

**EXECUTIVE  
BOARD  
MEETING**

SM/22/105

May 23, 2022

To: Members of the Executive Board  
From: The Acting Secretary  
Subject: **Bosnia and Herzegovina—Staff Report for the 2022 Article IV Consultation**

Board Action: Executive Directors' **consideration** (Formal)  
Tentative Board Date: **Friday, June 3, 2022**  
Publication: Yes\*  
Questions: Ms. Iancu, EUR (ext. 36098)  
Mr. Ben Ltaifa, EUR (ext. 34045)  
Mr. Al-Karablieh, EUR (ext. 35434)  
Ms. Lenarcic, SPR (ext. 34931)  
Ms. Munkacsi, FAD (ext. 30954)  
Document Transmittal in the Absence of an Objection and in accordance with Board policy: After Board Consideration—European Bank for Reconstruction and Development, World Trade Organization

**\*Unless an objection from the authorities is received prior to the conclusion of the Board's consideration, the document will be published.**





# BOSNIA AND HERZEGOVINA

## STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

May 20, 2022

### KEY ISSUES

**Context.** Bosnia and Herzegovina (BiH) is facing considerable challenges just as it has rebounded from the Covid-19 pandemic. Spillovers from the war in Ukraine are fueling inflation and weighing on domestic spending and external demand, while domestic political tensions are hampering economic policies and reforms.

**Outlook and risks.** The outlook is highly uncertain. Growth is projected to drop to 2.4 percent in 2022 from 7.1 percent in 2021, and stabilize at around 3 percent in the medium term. Inflation will remain elevated until late this year and soften gradually afterward. Downside risks are high.

**Key policy recommendations.** The authorities need to protect the most vulnerable against inflation, preserve financial stability, and scale up public investment and accelerate reforms to strengthen the single economic space and put the economy on a higher medium-term growth trajectory.

- **Fiscal policy.** The authorities should cushion the impact of high prices on the most vulnerable while resisting wage increases and differentiated VAT rates. Given the lack of adequate social assistance, a temporary suspension of fuel excises could be considered. The authorities should also improve social assistance to prepare for future shocks, strengthen public financial management, and scale up public investment in infrastructure and green energy to boost medium-term growth.
- **Currency board and financial sector policies.** The currency board continues to serve BiH well and should be further strengthened. Strict enforcement of prudential requirements and the development of contingency plans for future liquidity pressures are essential for preserving financial stability. Establishing a country-wide financial stability fund that can facilitate bank restructuring and provide liquidity on an exceptional basis would close a critical gap in the financial safety net.
- **Governance.** There is a pressing need to address longstanding deficiencies, particularly by overhauling the AML/CFT and public procurement frameworks. The creation of a country-wide registry of bank accounts of individuals would strengthen AML/CFT practices and asset recovery. Work to improve the governance of public enterprises and reduce fiscal risks should resume.

Approved By  
**Jörg Decressin (EUR)**  
**Gavin Gray (SPR)**

Discussions were held virtually February 28–March 10, and in-person in Sarajevo and Banja Luka March 16–25, 2022. The mission comprised Ms. Iancu (head), Messrs. Al-Karablieh, Ben Ltaifa, Cipollone (all EUR), Mr. Jewell (Resident Representative), Ms. Munkacsi and Mr. Nakatani (FAD), Ms. Lenarčič (SPR), and Ms. Čegar and Mr. Musić (local economists). The mission met with Chairman of the BiH Council of Ministers Tegeltija, BiH Finance Minister Bevanda, Central Bank of BiH Governor Softić, Federation of BiH (FBiH) Prime Minister Novalić, Republika Srpska (RS) Prime Minister Višković, FBiH Finance Minister Milićević, RS Finance Minister Vidović, other government officials, members of the business and diplomatic communities, and civil society organizations. Mr. Manchev (OED) attended most mission meetings.

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## CONTEXT

1. **More than two years since the outbreak of the Covid-19 pandemic, Bosnia and Herzegovina (BiH) is still grappling with the health impact.** After a fourth, all-time-high surge in January 2022, new cases declined sharply, together with hospitalizations and deaths. However, as of April 2022, the death rate was one of the highest in the world at around 450 per 100,000. Vaccination in BiH continues to lag the rest of Europe due to lack of vaccines early on and vaccine hesitancy afterward (Figure 1).
2. **BiH is seeing rippling effects from the war in Ukraine.** Initial spillovers to BiH's financial sector were quickly contained (118), and the remaining direct exposure to Russia and Ukraine—through trade, energy, and financial links—is limited.<sup>1</sup> The war, however, is weakening the global economic recovery and fueling inflationary pressures, particularly through food and energy prices. Accelerating inflation and fear of shortages in food items have led to increasing pressures on the authorities, ahead of the October 2022 general elections, to raise wages and social benefits.
3. **Domestic political tensions have hampered economic policy and reforms over the past year.** Since July 2021, the Republika Srpska (RS) has been blocking key decisions of state-level institutions, while in December 2021, the RS National Assembly adopted conclusions to withdraw the RS from key state institutions (including the Indirect Tax Authority). This political blockage has put reforms on hold (Annex I), further slowing BiH's convergence toward fulfilling the EU accession criteria and weighing on investor sentiment. The EU has suspended financing to the RS pending the RS's return in full to state institutions, while other donors have imposed sanctions on individuals accused of corruption and threatening BiH's stability. Moreover, long-standing disagreements between Croats and Bosniaks related to electoral reform threaten to delay the elections.

## RECENT DEVELOPMENTS

4. **Despite difficult health and political conditions, economic activity rebounded strongly in 2021.** Real GDP is estimated to have rebounded by 7.1 percent in 2021, reflecting pent-up domestic spending and higher exports to the EU. High-frequency indicators of economic activity returned to or surpassed pre-pandemic levels—industrial production and exports have exceeded pre-pandemic levels since 2021:Q2, while employment returned to its pre-pandemic level in 2021:Q4 (Figures 2 and 3). Strong exports together with improved remittances more than offset rebounding imports, helping narrow the current account deficit. Official foreign reserves are above

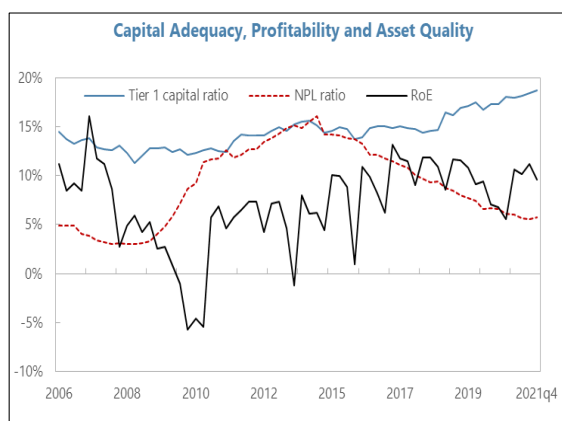
<sup>1</sup> BiH has no remaining financial links and only limited trade links with Russia (less than 1 percent of BiH's exports are going to Russia and around 3 percent of its imports are from Russia; trade flows with Ukraine are smaller). As the only net electricity exporter in Western Balkans, BiH's energy exposure is also relatively limited. While all natural gas is imported from Russia, and consumption is vulnerable to higher prices and possible shortages, natural gas represents less than 5 percent of total energy needs as BiH relies heavily on domestic sources, mostly coal and hydro power.

the minimum reserve adequacy threshold, while the external position is stronger than fundamentals (Annex II).<sup>2</sup>

**5. After a year-long deflation, headline inflation surged, driven by accelerating food and transport prices.** Monthly inflation reached 10.2 percent (y/y) in March 2022, while the average 12-month inflation rose to 4.4 percent (from a trough of -1.4 percent in March 2021). Core inflation, while significantly below headline inflation, has also edged up, reaching 2.5 percent (y/y) in March. The sharp increase in prices was driven by elevated global commodity and fuel prices, which came on top of earlier pressures from rebounding demand and drought. Net wages have been growing steadily, in line with the long-run growth in labor productivity (Figure 2).

**6. The fiscal position turned to a surplus of 0.8 percent of GDP in 2021 from a deficit of 4.7 percent in 2020.** This reflected mainly record-high indirect tax revenues, which grew by 16.7 percent compared to 2020, reflecting recovering consumption and higher prices, as well as lower domestically financed capital spending. Current expenditures rose marginally, driven mainly by higher spending on goods and services, public wages, and social benefits (pensions), while pandemic-related spending declined somewhat (Box 1). External financing in 2021 was ample, with the SDR allocation (Euro 306 million) and a first tranche of EU macro-financial assistance (Euro 125 million) adding to RS's Eurobond issuance in April (Euro 300 million). The authorities used part of this financing for pandemic-related spending and transfers to lower government levels in line with their revised 2021 spending plans.<sup>3</sup>

**7. The banking sector weathered the Covid-19 crisis well.** Banks continued to have adequate capital buffers, solid profits, ample liquidity, and, except for a small uptick recently, declining NPLs. The loan moratoria and other borrower relief measures adopted at the outset of the pandemic helped mitigate the economic fallout, and are yet to be fully reflected on banks' financial statements (Box 2). Despite the strong economic rebound, private sector credit growth remained shallow, at around 4 percent (y/y) in December 2021. The recent European Commission decision that the regulatory and supervisory framework in BiH is equivalent to that applied in EU is a major achievement.



<sup>2</sup> No changes have been introduced in the foreign exchange system since the 2020 Article IV consultation (Informational Annex).

<sup>3</sup> The RS used its entire portion of the SDR allocation, mainly for pandemic-related spending. The FBiH spent slightly more than half of its portion on transfers to lower government levels (i.e., cantons and municipalities).

### Box 1. Fiscal Measures in Response to Covid-19

**Pandemic-related fiscal support declined in 2021.** Overall crisis-support measures amounted to around 1.5 percent of GDP in 2021 compared to 2.1 percent of GDP in 2020, reflecting a sizable reduction in support to the corporate sector and lower transfers to the health sector and lower levels of governments. Support to firms, mostly in the form of subsidies for wages and social security contributions, was reduced in 2021 following the authorities' decision not to impose lockdowns during the Delta and Omicron variants. In contrast, support to households increased, and included mainly one-off assistance to pensioners.

	BiH		FBIH		RS		Institutions of Bosnia and Herzegovina		Brčko District	
2020	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP
<b>Total</b>	733.1	2.1	491.1	2.2	189.0	1.7	38.0	0.1	15.0	1.7
Health Sector	191.9	0.6	55.1	0.2	94.5	0.8	38.0	0.1	4.3	0.5
Household Sector	6.1	0.0	0.0	0.0	5.1	0.0	0.0	0.0	1.0	0.1
Corporate Sector	276.6	0.8	180.0	0.8	88.2	0.8	0.0	0.0	8.4	1.0
Local Governments/Others	258.6	0.8	256.0	1.2	1.3	0.0	0.0	0.0	1.3	0.1
2021	BiH		FBIH		RS		Institutions of Bosnia and Herzegovina		Brčko District	
2021	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP
<b>Total</b>	578.5	1.5	467.0	1.9	106.4	0.9	0.0	0.0	5.1	0.6
Health Sector	138.3	0.4	72.0	0.3	63.2	0.5	0.0	0.0	3.1	0.3
Household Sector	60.0	0.2	60.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Corporate Sector	147.3	0.4	105.0	0.4	40.4	0.3	0.0	0.0	1.9	0.2
Local Governments/Others	232.9	0.6	230.0	0.9	2.8	0.0	0.0	0.0	0.1	0.0

Note: Percentages of GDP are calculated as the share of respective GDPs for FBIH, RS, and Brčko District, and as a percent of BiH GDP for BiH and Institutions of Bosnia and Herzegovina

**Audits covered the allocation of funds, but not their intended use.** In both entities, supreme audit institutions (SAI) conducted regular and mandatory audits of consolidated financial statements of budget users in 2021, as well as compliance audits. The auditors found that the governments followed established criteria when allocating funds intended for Covid-19 relief.<sup>1/</sup> However, the Federation SAI pointed out that the regulations on the allocation of funds were not timely, as only 18.6 percent of the allocations were spent, and pandemic-related spending was not well targeted. Further, in some cases, performance audits to assess the effectiveness and quality of pandemic-related spending measures were not possible due to lack of adequate data. In the RS, the auditor found that the criteria for allocating funds by line ministries were met, but the ministries did not exercise further control over the use of those funds.

<sup>1/</sup> FBIH SAI report: [https://www.vrifbih.ba/wp-content/uploads/2021/07/FR\\_2020\\_Proraacun-FBiH\\_Izvjescje-Konacno\\_20210728.pdf](https://www.vrifbih.ba/wp-content/uploads/2021/07/FR_2020_Proraacun-FBiH_Izvjescje-Konacno_20210728.pdf); and RS SAI report: [https://www.gsr-rs.org/static/uploads/report\\_attachments/2021/08/20/RV029-21\\_Cyr.pdf](https://www.gsr-rs.org/static/uploads/report_attachments/2021/08/20/RV029-21_Cyr.pdf)

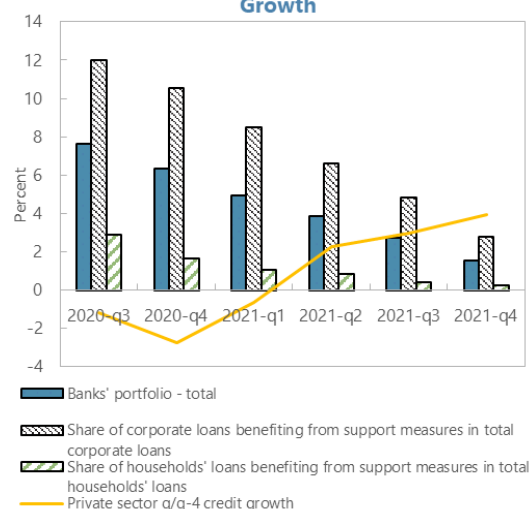
**8. Initial spillovers to the banking sector from the war in Ukraine appear contained.** The payment moratorium imposed by the EU resolution authority on Sberbank, a Russian bank operating in Europe, led to a deposit run on the two Sberbank subsidiaries operating in the BiH. The entity banking agencies swiftly seized control and sold the subsidiaries to two domestic banks, containing the spreading of the deposit run to other banks. The central bank of BiH (CBBH) in turn helped restore confidence by providing sufficient Euro and KM banknotes to meet a temporary surge in demand for cash.

### Box 2. Borrower Relief Measures

**Borrower relief measures helped mitigate the economic fallout from the COVID-19.** The entity banking regulators introduced, in March 2020, a set of short-term, targeted relief measures, providing liquidity to borrowers facing repayment difficulties at a time when the economy was locked down. These measures were used mostly by companies, with higher use in the service sectors, particularly tourism. With the strong economic recovery in 2021, the ability of borrowers to service debt obligations recovered, and loans benefiting from temporary relief measures declined from 7.6 percent of total loans in September 2020 to less than 2 percent at end-2021. All measures were unwound by end-March 2022.

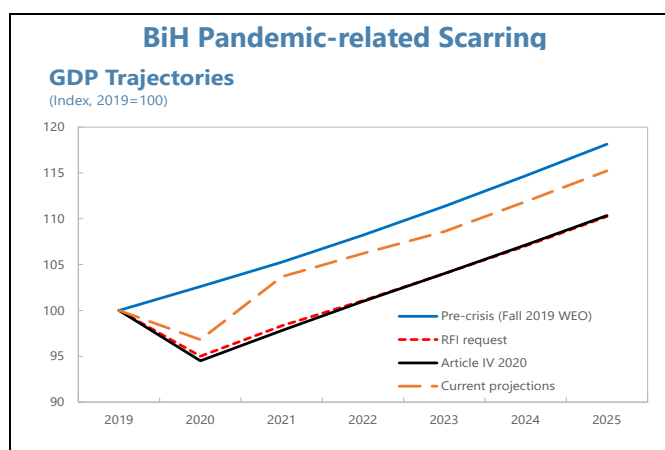
**The targeted approach helped minimize the impact on banks' cash flows.** While the flow of credit to the real economy was sustained, the measures had no adverse impact on overall financial stability. Although only a small portion of the loan portfolio remains under relief measures, vigilance is warranted as the impact of the unwinding is not yet fully reflected in banks' financial statements.

Share of Banks' Portfolio Benefiting from Support Measures and Credit Growth



## OUTLOOK AND RISKS

**9. Growth is projected to decline this year and remain subdued in the medium term.** The war in Ukraine will likely lead to further trade disruptions and higher fuel and food prices, weighing on household consumption and private sector investment. Given impending elections and heightened political tensions, no progress is expected on structural reforms. Real GDP growth is thus projected to drop to 2.4 percent in 2022 (and 2.3 percent in 2023) despite a sizable expansion in government spending in 2022 (related to elections and measures to cushion the impact of inflation), and then stabilize at around 3 percent in the medium term. The current account deficit is projected to widen to 5 percent of GDP in 2022, due to moderating exports and a larger, price-driven, import bill. However, given the strong economic rebound in 2021, scarring from the pandemic has been revised down to around one third of the 2020 Article IV estimate.



**10. Inflation is projected to remain elevated in 2022.** The surge in headline inflation could extend well into the second half this year and soften gradually from 2022:Q4, consistent with a projected slowdown in global food and energy prices and easing of supply constraints, and caps on

domestic electricity prices.<sup>4</sup> The average 12-month CPI inflation is projected to reach 6.5 percent in 2022, and decline to around 3 percent in 2023 and 2 percent over the medium term, in line with projected euro area inflation.

