table 3. Bulgaria: Balance of Payments, 2018–27
(Billions of Euros, Unless Otherwise Indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections									
Current account balance	0.5	1.1	0.0	-0.3	-1.0	-1.0	-1.2	-3.2	-1.3	-0.1
Trade balance	-2.7	-2.9	-1.9	-3.3	-4.9	-5.5	-5.8	-7.1	-5.8	-5.3
Exports (f.o.b.)	27.7	29.1	27.3	34.3	43.2	44.8	46.4	48.3	50.4	52.7
Imports (f.o.b.)	30.4	32.0	29.2	37.6	48.0	50.2	52.2	55.5	56.2	57.9
Services balance	4.1	4.9	3.1	4.5	5.7	5.9	6.2	6.6	7.0	7.4
Exports of non-factor services	9.2	10.2	7.3	9.3	11.7	12.1	12.6	13.1	13.6	14.2
Imports of non-factor services	5.1	5.3	4.2	4.8	6.0	6.2	6.3	6.5	6.6	6.8
Primary Income balance	-2.7	-2.6	-2.1	-2.2	-2.5	-2.8	-2.9	-3.0	-3.2	-3.3
Receipts	1.1	1.3	1.9	2.3	2.5	2.6	2.7	2.8	2.9	3.0
Payments	3.8	3.9	4.0	4.5	5.0	5.3	5.6	5.9	6.1	6.3
Secondary income balance	1.8	1.8	0.9	0.7	0.7	1.3	1.3	0.4	0.7	1.0
Capital account balance	0.6	0.9	0.9	0.5	1.4	1.9	2.0	1.6	1.8	1.4
Financial account balance	1.8	3.0	-3.3	-0.3	1.1	0.3	1.1	1.5	1.7	1.9
Foreign direct investment balance	-0.8	-1.2	-2.8	-1.1	-1.3	-1.4	-1.5	-1.6	-1.7	-1.8
Portfolio investment balance	1.5	1.6	0.8	2.3	0.9	0.3	0.5	0.8	1.0	1.1
Other investment balance	0.9	2.6	-1.3	-1.3	1.7	1.4	2.2	2.3	2.4	2.5
Errors and omissions	2.0	0.4	1.6	3.1	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	1.4	-0.6	5.8	3.6	-0.7	0.6	-0.3	-3.1	-1.2	-0.6
Financing	-1.4	0.6	-5.8	-3.6	0.7	-0.6	0.3	3.1	1.2	0.6
Gross international reserves (increase -)	-1.4	0.6	-5.8	-3.6	0.7	-0.6	0.3	3.1	1.2	0.6
Memorandum items:	(Percent of GDP, unless otherwise indicated)									
Current account balance	0.9	1.9	-0.1	-0.4	-1.3	-1.2	-1.3	-3.3	-1.3	-0.1
Merchandise trade balance	-4.8	-4.7	-3.2	-4.9	-6.1	-6.4	-6.3	-7.4	-5.8	-5.0
Exports	49.3	47.3	44.5	50.5	54.3	52.0	50.8	50.3	49.9	49.7
Imports	54.2	52.0	47.6	55.4	60.5	58.3	57.1	57.7	55.7	54.6
Capital account balance	1.1	1.4	1.5	0.7	1.8	2.2	2.2	1.6	1.7	1.3
Foreign direct investment balance	-1.3	-2.0	-4.5	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7
Terms of trade (merchandise, percent change)	0.6	1.9	4.2	2.6	-0.3	-0.1	0.3	0.3	0.2	0.2
Exports of goods (volume, growth rate)	0.1	3.2	-4.4	6.3	3.9	4.5	4.1	3.9	3.7	3.5
Imports of goods (volume, growth rate)	7.5	5.3	-3.0	11.6	3.5	3.7	3.1	2.2	2.2	2.2
Exports of goods (prices, growth rate)	2.8	1.7	-2.0	18.2	21.2	-0.8	-0.4	0.3	0.5	1.1
Imports of goods (prices, growth rate)	2.2	-0.1	-6.0	15.2	21.6	-0.7	-0.7	0.0	0.3	0.9
Net international investment position	-37.0	-30.2	-27.1	-19.7	-16.3	-13.9	-12.2	-13.2	0.0	0.0
GDP (billions of euro)	56.2	61.6	61.3	67.9	79.5	86.1	91.3	96.1	100.9	106.0

Sources: Bulgarian authorities; and IMF staff estimates.

Table 4a. Bulgaria: General Government Operations, 2018–27^{1/}
(Billions of Leva, Unless Otherwise Indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections									
Revenue	37.9	42.0	42.0	49.7	56.8	62.8	65.7	66.8	70.8	73.9
Taxes	22.8	24.7	24.8	28.6	32.9	35.6	37.8	39.9	42.0	44.1
Taxes on profits	2.5	2.7	2.7	3.4	3.8	4.3	4.5	4.8	5.0	5.2
Taxes on income	3.7	4.0	4.2	4.9	5.5	5.9	6.2	6.4	6.7	7.1
Value-added taxes	10.1	11.1	11.0	13.0	14.9	16.0	17.1	18.2	19.2	20.2
Excises	5.2	5.5	5.4	5.7	6.6	7.2	7.6	8.0	8.4	8.8
Customs duties	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Other taxes	1.2	1.2	1.2	1.5	1.8	1.9	2.0	2.1	2.2	2.3
Social contributions	7.7	8.5	8.7	9.6	10.8	11.7	12.3	12.9	13.4	14.1
Grants	2.1	2.5	2.7	3.5	5.1	7.0	6.5	4.4	5.4	5.2
Other revenue 2/	5.3	6.3	5.8	8.0	7.9	8.6	9.1	9.6	10.0	10.5
Expenditure	37.7	43.2	45.6	53.7	61.2	66.5	68.6	69.3	71.0	73.3
Expense	32.3	35.5	40.3	48.3	52.7	54.5	56.4	57.8	60.8	63.9
Compensation of employees	6.9	7.9	9.0	10.4	10.4	10.7	10.9	11.1	11.8	12.4
Wages and salaries	5.8	6.7	7.6	8.7	9.0	9.5	9.7	9.8	10.5	11.0
Other compensation	1.1	1.2	1.4	1.7	1.4	1.2	1.2	1.2	1.3	1.4
Use of goods and services	4.4	4.5	5.1	5.1	8.6	7.9	7.5	7.2	7.6	8.0
Interest	0.7	0.6	0.6	0.6	0.7	0.8	1.1	1.3	1.3	1.4
External	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.9	0.9	0.9
Domestic	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.4	0.4	0.5
Subsidies	3.0	3.9	5.1	7.3	5.8	5.5	6.0	5.9	6.2	6.5
Grants 3/	1.1	1.2	1.3	1.7	1.7	1.8	1.9	2.0	2.1	2.2
Social benefits	16.0	17.1	19.0	22.9	25.3	27.6	28.8	30.1	31.6	33.3
Pensions	9.5	9.9	11.2	14.3	15.0	16.4	17.2	18.0	19.0	20.0
Social assistance	2.8	3.1	3.5	3.6	4.6	5.1	5.1	5.1	5.3	5.6
Health Insurance Fund	3.6	4.1	4.3	5.0	5.7	6.1	6.5	7.0	7.3	7.7
Other expense	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Contingency	0.2	0.2	0.2	1.6	0.3	0.3	0.3	0.3	0.4	0.4
Net acquisition of nonfinancial assets 4/	5.3	7.5	5.0	3.7	8.2	11.7	11.8	11.2	9.8	8.9
Net lending/borrowing	0.1	-1.2	-3.5	-3.9	-4.4	-3.7	-2.8	-2.5	-0.1	0.7
Primary balance	0.8	-0.5	-2.9	-3.3	-3.7	-2.9	-1.7	-1.2	1.2	2.0
Financing	-0.1	1.2	3.5	3.9	4.4	3.7	2.8	2.5	0.1	-0.7
Privatization proceeds	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net external financing	-0.2	-0.1	5.7	0.7	1.6	4.4	3.5	5.6	0.5	0.3
Net domestic financing	-1.2	0.0	0.2	3.3	2.7	2.7	2.3	0.3	0.3	-0.2
Net lending and other items	1.2	1.2	-2.4	-0.1	0.2	-3.3	-3.0	-3.4	-0.6	-0.8
Memorandum items:										
Fiscal reserve account	9.0	8.6	8.5	9.7	9.7	9.7	9.7	9.7	9.7	9.7
Gross public debt	22.1	22.0	28.0	31.6	35.9	42.9	48.7	54.7	55.5	55.6
Nominal GDP (percent change)	7.0	9.5	-0.4	10.7	17.1	8.4	6.1	5.3	5.0	5.1
Real GDP (percent change)	2.7	4.0	-4.4	4.2	2.8	4.0	4.1	2.9	2.8	2.8
HICP inflation (percent change)	2.6	2.5	1.2	2.8	12.2	4.1	1.8	2.0	2.0	2.0
Nominal private consumption (percent change)	6.2	8.1	-1.0	11.9	15.1	7.4	6.5	6.4	5.8	5.2
Nominal imports (percent change)	7.9	5.2	-10.7	26.9	27.6	4.4	3.7	5.9	1.4	3.1

Sources: Ministry of Finance; and IMF staff estimates.

1/ On cash basis. The data correspond to the Consolidated Fiscal Program of the government.

2/ Includes dividends. For 2021, it includes the Sofia Airport concession revenue BGN 660 million.

3/ Contribution to EU budget.

4/ Includes only acquisitions of nonfinancial assets, i.e., capital expenditure. For 2021, includes concession revenue BGN 660 million for the Sofia Airport.

Table 4b. Bulgaria: General Government Operations, 2018–27^{1/}
(Percent of GDP, Unless Otherwise Indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Projections									
Revenue	34.4	34.9	35.0	37.5	36.5	37.3	36.8	35.5	35.9	35.7
Taxes	20.7	20.5	20.7	21.6	21.2	21.1	21.2	21.2	21.3	21.3
Taxes on profits	2.2	2.2	2.3	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Taxes on income	3.3	3.3	3.5	3.7	3.5	3.5	3.5	3.4	3.4	3.4
Value-added taxes	9.2	9.2	9.2	9.8	9.6	9.5	9.6	9.7	9.8	9.8
Excises	4.7	4.6	4.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Customs duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other taxes	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Social contributions	7.0	7.1	7.3	7.3	7.0	6.9	6.9	6.9	6.8	6.8
Grants	1.9	2.0	2.2	2.6	3.3	4.1	3.6	2.4	2.7	2.5
Other revenue 2/	4.8	5.2	4.8	6.0	5.1	5.1	5.1	5.1	5.1	5.1
Expenditure	34.3	35.9	38.0	40.4	39.4	39.5	38.4	36.9	36.0	35.3
Expense	29.3	29.5	33.6	36.4	33.9	32.4	31.6	30.7	30.8	30.8
Compensation of employees	6.3	6.6	7.5	7.8	6.7	6.4	6.1	5.9	6.0	6.0
Wages and salaries	5.3	5.5	6.3	6.5	5.8	5.6	5.4	5.2	5.3	5.3
Other compensation	1.0	1.0	1.2	1.3	0.9	0.7	0.7	0.7	0.7	0.7
Use of goods and services	4.0	3.8	4.2	3.8	5.6	4.7	4.2	3.9	3.9	3.9
Interest	0.6	0.5	0.5	0.5	0.4	0.5	0.6	0.7	0.7	0.7
External	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.5	0.4	0.4
Domestic	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Subsidies	2.8	3.2	4.2	5.5	3.7	3.3	3.3	3.1	3.1	3.1
Grants 3/	1.0	1.0	1.1	1.3	1.1	1.1	1.0	1.1	1.1	1.1
Social benefits	14.5	14.2	15.9	17.2	16.3	16.4	16.1	16.0	16.0	16.1
Pensions	8.6	8.2	9.3	10.8	9.7	9.8	9.7	9.6	9.6	9.7
Social assistance	2.6	2.6	2.9	2.7	3.0	3.0	2.8	2.7	2.7	2.7
Health Insurance Fund	3.3	3.4	3.6	3.7	3.7	3.6	3.7	3.7	3.7	3.7
Other expense	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Contingency	0.2	0.2	0.2	1.2	0.2	0.2	0.2	0.2	0.2	0.2
Net acquisition of nonfinancial assets 4/	4.8	6.2	4.2	2.8	5.3	6.9	6.6	6.0	5.0	4.3
Net lending/borrowing	0.1	-1.0	-2.9	-2.9	-2.8	-2.2	-1.6	-1.3	-0.1	0.3
Primary balance	0.7	-0.4	-2.4	-2.5	-2.4	-1.7	-1.0	-0.6	0.6	1.0
Financing	-0.1	1.0	2.9	2.9	2.8	2.2	1.6	1.3	0.1	-0.3
Privatization proceeds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net external financing	-0.2	-0.1	4.8	0.5	1.0	2.6	2.0	3.0	0.2	0.2
Net domestic financing	-1.1	0.0	0.2	2.5	1.7	1.6	1.3	0.2	0.2	-0.1
Net lending and other items	1.1	1.0	-2.0	-0.1	0.1	-2.0	-1.7	-1.8	-0.3	-0.4
Memorandum items:										
Gross public debt	20.1	18.3	23.3	23.8	23.1	25.5	27.3	29.1	28.1	26.8
Output gap (percent of potential GDP)	0.1	0.0	-3.1	-1.2	-0.5	-0.2	0.3	0.0	0.0	0.0
Nominal GDP (billions of leva)	110.0	120.4	120.0	132.7	155.4	168.4	178.6	188.0	197.3	207.3

Sources: Ministry of Finance; and IMF staff estimates.

1/ On cash basis. The data correspond to the Consolidated Fiscal Program of the government.

2/ Includes dividends. For 2021, it includes the Sofia Airport concession revenue BGN 660 million.

3/ Contribution to EU budget.

4/ Includes only acquisitions of nonfinancial assets, i.e., capital expenditure. For 2021, includes concession revenue BGN 660 million for the Sofia Airport.

Table 5. Bulgaria: Monetary Accounts, 2018–21^{1/}

(Billions of Leva, Unless Otherwise Indicated)

	2018	2019	2020	2021
Monetary Survey				
Net foreign assets	56.1	57.8	66.6	71.3
Net domestic assets	57.9	66.1	69.7	78.5
Domestic credit	58.5	65.2	70.3	78.7
General government	-0.4	0.6	2.8	5.2
Non-government	58.9	64.6	67.5	73.5
Broad money (M3)	93.3	102.5	113.6	125.8
Currency outside banks	15.6	17.2	19.3	22.4
Reserve money	32.6	32.5	43.8	47.8
Deposits 2/	77.7	85.3	94.3	103.4
Accounts of the Bulgarian National Bank				
Net foreign assets	47.4	47.0	58.8	63.8
Net foreign reserves (billions of euro)	24.2	24.0	30.0	32.6
Net domestic assets	-10.6	-9.8	-9.9	-11.1
Net claims on government	-9.4	-9.1	-8.3	-8.8
Base money	32.6	32.5	43.8	47.8
Currency in circulation	15.6	17.2	19.3	22.4
Banks reserves	17.0	15.3	24.5	25.4
Deposit money banks				
Net foreign assets	8.6	10.8	7.9	7.4
Gross foreign assets	16.8	19.2	15.8	17.1
Gross foreign liabilities	8.1	8.4	8.0	9.7
Net domestic assets	67.4	75.2	78.5	87.7
Domestic credit	67.8	74.1	78.5	87.3
Memorandum items:				
	(Annual percentage change, unless otherwise indicated)			
Base money	10.1	-0.3	34.9	9.1
Broad money	8.8	9.9	10.9	10.7
Domestic non-government credit	8.9	9.7	4.5	8.8
Domestic deposits	8.5	9.8	10.6	9.6
Domestic currency	10.3	11.6	8.0	13.8
Foreign currency	5.4	6.4	15.6	2.3
Money multiplier (ratio)	2.9	3.2	2.6	2.6
Velocity (M3) (ratio)	1.2	1.2	1.1	1.1
GDP (billions of leva)	110.0	120.4	120.0	132.7

Sources: BNB and IMF.

1/ Due to the revocation of the banking license of KTB, the bank is excluded as a reporting agent from the monetary statistics data starting in November 2014.

2/ Includes deposits at central bank.