**11. Downside risks are high.** The war in Ukraine is likely to have a limited *direct* economic impact on BiH given limited economic ties. Direct risks related to a Russian gas shut off are likely to be contained, also because BiH has one of the largest electricity generation in Western Balkans and limited gas usage. However, the conflict could do significant harm *indirectly* if it destabilizes key commodity and global financial markets and induces a recession in major European economies, with a negative impact on external accounts and domestic growth prospects. A de-anchoring of inflation expectations globally and/or rising and volatile food and energy prices would lead to higher domestic inflation, while more Covid-19 outbreaks could dampen growth (Annex III). Domestically, vulnerabilities in the banking sector have been rising, and a marked escalation in political tensions could lead to further sanctions and less donor financing.

## POLICY DISCUSSIONS: SUPPORTING THE RECOVERY THROUGH REFORMS

*Amid exceptionally high uncertainty, fiscal policy should pivot toward supporting the most vulnerable, preserving room for emergency support, and accelerating investment in infrastructure and green energy. Structural reforms should focus on preserving financial stability, resuscitating the long-stalled governance and PFM agenda, and improving the business environment, aiming to strengthen the single economic space and put the economy on a higher medium-term growth trajectory. State-level reforms, in particular, are critical for reducing economic inefficiencies and combatting corruption.*

### A. Fiscal Policy: Cushion the Impact of Higher Prices on the most Vulnerable, Remain Vigilant to Risks, and Spur Medium-term Growth

**12. The baseline scenario assumes moderate expansion in 2022 and consolidation over the medium term.** The baseline is anchored in the authorities' current policies as outlined in the 2022 budgets and the 2022–24 Global Fiscal Framework. Fiscal policy is largely swayed by rising social demands in response to rising inflation. After a surplus in 2021, a fiscal deficit of around 0.6 percent of GDP is projected in 2022 as expenditures are rising faster than revenues (10.3 percent compared to 6.9 percent). Higher expenditures are driven by a rise in the public wage bill (11.7 percent) and spending on goods and services and social benefits (pensions) (Table 4b), while capital spending will increase by a meager 3.1 percent. A temporary suspension of fuel excises is assumed for the second half of the year, in line with a government proposal under consideration in parliament (Box 3). Fiscal consolidation is expected to resume in 2023, albeit at a different pace in the two entities, with the

<sup>4</sup> FBiH capped increases in electricity prices for corporates at 20 percent, while the RS increased them by around 40 percent starting in January 2022. Electricity prices for households have so far remained unchanged. FBiH has recently approved a 22 percent increase in gas prices for distributors from April to June.

overall fiscal surplus reaching about 0.6 percent of GDP in 2027. This reflects improved revenues with the resumption of fuel excises in 2023 and higher tax compliance in outer years, while spending remains restrained. Public debt is projected to remain below 35 percent of GDP, but tighter financial conditions could make it more difficult for the RS to roll over a EUR 168 million Eurobond maturing in 2023 (assumed in the baseline).

### Box 3. Fiscal Measures to Mitigate the Impact of Inflation

Several measures have been taken to address rising inflation:

**Public sector wages and pensions.** In FBiH, they were raised in March 2022 by 5 and 7.5 percent, respectively, with an additional increase of 3.5 percent for pensions effective in June. In the RS, increases were introduced in January 2022, for wages ranging between 5 percent (for wages below KM 1000) and 3 percent (the rest), and for pensions by around 4 percent. The overall budgetary impact in 2022 is estimated at 0.5 percent of FBiH GDP in FBiH and 1 percent of RS GDP in the RS.

**Funds for commodity reserves.** The FBiH government allocated KM 20 million (0.1 percent of FBiH GDP) for commodity reserves, to be used either for purchase of necessary goods and storage, or for subsidies to farmers and producers of finished products. In the RS, funds in the amount of KM 15 million (0.1 percent of the RS GDP) are planned for the same purposes.

2022 measures included in the budgets	BiH		FBiH		RS		Brčko District (BD)	
	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP	KM million	% of GDP
Increase in salaries	83.3	0.2	21.5	0.1	61.8	0.5	0.0	0.0
Increase in pensions	178.1	0.4	116.9	0.4	61.2	0.5	0.0	0.0
Purchase of commodity reserves	35.0	0.1	20.0	0.1	15.0	0.1	0.0	0.0

Note: Institutions of BiH (IBiH) has not yet adopted 2022 budget, but based on the global fiscal framework they plan a salary increase in amount of KM 90.5 million.

Other measures under consideration are:<sup>1/</sup>

**Suspension of excises on fuel.** Parliament is considering suspending excise duties on oil and derivatives on a temporary basis. Staff estimates the revenue loss from suspension during July-December 2022 at 0.8 percent of BiH GDP.

**Differentiated VAT rates.** The authorities are considering introducing a lower VAT rate on essential goods and a higher rate on luxury goods. The estimated revenue loss is highly uncertain and ranges between 0.4 percent and 2.2 percent of BiH GDP.

**Further increase in wages and social benefits.** The RS authorities announced a further 10 percent increase in public wages and pensions, effective in May, to be introduced as part of a supplementary budget for 2022. The RS also plans a permanent increase in benefits for war veterans and the disabled, as well as one-off financial assistance to pensioners, war veterans, and young people.

<sup>1/</sup> The baseline scenario assumes a six-month suspension of fuel excises and additional wage and pension increases in the RS, but no VAT rate changes.

<b>Bosnia and Herzegovina: General Government Finances, 2019–2022</b>												
(in percent of respective GDP, general government)												
	<b>Federation</b>				<b>Republika Srpska</b>				<b>Bosnia and Herzegovina</b>			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
<b>Revenue</b>	<b>38.6</b>	<b>37.9</b>	<b>38.4</b>	<b>38.3</b>	<b>40.9</b>	<b>40.6</b>	<b>42.7</b>	<b>40.6</b>	<b>41.9</b>	<b>41.3</b>	<b>42.4</b>	<b>41.5</b>
Taxes	19.8	18.3	19.5	18.8	22.5	21.6	23.3	22.0	23.0	21.8	23.1	22.0
Social security contributions	15.9	16.5	16.0	16.0	14.3	15.1	15.3	14.9	15.1	15.7	15.6	15.4
Grants	0.4	0.3	0.2	0.3	0.7	0.5	0.3	0.2	0.5	0.4	0.3	0.3
Other revenue	2.4	2.8	2.7	3.2	3.4	3.4	3.8	3.5	3.2	3.3	3.4	3.7
<b>Expenditure</b>	<b>37.3</b>	<b>42.4</b>	<b>37.7</b>	<b>38.8</b>	<b>40.2</b>	<b>45.9</b>	<b>43.0</b>	<b>42.7</b>	<b>40.5</b>	<b>46.0</b>	<b>41.7</b>	<b>42.1</b>
<b>Expense</b>	<b>34.3</b>	<b>37.8</b>	<b>33.9</b>	<b>34.9</b>	<b>35.6</b>	<b>39.2</b>	<b>38.4</b>	<b>38.3</b>	<b>36.9</b>	<b>40.5</b>	<b>37.5</b>	<b>38.0</b>
Compensation of employees	8.6	9.3	8.6	8.8	8.9	9.8	9.5	10.2	10.6	11.4	10.8	11.1
Use of goods and services	8.4	8.8	8.4	8.6	3.3	3.4	3.2	3.1	7.2	7.5	7.1	7.3
Social benefits	13.2	14.8	13.6	13.4	18.9	20.3	20.4	20.4	14.8	16.3	15.5	15.4
Other	4.1	5.0	3.3	4.2	4.5	5.7	5.3	4.6	4.3	5.3	4.0	4.3
<b>Net acquisition of nonfinancial assets</b>	<b>3.1</b>	<b>4.5</b>	<b>3.8</b>	<b>3.9</b>	<b>4.7</b>	<b>6.7</b>	<b>4.6</b>	<b>4.5</b>	<b>3.6</b>	<b>5.4</b>	<b>4.1</b>	<b>4.0</b>
Acquisition of nonfinancial assets	3.2	4.6	4.1	4.0	4.8	6.9	4.8	4.7	3.8	5.6	4.4	4.2
Foreign financed capital spending	1.7	2.6	2.5	2.5	1.5	1.3	0.8	1.0	1.6	2.1	1.9	1.9
Domestically financed capital spending	1.5	2.0	1.6	1.5	3.3	5.6	4.0	3.7	2.2	3.4	2.5	2.2
<b>Fiscal balance</b>	<b>1.2</b>	<b>-4.5</b>	<b>0.7</b>	<b>-0.5</b>	<b>0.7</b>	<b>-5.3</b>	<b>-0.3</b>	<b>-2.1</b>	<b>1.4</b>	<b>-4.7</b>	<b>0.8</b>	<b>-0.6</b>
<b>Primary balance</b>	<b>1.8</b>	<b>-3.9</b>	<b>1.2</b>	<b>0.1</b>	<b>1.9</b>	<b>-4.1</b>	<b>0.9</b>	<b>-1.2</b>	<b>2.1</b>	<b>-3.9</b>	<b>1.5</b>	<b>0.1</b>

Sources: BiH authorities, and IMF staff calculations.

**13. Fiscal policy is appropriately accommodative in 2022 but needs to be better targeted and preserve room given the uncertain outlook.** Automatic stabilizers should be left to operate freely, unless financing constraints threaten to arise. However, some of the fiscal measures considered by the authorities could permanently weaken the tax system and lead to unsustainable increases in government spending (Box 3). In particular, staff opposed the proposed introduction of differentiated VAT rates, which would be costly to administer and lead to more tax evasion. While a suspension of fuel excises bears risks, it could be considered on a temporary basis given the lack of adequate social assistance programs to cushion the impact of higher food and fuel prices on the most vulnerable. On the expenditure side, further increases in the public wage bill (already high, 15<sup>11</sup>) should be resisted to avoid further fueling inflationary pressures and worsening the composition of spending. In parallel, staff called on the authorities to enhance the coverage and targeting of social support to vulnerable groups to be better prepared for future shocks. The authorities should also preserve room for potential health-related spending given risks of more Covid-19 outbreaks.

**14. Public sector investment in infrastructure and green energy should be scaled up.** BiH has large needs for growth-enhancing investment in infrastructure and green energy (Figures 5–6). The implementation of externally financed projects, however, has been delayed due to political gridlock (Box 4).

#### Box 4. Infrastructure Investment

**Political gridlock is delaying large infrastructure projects.** Although project investment reached new highs during the pandemic at over Euro 350 million per year in 2020–21, major parts of the main highway project (Corridor Vc) remain to be completed. The political stalemate threatens to delay disbursement of funds and therefore the completion of investment projects through two main channels:

- First, a portion of IFI financing to the RS, mainly EU grants and loans, has been recently suspended pending the RS's return in full to state institutions. This mainly affects the remaining part of the northern section of Corridor Vc (Euro 300 million EBRD/EIB loans) and a railway reconstruction project (Euro 200 million EBRD/EIB loans). Some bilateral financing of power plants and green projects in the RS has also been suspended (e.g., Euro 105 million loans and grants from Germany).
- Second, some projects in the FBiH are currently on hold—primarily financing of new highway sections (Euro 850 million loans and grants over five years, provided by the EU, EIB, EBRD, and commercial banks)—due to a lack of ratification of sovereign loans by the BiH Presidency.

These are expected to delay the completion of Corridor Vc from 2028 to 2030.

**Other sources of external financing are currently filling other infrastructure gaps.** For example, the RS is engaging with Chinese investors for several highway sections outside of Corridor Vc, and is planning to finance one section through the RS budget.

**15. Staff sees scope to accommodate higher capital and social spending by running a small fiscal deficit in 2023–24.** BiH's fiscal position in the baseline is projected to remain favorable, with an expected return to fiscal surplus already in 2023 and relatively low government debt (Annex IV). Under staff's normative scenario, the fiscal deficit could be as high as 1.3 percent of GDP in 2022 and decline to 0.3–0.5 percent in 2023–24. This scenario assumes an end to the political gridlock, which allows for the accelerated implementation of externally financed projects. To support higher public investment, FBiH should improve project implementation, while the RS should restrain current expenditures—particularly wages and other expenses—and prioritize growth-enhancing investment. Both entities need to also strengthen their social assistance programs, including the coverage and targeting, to support the most vulnerable. More specifically:

- *Public infrastructure investment.* Additional spending on infrastructure and green investment, preferably financed by IFIs, would boost medium-term growth with limited impact on debt and financing needs. To strengthen public sector investment and alleviate capacity constraints, staff encouraged FBiH to implement IMF's Public Investment Management Assessment (PIMA) recommendations and the RS to request a PIMA mission.
- *Wage bill restraint.* Public sector wages are significantly higher than wages in other sectors, while the overall public wage bill is among the highest in the region (Figures 2 and 5). Keeping wages constant in real terms should be complemented by conducting functional reviews of public employment to identify redundancies.
- *Revenue administration reforms.* Ongoing reforms (supported by FAD TA) to improve risk analysis, tax audits, and tax compliance and restore efficient data sharing among tax

administrations in BiH (including by enhancing utilization of third-party data) should help generate a gradual improvement in direct and indirect tax revenue collection. Similarly, efforts to modernize all four tax administrations should improve arrears management and tax collection. Further efforts should focus on modernizing the F BiH tax administration (including through adjustments to the legal framework, rationalization of the office network, and digitalization of processes).

- *Social assistance reforms.* Social assistance is not adequate, covers only part of the vulnerable, and is poorly targeted. To mitigate the impact of high prices, the authorities are mainly turning to wage and pension increases (Box 3). Reforms should focus on enhancing social safety nets, starting with building up a social registry.<sup>5</sup> These reforms will take time and should be undertaken without delay, to be better prepared for future shocks.

Bosnia and Herzegovina: Fiscal Policy Scenarios 2022–2024										
(in percent of GDP)										
	Baseline Scenario (A)			Normative Scenario (B)			Difference (B-A)			Policy Measures
Year	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022-2024
<b>Revenues</b>	41.5	42.3	42.3	41.6	42.4	42.5	0.1	0.1	0.2	
Taxes	22.0	22.9	22.8	22.1	23.0	23.0	0.1	0.1	0.2	Improve tax compliance
<b>Expenditure</b>	42.1	41.7	41.7	42.9	42.7	43.0	0.8	1.0	1.3	
Compensation of employees	11.1	11.0	11.0	10.9	10.8	10.9	-0.2	-0.2	-0.1	Restrain wage growth
Social benefits	15.4	15.1	15.1	15.6	15.4	15.6	0.2	0.3	0.5	Enhance social assistance
Capital spending	4.2	4.2	4.2	4.7	5.4	5.6	0.5	1.2	1.4	Infrastructure and energy
<b>Fiscal balance</b>	-0.6	0.6	0.6	-1.3	-0.3	-0.5	-0.7	-0.9	-1.1	

Source: IMF staff calculations.

### Authorities' Views

The authorities agreed with staff that a temporary fiscal expansion is appropriate to cushion the impact of spillovers from the war in Ukraine, particularly from higher food and fuel prices. They argued that, in the absence of well-developed social assistance programs, there are no alternatives to increasing public sector wages and pensions (including for war veterans) and providing some support for basic commodities purchases. They are also considering several proposals to suspend fuel excises temporarily and introduce differentiated VAT rates as possible measures to help the vulnerable. At the same time, they expressed concerns about the time required to implement the new VAT rates. The authorities also agreed with the need to scale up public sector investment. Regarding financing, F BiH indicated that it has ample liquidity this year, while the RS plans to rely mostly on domestic borrowing from banks (which should have scope and appetite to finance the budget).

<sup>5</sup> The World Bank is currently conducting a situational analysis of BiH's social protection system, including social assistance programs.

## B. Currency Board Arrangement and Financial Sector Policies: Strengthen the Currency Board and Preserve Financial Stability

**16. The Currency Board Arrangement (CBA) has continued to serve BiH well amid heightened domestic and external pressures.** During the pandemic and, more recently, the war in Ukraine, the CBA has helped ensure macroeconomic and financial stability by maintaining public confidence in the currency. Staff welcomed CBBH's reforms to strengthen the reserve requirement framework by applying differentiated remuneration rates on commercial banks' reserves.<sup>6</sup> These reforms will help improve CBBH's profitability, and thus the currency board coverage ratio. In the long run, they are also expected to promote a gradual de-euroization of the economy. Staff also welcomed CBBH's commitment to implement the remaining 2019 TA report recommendations.<sup>7</sup>

**17. Staff discussed with the central bank how to enhance the resilience of the CBA.** Rising interest rates in the euro area would have offsetting effects on the currency board coverage, on the one hand lowering the market value of CBBH foreign assets, and on the other hand increasing their return and thus CBBH's profitability (Annex V). Staff encouraged CBBH to align the remuneration rate on banks' excess reserves with the ECB rate while monitoring the impact on capital flows. It also recommended to update the investment guidelines for foreign exchange reserves and strengthen the risk-based model to better assess and monitor the resilience of the CBA. Staff also reiterated that calls for the central bank to finance entity budgets or provide liquidity to commercial banks are misguided and threaten the stability of the CBA.

**18. Enhanced supervision is critical to preserving financial stability.** The recent acquisition of Sberbank subsidiaries by domestic banks has increased the market share of locally owned banks with no access to parent financing, and, in RS, sole ownership. Furthermore, there is a risk that the market share of foreign-owned banks in BiH drops even further with negative economic implications. Moreover, rising interest rates could lead to bank losses given the large share of loans with fixed interest rates. With vulnerabilities rising and the outlook highly uncertain, staff called on the authorities to closely monitor banks' liquidity positions and request updated recovery plans. Staff underscored the importance of strictly enforcing prudential requirements, including regarding capital adequacy, loan-loss provisioning, and related-party exposures and governance. The recently introduced Supervisory Review and Evaluation Process (SREP) methodology will facilitate the identification of key shortfalls. Supervisors should also continue to monitor the timely recognition of banks' impaired assets and support implementation of effective NPL resolution strategies. Staff was encouraged by supervisors' emphasis on NPL resolution and called for designing an NPL action plan, including an out-of-court restructuring mechanism.

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<sup>6</sup> Required reserves on banks' foreign currency liabilities have been remunerated at -60 bps since June 2021, while excess reserves, regardless of the currency denomination of related bank liabilities, have been remunerated at -75 bps since January 2022. A new fee framework for services to domestic banks, depositors, and non-banking clients has been in place since May 2021.

<sup>7</sup> These are to establish accounts for foreign exchange reserve requirements and introduce a mandatory fulfilment of reserve requirements for foreign currency liabilities in foreign currency.

**19. The authorities have appropriately decided not to extend the use of loan moratoria introduced at the onset of the pandemic.** Although the measures played some role in easing liquidity pressures and maintaining credit, their use has been limited. Moreover, loan moratoria can blur signals from delayed or missed payments, especially under prolonged use, undermining the asset quality assessment and leading to under-provisioning and overestimated capital.

**20. Enhanced coordination among state- and entity-level authorities is key to strengthening the financial safety net.** Staff commended the authorities for their prompt response to contain the Sberbank crisis and welcomed their decision to hold a Standing Committee for Financial Stability (SCFS) meeting. It emphasized that regular SCFS meetings and more frequent, regular interactions between all relevant stakeholders—the CBBH, banking agencies, Deposit Insurance Agency (DIA), and ministries of finance—are essential for crisis prevention and resolution. Staff called on the authorities to finalize the long-overdue Financial Sector Memorandum of Understanding (MoU) to strengthen country-wide cooperation and ensure the timely sharing of information on banking supervision and regulation, crisis management, and systemic risk oversight.

**21. Staff reiterated its recommendation to enhance the bank resolution framework.** The Sberbank crisis showed how a healthy bank can face a liquidity crisis due to significant deposit withdrawals, given the absence of an interbank market and a lender of last resort. Staff underscored the importance of establishing a country-wide Financial Stability Fund (FSF) that could be managed by the DIA. The FSF would play a crucial role in facilitating bank restructuring and should include, as part of its responsibilities, provision of liquidity in exceptional cases, including when a (bank) sale option is unavailable or private capital is insufficient. A single fund would generate sufficient resources for potential systemic failures and promote cost effective resolution. Staff also recommended that the DIA continue working on the methodology for charging risk-based premia and publish its annual report regularly.

**22. The 2021 update safeguards assessment found that the CBBH continues to maintain robust safeguards.** Most recommendations from the 2021 assessment have been implemented, and staff recommended further improvements (Informational Annex).

### **Authorities' Views**

*The authorities assessed their banking sector as strong and resilient. They are pleased with the outcome of the recent acquisition of Sberbank subsidiaries by domestic banks, which will, inter alia, consolidate the banking sector. The authorities agreed on the need to have an FSF. However, the RS continues to oppose having a single fund at the state level, arguing for separate funds at the entity level with the possibility of lending between the funds when needed. The authorities agreed on the need for close monitoring of the banking system liquidity given the high economic and financial uncertainty, but they dismissed staff's concerns about the declining market share of foreign-owned banks. They do not expect the loan moratoria measures to negatively impact bank asset quality and agreed not to extend them absent new extraordinary systemic disturbances. They also agreed with the need for an enhanced framework to identify risks to the currency board.*

## C. Governance and Transparency: Resume and Accelerate Reforms

**23. Governance weaknesses remain widespread.** BiH has lagged the Western Balkans in governance reforms, while its public sector corruption rating is the worst since 2012, according to indicators from Transparency International and the World Bank (Figure 7). The institutional and legal framework for fighting corruption is fragmented, anti-corruption bodies are weak, whistleblowers lack protection, and corruption cases are rarely prosecuted. The European Commission concluded, in its 2020 assessment of rule of law in the Balkans, that BiH has made no progress in fighting corruption, ensuring freedom of expression, improving the functioning of the judiciary, or fighting organized crime. BiH has not fully implemented any of the 23 recommendations of the Group of States against Corruption (GRECO). Staff expressed concern about the lack of progress on governance and transparency and encouraged the authorities to request an IMF Governance Diagnostic mission to help identify key weaknesses and prioritize reforms.

**24. The authorities should step up efforts to strengthen the AML/CFT regime by ensuring both the comprehensiveness of the applicable legal framework and its effectiveness in practice.** The AML/CFT law should be urgently amended to bring it in line with Fund advice and international standards, including with respect to virtual assets and beneficial ownership. The legal framework should clearly assign and define supervisory powers for all designated professions and businesses in the non-financial sector. Ensuring effectiveness in practice, including through proportionate and dissuasive sanctioning for non-compliance, is also important. The authorities should ensure that there is a functioning state-level body that helps define AML/CFT policy priorities as well as serves as a forum for domestic cooperation, discussion, and dialogue for all the relevant agencies. Effective inter-agency cooperation and information sharing is key given the numerous agencies involved in the oversight and enforcement of the AML/CFT framework. In addition, a country-wide registry of bank accounts of individuals would be an efficient measure to further strengthen the AML/CFT framework, improve tax recovery, and strengthen debt enforcement.

**25. Greater efforts are needed to strengthen public procurement and PFM reforms.** Amendments aimed at bringing the public procurement law in line with the relevant EU Directives have stalled in parliament. In its 2021 report, SIGMA (Support for Improvement in Governance and Management, a joint OECD-EU initiative) assessed BiH's public procurement framework to be the weakest in the Western Balkans, noting the lack of improvement since the previous assessment in 2017. Procurement procedures are complex and are not conducted fully electronically, while the two agencies overseeing the public procurement system—the Public Procurement Agency and the Procurement Review Body—remain understaffed and unable to fully perform their functions. A third of businesses report that they refrain from participating in tenders due to the perception of favoritism. Staff urged the authorities to upgrade the public procurement law, strengthen enforcement, and commit to publishing beneficial ownership information of companies awarded procurement contracts. Staff also encouraged the authorities to speed up the adoption of the country-wide PFM strategy, in line with FAD TA recommendations.

**26. The authorities should strengthen public enterprise (PE) governance.** PEs account for 11 percent of total employment and own about 40 percent of fixed assets. Many PEs are loss-making or barely profitable, and some are engaged in activities with no obvious public policy objective. Moreover, PE governance in BiH falls short of OECD guidelines and ranks low compared to regional comparators. The governments of both entities have committed to establishing PE central oversight units within the Prime Ministers' Offices, but the recruiting of staff has not yet begun. Further, no concrete steps have been undertaken to assess fiscal risks within the Ministries of Finance. The process for establishing oversight and fiscal risk units should accelerate. Staff welcomed the publication of a register of PEs in FBiH, which should be expanded and replicated for all PEs in the country. The authorities should also publish documents explaining the rationale of PE ownership.

**27. Comprehensive plans are needed to accelerate arrear clearance.** Public sector arrears, including on payments of social security contributions, have been accumulating since before the pandemic in the health sector and PEs. They are estimated at around KM 1.7 billion: PE arrears account for KM 1.2 billion in the FBiH, while health sector arrears are around KM 400 million in the RS and KM 112.5 million in the FBiH. Both health institutions and PEs are generally low on liquidity and thus at risk of further arrear accumulation. Staff emphasized the need to first stop the accumulation of new arrears before addressing the existing stock, and encouraged the authorities to resume work with the World Bank on compiling existing health arrears (Annex VI).

### **Authorities' Views**

*The authorities recognized the need to accelerate governance reforms. However, the RS continues to oppose state level reforms, including the introduction of a single (countrywide) registry of bank accounts of individuals at the CBBH arguing that already established registries at the entity level could be linked and data comprehensiveness for the entire BiH achieved based on clear protocol on data exchange. Some counterparts expressed concern that delays in strengthening the AML/CFT framework could lead to the redesignation of BiH as a country with significant AML/CFT deficiencies. The authorities agreed that PE and health sector reforms are urgent. They recognized that progress has been slow, but they attributed it to more urgent priorities (previously the pandemic and now the war in Ukraine). They noted their recent work to amend the rules on job systematization, which would allow them to staff the central oversight units. Regarding arrears, the RS authorities indicated that they stopped further accumulation, but the existing stock could be cleared only with IFI support.*

## **D. Other Structural Policies and Reforms: Facilitate Transition to Green Energy and Digitalization, and Encourage Private Sector Employment**

**28. BiH's transition to renewable energy has been slow, reflecting energy security considerations and a lack of commitment to reforms.** BiH relies largely on coal for power generation (Figure 6), while investment in sustainable energy production (wind and solar) is lacking. At current trends, most electricity production will remain coal based by 2025, when the EU plans to implement its carbon border adjustment mechanism (CBAM). BiH stands to be significantly affected

by the CBAM given the extent of its electricity exports to the EU. A successful transition to green energy will require phasing out coal and exploiting BiH's ample wind and solar potential. The authorities should adopt without delay a state law on energy that would help develop the energy market, boost competition, and encourage new investment. The legislation has been under discussion since 2015, but disagreements between the entities remain. New legislation on renewable energy was adopted in the RS but is pending in FBiH and Brčko District.

**29. Broad reforms are needed to improve the business environment and encourage greater labor force participation and employment.** The authorities should adopt country-wide legislation on electronic identification and trust services for electronic transactions. Emigration and skill mismatches continue to hamper the labor market, while high public sector wages have raised reservation wages, posing challenges to private sector employment. The labor market is also characterized by high long-term unemployment and low female and youth participation. Staff cautioned the authorities against further increases in the minimum wage, which could lower competitiveness, and underscored the need to encourage greater labor force participation and private sector employment by expanding childcare, improving public education and vocational training, and encouraging flexible employment.

#### **Authorities' Views**

*The authorities are highly interested in attracting private sector investment in renewables. FBiH further indicated that a law on energy efficiency is under preparation. They recognize, however, that they face significant challenges in restructuring the mining sector. The RS authorities remain opposed to a state law on electronic identification and trust services because it would assign supervisory powers to a state institution.*

## **STAFF APPRAISAL**

**30. The BiH economy is facing a setback just as it has recovered from the pandemic.** Strong external demand for exports and pent-up domestic demand powered a rebound in 2021. However, growth is projected to decelerate to below potential in 2022, as spillovers from the war in Ukraine weigh on economic activity in Europe, compounding the negative effect of ongoing domestic tensions. Inflation will remain high in 2022 on the back of high food and fuel prices.

**31. Fiscal policy is appropriately accommodative this year, but spending should be more targeted.** The authorities should aim to better cushion the impact of higher prices on the most vulnerable while resisting demands for non-targeted, election-related spending. In particular, the public sector wage bill should not be increased further as this would exacerbate inflationary pressures and worsen the composition of public spending. In parallel, the authorities should seek to improve the coverage and targeting of social assistance to prepare for future shocks. They should also set aside resources for potential increases in emergency spending, including health.

**32. Staff strongly advised against introducing differentiated VAT rates to mitigate the impact of inflation.** Indirect taxes collected by the Indirect Tax Authority represent the most

important source of revenues for the entity governments. Differentiated VAT rates would be costly to administer and lead to more tax evasion. Given the lack of adequate social assistance, a suspension of fuel excises could be considered instead on a temporary basis. Although poorly targeted and costly, it is preferable to permanent changes in tax policy.

**33. The authorities should scale up public sector investment to boost growth over the medium term.** Given a relatively low debt-to-GDP level, BiH can accommodate additional public sector investment in infrastructure and green energy, preferably financed by low-cost IFI loans. Investment should be complemented by reforms, to improve budget execution and project implementation in the FBiH and contain current spending and prioritize capital spending in the RS.

**34. Enhancing the resilience of the CBA should remain the priority of the central bank.** The external position of BiH in 2022 is stronger than medium-term fundamentals and desirable policy settings. The CBA has provided a credible monetary anchor for the BiH economy, and the CBBH has appropriately resisted pressures to provide fiscal financing. The introduction of differentiated remuneration rates on commercial banks' reserves will help improve CBBH's profitability and the currency board coverage ratio. The CBBH should continue to assess the impact of rising euro area interest rates on the currency board and to align remuneration rates.

**35. Enhanced supervision is crucial for preserving financial stability.** The banking sector has weathered the pandemic well and stabilized after the Sberbank crisis. However, vulnerabilities have been rising and the outlook remains highly uncertain. Strict enforcement of prudential requirements and the development of contingency plans for dealing with potential liquidity pressures is essential for preserving financial stability. The authorities should also identify the obstacles to NPL resolution and design an NPL action plan that includes an out-of-court resolution mechanism. The authorities' decision not to extend borrowing relief measures is appropriate.

**36. Staff also called for a country-wide financial stability fund and better coordination.** The recent Sberbank crisis is a stark reminder of the importance of effective collaboration among policymakers on financial sector issues. The roles of different stakeholders should be defined in a financial stability MoU, and the SCFS should meet regularly. Establishing a country-wide financial stability fund would close an important gap in the financial sector safety net.

**37. The authorities should address weaknesses in governance, particularly AML/CFT and public procurement.** Reforms of the AML/CFT framework need to accelerate ahead of the upcoming BiH assessment by MONEYVAL. The creation of a country-wide registry of bank accounts of individuals would strengthen AML/CFT practices and asset recovery. Regarding public procurement, the law should be amended in line with the relevant EU Directives, enforcement strengthened, and beneficial ownership information of companies awarded contracts published. Adoption of a country-wide PFM strategy would help unlock international assistance and improve public spending efficiency. An IMF governance diagnostic mission could help prioritize key areas for governance reforms.

**38. Work to strengthen the governance and transparency of PEs and reduce fiscal risks should resume.** The authorities should establish PE oversight units to monitor their financial performance, identify fiscal risks, and improve transparency. Comprehensive registers of all PEs and documents explaining PE rationale should be available to the public.

**39. BiH needs to accelerate the transition to renewables and digitalization.** A successful transition to green energy will require phasing out coal and exploiting BiH's ample wind and solar potential. The authorities should adopt a state law to create an effective energy market and encourage more investment. To foster digitalization, the authorities should adopt country-wide legislation on electronic identification and trust services.

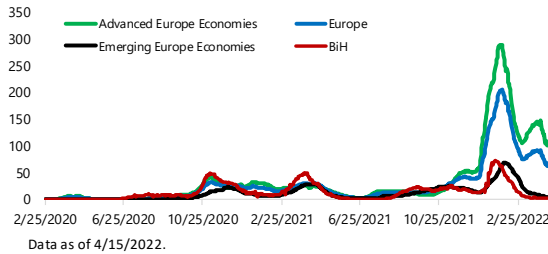
**40. It is recommended that the next Article IV Consultation takes place on the standard 12-month cycle.**

**Figure 1. Bosnia and Herzegovina: COVID-19 Latest Developments**

After a record surge in January 2022, the number of new cases has declined sharply.

**Daily New Covid-19 Cases: Aggregates**

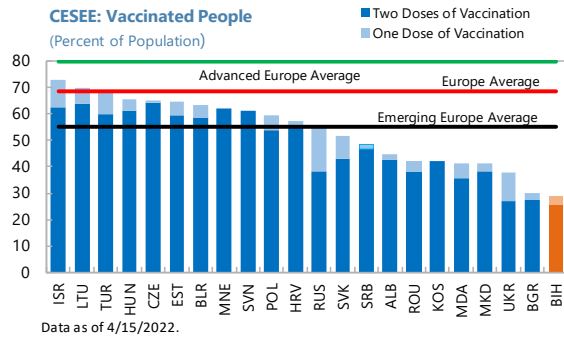
(7-day moving average cases per day per 100,000 people)



BiH continues to lag the rest of Europe in vaccination.

**CESEE: Vaccinated People**

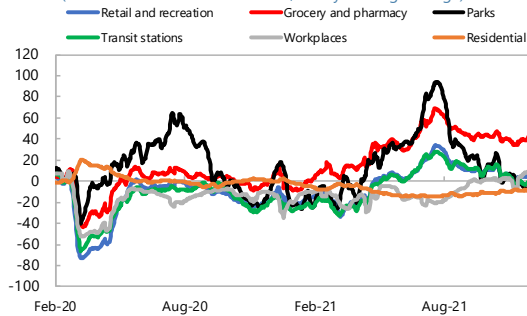
(Percent of Population)



Mobility is largely back to normal.

**Google Mobility Index**

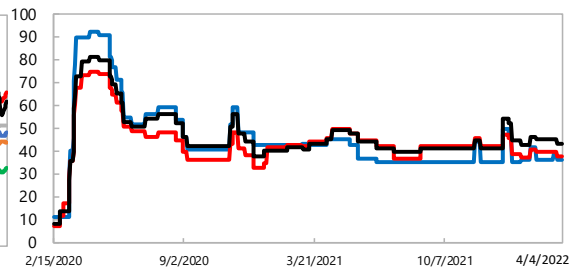
(Percent deviation from baseline, 7-day moving average)



Government response stringency moderated after an initial surge at the onset of the pandemic.

**COVID-19 Government Response Stringency Index**

Stringency Index 1/ (blue line), Government Response Index 2/ (red line), Containment Health Index 3/ (black line)

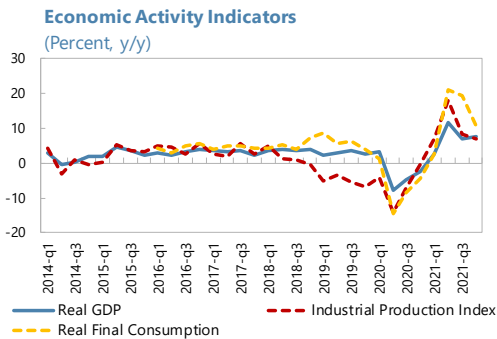


- 1/ The original stringency index, which records the strictness of 'lockdown style' policies that primarily restrict people's behaviour.
- 2/ The overall government response index records how the response of governments has varied overall.
- 3/ The containment and health index combines 'lockdown' restrictions and closures with measures such as testing policy and contact tracing, short term investment in healthcare, as well investments in vaccine.