Table 6. Bulgaria: Financial Soundness Indicators, 2016–21

(Percent)

	2016	2017	2018	2019	2020	2021		
						Q1	Q2	Q3
Core indicators								
Capital adequacy								
Capital to risk-weighted assets	22.2	22.1	20.4	20.2	22.7	22.5	22.9	22.4
Tier 1 capital to risk-weighted assets	20.9	20.9	19.4	19.5	22.1	21.9	22.3	21.8
Asset quality								
Nonperforming loans to total gross loans	13.2	10.4	7.8	6.6	5.8	5.6	5.4	5.1
Nonperforming loans net of provisions to capital	44.7	36.6	28.2	23.9	20.8	20.0	18.6	18.0
Large exposures to capital	61.7	61.0	80.8	91.7	58.6	56.1	57.4	58.6
Earnings and profitability								
Return on assets	1.4	1.2	1.6	1.5	0.7	1.1	1.0	1.1
Return on equity 1/	10.4	9.3	11.8	11.3	5.2	8.7	8.0	8.7
Net interest income to gross income	69.2	69.4	65.1	65.0	63.7	61.1	61.8	62.3
Noninterest expense to gross income	44.0	45.7	44.8	46.9	57.0	54.1	52.2	50.9
Personnel expense to total income	18.4	20.3	20.3	20.9	21.8	21.1	21.6	21.6
Liquidity								
Liquid assets to total assets	32.4	33.1	28.9	27.9	30.3	28.6	28.1	28.2
Liquid assets to short-term liabilities	41.0	41.5	35.8	33.9	36.3	34.4	34.6	35.0
Liquid assets to total liabilities	40.3	41.3	35.8	34.4	37.1	34.9	34.1	34.3
Encouraged indicators								
Deposit-taking institutions								
Capital to assets 2/	11.6	11.4	10.8	11.6	11.9	11.9	12.1	11.7
Trading income to total income	10.3	2.3	8.9	8.1	4.5	8.4	6.2	5.9
Personnel expenses to noninterest expenses	41.7	44.5	45.2	44.5	38.2	39.0	41.5	42.4
Customer deposits to total (non-interbank) loans	134.7	138.8	139.2	139.2	144.7	146.9	146.8	147.0
Foreign currency denominated loans to total loans	32.0	26.7	25.2	24.5	23.4	23.1	22.8	22.3
Foreign currency denominated liabilities to total liabilities	41.7	39.4	38.0	36.2	37.6	37.8	37.7	37.6

Sources: BNB; and IMF.

1/ Return on equity is calculated with Tier I capital as denominator.

2/ Capital to assets is based on Tier I capital.

Annex I. Public Debt Sustainability Analysis

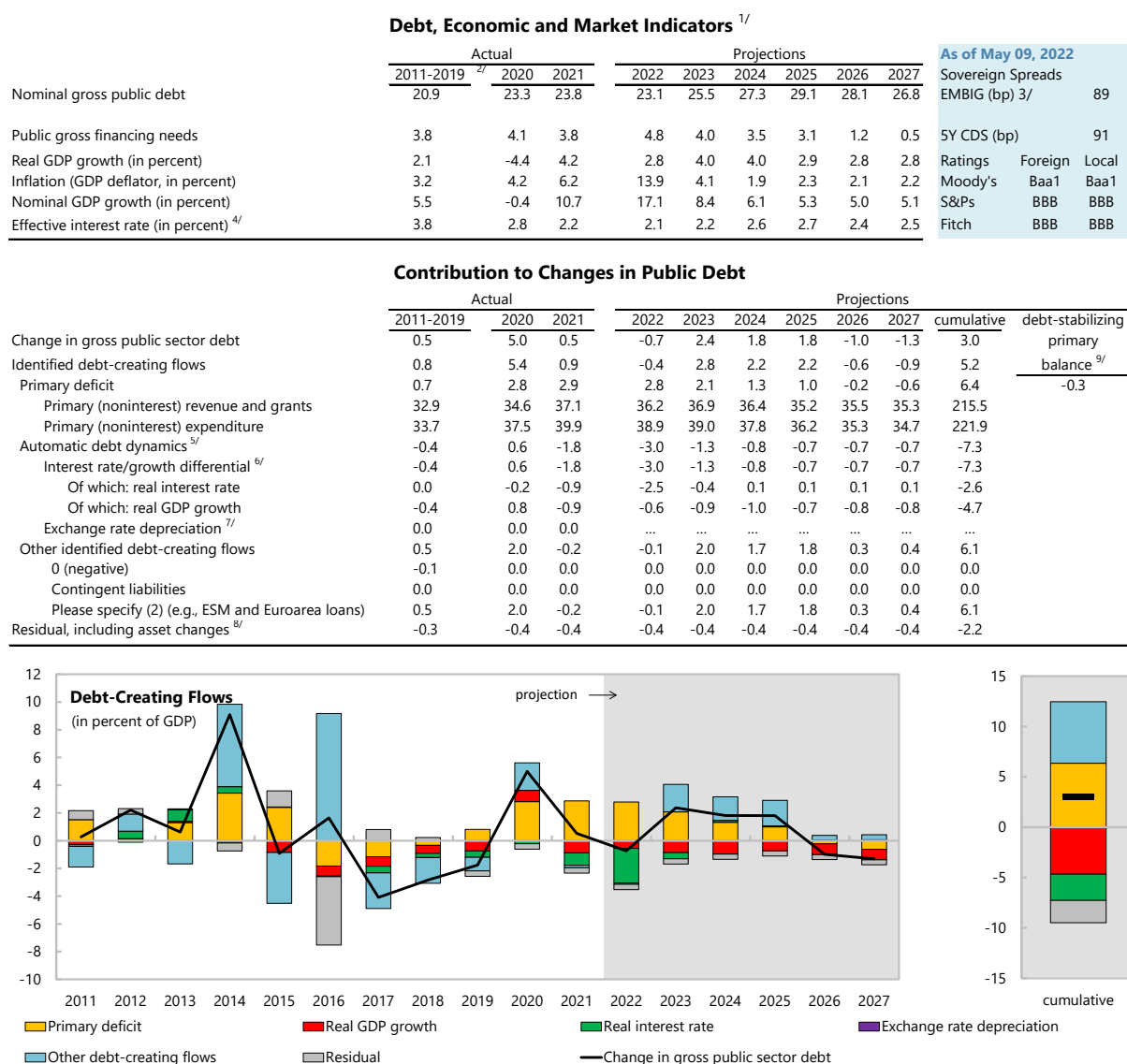
1. In 2021, public debt increased marginally but remained low and sustainable.

Reflecting the impact of the COVID-19 crisis and the fiscal support to address it, public debt increased to 23.8 percent of GDP in 2021, up from 23.3 percent of GDP in 2020 and 18.3 percent of GDP in 2019. Public gross financing needs returned to their pre-pandemic average of 3.8 percent of GDP. In 2021, the authorities issued domestic bonds worth BGN 3.8 billion, which was in line with the domestic borrowing limit of BGN 4.5 billion of new domestic debt for the year.

2. Public debt is projected to remain low. Staff projects the fiscal deficit to decrease by 0.1 percent of GDP between 2021 and 2022 as the increase in the deficit in nominal terms (by BGR 0.5 billion or +13 percent) is offset by the strong nominal GDP growth (+17 percent) itself reflecting an exceptionally high increase in the projected GDP deflator. Despite a 14 percent increase in nominal euros terms, public debt is expected to decline as a share of GDP to 23.1 percent in 2022 from 23.8 percent in 2021, as a result of high nominal GDP growth. Gross financing needs are projected to increase to 4.7 percent of GDP in 2022 from 3.8 percent of GDP in 2021.

3. General government gross debt is projected to decline over the medium term. Staff projects an improvement in the fiscal balance from a deficit of 2.2 percent of GDP in 2023 to a surplus of 0.3 percent of GDP in 2027. The consolidation is supported by a gradual reduction in expenditure in percent of GDP. Taking into account the authorities' planned borrowing underpinning the medium budget framework 2022-25, the public debt-to-GDP ratio is projected to peak at 29.1 percent in 2025, and subsequently decline gradually to 26.8 percent of GDP in 2027. Alternative scenarios indicate that public debt would not exceed 36 percent of GDP under various shocks in the medium term and gross financing needs would remain below 7 percent of GDP.

Figure 1. Bulgaria: Public Sector Debt Sustainability Analysis (DSA) – Baseline Scenario
(In percent of GDP Unless Otherwise Indicated)



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g)) - g + ae(1+r)] / (1+g+\pi+gn)$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

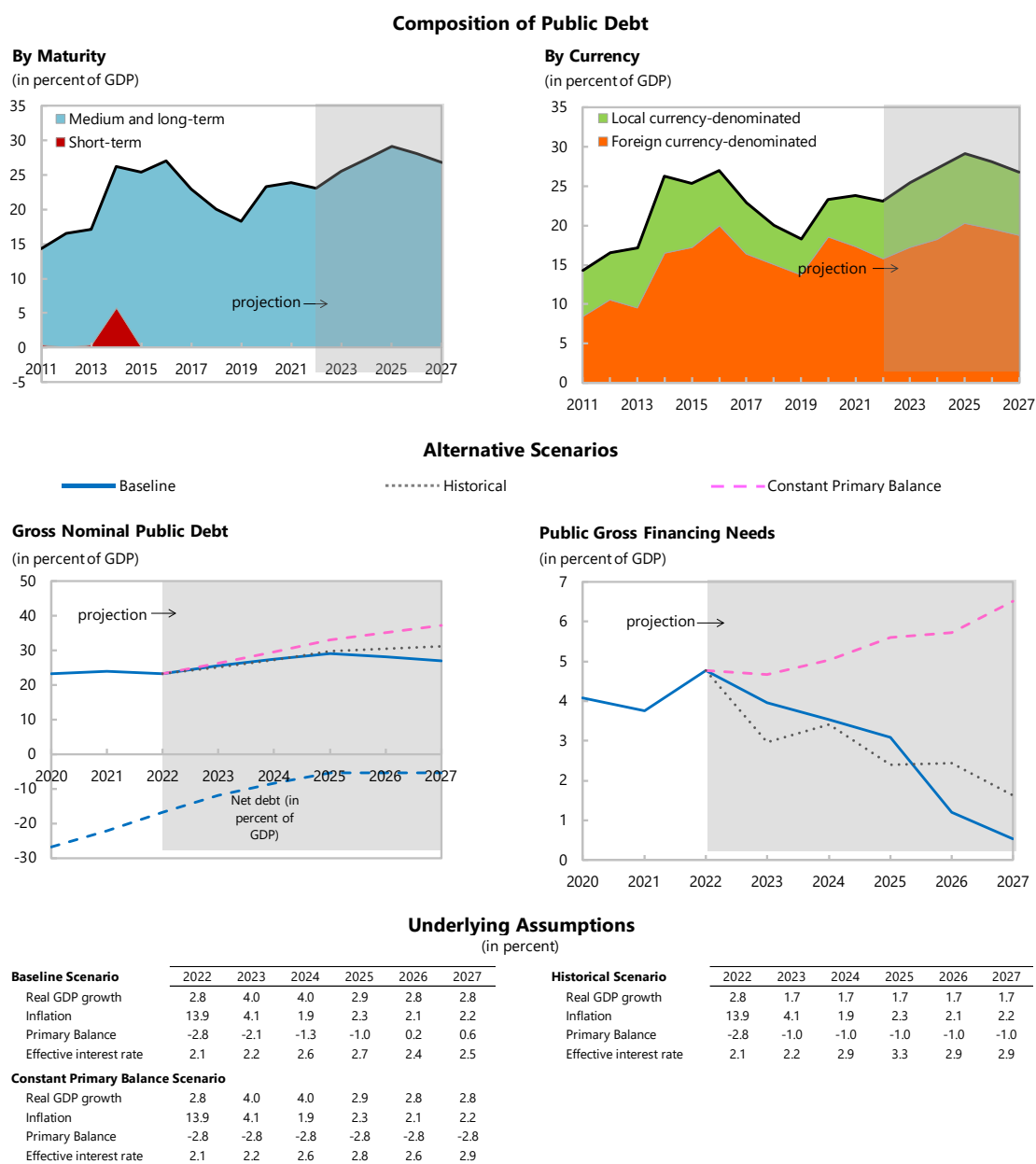
6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as $-g$.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

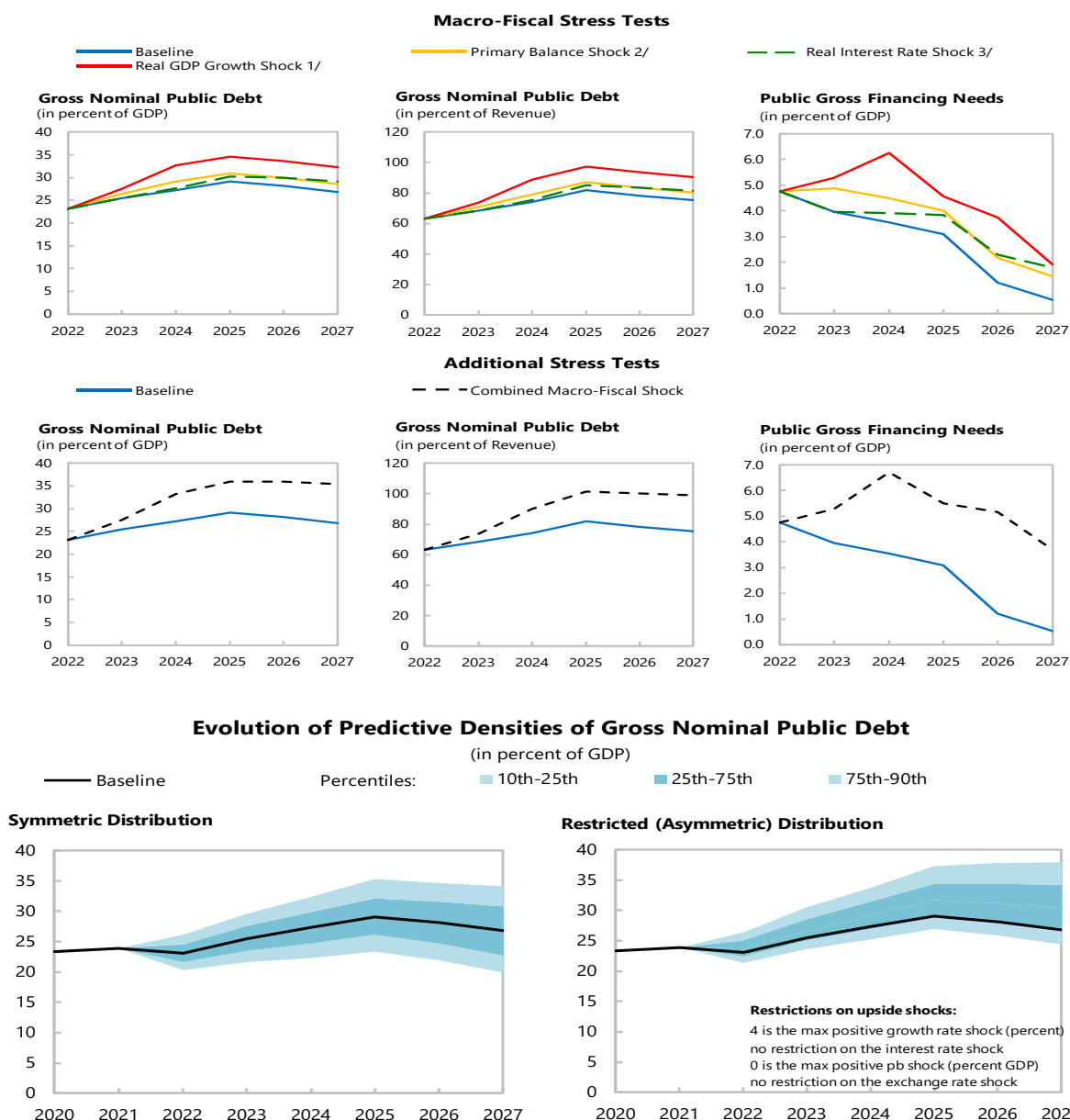
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 2. Bulgaria: Public DSA – Composition of Public Debt and Alternative Scenarios



Source: IMF staff.

Figure 3. Bulgaria: Public DSA – Stress Tests



Source: IMF staff.

1/ Real GDP growth shock scenario assumes (i) real GDP growth is reduced by 1 standard deviation for 2020-21; (ii) revenue-to-GDP ratio remains the same as in the baseline; (iii) level of non-interest expenditures is the same as in the baseline; (iv) deterioration in primary balance lead to higher interest rate; and (v) decline in growth leads to lower inflation (0.25 percentage points per 1 percentage point decrease in GDP growth).

2/ Primary balance shock scenario assumes (i) the primary balance for 2020-21 to be below the baseline projections by 50 percent of the 10-year historical standard deviation; and (ii) additional borrowing leads to increase in interest rate of 25bp per 1 percent of GDP worsening of the primary balance.