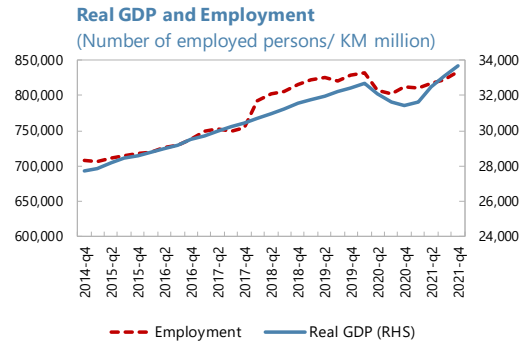
Sources: WHO and IMF staff calculations; Our World in Data; Google Mobility Report; and the Oxford COVID-19 Government Response Tracker.

**Figure 2. Bosnia and Herzegovina: High Frequency Indicators of Economic Activity**

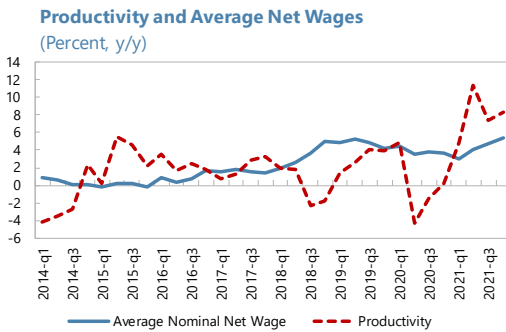
The strong recovery in economic activity in 2021 was driven by increasing demand for BiH exports and pent-up domestic demand.



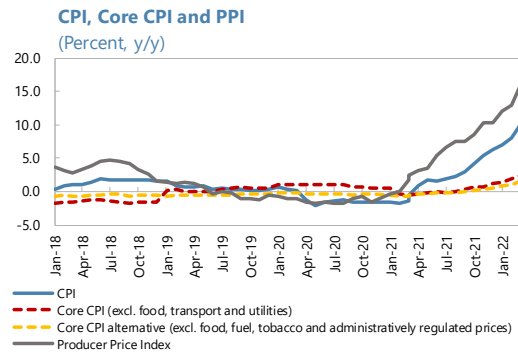
Employment, which declined less than output during the pandemic, has largely recovered.



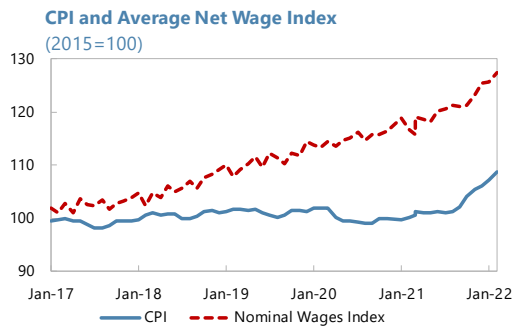
Labor productivity also recovered strongly in 2021, while average nominal net wages have been steadily rising.



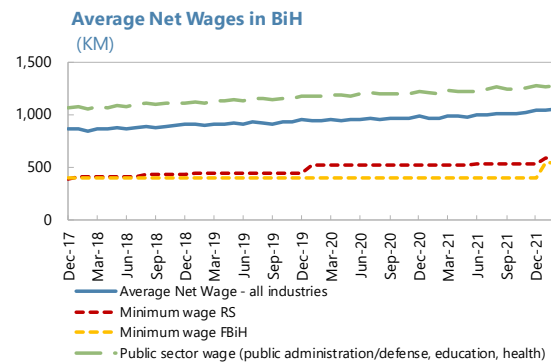
Headline inflation, which turned negative at the onset of the pandemic, accelerated in 2021 and 2022.



The steady rise in wages predates the pandemic...



...with public sector wages nearly twice as high as minimum wages and much higher than average net wages.

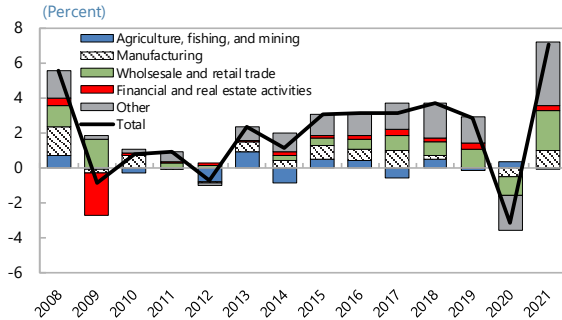


Sources:BiH authority; and IMF staff calculations.

**Figure 3. Bosnia and Herzegovina: Selected Economic Developments**

*Growth rebounded strongly in 2021 after contracting in 2020.*

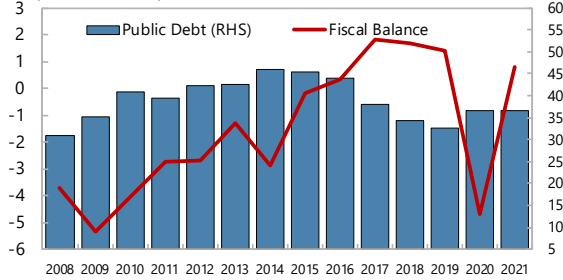
**Real GDP Growth**



*The fiscal balance returned to surplus after a sizable deficit in 2020, while debt remains contained.*

**Fiscal Balance and Public Debt**

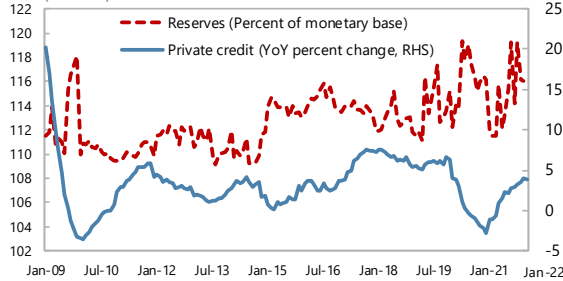
(Percent of GDP)



*Central bank reserves improved, while private sector credit growth remained sluggish.*

**Central Bank Reserves and Private Credit Growth**

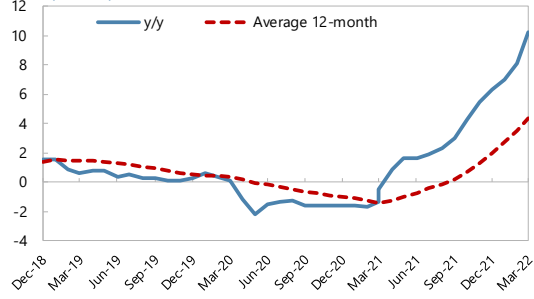
(Percent)



*Inflation accelerated after yearlong deflation.*

**CPI**

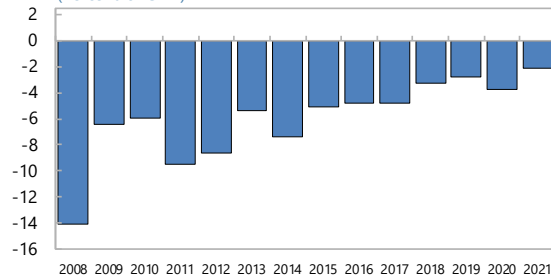
(Percent)



*The current account deficit narrowed, buoyed by strong exports and remittances.*

**Current Account Balance**

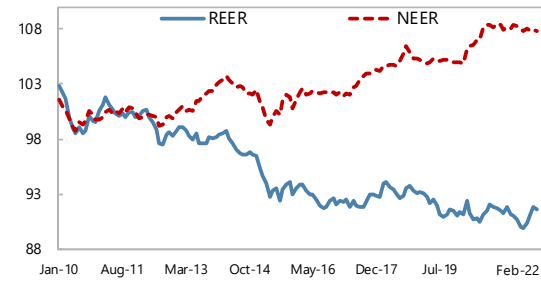
(Percent of GDP)



*The real effective exchange rate has continued to depreciate, in spite of higher domestic inflation.*

**Effective Exchange Rate Indices**

(2010 = 100; increase = appreciation)



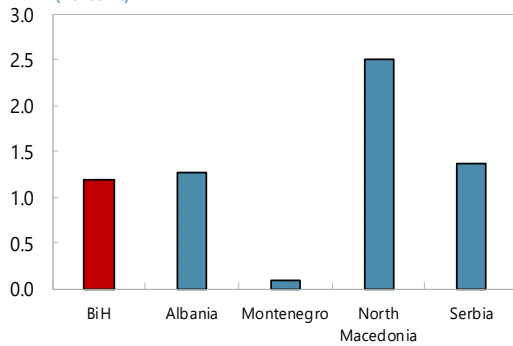
Sources: BiH authority, and IMF staff calculations.

**Figure 4. Bosnia and Herzegovina: Impact of COVID-19 on Firms 1/**

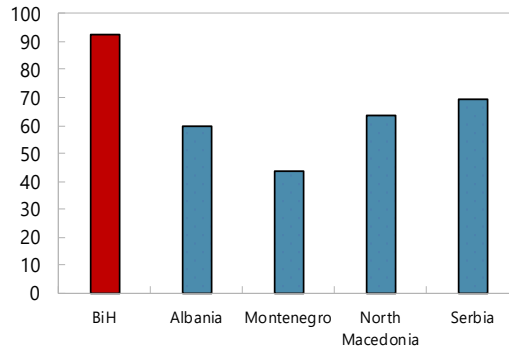
The share of BiH firms confirmed to have closed has been modest and in line with neighboring countries.

Capacity utilization, however, remained higher than in the region.

**Firms Confirmed Permanently Closed since Pandemic Outbreak**  
(Percent)



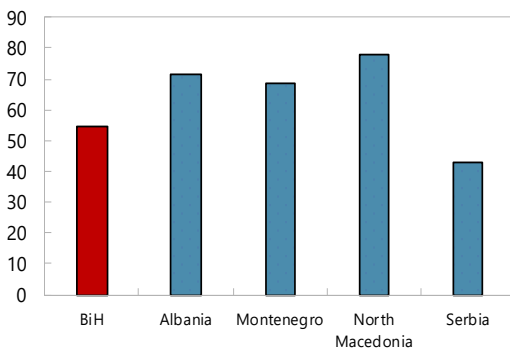
**Capacity Utilization**  
(Percent)



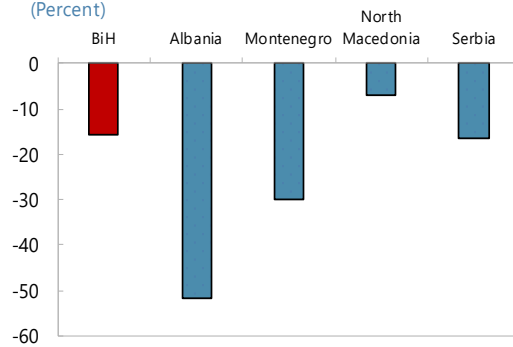
More than half of the surveyed companies in BiH experienced liquidity constraints.

Supply disruptions and demand restraints affected sales somewhat less than in most other neighboring countries.

**Firms Experiencing Decreased Liquidity or Cash Flow Availability since Pandemic Outbreak**  
(Percent)



**Average Change in Monthly Sales Compared to One Year Ago**  
(Percent)

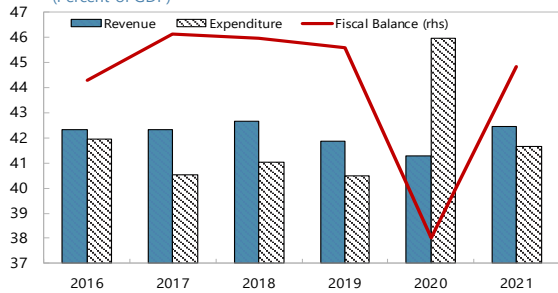


1/ The World Bank follow-up enterprise surveys were conducted: February / March 2021 for BiH; June 2020 for Albania; February 2021 for Montenegro; May/June 2021 for North Macedonia; and February 2021 for Serbia.  
Sources: World Bank Follow-Up Enterprise Surveys: Covid-19 Impact on Firms.

**Figure 5. Bosnia and Herzegovina: Composition of Public Expenditure**

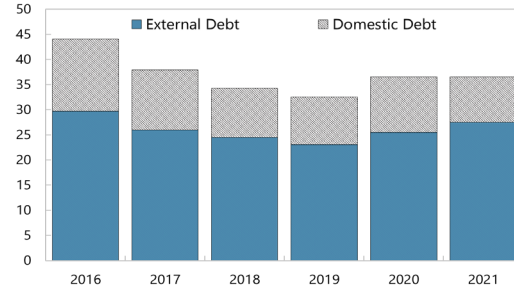
The fiscal balance returned to surplus in 2021, thanks to record tax revenues and lower capital spending.

**Revenue and Expenditure, 2016-2021**  
(Percent of GDP)



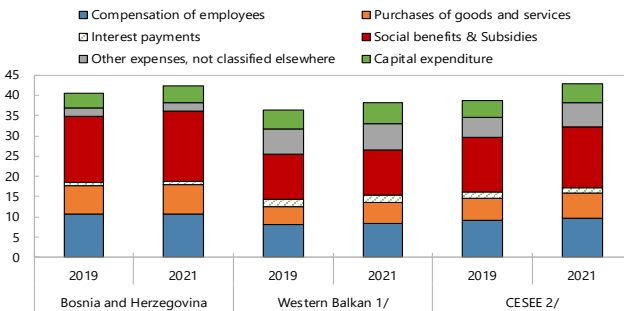
However, the debt-to-GDP ratio remained above the pre-pandemic level.

**General Government Debt, 2016-2021**  
(Percent of GDP)



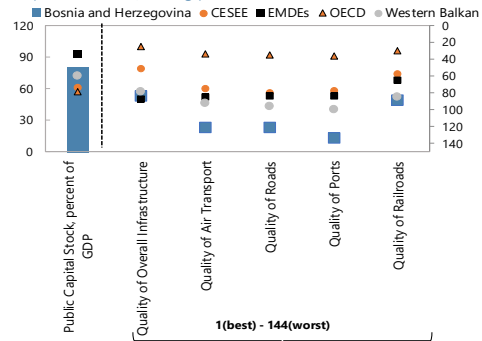
Government spending is higher than in Western Balkans, but with a broadly similar composition.

**Current and Capital Expenditure, 2019 vs 2021**  
(Percent of GDP)



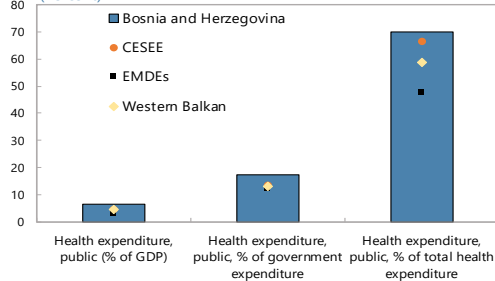
Despite a high capital stock, BiH ranks poorly compared to peers on infrastructure quality.

**Capital Stock and Infrastructure Quality 3/**  
(Percent of GDP, rankings)



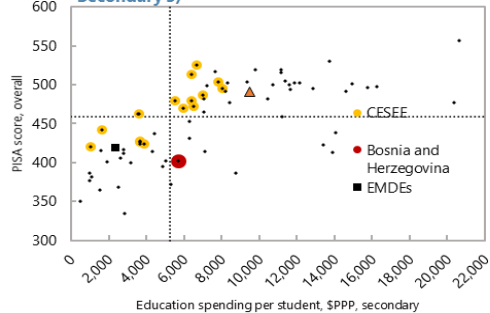
Health spending in BiH is higher than in the region and EMDEs.

**Health Expenditure, Different Metrics, 4/**  
(Percent)



BiH education spending is also high, while outcomes compare poorly to peers.

**Government Education Spending and Outcome, Secondary 5/**

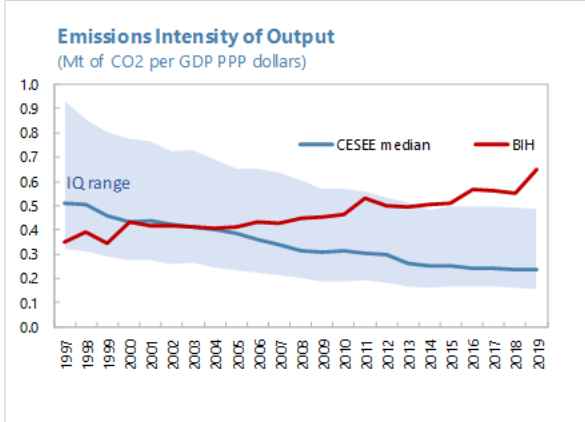


1/ The Western Balkan average does not include North Macedonia due to data availability.  
 2/ CESEE average is calculated with the countries for which data is available.  
 3/ Public capital stock is as of 2017. Infrastructure data is as of 2019.  
 4/ The data for BiH is 2018, the other countries are the latest available.  
 5/ For BiH, Education spending is as of 2016, PISA score is 2018. Other countries are the latest available

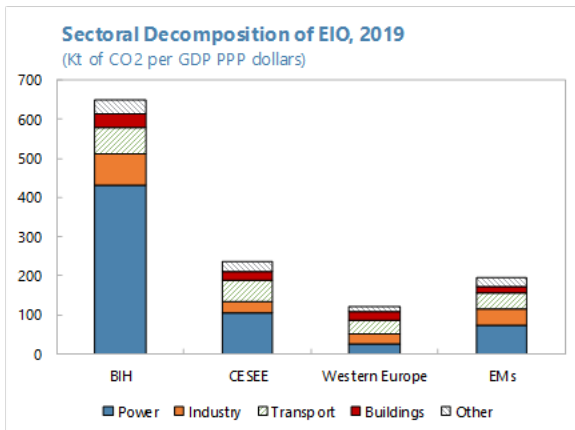
Sources: World Economic Outlook; IMF FAD Expenditure Assessment Tool; World Development Indicators; IMF Investment and Capital Stock Dataset; World Economic Forum; and World Health Organization.

**Figure 6. Bosnia and Herzegovina: Climate Indicators**

Unlike in other countries, emissions intensity in BiH has continued to rise...



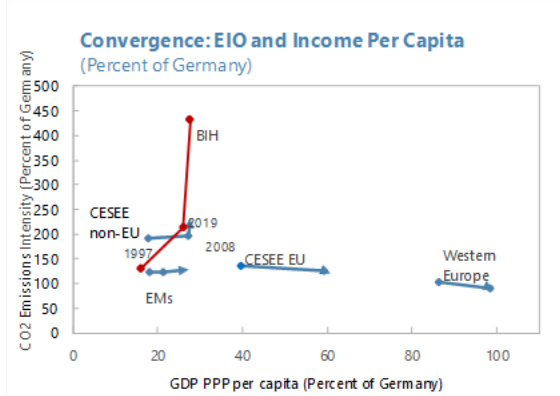
BiH CO<sub>2</sub> emissions intensity is driven mainly by the power sector...



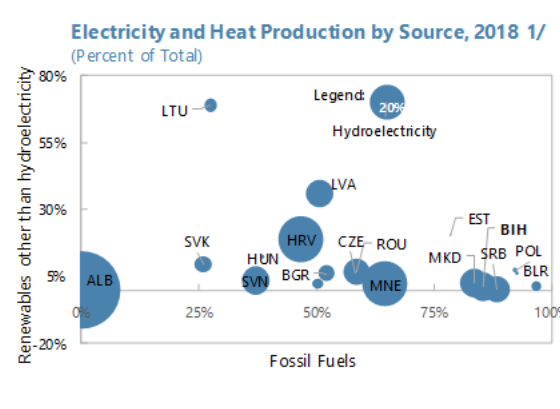
1/ Bubble sizes indicate the percent of hydroelectricity in renewable energy.

Sources: Emission Database for Global Atmospheric Research (EDGAR); World Economic Outlook; and International Energy Agency.

...further widening the gap with the rest of Europe.



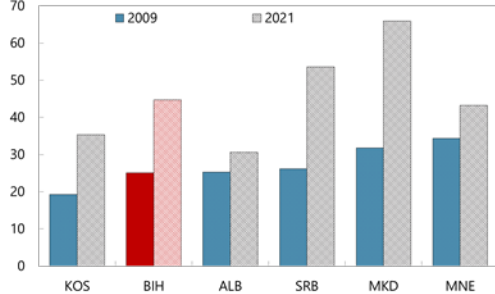
...as BiH relies mostly on fossil fuels (coal), and less so on hydro and other renewables.



**Figure 7. Bosnia and Herzegovina: Business and Competitiveness Indicators**

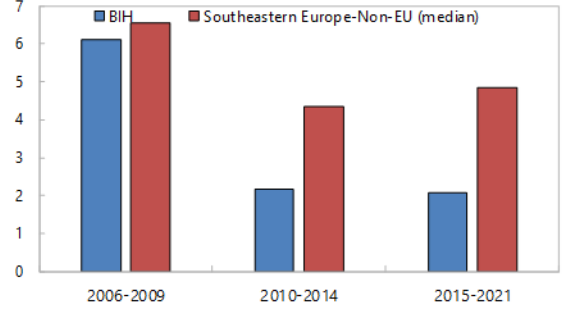
*BiH has seen faster growth in exports than some of its peers...*

**Exports of Goods and Services**  
(Percent of GDP)



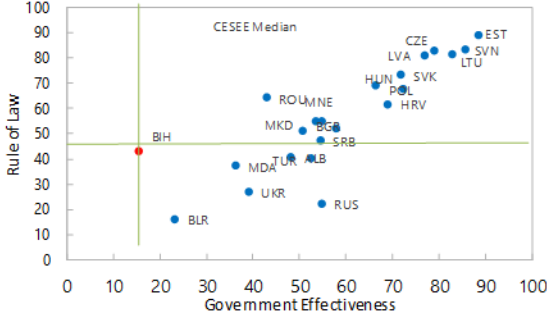
*...but it has not managed to attract more FDI.*

**FDI Inflows Foreign Direct Investment, Net Inflows**  
(Percent of GDP)



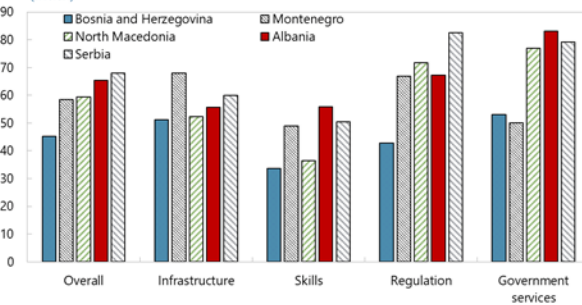
*BiH performs very poorly on governance relative to peers...*

**Governance Indicator, 2020**  
(Percentile Rank)



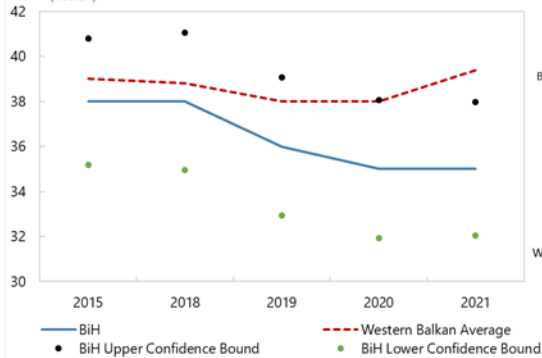
*...and lags in digitalization when compared to peers in the region.*

**Digital Enabler Index 2020, 1/**  
(Index)



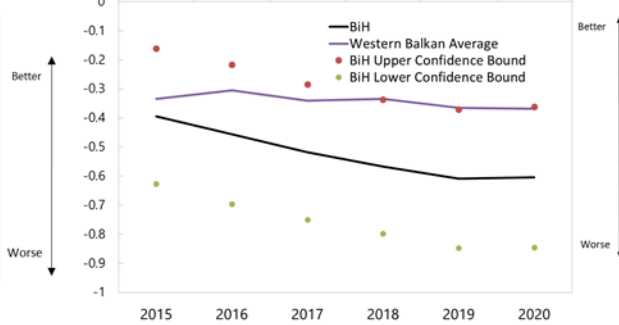
*Unlike Western Balkans, corruption perception in BiH has continued to worsen in recent years...*

**Corruption Perception 2/**  
(Index)



*...and BiH fares worse than the rest of Western Balkans on control of corruption.*

**Control of Corruption 3/**  
(Index)



1/ The index covers key areas that facilitate the application of digital technologies: infrastructure, skills and regulation and digital provision of government services.

2/ The Index ranges from 0 to 100 and it measures how corrupt each country's public sector is perceived to be, according to experts and business people.

3/ The index ranges from -2.5 to 2.5, it reflects perceptions of the extent to which public power is exercised for private gain.

including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Sources: World Governance Indicator; Transparency International; World Economic Outlook and Staff Calculation; European Bank for Reconstruction and Development, Transition Report.

**Table 1. Bosnia and Herzegovina: Selected Economic Indicators, 2018–27**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Est.	Proj.					
Nominal GDP (KM billion)	33.4	35.3	34.3	37.3	40.8	43.1	45.5	48.0	50.6	53.3
Gross national saving (in percent of GDP)	20.4	21.5	18.9	19.9	17.1	18.4	18.6	18.7	18.8	19.0
Gross investment (in percent of GDP)	23.7	24.3	22.7	22.0	22.1	22.1	22.1	22.1	22.2	22.3
	(Percent change)									
Real GDP	3.7	2.8	-3.1	7.1	2.4	2.3	3.0	3.0	3.0	3.0
GDP deflator	2.7	2.6	0.2	1.7	6.7	3.3	2.6	2.4	2.3	2.2
CPI (period average)	1.4	0.6	-1.1	2.0	6.5	3.0	2.3	2.1	2.1	2.1
Money and credit (end of period)										
Base money	10.3	6.9	10.7	17.4	2.0	--	--	--	--	--
Broad money	8.8	8.7	7.1	12.4	8.2	--	--	--	--	--
Credit to the private sector	5.6	6.3	-2.8	4.0	5.1	--	--	--	--	--
	(In percent of GDP)									
Operations of the general government										
Revenue, of which :	42.7	41.9	41.3	42.4	41.5	42.3	42.3	42.3	42.4	42.4
Taxes	22.9	23.0	21.8	23.1	22.0	22.9	22.8	22.8	23.0	23.0
Social security contributions	15.1	15.1	15.7	15.6	15.4	15.4	15.4	15.4	15.4	15.4
Expenditure	41.0	40.5	46.0	41.7	42.1	41.7	41.7	41.6	41.7	41.9
of which : Investment expenditure	3.6	3.6	5.4	4.1	4.0	4.1	4.0	3.9	3.9	3.9
Fiscal balance	1.7	1.4	-4.7	0.8	-0.6	0.6	0.6	0.7	0.7	0.6
Primary fiscal balance	2.4	2.1	-3.9	1.5	0.1	1.3	1.4	1.5	1.6	1.5
Total general government debt	34.3	32.5	36.5	36.7	34.5	32.3	30.9	30.2	31.4	32.3
Domestic general government debt 1/2/	9.8	9.5	11.1	9.4	9.2	9.0	9.5	10.2	12.1	13.5
External general government debt	24.5	23.1	25.5	27.3	25.3	23.3	21.4	20.0	19.3	18.8
Balance of payments	(In percent of GDP)									
Exports of goods and services	42.5	40.6	34.6	44.1	41.9	42.5	42.4	42.7	42.6	42.5
Imports of goods and services	57.2	55.2	48.5	56.4	57.0	56.8	56.7	56.8	56.8	56.8
Trade balance	-14.7	-14.7	-14.0	-12.3	-15.1	-14.3	-14.2	-14.1	-14.3	-14.3
Current transfers, net	12.0	12.2	11.1	11.1	11.0	11.2	11.3	11.2	11.3	11.3
Current account balance	-3.3	-2.8	-3.8	-2.1	-5.0	-3.7	-3.5	-3.4	-3.4	-3.3
Foreign direct investment (+ =inflow)	2.9	1.6	1.7	2.1	1.7	1.8	2.0	2.1	2.1	2.1
Gross official reserves (Euro million)	5,956	6,455	7,105	8,372	8,260	8,536	8,818	9,091	9,569	10,075
(In months of imports)	7.2	9.1	7.9	8.5	7.9	7.8	7.6	7.4	7.4	7.4
(In percent of monetary base)	112.0	113.5	112.9	113.3	--	--	--	--	--	--
(In percent of IMF ARA metric)	103.1	108.9	121.2	126.7	--	--	--	--	--	--
External debt 3/	64.4	64.3	69.5	61.0	60.3	57.9	55.4	53.5	52.4	51.6
Memorandum Items:										
Unemployment rate (national definition) 4/	18.4	15.7	15.9	17.4	--	--	--	--	--	--
GDP per capita (in euros)	4,891	5,169	5,023	5,482	6,005	6,358	6,736	7,127	7,526	7,949
Output gap (in percent of potential GDP)	1.4	1.8	-3.8	0.5	0.3	-0.2	0.0	0.1	0.2	0.2
REER (Index 2000=100)	86.5	85.1	84.6	84.1	--	--	--	--	--	--
NEER (Index 2000=100)	113.0	112.9	114.8	114.8	--	--	--	--	--	--

Sources: BiH authorities; and IMF staff estimates and projections.

1/ On average, half of the domestic debt stock is indexed to the Euro.

2/ The stock of general government domestic debt does not include domestic arrears and those of public enterprises.

3/ Includes inter-company loans in private external debt.

4/ The 2021 unemployment rate is not comparable with 2020 due to redesign of BHAS Labor Force Survey (LFS) methodology in line with EU regulations. The 2020 unemployment rate is not comparable with 2019 due to change in sample design, which was defined separately each year prior to 2020 and has been replaced since with a panel component sample design where households have been re-surveyed four times.

Table 2. Bosnia and Herzegovina: Real Sector Developments, 2018–2027

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Est.			Proj.			
<b>Real growth rates</b>										
(Percent change)										
GDP at constant 2010 prices	3.7	2.8	-3.1	7.1	2.4	2.3	3.0	3.0	3.0	3.0
Domestic demand	2.6	2.9	-3.7	7.1	4.7	2.8	3.4	3.1	3.3	3.3
Private	2.7	3.3	-6.9	9.9	5.0	2.7	3.5	3.2	3.2	3.2
Public	2.0	1.5	8.8	-2.4	3.7	3.2	3.4	3.0	3.6	3.4
Consumption	1.8	1.7	-2.3	7.3	5.7	2.1	2.8	2.7	2.9	2.9
Private	2.0	2.0	-3.4	9.0	5.9	2.1	2.7	2.6	2.7	2.8
Public	1.0	0.9	1.3	1.6	5.0	2.4	3.1	3.2	3.6	3.3
Gross capital formation	5.5	7.3	-8.4	6.3	0.9	5.5	5.9	4.6	4.9	4.6
Private	5.1	7.8	-18.2	13.4	1.6	5.2	6.3	5.1	5.1	4.8
Public	7.9	4.8	47.8	-16.5	-1.9	6.8	4.3	2.3	3.8	4.0
Net Exports										
Exports of goods and services	6.6	0.5	-15.7	10.8	-16.5	12.6	9.1	8.3	6.3	5.2
Imports of goods and services	3.4	1.3	-13.3	9.7	-5.9	10.1	7.9	6.7	5.8	5.0
<b>Contributions to real GDP growth</b>										
(Year-on-year change over real GDP in previous year, in percent)										
GDP at constant 2010 prices	3.7	2.8	-3.1	7.1	2.4	2.3	3.0	3.0	3.0	3.0
Domestic demand	3.0	3.4	-4.3	8.2	5.4	3.3	4.1	3.7	3.9	3.9
Private	2.5	3.0	-6.4	8.8	4.5	2.5	3.2	3.0	3.0	3.1
Public	0.5	0.4	2.1	-0.6	0.9	0.8	0.8	0.8	0.9	0.9
Consumption	1.7	1.6	-2.1	6.7	5.2	2.0	2.6	2.6	2.7	2.7
Private	1.5	1.4	-2.4	6.3	4.2	1.5	2.0	1.9	2.0	2.0
Public	0.2	0.2	0.3	0.3	1.0	0.5	0.6	0.7	0.7	0.7
Gross capital formation	1.3	1.8	-2.2	1.5	0.2	1.3	1.5	1.2	1.3	1.2
Private	1.1	1.6	-4.0	2.5	0.3	1.0	1.3	1.1	1.1	1.0
Public	0.3	0.2	1.8	-1.0	-0.1	0.3	0.2	0.1	0.2	0.2
Net exports	0.7	-0.6	1.2	-1.1	-3.0	-1.1	-1.1	-0.7	-0.9	-0.9
Exports of goods and services	2.7	0.2	-6.5	3.9	-6.1	3.8	3.0	2.9	2.3	2.0
Imports of goods and services	2.0	0.8	-7.7	5.0	-3.1	4.9	4.1	3.7	3.3	2.9
<b>Deflators</b>										
(Percent Change)										
GDP	2.7	2.6	0.2	1.7	6.7	3.3	2.6	2.4	2.3	2.2
Domestic demand	2.5	2.5	0.2	0.3	6.9	2.0	2.1	2.2	2.1	2.0
Consumption	2.9	3.0	0.5	0.4	6.5	2.5	2.7	2.6	2.4	2.3
Investment	1.3	0.9	-1.4	-0.4	8.6	0.3	0.0	0.6	0.8	1.2
Exports of goods and services	3.6	0.0	-1.6	25.1	24.2	-4.8	-3.3	-2.1	-1.1	-0.1
Imports of goods and services	2.9	0.4	-1.4	15.3	17.3	-4.4	-2.3	-1.0	-0.4	0.3
(In percent of GDP)										
Consumption	91.0	90.3	91.3	90.3	93.0	92.2	92.1	92.0	92.1	92.0
Private	71.2	70.9	70.5	70.8	73.2	72.4	72.4	72.3	72.3	72.2
Public	19.8	19.4	20.8	19.5	19.9	19.8	19.7	19.7	19.8	19.8
Gross capital formation	23.7	24.3	22.7	22.0	22.1	22.1	22.1	22.1	22.2	22.3
Private	20.1	20.7	17.2	17.9	18.0	18.0	18.1	18.2	18.3	18.4
Public	3.6	3.6	5.4	4.1	4.0	4.1	4.0	3.9	3.9	3.9
National savings	20.4	21.5	18.9	19.9	17.1	18.4	18.6	18.7	18.8	19.0
Private	15.3	16.6	18.7	14.9	13.7	13.8	14.1	14.1	14.3	14.6
Public	5.2	4.9	0.2	4.9	3.4	4.6	4.6	4.6	4.5	4.4
Saving-Investment balance	-3.3	-2.8	-3.8	-2.1	-5.0	-3.7	-3.5	-3.4	-3.4	-3.3
<b>Memorandum items:</b>										
(In percent)										
Unemployment rate (national definition) 1/	18.4	15.7	15.9	17.4	--	--	--	--	--	--
Nominal GDP (KM million)	33,444	35,296	34,255	37,324	40,789	43,073	45,522	48,021	50,580	53,266

Source: BiH, FBIH and RS Statistical Agencies, and Fund staff estimates.