3/ Real interest rate shock scenario assumes nominal interest rate increases by the difference between the maximum real interest rate over history (last 10 years) and the average real interest rate level over projection.

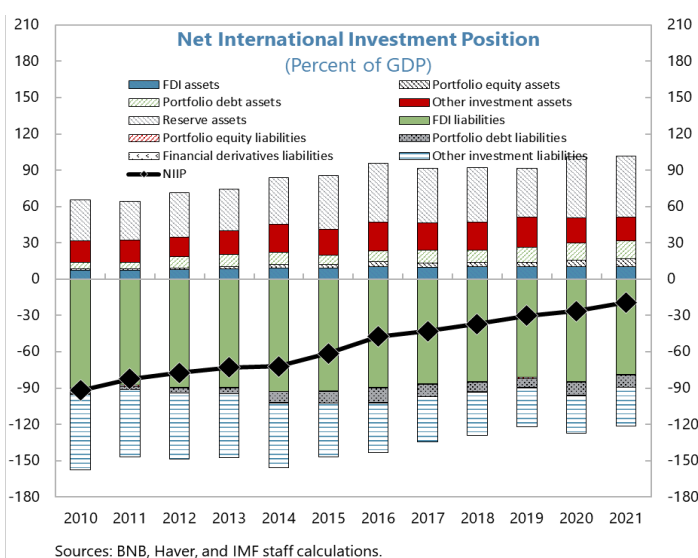
Annex II. External Sector Assessment

Overall Assessment: Based on still-preliminary data, the external position in 2021 is assessed to be stronger than the level implied by medium-term fundamentals and desirable policies. However, this assessment is subject to frequent and large data revisions and significant errors and omissions. The current account is projected to remain in deficit throughout the projection period, partly due to large imports of military equipment in 2025.

Potential Policy Responses: Following the COVID-19 outbreak, short-term policies have focused on supporting activity and limiting the long-term scarring effect of the crisis, taking advantage of Bulgaria's fiscal space. Ensuring consistency of the external position with medium-term fundamentals will require structural policies to stimulate investment, raise Bulgaria's economic potential, and facilitate its economic transformation. To that effect, it will be key to make effective and efficient use of EU transfers, which are expected to become quite large.

Foreign Assets and Liabilities: Position and Trajectory

Background. From a peak of 92 percent of GDP in 2010, the negative NIIP steadily improved to 27.1 percent in 2020 (Figure 2). The main factors include the increase in foreign reserve assets, the reduction of banks' liabilities towards parent companies and the increase of foreign assets by domestic companies. Positive current account developments and sustained economic growth performance have also contributed to the favorable NIIP trend.



Assessment. The NIIP continued to improve in 2021 and is expected to reach -16.3 percent of GDP by end-2022. Over the medium term, the NIIP-to-GDP ratio is expected to further improve on account of projected increases in reserve assets. Bulgaria's overall NIIP financing vulnerabilities appear moderate, as foreign direct investment accounts for a large share of the position.

2021 (% GDP)	NIIP	Gross Assets	Debt Assets	Gross Liabilities	Debt Liabilities
	-19.7	103.0	15.0	-122.3	-9.8

Current Account

Background. Bulgaria's external balance has significantly improved in recent years, recording sizable current account surpluses every year from 2013 to 2019. During the pandemic, the current

account contracted sharply, posting a deficit of 0.1 percent of GDP in 2020 (down from a surplus of 1.9 percent of GDP in 2019). The deficit has further widened to 0.4 percent of GDP in 2021, largely driven by the higher trade balance deficit, as imports recovered faster than exports and the terms of trade deteriorated. Partly due to one-off effects (such as large imports of military equipment in 2025), the current account is expected to remain in deficit over the projection period. Data uncertainty remains high, due to frequent and substantial revisions and large errors and omissions as documented in the [2019 Article IV](#): preliminary data for 2021 report "net errors and omissions" reaching EUR 3.1 bn or 4.6 percent of GDP, making a revision of the 2021 headline current account very likely.

Assessment. After accounting for the temporary impact of the pandemic on tourism (1.1 percent of GDP), staff estimates the 2021 cyclically-adjusted current account to be 2.3 percent of GDP higher than the norm (estimated at -1.7 percent of GDP). The contribution of the relative fiscal policy gap to the overall CA gap—which mainly reflects large exceptional fiscal stimulus in the rest of the world relative to Bulgaria—is estimated at 1.2 percent of GDP, while a relatively lower domestic public health care spending with respect to the rest of the world is estimated to have contributed 1.7 percentage point to the CA gap. Unidentified residuals are large, potentially reflecting other idiosyncratic factors that are not captured by the model. The assessment is also subject to high uncertainties related to underlying data issues.

Bulgaria: Model Estimates for 2021 (in percent of GDP)

	CA model 1/	REER model 1/	ES model
CA-Actual	-0.4		
Cyclical contributions (from model)	0.4		
COVID-19 adjustor (+) 2/	-1.1		
Natural disasters and conflicts	-0.2		
Adjusted CA	0.6		
CA Norm (from model) 3/	-1.7		
Adjusted CA Norm	-1.7		
CA Gap	2.3	1.5	2.9
o/w Policy gap	4.4		
Elasticity	-0.45		
REER Gap (in percent)	-5.1	-3.3	-6.4

1/ Based on the EBA-lite 3.0 methodology.

2/ Additional cyclical adjustment to account for the temporary impact of the pandemic on tourism.

3/ Cyclically adjusted, including multilateral consistency adjustments.

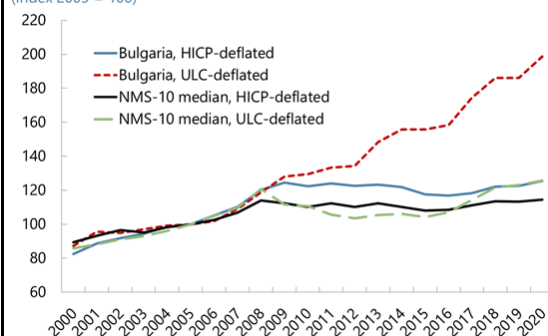
Real Exchange Rate

Background. With wage growth outpacing productivity growth by a wide margin in recent years, ULC-based REER has deviated from the CPI-based REER and appreciated significantly since 2009. This suggests that the CPI-based REER may underestimate the weakening of cost competitiveness, as Bulgarian firms have continued to report increasing labor shortages (BNB, 2019), forcing them to compete on the offered remuneration. Cyclical factors have also played a role, fueling rapid ULC growth in the booming years before the 2009 crisis and limiting the pace of ULC increase thereafter. While the share of world merchandise exports declined somewhat over 2018–19 after trending up in earlier years—possibly raising concerns on eroding price competitiveness—Bulgaria’s 2021 wage level was still substantially below the median NMS level and corporate profits (measured by gross operating surplus) are viewed as having room to absorb further labor cost increases. Aggregate competitiveness developments tend to mask nonetheless different trends across production sectors.¹

Assessment. The EBA-lite REER index model estimates a REER undervaluation of 3.3 percent in 2021. The external sustainability (ES) model suggests a REER undervaluation of 6.4 percent. The REER gap derived from the IMF staff’s CA gap assessment, with an estimated elasticity of -0.45, implies a REER undervaluation of 5.1 percent. In line with the assessment implied by the current account model—while considering all estimates and the uncertainties around them—staff assesses the REER gap in 2021 to range between -6.4 and -3.3 percent.

Real Effective Exchange Rates

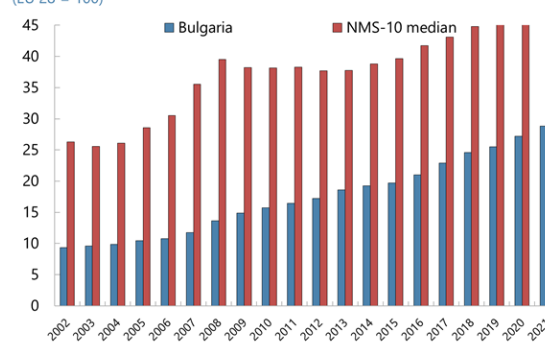
(Index 2005 = 100)



Sources: European Commission; and IMF staff calculations.

Nominal Compensation per Employee

(EU 28 = 100)



Sources: European Commission; and IMF staff calculations.