1/ The 2021 unemployment rate is not comparable with 2020 due to redesign of BHAS Labor Force Survey (LFS) methodology in line with EU regulations. The 2020 unemployment rate is not comparable with 2019 due to change in sample design, which was defined separately each year prior to 2020 and has been replaced since with a panel component sample design where households have been re-surveyed four times.

**Table 3. Bosnia and Herzegovina: Balance of Payments, 2019–27 1/**

(In millions of euros, unless otherwise indicated)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
			Est.			Proj.			
<b>A. Current account</b>	-505	-659	-410	-1,046	-824	-818	-836	-874	-904
Trade balance	-2,645	-2,447	-2,362	-3,150	-3,151	-3,315	-3,470	-3,687	-3,896
Goods	-4,072	-3,218	-3,679	-4,583	-4,689	-4,957	-5,218	-5,560	-5,857
Export of goods (fob)	5,204	4,826	6,500	6,745	7,144	7,434	7,845	8,207	8,621
Import of goods (fob)	-9,275	-8,045	-10,179	-11,328	-11,833	-12,391	-13,063	-13,767	-14,478
Services (net)	1,427	771	1,323	1,433	1,538	1,642	1,748	1,874	1,961
Exports	2,115	1,229	1,910	1,987	2,218	2,445	2,629	2,799	2,948
Imports	-688	-458	-587	-554	-681	-803	-881	-925	-987
Primary income (net):	-59	-151	-179	-186	-149	-135	-124	-111	-94
Total credit	579	400	497	455	607	672	720	775	830
Total debit	-638	-551	-676	-641	-756	-807	-844	-885	-924
<i>Of which</i> : interest payments	-79	-77	-77	-111	-209	-237	-251	-269	-283
Secondary income (net, <i>of which</i> :	2,199	1,940	2,125	2,290	2,477	2,632	2,758	2,924	3,086
Government (net)	51	41	-28	44	48	52	56	61	66
Workers' remittances	1,474	1,213	1,475	1,552	1,719	1,846	1,938	2,061	2,170
Other (NGOs etc.)	634	640	606	618	630	649	675	709	751
<b>B. Capital account</b>	198	162	145	148	150	152	156	161	168
Capital transfers (net)	198	162	145	148	150	152	156	161	168
General government	150	132	107	110	112	114	117	122	128
Other sectors	48	31	38	38	38	38	39	39	39
<b>C. Financial account</b>	-681	-1,024	-1,060	-786	-950	-948	-953	-1,190	-1,242
Direct investment (net)	-281	-290	-407	-360	-407	-457	-504	-551	-580
Assets	109	70	38	-7	-11	-16	-15	-13	-11
Liabilities	391	360	445	352	396	441	488	538	569
Portfolio investment (net)	112	7	57	-14	-14	-14	-14	-14	-14
Assets (net)	94	-9	166	-14	-14	-14	-14	-14	-14
Liabilities (net)	-18	-15	109	0	0	0	0	0	0
<i>Of which</i> : official bond disbursements			300	0	0	0	0	0	0
Other investment (net)	-512	-741	-710	-412	-529	-477	-436	-626	-648
Assets (net)	-6	-91	-30	-30	-58	198	242	241	303
Short-term	29	-113	-20	-28	-49	206	249	250	312
Banks	222	10	8	144	103	118	147	148	210
Other sectors, excl. government and central bank	-182	-123	-26	-170	-150	90	103	103	103
Medium and long-term	-35	22	-10	-2	-9	-8	-7	-9	-9
Banks	27	-6	-3	6	-1	1	2	1	1
Other sectors, excl. government and central bank	-61	27	-7	-8	-8	-9	-9	-10	-10
Liabilities (net)	506	650	680	382	471	676	677	866	951
Short-term	308	143	343	274	304	331	328	347	361
General government	-14	5	0	0	0	0	0	0	0
Banks	-41	-286	-82	50	52	55	58	60	64
Other sectors	364	424	425	224	252	276	271	286	298
Medium and long-term	197	506	337	109	167	344	349	520	590
Monetary authority	0	0	0	0	0	0	0	0	0
General government	-24	418	186	75	-67	13	12	165	219
SDR allocation			306						
Disbursements of loans	297	713	508	381	396	419	422	458	481
Project	297	357	321	381	396	419	422	458	481
Budget	0	356	188	0	0	0	0	0	0
Other	2	0	0	0	0	0	0	0	0
Amortization of loans	321	296	322	306	463	405	410	293	261
Banks	82	-120	-112	-190	-48	55	38	40	45
Other sectors	140	209	263	224	282	276	299	315	326
<b>D. Errors and omissions</b>	103	100	269	0	0	0	0	0	0
Overall balance (A+B-C+D)	477	628	1,065	-112	276	282	273	478	506
Financing	-477	-628	-1,065	112	-276	-282	-273	-478	-506
Change in net international reserves ("-"=increase)	-477	-628	-1,065	112	-276	-282	-273	-478	-506
<b>Memorandum items:</b>									
Current account balance (in percent of GDP)	-2.8	-3.8	-2.1	-5.0	-3.7	-3.5	-3.4	-3.4	-3.3
Trade balance-Goods (in percent of GDP)	-22.6	-18.4	-19.3	-22.0	-21.3	-21.3	-21.3	-21.5	-21.5
Import of goods (change, percent)	1.3	-13.3	26.5	11.3	4.5	4.7	5.4	5.4	5.2
Export of goods (change, percent)	-2.2	-7.3	34.7	3.8	5.9	4.1	5.5	4.6	5.0
Transfers (in percent of GDP)	12.2	11.1	11.1	11.0	11.2	11.3	11.2	11.3	11.3
Net foreign direct investment (in percent of GDP)	-1.6	-1.7	-2.1	-1.7	-1.8	-2.0	-2.1	-2.1	-2.1
External debt/GDP (in percent)	64.3	69.5	61.0	60.3	57.9	55.4	53.5	52.4	51.6
Private sector	41.3	42.0	34.8	34.8	34.4	33.9	33.5	33.1	32.7
Public sector	23.1	27.5	26.1	25.4	23.5	21.5	20.1	19.3	18.9
External debt service/GNFS exports (percent)	17.5	20.8	15.0	14.1	17.0	17.0	15.8	14.5	14.0
Gross official reserves (in millions of Euro)	6,455	7,105	8,372	8,260	8,536	8,818	9,091	9,569	10,075
(In months of prospective imports of goods and services)	9.1	7.9	8.5	7.9	7.8	7.6	7.4	7.4	7.4
Reserves/IMF ARA metric (percent)	108.9	121.2	126.7	...	...	...	...	...	...

Sources: BiH authorities; and IMF staff estimates and projections.

1/ Based on BPM6.

**Table 4a. Bosnia and Herzegovina: Government Statement of Operations, 2019–27**

(Percent of GDP)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Proj.					
<b>Revenue</b>	<b>41.9</b>	<b>41.3</b>	<b>42.4</b>	<b>41.5</b>	<b>42.3</b>	<b>42.3</b>	<b>42.3</b>	<b>42.4</b>	<b>42.4</b>
Taxes	23.0	21.8	23.1	22.0	22.9	22.8	22.8	23.0	23.0
Direct taxes	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Individual income tax	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9
Corporate income tax	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Indirect taxes	19.1	17.9	19.2	18.1	18.9	18.9	18.9	19.0	19.1
Other taxes	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Social security contributions	15.1	15.7	15.6	15.4	15.4	15.4	15.4	15.4	15.4
Grants	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other revenue	3.2	3.3	3.4	3.7	3.7	3.7	3.7	3.7	3.7
<b>Expenditure</b>	<b>40.5</b>	<b>46.0</b>	<b>41.7</b>	<b>42.1</b>	<b>41.7</b>	<b>41.7</b>	<b>41.6</b>	<b>41.7</b>	<b>41.9</b>
<b>Expense</b>	<b>36.9</b>	<b>40.5</b>	<b>37.5</b>	<b>38.0</b>	<b>37.6</b>	<b>37.6</b>	<b>37.6</b>	<b>37.8</b>	<b>38.0</b>
Compensation of employees	10.6	11.4	10.8	11.1	11.0	11.0	11.0	11.0	11.0
Use of goods and services	7.2	7.5	7.1	7.3	7.2	7.2	7.2	7.2	7.2
Social benefits	14.8	16.3	15.5	15.4	15.1	15.1	15.1	15.2	15.3
Interest	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.9	1.0
Subsidies	1.4	2.4	2.0	1.7	1.6	1.6	1.6	1.6	1.6
Other expense	2.1	2.1	1.4	2.0	2.0	2.0	2.0	1.9	1.9
<b>Net acquisition of nonfinancial assets</b>	<b>3.6</b>	<b>5.4</b>	<b>4.1</b>	<b>4.0</b>	<b>4.1</b>	<b>4.0</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>
Acquisition of nonfinancial assets	3.8	5.6	4.4	4.2	4.2	4.2	4.1	4.0	4.0
Foreign financed capital spending	1.6	2.1	1.9	1.9	1.9	1.8	1.7	1.7	1.7
Domestically financed capital spending	2.2	3.4	2.5	2.2	2.3	2.3	2.3	2.3	2.3
Disposal of nonfinancial assets	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1
<b>Gross/net operating balance (revenue - expense)</b>	<b>5.0</b>	<b>0.7</b>	<b>4.9</b>	<b>3.5</b>	<b>4.7</b>	<b>4.7</b>	<b>4.6</b>	<b>4.6</b>	<b>4.5</b>
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>1.4</b>	<b>-4.7</b>	<b>0.8</b>	<b>-0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>
<b>Net acquisition of financial assets</b>	<b>0.4</b>	<b>-1.5</b>	<b>3.0</b>	<b>0.2</b>	<b>0.6</b>	<b>1.1</b>	<b>1.6</b>	<b>3.6</b>	<b>3.2</b>
Domestic assets	0.4	-1.5	3.0	0.2	0.6	1.1	1.6	3.6	3.2
Currency and deposits	0.4	-1.2	3.4	0.2	0.6	1.2	1.7	3.6	3.3
Loans	-0.2	-0.2	-0.4	0.0	0.0	-0.1	0.0	0.0	0.0
Equity and investment fund shares	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net incurrence of liabilities</b>	<b>-0.1</b>	<b>3.8</b>	<b>2.7</b>	<b>0.7</b>	<b>0.1</b>	<b>0.5</b>	<b>0.9</b>	<b>2.9</b>	<b>2.7</b>
Domestic liabilities	0.1	1.6	-1.6	0.3	0.7	1.1	1.2	2.6	2.2
Debt securities	0.5	1.3	-0.8	-0.2	0.2	0.5	0.7	1.7	1.7
Other government obligations	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Loans	0.0	0.0	-0.2	0.6	0.6	0.7	0.6	0.9	0.6
Other accounts payable	-0.1	0.3	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Foreign liabilities	-0.2	2.2	4.3	0.4	-0.6	-0.7	-0.3	0.3	0.5
Debt securities	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Loans	-0.2	2.3	2.8	0.4	-0.6	-0.7	-0.3	0.3	0.5
Drawings	1.8	4.1	2.3	1.9	1.8	1.8	1.7	1.7	1.7
Amortization	2.0	1.9	-0.6	1.5	2.4	2.4	2.0	1.4	1.2
<b>Statistical discrepancy</b>	<b>-0.9</b>	<b>-0.6</b>	<b>-0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Memorandum items</b>									
Net lending exc externally-financed operations	2.5	-2.9	2.5	1.2	2.3	2.2	2.2	2.2	2.1
Structural balance (% of potential GDP)	0.6	-2.8	0.5	-0.7	0.6	0.6	0.7	0.6	0.5
Cyclically-adjusted primary balance	1.4	-2.4	1.2	0.0	1.4	1.4	1.4	1.5	1.4

Sources: BiH authorities; and IMF staff estimates and projections.

**Table 4b. Bosnia and Herzegovina: Government Statement of Operations, 2019–27**

	(KM million)										
	2019	2020	2021	2022	2023	2024	2025	2026	2027		
				Proj.							
<b>Revenue</b>	<b>14,774</b>	<b>14,139</b>	<b>15,844</b>	<b>16,931</b>	<b>18,224</b>	<b>19,241</b>	<b>20,290</b>	<b>21,450</b>	<b>22,605</b>		
Taxes	8,127	7,475	8,621	8,993	9,848	10,397	10,962	11,625	12,258		
Direct taxes	1,337	1,298	1,410	1,567	1,655	1,749	1,845	1,944	2,047		
Individual income taxes	613	619	669	757	800	845	892	939	989		
Corporate income tax	638	593	652	713	753	796	839	884	931		
Indirect taxes	6,757	6,141	7,168	7,380	8,145	8,596	9,062	9,625	10,151		
Other taxes	34	37	42	46	49	51	54	57	60		
Social security contributions	5,345	5,384	5,810	6,295	6,648	7,025	7,411	7,806	8,221		
Grants	185	147	126	134	139	145	152	160	169		
Other revenue	1,117	1,133	1,287	1,510	1,589	1,673	1,765	1,859	1,957		
<b>Expenditure</b>	<b>14,285</b>	<b>15,742</b>	<b>15,551</b>	<b>17,158</b>	<b>17,979</b>	<b>18,961</b>	<b>19,953</b>	<b>21,102</b>	<b>22,305</b>		
<b>Expense</b>	<b>13,010</b>	<b>13,884</b>	<b>14,005</b>	<b>15,513</b>	<b>16,216</b>	<b>17,123</b>	<b>18,063</b>	<b>19,122</b>	<b>20,223</b>		
Compensation of employees	3,741	3,920	4,040	4,512	4,741	4,995	5,266	5,565	5,884		
Use of goods and services	2,543	2,560	2,666	2,958	3,104	3,276	3,452	3,650	3,829		
Social benefits	5,224	5,587	5,793	6,276	6,514	6,884	7,275	7,691	8,133		
Interest	269	253	256	282	320	343	369	437	516		
Subsidies	502	830	743	677	684	723	763	804	846		
Grants	1	18	11	0	0	0	0	0	0		
Other expense	730	734	507	808	853	901	938	975	1,014		
<b>Net acquisition of nonfinancial assets</b>	<b>1,275</b>	<b>1,858</b>	<b>1,546</b>	<b>1,646</b>	<b>1,763</b>	<b>1,838</b>	<b>1,891</b>	<b>1,980</b>	<b>2,082</b>		
Acquisition of nonfinancial assets	1,332	1,904	1,652	1,703	1,822	1,900	1,956	2,048	2,154		
Foreign financed capital spending	560	728	721	790	818	831	828	875	919		
Domestically financed capital spending	772	1,176	930	913	1,004	1,069	1,128	1,173	1,235		
Disposal of nonfinancial assets	57	46	106	57	60	62	65	68	72		
<b>Gross/net operating balance (revenue - expense)</b>	<b>1,764</b>	<b>255</b>	<b>1,839</b>	<b>1,419</b>	<b>2,007</b>	<b>2,118</b>	<b>2,228</b>	<b>2,328</b>	<b>2,382</b>		
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>489</b>	<b>-1,603</b>	<b>293</b>	<b>-227</b>	<b>244</b>	<b>280</b>	<b>337</b>	<b>348</b>	<b>300</b>		
<b>Net acquisition of financial assets</b>	<b>130</b>	<b>-520</b>	<b>1,107</b>	<b>76</b>	<b>268</b>	<b>494</b>	<b>772</b>	<b>1,807</b>	<b>1,723</b>		
Domestic assets	130	-520	1,107	76	268	494	772	1,807	1,723		
Currency and deposits	152	-424	1,256	80	265	536	804	1,831	1,744		
Loans	-65	-71	-153	5	12	-32	-22	-14	-10		
Equity and investment fund shares	-5	26	4	0	0	0	0	0	0		
Foreign assets	0	0	0	0	0	0	0	0	0		
<b>Net incurrence of liabilities</b>	<b>-29</b>	<b>1,302</b>	<b>1,016</b>	<b>303</b>	<b>24</b>	<b>215</b>	<b>435</b>	<b>1,458</b>	<b>1,423</b>		
Domestic liabilities	50	535	-604	129	304	519	585	1,320	1,181		
Debt securities	172	462	-306	-100	75	216	329	872	887		
Issuance	522	796	238	894	1,123	1,716	2,262	3,409	3,401		
Short-term T-Bills	20	268	100	538	553	863	1,082	1,799	1,543		
Long-term government bonds	502	528	138	356	570	853	1,180	1,610	1,858		
Amortization	348	332	-56	994	1,048	1,501	1,933	2,538	2,515		
Short-term T-Bills	40	80	-42	587	552	862	1,081	1,798	1,542		
Long-term government bonds	309	254	-13	407	496	639	852	740	973		
Other government obligations	-59	-50	-49	-22	-21	-20	-19	-18	-17		
Loans	-16	5	-70	252	250	324	274	466	311		
Other accounts payable	-47	118	-178	0	0	0	0	0	0		
Foreign liabilities	-79	767	1,621	174	-280	-305	-149	139	241		
Debt securities	-13	-13	568	0	0	0	0	0	0		
Loans	-66	780	1,053	174	-280	-305	-149	139	241		
Drawings	629	1,415	843	766	763	798	801	862	905		
Amortization	696	635	-210	592	1,043	1,102	950	724	664		
<b>Statistical discrepancy</b>	<b>-330</b>	<b>-219</b>	<b>-202</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>Memorandum items</b>											
Indirect revenues	6,757	6,141	7,168	7,380	8,145	8,596	9,062	9,625	10,151		
Net lending excl. externally-financed operations	889	-999	950	473	969	1,014	1,064	1,117	1,106		

Sources: BiH authorities; and IMF staff estimates and projections.