Capital and Financial Accounts: Flows and Policy Measures

Background. Bulgaria’s gross external debt-to-GDP ratio declined continuously from 2012 until 2019 (reaching 60.8 percent of GDP). During the pandemic, gross external indebtedness of Bulgarian residents temporarily rose to 69.2 percent of GDP at end-2020—mainly on account of public debt—and declining below its pre-pandemic level in 2021 (see below). Over 2021, Bulgaria experienced small net financial outflows (0.4 percent of GDP), largely driven by transactions in other investment and—to a lesser extent—FDI, while debt and equity flows recorded net inflows.

Assessment. In terms of maturity structure, the high share of long-term debt in Bulgaria’s total gross external debt (63.2 percent) has reduced economy’s vulnerability to potential volatility of international capital flows, whereas the current terms for servicing external obligations by

Bulgarian residents are expected to remain favorable. The external-debt-to-GDP ratio is projected to steadily decline over the medium term, as the increase, in nominal terms, of public and the private sectors' external debt is likely to be smaller than the nominal GDP growth.

FX Intervention and Reserves Level

Background. As of end-December 2021, gross international reserves amounted to EUR 34.5bn (50.8 percent of GDP), up from EUR 30.9bn at end-December 2020. The increase in FX reserves over 2021 partly reflects the general SDR allocation in August 2021 (SDR 859.1 million or EUR 1.05bn).

Assessment. Foreign exchange reserves are assessed to be adequate under a currency board arrangement.² Available FX reserves at the end of 2021 exceed the upper bound of the IMF metric's suggested adequacy range and the coverage ratio required for the functioning of the currency board, while remaining well above traditional metrics.

¹ [Determinants of Bulgarian Exports: the Role of Price and Non-Price Competitiveness](#) (BNB DP/118/2021).

² Under a currency board regime, reserves are required to cover currency in circulation, liabilities to banks, the government, and other depositors.

Table 1. Bulgaria: External Debt Sustainability Framework, 2011–2027
(In Percent of GDP, Unless Otherwise Indicated)

	Actual											Projections							Debt-stabilizing non-interest current account 6/ -3.8
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
1 Baseline: External debt	87.8	96.4	96.0	89.9	78.6	74.4	75.2	63.7	60.8	69.2	59.1	55.2	55.0	55.0	56.9	55.6	54.2		
2 Change in external debt		8.7	-0.5	-6.0	-11.3	-4.2	0.8	-11.5	-2.9	8.4	-10.2	-3.9	-0.2	0.0	1.9	-1.3	-1.4		
3 Identified external debt-creating flows (4+8+9)		3.8	-6.8	-3.6	7.1	-8.8	-12.4	-10.4	-6.0	-5.2	-10.0	-1.9	-2.6	-2.5	0.1	-2.0	-3.1		
4 Current account deficit, excluding interest payments		-1.3	-3.0	-2.6	-1.2	-4.0	-4.2	-1.7	-2.5	-0.4	0.3	0.7	0.5	0.6	2.5	0.5	-0.6		
5 Deficit in balance of goods and services		3.3	0.7	0.5	-1.0	-4.9	-4.3	-2.5	-3.2	-1.9	-1.8	-1.0	-0.5	-0.5	0.6	-1.2	-2.0		
6 Exports	58.8	60.4	64.5	64.7	63.8	63.9	67.0	65.7	63.9	56.3	64.2	69.0	66.1	64.5	63.9	63.4	63.1		
7 Imports		63.7	65.2	65.3	62.9	58.9	62.7	63.2	60.7	54.4	62.4	68.0	65.5	64.1	64.4	62.3	61.1		
8 Net non-debt creating capital inflows (negative)		-2.5	-2.9	-0.2	-4.0	-1.1	-2.3	-1.4	-1.9	-4.3	-1.5	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7		
9 Automatic debt dynamics 1/		7.6	-0.8	-0.8	12.4	-3.6	-5.8	-7.2	-1.7	-0.4	-8.8	-0.9	-1.4	-1.3	-0.7	-0.8	-0.8		
10 Contribution from nominal interest rate		2.1	1.8	1.4	1.2	1.0	0.9	0.8	0.6	0.5	0.1	0.6	0.7	0.8	0.8	0.8	0.7		
11 Contribution from real GDP growth		-0.7	0.5	-0.9	-3.5	-2.3	-1.9	-1.8	-2.5	2.6	-2.5	-1.5	-2.0	-2.1	-1.5	-1.5	-1.5		
12 Contribution from price and exchange rate changes 2/		6.2	-3.1	-1.2	14.6	-2.4	-4.9	-6.2	0.2	-3.6	-6.4	...	...	...	...	...	...
13 Residual, incl. change in gross foreign assets (2-3) 3/		4.9	6.4	-2.5	-18.4	4.6	13.1	-1.1	3.1	13.6	-0.1	-1.9	2.4	2.5	1.8	0.7	1.8		
External debt-to-exports ratio (in percent)	149.1	159.8	148.8	138.9	123.2	116.5	112.3	97.0	95.1	122.9	92.0	79.9	83.3	85.3	89.1	87.7	85.9		
Gross external financing need (in billions of US dollars) 4/ in percent of GDP		19.0	18.9	16.5	17.9	10.0	10.0	13.2	11.4	12.2	8.9	13.1	12.8	13.2	13.3	12.1	9.9		
		35.1	33.8	28.8	35.3	18.6	16.8	19.8	16.6	17.4	11.1	14.8	13.2	12.6	12.0	10.3	8.0		
Scenario with key variables at their historical averages 5/												55.2	55.3	54.4	52.9	49.9	48.1	-3.3	
Key Macroeconomic Assumptions Underlying Baseline												Historical Average	Standard Deviation						
Real GDP growth (in percent)		0.8	-0.6	1.0	3.4	3.0	2.8	2.7	4.0	-4.4	4.2	1.7	2.6	2.7	4.0	4.0	2.9	2.8	
GDP deflator in US dollars (change in percent)		-6.6	3.4	1.3	-14.0	3.1	7.0	9.1	-0.3	6.2	10.2	1.9	7.4	7.3	5.6	3.3	3.3	2.8	
Nominal external interest rate (in percent)		2.3	1.9	1.5	1.2	1.3	1.3	1.2	1.0	0.8	0.2	1.3	0.6	1.1	1.3	1.5	1.4	1.4	
Growth of exports (US dollar terms, in percent)		-3.4	9.8	2.7	-12.3	6.3	15.3	9.8	1.0	-10.6	30.8	4.9	12.7	18.6	5.1	5.0	5.2	4.9	
Growth of imports (US dollar terms, in percent)		2.2	5.2	2.5	-14.3	-0.5	16.9	12.9	-0.3	-8.9	31.6	4.7	13.1	20.2	5.9	5.1	6.9	2.1	
Current account balance, excluding interest payments		1.3	3.0	2.6	1.2	4.0	4.2	1.7	2.5	0.4	-0.3	2.1	1.5	-0.7	-0.5	-0.6	-2.5	-0.5	
Net non-debt creating capital inflows		2.5	2.9	0.2	4.0	1.1	2.3	1.4	1.9	4.3	1.5	2.2	1.3	1.7	1.7	1.7	1.7	1.7	

1/ Derived as $[r - g - r(1+g) + ea(1+r)]/(1+g+r+gr)$ times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate,

e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

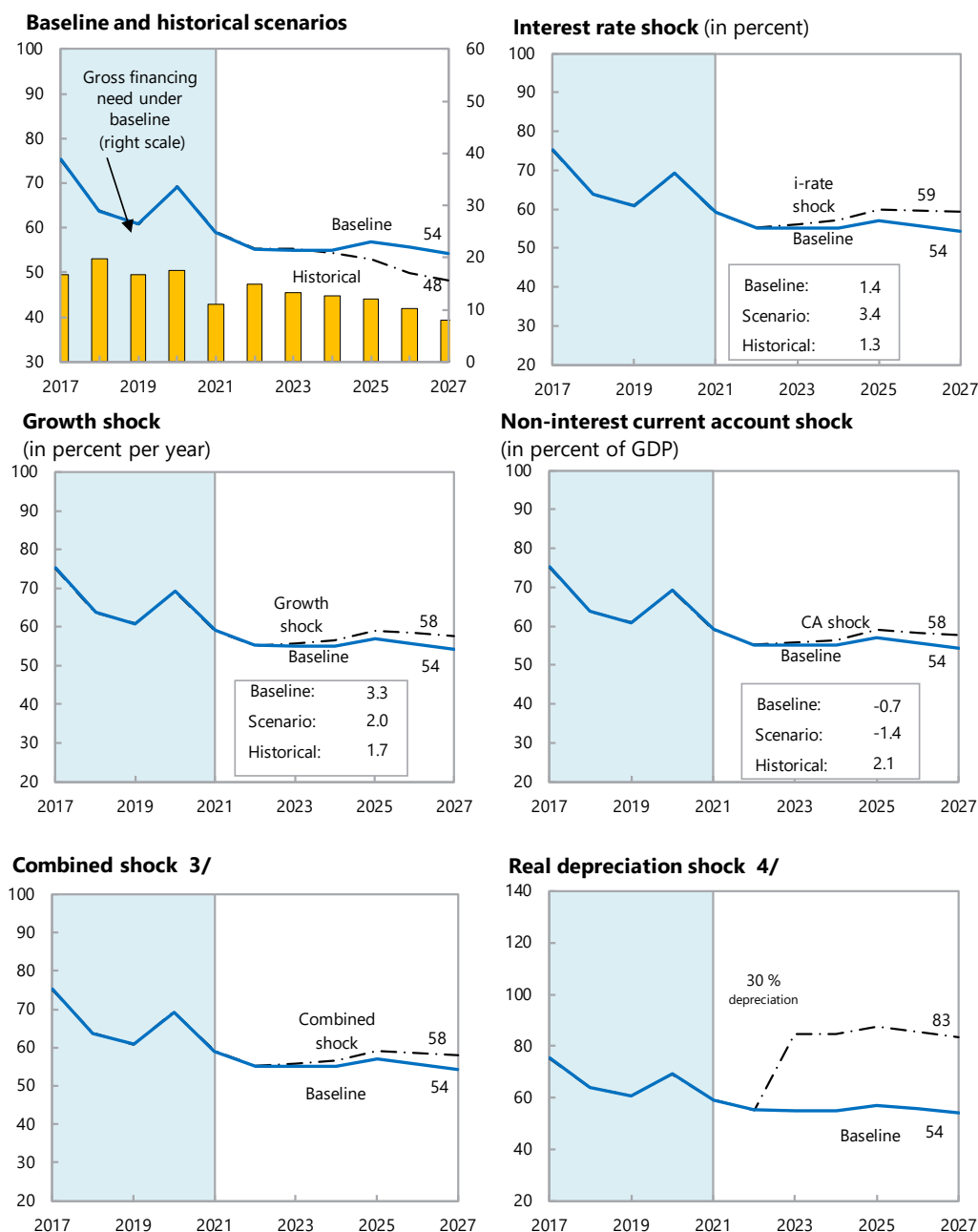
2/ The contribution from price and exchange rate changes is defined as $[-r(1+g) + ea(1+r)]/(1+g+r+gr)$ times previous period debt stock. r increases with an appreciating domestic currency ($e > 0$) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure 1. Bulgaria: External Debt Sustainability: Bound Tests 1/ 2/

Sources: International Monetary Fund, Country desk data, and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks, except in case of the interest rate shock where a 200 bp shock is assumed. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

4/ One-time real depreciation of 30 percent occurs in 2023.

Annex III. Risk Assessment Matrix¹

Risks	Likelihood	Impact if Realized	Policy Response
Global Risks			
Russia's invasion of Ukraine leads to escalation of sanctions and other disruptions. Sanctions on Russia are broadened to include oil, gas, and food sectors. ¹	High	High Russian countersanctions and secondary sanctions on countries and companies that continue business with Russia leads to even higher commodity prices, tighter financial conditions, and other adverse spillovers.	Accelerate the cooperation with regional partners to improve energy security. Loosen the fiscal stance to accommodate additional spending needs related to the war. Extend the support to the most vulnerable to protect from increases in food and energy prices.
Rising and volatile food and energy prices. Commodity prices are volatile and trend up amid supply constraints, war in Ukraine, export restrictions, and currency depreciations.	High	High Bouts of price and real sector volatility, including in the energy and food, affect household disposable income and confidence.	Accelerate structural reform efforts to boost productivity and to improve social protection. Extend the support to the most vulnerable to protect from increases in food and energy prices.
Outbreaks of lethal and highly contagious COVID-19 variants. Rapidly increasing hospitalizations and deaths due to low vaccine protection or	Medium	High Low vaccination increases Bulgaria's vulnerability to this risk. Economic activity would be disrupted leading to a	Allow automatic stabilizers to operate. Use fiscal space to provide adequate support and, if

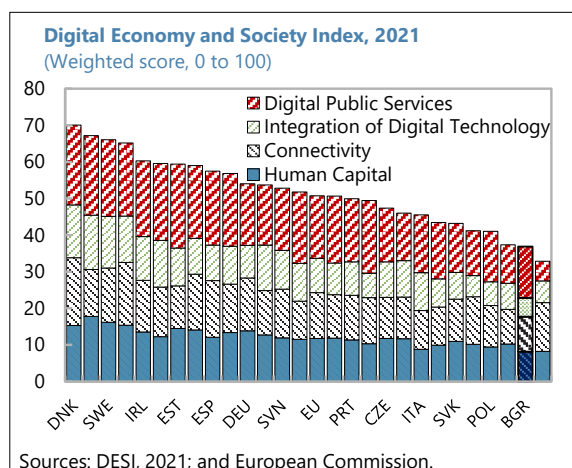
¹ The risk assessment matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

vaccine-resistant variants force more social distancing and/or new lockdowns.		contraction of domestic demand and of exports notably through tourism and investment. Supply chain disruptions result in growth slowdowns and price surges.	needed, further stimulus.
De-anchoring of inflation expectations in the U.S. and/or advanced European economies. Worsening supply-demand imbalances, higher commodity prices (in part due to war in Ukraine), and higher nominal wage growth lead to persistently higher inflation and/or inflation expectations, prompting central banks to tighten policies faster than anticipated.	Medium (for U.S.) / Medium/Low (for Euro area)	Low/Medium A tightening of global financing conditions may increase the cost of borrowing and, ultimately, affect lending.	Consider a more rapid consolidation path to limit the cost of rollover of public debt and adjust the macro-prudential rules if needed.
Domestic Risks			
Delays in developing and implementing economic policies. Fragmented political landscape delays policy design and the structural reform agenda.	High/Medium	High Delays in preparing the revised 2022 budget may delay the implementation of large public investment. Slow progress in structural reforms would reduce potential growth and employment, stalls real convergence, and increases fiscal risks.	Accelerate the implementation of the reform agenda to build confidence and foster private investment.
¹ Although the EU decided on an embargo from most Russia oil imports in May 2022, Bulgaria has been exempted of it until December 2024.			

Annex IV. Digital Transition: Challenges and Policy Agenda

1. Bulgaria can increase its productivity, deepen its European integration, and raise its economic potential by embracing the digital transition. The opportunities are significant as the country lags EU peers in many dimensions of a digital economy. The authorities' broad reform agenda in this area is underway, building on two initiatives that seek to boost digitalization in the EU: the Recovery and Resilience Facility and the Digital Decade Compass.

2. Bridging digital skill gaps is a major challenge. The overall level of basic digital skills in Bulgaria is the lowest in the EU. Only 29 percent of the population aged 16-74—about half the EU average—has at least basic digital skills, and only 11 percent have above-basic skills, slightly less than a third of the EU average. ICT specialists account for 3.3 percent of total employment, compared to an EU average of 4.3 percent. Furthermore, Bulgaria continues to report a net loss of skilled labor to emigration, while the competition for frontier digital skills in Europe is expected to intensify. Targeted measures for digital education are part of the broader 2021-30 strategic framework for the development of education, training and learning. In addition, an EU-funded 'Digital Skills Development' initiative aims to provide a framework to increase workers' digital skills. During the pandemic, both the domestic budget and EU structural funds were used to purchase digital equipment to support the continuity of education and conduct training for remote work.



3. Connectivity is insufficient to support a digital economy, but efforts are underway to increase coverage and take-up of fixed and mobile broadband. Entry barriers and high capital investment requirements have slowed the deployment of advanced network technologies, contributing to low broadband penetration rates. Bulgaria scores 63 below the EU average in the overall broadband take-up of households subscribing to internet 77 and lags further behind in the take-up of high-speed fixed broadband of at least 100 Mbps. In line with EU targets, the authorities' priorities in this area include improving access to high-speed internet in less populated regions and securing connectivity to all public institutions. The RRP aims to step up the connectivity networks throughout the country, with a focus on underserved regions and European interconnection.