Table 4c. Bosnia and Herzegovina: Entity Governments Statement of Operations, 2019–27

(Percent of GDP)

	Federation					Republika Srpska					Federation					Republika Srpska					Bosnia and Herzegovina										
	Central Government					Central Government					General Government					General Government															
	2019	2020	2021	2022	2023	2027	2019	2020	2021	2022	2023	2027	2019	2020	2021	2022	2023	2027	2019	2020	2021	2022	2023	2027	2019	2020	2021	2022	2023	2027	
<b>Revenue</b>	<b>8.3</b>	<b>16.9</b>	<b>16.8</b>	<b>16.9</b>	<b>17.9</b>	<b>17.4</b>	<b>26.3</b>	<b>25.8</b>	<b>27.2</b>	<b>26.3</b>	<b>27.3</b>	<b>27.4</b>	<b>38.6</b>	<b>37.9</b>	<b>38.4</b>	<b>38.3</b>	<b>39.2</b>	<b>39.7</b>	<b>40.9</b>	<b>40.6</b>	<b>42.7</b>	<b>40.6</b>	<b>41.6</b>	<b>42.2</b>	<b>41.9</b>	<b>41.3</b>	<b>42.4</b>	<b>41.5</b>	<b>42.3</b>	<b>42.4</b>	
Taxes	7.3	6.6	7.0	6.6	7.7	7.1	16.2	15.6	16.8	16.1	17.1	17.2	19.8	18.3	19.5	18.8	19.7	20.2	22.5	21.6	23.3	22.0	23.0	23.5	23.0	21.8	23.1	22.0	22.9	23.0	
Direct taxes	0.4	0.4	0.3	0.3	0.3	0.3	3.4	3.4	3.3	3.5	3.5	3.5	3.7	3.7	3.7	3.7	3.7	3.7	4.1	4.1	4.0	4.2	4.2	4.2	3.8	3.8	3.8	3.8	3.8		
Indirect taxes	6.8	6.3	6.7	6.3	7.4	6.8	12.6	11.9	13.2	12.4	13.3	13.5	16.2	14.6	15.8	15.1	16.0	16.5	18.1	17.2	19.0	17.5	18.5	19.0	19.1	17.9	19.2	18.1	18.9	19.1	
Social security contributions	0.0	9.1	8.9	8.9	8.9	8.9	7.9	8.4	8.6	8.6	8.6	8.6	15.9	16.5	16.0	16.0	16.0	16.0	14.3	15.1	15.3	14.9	14.9	14.9	15.1	15.7	15.6	15.4	15.4	15.4	
Grants	0.3	0.3	0.1	0.2	0.2	0.2	0.7	0.4	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.3	0.3	0.7	0.5	0.3	0.2	0.2	0.2	0.5	0.4	0.3	0.3	0.3	0.3	
Other revenue	0.7	0.8	0.8	1.1	1.1	1.2	1.5	1.4	1.6	1.4	1.4	1.4	2.4	2.8	2.7	3.2	3.2	3.3	3.4	3.4	3.8	3.5	3.5	3.5	3.2	3.3	3.4	3.7	3.7	3.7	
<b>Expenditure</b>	<b>7.2</b>	<b>19.0</b>	<b>16.6</b>	<b>18.6</b>	<b>18.3</b>	<b>18.1</b>	<b>26.7</b>	<b>30.6</b>	<b>28.9</b>	<b>29.3</b>	<b>29.0</b>	<b>29.4</b>	<b>37.3</b>	<b>42.4</b>	<b>37.7</b>	<b>38.8</b>	<b>38.5</b>	<b>38.9</b>	<b>40.2</b>	<b>45.9</b>	<b>43.0</b>	<b>42.7</b>	<b>42.5</b>	<b>43.4</b>	<b>40.5</b>	<b>46.0</b>	<b>41.7</b>	<b>42.1</b>	<b>41.7</b>	<b>41.9</b>	
<b>Expense</b>	<b>6.5</b>	<b>18.1</b>	<b>16.0</b>	<b>17.3</b>	<b>17.0</b>	<b>17.0</b>	<b>24.9</b>	<b>28.9</b>	<b>27.5</b>	<b>27.8</b>	<b>27.5</b>	<b>27.7</b>	<b>34.3</b>	<b>37.8</b>	<b>33.9</b>	<b>34.9</b>	<b>34.7</b>	<b>35.4</b>	<b>35.6</b>	<b>39.2</b>	<b>38.4</b>	<b>38.3</b>	<b>38.0</b>	<b>38.7</b>	<b>36.9</b>	<b>40.5</b>	<b>37.5</b>	<b>38.0</b>	<b>37.6</b>	<b>38.0</b>	
Compensation of employees	1.0	1.2	1.1	1.1	1.1	1.1	6.7	7.4	7.2	7.8	7.7	7.6	8.6	9.3	8.6	8.8	8.9	9.2	8.9	9.8	9.5	10.2	10.2	10.5	10.6	11.4	10.8	11.1	11.0	11.0	
Use of goods and services	0.3	0.4	0.4	0.6	0.6	0.6	1.4	1.5	1.5	1.5	1.5	1.5	8.4	8.8	8.4	8.6	8.6	8.7	3.3	3.4	3.2	3.1	3.1	3.0	7.2	7.5	7.1	7.3	7.2	7.2	
Social benefits	2.0	12.5	11.6	11.8	11.6	11.6	12.1	12.8	12.6	12.9	12.7	12.6	13.2	14.8	13.6	13.4	13.1	13.3	18.9	20.3	20.4	20.4	20.1	20.1	14.8	16.3	15.5	15.4	15.1	15.3	
Interest	0.5	0.5	0.4	0.5	0.6	0.7	1.0	1.0	1.0	0.7	0.8	1.2	0.6	0.5	0.5	0.6	0.7	0.8	1.2	1.2	1.2	0.9	1.0	1.4	0.8	0.7	0.7	0.7	0.7	1.0	
Subsidies	0.5	1.2	0.9	0.6	0.5	0.5	1.0	2.0	1.3	0.9	0.9	0.9	1.4	2.4	2.1	1.8	1.7	1.7	1.4	2.4	1.7	1.3	1.3	1.3	1.4	2.4	2.0	1.7	1.6	1.6	
Other expense	0.4	0.6	0.2	1.2	1.2	1.1	1.1	1.3	1.7	1.6	1.6	1.6	2.1	2.0	0.7	1.8	1.8	1.6	1.9	2.1	2.4	2.4	2.4	2.4	2.1	2.1	1.4	2.0	2.0	1.9	
<b>Net acquisition of nonfinancial assets</b>	<b>0.7</b>	<b>1.0</b>	<b>0.5</b>	<b>1.2</b>	<b>1.2</b>	<b>1.1</b>	<b>1.8</b>	<b>1.7</b>	<b>1.4</b>	<b>1.5</b>	<b>1.6</b>	<b>1.6</b>	<b>3.1</b>	<b>4.5</b>	<b>3.8</b>	<b>3.9</b>	<b>3.8</b>	<b>3.5</b>	<b>4.7</b>	<b>6.7</b>	<b>4.6</b>	<b>4.5</b>	<b>4.5</b>	<b>4.7</b>	<b>3.6</b>	<b>5.4</b>	<b>4.1</b>	<b>4.0</b>	<b>4.1</b>	<b>3.9</b>	
Acquisition of nonfinancial assets	0.7	1.0	0.7	1.2	1.2	1.1	1.8	1.8	1.5	1.6	1.6	1.7	3.2	4.6	4.1	4.0	3.9	3.6	4.8	6.9	4.8	4.7	4.7	4.9	3.8	5.6	4.4	4.2	4.2	4.0	
Foreign financed capital spending	0.6	0.8	0.7	1.1	1.1	0.9	0.4	0.4	0.3	0.4	0.4	0.5	1.7	2.6	2.5	2.5	2.4	2.1	1.5	1.3	0.8	1.0	1.0	1.1	1.6	2.1	1.9	1.9	1.9	1.7	
Domestically financed capital spending	0.2	0.2	0.1	0.2	0.2	0.2	1.5	1.4	1.2	1.2	1.2	1.2	1.5	2.0	1.6	1.5	1.5	1.5	3.3	5.6	4.0	3.7	3.8	3.8	2.2	3.4	2.5	2.2	2.3	2.3	
Disposal of nonfinancial assets	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.1	0.1	0.1	
<b>Gross/net operating balance (revenue - expense)</b>	<b>1.8</b>	<b>-1.2</b>	<b>0.8</b>	<b>-0.5</b>	<b>0.9</b>	<b>0.4</b>	<b>1.4</b>	<b>-3.1</b>	<b>-0.4</b>	<b>-1.5</b>	<b>-0.2</b>	<b>-0.3</b>	<b>4.3</b>	<b>0.1</b>	<b>4.5</b>	<b>3.4</b>	<b>4.5</b>	<b>4.4</b>	<b>5.4</b>	<b>1.4</b>	<b>4.3</b>	<b>2.4</b>	<b>3.7</b>	<b>3.4</b>	<b>5.0</b>	<b>0.7</b>	<b>4.9</b>	<b>3.5</b>	<b>4.7</b>	<b>4.5</b>	
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>1.1</b>	<b>-2.1</b>	<b>0.3</b>	<b>-1.7</b>	<b>-0.3</b>	<b>-0.7</b>	<b>-0.3</b>	<b>-4.8</b>	<b>-1.8</b>	<b>-3.0</b>	<b>-1.7</b>	<b>-1.9</b>	<b>1.2</b>	<b>-4.5</b>	<b>0.7</b>	<b>-0.5</b>	<b>0.7</b>	<b>0.9</b>	<b>0.7</b>	<b>-5.3</b>	<b>-0.3</b>	<b>-2.1</b>	<b>-0.9</b>	<b>-1.2</b>	<b>1.4</b>	<b>-4.7</b>	<b>0.8</b>	<b>-0.6</b>	<b>0.6</b>	<b>0.6</b>	
<b>Net acquisition of financial assets</b>	<b>-0.7</b>	<b>-2.1</b>	<b>0.5</b>	<b>-1.9</b>	<b>-1.7</b>	<b>-1.5</b>	<b>1.0</b>	<b>-0.7</b>	<b>1.9</b>	<b>-2.8</b>	<b>-0.8</b>	<b>2.0</b>	<b>-0.3</b>	<b>-2.4</b>	<b>2.8</b>	<b>0.3</b>	<b>0.2</b>	<b>2.9</b>	<b>1.7</b>	<b>-0.4</b>	<b>2.9</b>	<b>-1.3</b>	<b>0.3</b>	<b>2.9</b>	<b>0.4</b>	<b>-1.5</b>	<b>3.0</b>	<b>0.2</b>	<b>0.6</b>	<b>3.2</b>	
Domestic assets	-0.7	-2.1	0.5	-1.9	-1.7	-1.5	1.0	-0.7	1.9	-2.8	-0.8	2.0	-0.3	-2.4	2.8	0.3	0.2	2.9	1.7	-0.4	2.9	-1.3	0.3	2.9	0.4	-1.5	3.0	0.2	0.6	3.2	
Currency and deposits	0.0	-1.2	1.4	-1.1	-1.0	-0.9	0.2	-0.3	2.2	-3.2	-1.4	1.3	0.0	-2.1	3.3	0.3	0.2	2.9	1.2	-0.2	3.2	-1.3	0.3	3.0	0.4	-1.2	3.4	0.2	0.6	3.3	
Loans	-0.7	-0.9	-0.9	-0.8	-0.8	-0.6	0.8	-0.4	-0.2	0.4	0.6	0.6	-0.3	-0.3	-0.5	0.0	0.0	0.0	0.2	0.0	-0.3	0.1	0.1	0.0	-0.2	-0.2	-0.4	0.0	0.0	0.0	
<b>Net incurrence of liabilities</b>	<b>-1.5</b>	<b>1.3</b>	<b>0.0</b>	<b>-0.2</b>	<b>-1.4</b>	<b>-0.8</b>	<b>1.4</b>	<b>4.2</b>	<b>3.6</b>	<b>0.2</b>	<b>1.0</b>	<b>3.9</b>	<b>-0.5</b>	<b>2.9</b>	<b>5.4</b>	<b>0.7</b>	<b>-0.5</b>	<b>2.1</b>	<b>0.9</b>	<b>5.2</b>	<b>3.3</b>	<b>0.8</b>	<b>1.2</b>	<b>4.1</b>	<b>-0.1</b>	<b>3.8</b>	<b>2.7</b>	<b>0.7</b>	<b>0.1</b>	<b>2.7</b>	
Domestic liabilities	0.0	0.6	-0.4	0.3	0.3	-0.2	1.1	2.6	-3.0	1.0	2.3	3.8	-0.1	0.4	-0.6	0.0	-0.1	1.5	0.6	3.3	-3.2	1.0	2.3	3.8	0.1	1.6	-1.6	0.3	0.7	2.2	
Debt securities	0.0	0.6	-0.4	0.0	0.0	0.9	1.3	2.8	-1.6	-0.7	0.6	3.3	0.1	0.6	-0.4	0.0	0.0	0.9	1.4	3.0	-1.6	-0.7	0.6	3.3	0.5	1.3	-0.8	-0.2	0.2	1.7	
Other government obligations	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.4	-0.4	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.4	-0.4	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0	
Loans	0.0	0.0	0.0	0.4	0.4	0.9	0.3	0.0	-0.5	1.9	1.9	0.6	-0.1	-0.2	-0.1	0.0	0.0	0.6	0.1	0.5	-0.4	1.9	1.9	0.6	0.0	0.0	-0.2	0.6	0.6	0.6	
Foreign liabilities	-1.5	0.7	0.4	-0.5	-1.7	-0.5	0.2	1.6	6.6	-0.8	-1.4	0.0	-0.4	2.5	5.9	0.7	-0.4	0.5	0.3	1.9	6.5	-0.2	-1.2	0.3	-0.2	2.2	4.3	0.4	-0.6	0.5	
Loans	-1.5	0.7	-1.2	-0.5	-1.7	-0.5	0.4	1.7	0.2	-0.8	-1.4	0.0	-0.4	2.5	4.3	0.7	-0.4	0.5	0.4	2.0	0.1	-0.2	-1.2	0.3	-0.2	2.3	2.8	0.4	-0.6	0.5	
Drawings	0.3	2.5	0.6	0.9	0.8	0.7	2.3	3.3	1.8	0.8	1.0	1.3	1.4	4.4	2.4	2.2	2.1	1.8	2.6	4.0	2.1	1.4	1.2	1.6	1.8	4.1	2.3	1.9	1.8	1.7	
Amortization	1.8	-1.8	-1.9	1.4	2.5	1.3	1.9	1.6	1.6	1.6	2.4	1.3	1.9	-1.8	-1.8	1.4	2.5	1.3	2.2	1.9	2.0	1.6	2.4	1.3	2.0	1.9	-0.6	1.5	2.4	1.2	
<b>Statistical discrepancy</b>	<b>-0.3</b>	<b>-1.3</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-1.1</b>	<b>-0.8</b>	<b>-3.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>-0.3</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.9</b>	<b>-0.6</b>	<b>-0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	
<b>Memorandum items</b>																															
Net lending excl. externally-financed operations	1.3	-1.6	0.8	-0.9	0.5	0.0	-0.7	-4.9	-1.7	-2.8	-1.5	-1.7	2.6	-2.2	3.1	1.8	2.9	2.8	2.2	-4.0	0.6	-1.1	0.1	-0.2	2.5	-2.9	2.5	1.2	2.3	2.1	
Primary balance (% of GDP)	1.5	-1.7	0.6	-1.2	0.2	0.0	0.6	-3.9	-0.8	-2.3	-1.0	-0.8	1.8	-3.9	1.2	0.1	1.3	1.7	1.9	-4.1	0.9	-1.2	0.1	0.2	2.1	-3.9	1.5	0.1	1.3	1.5	

Sources: BiH authorities; and IMF staff estimates and projections.

Note: Federation central government included pension fund in 2020.

**Table 5a. Institutions of BiH: Statement of Government Operations, 2019–27**

(KM million)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Proj.								
<b>Revenue</b>	<b>926</b>	<b>943</b>	<b>987</b>	<b>981</b>	<b>992</b>	<b>1,002</b>	<b>1,004</b>	<b>1,006</b>	<b>1,008</b>
Taxes	750	780	780	780	780	780	780	780	780
Direct taxes	0	0	0	0	0	0	0	0	0
Indirect taxes	750	780	780	780	780	780	780	780	780
Other taxes	0	0	0	0	0	0	0	0	0
Social security contributions	0	0	0	0	0	0	0	0	0
Grants	14	17	47	28	29	31	33	34	36
Other revenue	162	145	160	173	182	192	192	192	192
<b>Expenditure</b>	<b>876</b>	<b>984</b>	<b>924</b>	<b>895</b>	<b>923</b>	<b>935</b>	<b>933</b>	<b>932</b>	<b>925</b>
<b>Expense</b>	<b>855</b>	<b>899</b>	<b>876</b>	<b>896</b>	<b>890</b>	<b>900</b>	<b>896</b>	<b>908</b>	<b>901</b>
Compensation of employees	667	681	695	721	723	725	727	729	731
Use of goods and services	159	142	154	170	161	169	163	174	165
Social benefits	4	10	12	9	9	9	9	9	9
Interest	1	1	1	1	1	1	1	1	1
Transfers to other general government units	6	44	2	-8	-9	-9	-10	-10	-11
Other expense	19	12	4	4	4	5	5	5	5
<b>Net acquisition of nonfinancial assets</b>	<b>20</b>	<b>85</b>	<b>47</b>	<b>-2</b>	<b>33</b>	<b>35</b>	<b>37</b>	<b>24</b>	<b>24</b>
Acquisition of nonfinancial assets	26	86	49	-2	33	35	37	24	25
Foreign financed capital spending	3	3	5	5	6	6	6	7	7
Domestically financed capital spending	23	83	44	-7	28	29	31	17	18
Disposal of nonfinancial assets	6	0	1	0	0	0	0	0	1
<b>Gross/net operating balance (revenue - expense)</b>	<b>71</b>	<b>44</b>	<b>111</b>	<b>85</b>	<b>101</b>	<b>103</b>	<b>109</b>	<b>98</b>	<b>107</b>
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>50</b>	<b>-42</b>	<b>64</b>	<b>87</b>	<b>68</b>	<b>68</b>	<b>72</b>	<b>74</b>	<b>83</b>
<b>Net acquisition of financial assets</b>	<b>25</b>	<b>31</b>	<b>-29</b>	<b>87</b>	<b>68</b>	<b>68</b>	<b>72</b>	<b>74</b>	<b>83</b>
Domestic assets	25	31	-29	87	68	68	72	74	83
Foreign assets	0	0	0	0	0	0	0	0	0
<b>Net incurrence of liabilities</b>	<b>-25</b>	<b>79</b>	<b>-93</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Domestic liabilities	-22	83	-88	0	0	0	0	0	0
Foreign liabilities	-3	-4	-4	0	0	0	0	0	0
Debt securities	0	0	0	0	0	0	0	0	0
Loans	-3	-4	-4	0	0	0	0	0	0
Drawings	0	0	0	0	0	0	0	0	0
Amortization	3	4	4	0	0	0	0	0	0
Other accounts payable	0	0	0	0	0	0	0	0	0
<b>Statistical discrepancy</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Memorandum items</b>									
Net lending exc externally-financed operations	54	-38	68	92	74	73	78	80	90

Sources: BiH authorities; and IMF staff estimates and projections.