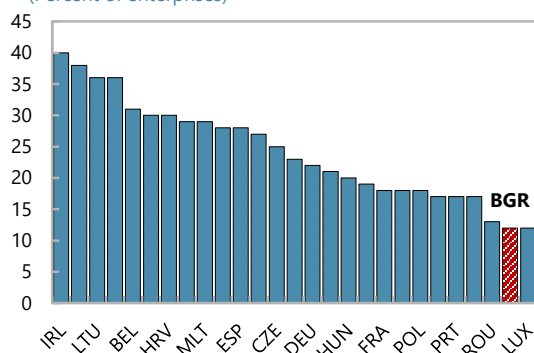
4. Bulgarian enterprises make low use of digital technology. Firms' engagement in e-commerce remains limited, lagging strongly behind EU averages, partly reflecting inadequate investment in innovation of small and medium enterprises (SMEs). In this respect, policies to support the digitalization of SMEs are crucial for the integration of digital technologies. The authorities' agenda is laid in several strategic documents and programs to support the digital transformation of

enterprises.¹ It includes the development and introduction of Industry 4.0 technologies and the selection of potential European Digital Innovation Hubs under the Digital Europe Program.

Figure 1. Bulgaria: Information and Communication Technologies Usage in Enterprises

Enterprises with E-Commerce Sales

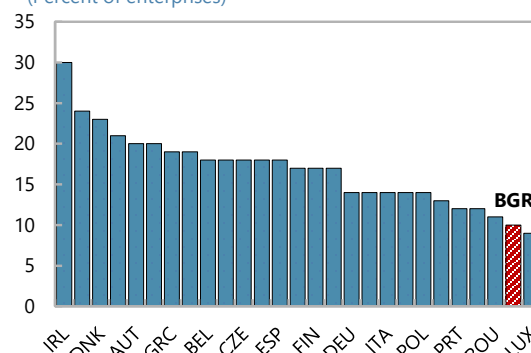
(Percent of enterprises)



Sources: Eurostat, most recent data available.

Enterprises with Web Sales - B2C

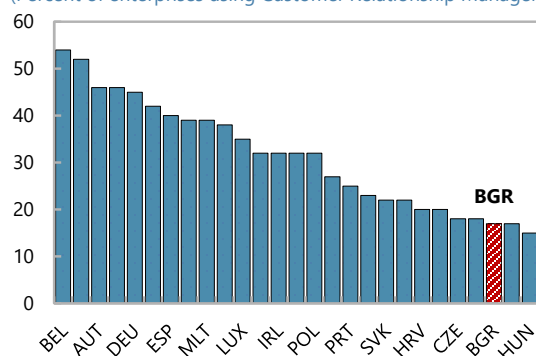
(Percent of enterprises)



Sources: Eurostat, most recent data available.

Integration of internal processes

(Percent of enterprises using Customer Relationship Management)

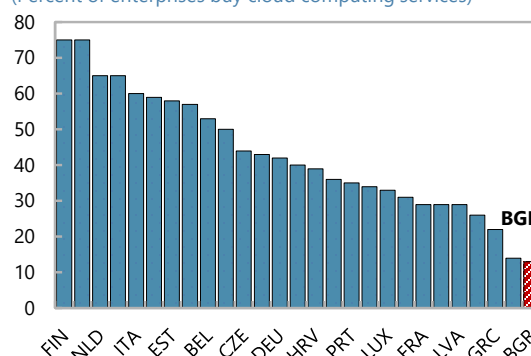


Sources: Eurostat, most recent data available.

Source: Eurostat.

Cloud Computing Services

(Percent of enterprises buy cloud computing services)



Sources: Eurostat, most recent data available.

5. Significant progress was made to offer eGovernment services, and actions are taken to encourage take-up. Since 2018, all administrative institutions have been required to exchange documents using an electronic document exchange platform. A unified model for requesting and delivering electronic administrative services was developed by the State e-Government Agency SEGA with the support of EU Structural Funds. In 2020, a private consortium received a 24-month EU grant to set up, deploy and maintain the first Bulgarian EBSI (European Blockchain Infrastructure for Services) node and to develop three use cases: ESSI (European Self Sovereign Identity), notarization, and diplomas. Digital public services for enterprises and the use of open data by public administrations are now above the EU average. However, users of e-government represent only 36 percent of internet users (EU average: 64 percent), and digital public services for citizens score 57

¹ Including: "Digital Transformation of Bulgaria for the period 2020-2030"; "The 2027 national strategy for SMEs", and the 2021-27 "Competitiveness and Innovation in Enterprises" Program, funded by the European Regional Development Fund.

out of 100 (EU average: 75). In this respect, the outdated legal framework remains a major obstacle, in addition to the lack of skills and internet usage.

6. Bulgaria is also an active participant in the EU's efforts to strengthen the oversight of the digital payment ecosystem. Data on payments processed by payment systems in Bulgaria show a significant growth: in the first six months of 2021, the value of payments made through the BNB-operated Real-time Gross Settlement System in BGN (RINGS) increased by 30 percent y/y, while the value of payments in euro through the national component system of the large-value payment system (TARGET2-BNB) increased by 66 percent. Payment services are evolving in line with developments in Europe, focusing on new technologies and cybersecurity. Instant payments, open banking, and mobile technologies are at the core of this process, while authorities explore the viability of digital currency payments options. As national regulator, the BNB aims to leverage the potential offered by technology to achieve cheaper, safer, and more accessible and integrated payment solutions—in line with the policies of the European Commission and the European Central Bank.²

² The ECB published last year a single Eurosystem oversight framework for electronic payment instruments, schemes and arrangements. This so-called PISA framework aims to cover both traditional payment schemes and instruments (e.g., payment cards), as well as innovative instruments, such as digital payment tokens backed by assets (e.g., stablecoins). A proposal for a Regulation on Markets in Crypto-assets (MiCA) is currently under discussion at EC level. Its objective is to ensure a more rigorous regulatory treatment of issuance of and transactions with some types of crypto-assets and crypto-asset service providers will be subject to authorization and control.

Annex V. Main Recommendations of the 2020 Article IV Consultation and Authorities' Actions

IMF 2020 Article IV Recommendations	Policy Actions
Fiscal Policy	
Continue proving fiscal support aimed at mitigating the impact of the COVID-19 crisis. Improve the implementation and design of some support measures.	The authorities expanded the size of COVID-19 related fiscal measures in 2021 more than budgeted. The design of the several measures was improved including by increasing the targeting of the job retention scheme.
Once the pandemic abates, shift the policy to facilitate resource reallocation and economic transformation. Use EU funds effectively.	The government decided to phase out the job retention scheme in 2022. The Resilience and Recovery Plan, to be supported by NGEU funds, includes measures to promote green transition and digital transformation.
Strengthen revenue mobilization and improve efficiency of public investment to finance reforms while to consolidate the fiscal stance over the medium-term.	Tax collection improved thanks to improved administration, but there was no change to the taxation system. Significant room for improving spending efficiency remains.
Review public sector wages and pension system.	No change yet but the government intends to rationalize public sector employment and review the pension system in the context of the announced mid-2022 budget revision.
Structural Reforms	
Strengthen active labor market policies to ease labor shortages, raise the quality of education to raise human capital, and improve the social protection system and access to education to alleviate inequality and poverty.	Public investment, education, and healthcare are the 3 main priorities of the 2022 budget and the Resilience and Recovery Plan includes measures aimed at raising the quality and coverage of education, enhancing worker skills, and improving social protection.
Continue efforts to strengthen governance.	As a first step toward broader judicial reforms that the authorities intend to implement to increase the efficiency and effectiveness of the anti-corruption framework, parliament adopted a law to close specialized anti-corruption courts that it deemed ineffective.
Financial Sector Policies	
Steer macroprudential policy to continue allowing banks room to absorb the deterioration of asset quality while extending credit.	The authorities maintained macroprudential measures that were introduced in response to the COVID-19 crisis through 2021. The BNB announced gradual increases in the countercyclical capital buffers through 2023.
Continue encouraging banks timely recognition of problem loans. Once recovery takes hold, encourage proactive resolution of non-performing loans.	Banks have continued proactively managing credit risks. The banking sector overall remains well-capitalized and liquid.