**Table 5b. Federation of BiH: Statement of General Government Operations, 2019–27**

(KM million)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Proj.								
<b>Revenue</b>	<b>8,936</b>	<b>8,438</b>	<b>9,415</b>	<b>10,272</b>	<b>11,087</b>	<b>11,732</b>	<b>12,410</b>	<b>13,157</b>	<b>13,902</b>
Taxes	4,597	4,069	4,783	5,047	5,576	5,914	6,263	6,672	7,062
Direct taxes	849	821	905	989	1,044	1,104	1,164	1,226	1,291
Indirect taxes	3,746	3,247	3,877	4,057	4,530	4,809	5,097	5,445	5,770
Other taxes	1	1	1	1	1	1	1	1	1
Social security contributions	3,689	3,662	3,927	4,292	4,532	4,790	5,053	5,322	5,605
Grants	89	74	46	76	79	82	86	90	95
Other revenue	562	633	659	857	900	947	1,009	1,073	1,140
<b>Expenditure</b>	<b>8,656</b>	<b>9,434</b>	<b>9,237</b>	<b>10,394</b>	<b>10,892</b>	<b>11,513</b>	<b>12,145</b>	<b>12,854</b>	<b>13,594</b>
<b>Expense</b>	<b>7,945</b>	<b>8,424</b>	<b>8,307</b>	<b>9,357</b>	<b>9,816</b>	<b>10,415</b>	<b>11,037</b>	<b>11,687</b>	<b>12,369</b>
Compensation of employees	1,996	2,063	2,120	2,363	2,518	2,685	2,857	3,034	3,223
Use of goods and services	1,943	1,966	2,053	2,297	2,426	2,564	2,719	2,880	3,039
Social benefits	3,063	3,287	3,323	3,584	3,711	3,934	4,170	4,407	4,663
Interest	131	118	113	160	185	201	217	248	278
Subsidies	329	532	516	479	476	503	531	559	589
Other expense	483	450	180	473	500	528	544	560	577
<b>Net acquisition of nonfinancial assets</b>	<b>710</b>	<b>1,011</b>	<b>930</b>	<b>1,038</b>	<b>1,076</b>	<b>1,098</b>	<b>1,109</b>	<b>1,167</b>	<b>1,226</b>
Acquisition of nonfinancial assets	742	1,032	1,008	1,067	1,107	1,131	1,143	1,203	1,264
Foreign financed capital spending	388	580	618	660	677	677	664	698	733
Domestically financed capital spending	354	452	390	407	430	454	479	505	532
Disposal of nonfinancial assets	32	21	78	29	31	33	34	36	38
<b>Gross/net operating balance (revenue - expense)</b>	<b>991</b>	<b>14</b>	<b>1,108</b>	<b>915</b>	<b>1,271</b>	<b>1,317</b>	<b>1,374</b>	<b>1,470</b>	<b>1,533</b>
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>281</b>	<b>-997</b>	<b>178</b>	<b>-122</b>	<b>195</b>	<b>219</b>	<b>265</b>	<b>303</b>	<b>307</b>
<b>Net acquisition of financial assets</b>	<b>-78</b>	<b>-538</b>	<b>696</b>	<b>72</b>	<b>54</b>	<b>287</b>	<b>372</b>	<b>1,147</b>	<b>1,028</b>
Domestic assets	-78	-538	696	72	54	287	372	1,147	1,028
<i>Of which: Currency and deposits</i>	0	-464	817	76	58	291	375	1,150	1,032
<b>Net incurrence of liabilities</b>	<b>-116</b>	<b>644</b>	<b>1,311</b>	<b>195</b>	<b>-141</b>	<b>68</b>	<b>107</b>	<b>844</b>	<b>721</b>
Domestic liabilities	-13	82	-136	-6	-19	228	162	712	528
<i>Of which: Debt securities</i>	19	129	-110	-2	-9	134	43	451	322
Foreign liabilities	-103	562	1,448	201	-122	-160	-55	132	192
Loans	-103	562	1,046	201	-122	-160	-55	132	192
Drawings	331	969	594	579	594	592	576	607	637
Amortization	434	-407	-453	379	716	752	631	475	445
Other accounts payable	0	0	0	0	0	0	0	0	0
<b>Statistical discrepancy / financing gap</b>	<b>-243</b>	<b>-185</b>	<b>-794</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Sources: BiH authorities; and IMF staff estimates and projections.

**Table 5c. Federation of BiH: Statement of Central Government Operations, 2019–27**

	(KM million)								
	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Proj.								
<b>Revenue</b>	<b>1,917</b>	<b>3,754</b>	<b>4,121</b>	<b>4,516</b>	<b>5,068</b>	<b>5,359</b>	<b>5,573</b>	<b>5,785</b>	<b>6,081</b>
Taxes	1,681	1,474	1,704	1,771	2,175	2,307	2,344	2,374	2,478
Direct taxes	99	81	72	78	83	87	92	97	102
Indirect taxes	1,582	1,393	1,633	1,693	2,092	2,220	2,252	2,277	2,376
Other taxes	0	0	0	0	0	0	0	0	0
Social security contributions	0	2,023	2,178	2,380	2,513	2,656	2,802	2,951	3,108
Grants	77	66	31	59	61	63	66	70	74
For budget support	0	0	0	0	0	0	0	0	0
For investment projects	77	66	31	59	61	63	66	70	74
Other revenue	159	187	205	306	319	332	361	390	421
<b>Expenditure</b>	<b>1,670</b>	<b>4,232</b>	<b>4,057</b>	<b>4,980</b>	<b>5,166</b>	<b>5,442</b>	<b>5,726</b>	<b>6,025</b>	<b>6,338</b>
<b>Expense</b>	<b>1,498</b>	<b>4,020</b>	<b>3,931</b>	<b>4,647</b>	<b>4,822</b>	<b>5,095</b>	<b>5,379</b>	<b>5,660</b>	<b>5,954</b>
Compensation of employees	234	260	262	300	317	335	353	372	392
Use of goods and services	63	83	88	150	158	167	176	186	195
Social benefits	465	2,777	2,840	3,174	3,282	3,464	3,669	3,854	4,049
Interest	110	101	91	135	159	173	188	217	246
Subsidies	121	265	230	168	147	155	164	172	182
Transfers to other general government units	412	409	374	394	414	436	458	480	504
Other expense	92	125	46	327	346	365	372	379	386
<b>Net acquisition of nonfinancial assets</b>	<b>172</b>	<b>212</b>	<b>126</b>	<b>333</b>	<b>344</b>	<b>347</b>	<b>347</b>	<b>365</b>	<b>384</b>
Acquisition of nonfinancial assets	173	213	177	333	344	347	347	365	384
Foreign financed capital spending	135	177	163	292	300	302	298	314	330
Domestically financed capital spending	37	36	15	41	43	46	48	51	54
Disposal of nonfinancial assets	0	0	51	0	0	0	0	0	0
<b>Gross/net operating balance (revenue - expense)</b>	<b>420</b>	<b>-266</b>	<b>190</b>	<b>-130</b>	<b>246</b>	<b>264</b>	<b>194</b>	<b>125</b>	<b>127</b>
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>247</b>	<b>-478</b>	<b>64</b>	<b>-464</b>	<b>-98</b>	<b>-83</b>	<b>-153</b>	<b>-240</b>	<b>-257</b>
<b>Net acquisition of financial assets</b>	<b>-168</b>	<b>-474</b>	<b>121</b>	<b>-517</b>	<b>-489</b>	<b>-271</b>	<b>-294</b>	<b>-365</b>	<b>-529</b>
Domestic assets	-168	-474	121	-517	-489	-271	-294	-365	-529
Of which: Currency and deposits	0	-273	345	-300	-272	-54	-78	-149	-313
Foreign assets	0	0	0	0	0	0	0	0	0
<b>Net incurrence of liabilities</b>	<b>-345</b>	<b>284</b>	<b>-9</b>	<b>-53</b>	<b>-391</b>	<b>-187</b>	<b>-141</b>	<b>-125</b>	<b>-272</b>
Domestic liabilities	10	130	-110	93	86	326	258	106	-83
Of which: Debt securities	10	130	-110	-2	-9	134	43	451	322
Foreign liabilities	-355	154	101	-146	-477	-514	-399	-231	-189
Loans	-355	154	-301	-146	-477	-514	-399	-231	-189
Drawings	73	564	157	233	239	238	232	244	256
For budget support	15	452	26	0	0	0	0	0	0
For investment projects	58	111	132	233	239	238	232	244	256
Amortization	428	-410	-458	379	716	752	631	475	445
Other accounts payable	0	0	0	0	0	0	0	0	0
<b>Statistical discrepancy</b>	<b>-70</b>	<b>-280</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Memorandum items</b>									
Net lending excl. externally-financed operations	305	-367	196	-231	141	155	79	4	-1

Sources: BiH authorities; and IMF staff estimates and projections.

Notes: Central government includes pension fund since 2020. Budget support does not include MFA in 2021.

**Table 5d. Republika Srpska: Statement of General Government Operations, 2019–27**

(KM million)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Proj.					
<b>Revenue</b>	<b>4,606</b>	<b>4,516</b>	<b>5,082</b>	<b>5,284</b>	<b>5,716</b>	<b>6,052</b>	<b>6,396</b>	<b>6,779</b>	<b>7,159</b>
Taxes	2,526	2,400	2,771	2,860	3,157	3,348	3,544	3,775	3,995
Direct taxes	460	451	472	542	572	605	638	672	708
Indirect taxes	2,035	1,914	2,259	2,274	2,538	2,694	2,855	3,049	3,230
Other taxes	31	35	40	44	46	49	51	54	57
Social security contributions	1,612	1,676	1,824	1,939	2,048	2,164	2,283	2,405	2,532
Grants	83	58	34	31	32	33	35	36	39
Other revenue	385	382	454	454	480	507	535	563	593
<b>Expenditure</b>	<b>4,526</b>	<b>5,108</b>	<b>5,116</b>	<b>5,557</b>	<b>5,834</b>	<b>6,164</b>	<b>6,504</b>	<b>6,922</b>	<b>7,368</b>
<b>Expense</b>	<b>4,001</b>	<b>4,365</b>	<b>4,572</b>	<b>4,977</b>	<b>5,212</b>	<b>5,492</b>	<b>5,794</b>	<b>6,170</b>	<b>6,575</b>
Compensation of employees	1,000	1,092	1,133	1,326	1,394	1,472	1,560	1,670	1,789
Use of goods and services	369	380	381	406	426	447	469	490	513
Social benefits	2,128	2,262	2,428	2,650	2,759	2,904	3,057	3,235	3,418
Interest	137	133	142	121	134	141	152	189	237
Subsidies	155	264	198	165	175	184	195	205	216
Other expense	212	235	290	307	324	343	362	381	401
<b>Net acquisition of nonfinancial assets</b>	<b>524</b>	<b>743</b>	<b>544</b>	<b>580</b>	<b>622</b>	<b>671</b>	<b>710</b>	<b>752</b>	<b>793</b>
Acquisition of nonfinancial assets	544	767	570	608	651	701	741	784	826
Foreign financed capital spending	169	144	99	125	136	149	158	170	179
Domestically financed capital spending	375	623	471	483	515	552	583	614	646
Disposal of nonfinancial assets	19	24	27	28	29	30	31	32	33
<b>Gross/net operating balance (revenue - expense)</b>	<b>605</b>	<b>151</b>	<b>510</b>	<b>307</b>	<b>505</b>	<b>560</b>	<b>602</b>	<b>609</b>	<b>584</b>
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>80</b>	<b>-593</b>	<b>-33</b>	<b>-273</b>	<b>-118</b>	<b>-112</b>	<b>-108</b>	<b>-143</b>	<b>-209</b>
<b>Net acquisition of financial assets</b>	<b>189</b>	<b>-43</b>	<b>351</b>	<b>-164</b>	<b>47</b>	<b>35</b>	<b>221</b>	<b>471</b>	<b>493</b>
Domestic assets	189	-43	351	-164	47	35	221	471	493
<i>Of which:</i> Currency and deposits	137	-26	377	-164	40	73	249	493	511
<b>Net incurrence of liabilities</b>	<b>99</b>	<b>582</b>	<b>398</b>	<b>108</b>	<b>165</b>	<b>146</b>	<b>328</b>	<b>615</b>	<b>702</b>
Domestic liabilities, <i>of which:</i>	64	371	-380	135	323	291	422	608	653
Debt securities	153	333	-196	-97	84	81	286	421	565
Loans	17	54	-44	250	255	225	150	200	100
Foreign liabilities	35	211	777	-27	-158	-145	-94	6	49
Loans	48	224	9	-27	-158	-145	-94	6	49
Drawings	297	440	247	187	169	206	224	255	268
Amortization	250	216	238	214	327	351	319	249	219
Other accounts payable	0	0	0	0	0	0	0	0	0
<b>Statistical discrepancy / financing gap</b>	<b>9</b>	<b>-32</b>	<b>-13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Sources: BiH authorities; and IMF staff estimates and projections.

**Table 5e. Republika Srpska: Statement of Central Government Operations, 2019–27**

(KM million)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Proj.					
<b>Revenue</b>	<b>2,962</b>	<b>2,874</b>	<b>3,231</b>	<b>3,426</b>	<b>3,748</b>	<b>3,973</b>	<b>4,187</b>	<b>4,419</b>	<b>4,658</b>
Taxes	1,820	1,733	1,995	2,094	2,343	2,488	2,621	2,770	2,921
Direct taxes	384	378	398	454	480	507	535	563	593
Indirect taxes	1,414	1,328	1,571	1,611	1,832	1,948	2,052	2,170	2,289
Other taxes	22	26	27	29	31	33	35	37	38
Social security contributions	892	935	1,022	1,117	1,180	1,247	1,315	1,385	1,459
Grants	81	49	18	31	32	33	35	36	39
For budget support	0	0	0	0	0	0	0	0	0
For investment projects	81	49	18	31	32	33	35	36	39
Other revenue	166	153	193	180	191	201	212	224	236
<b>Expenditure</b>	<b>3,001</b>	<b>3,410</b>	<b>3,443</b>	<b>3,816</b>	<b>3,988</b>	<b>4,195</b>	<b>4,418</b>	<b>4,689</b>	<b>4,987</b>
<b>Expense</b>	<b>2,804</b>	<b>3,218</b>	<b>3,275</b>	<b>3,619</b>	<b>3,771</b>	<b>3,962</b>	<b>4,170</b>	<b>4,424</b>	<b>4,707</b>
Compensation of employees	755	828	851	1,019	1,055	1,097	1,146	1,215	1,288
Use of goods and services	160	162	178	194	205	217	228	241	253
Social benefits	1,363	1,428	1,503	1,684	1,743	1,837	1,936	2,034	2,144
Interest	107	108	114	94	104	110	119	154	201
Subsidies	115	226	152	116	122	129	136	143	151
Transfers to other general government units	181	316	275	303	320	338	356	375	395
Other expense	122	150	202	211	223	235	248	261	275
<b>Net acquisition of nonfinancial assets</b>	<b>197</b>	<b>192</b>	<b>168</b>	<b>196</b>	<b>217</b>	<b>233</b>	<b>247</b>	<b>265</b>	<b>280</b>
Acquisition of nonfinancial assets	204	201	177	205	226	241	256	273	288
Foreign financed capital spending	40	46	34	53	60	69	74	82	86
Domestically financed capital spending	163	155	143	152	165	173	182	192	202
Disposal of nonfinancial assets	7	9	9	9	9	9	9	8	8
<b>Gross/net operating balance (revenue - expense)</b>	<b>159</b>	<b>-345</b>	<b>-44</b>	<b>-194</b>	<b>-23</b>	<b>10</b>	<b>17</b>	<b>-5</b>	<b>-49</b>
<b>Net lending/borrowing (revenue - expenditure)</b>	<b>-38</b>	<b>-537</b>	<b>-212</b>	<b>-390</b>	<b>-240</b>	<b>-222</b>	<b>-231</b>	<b>-270</b>	<b>-329</b>
<b>Net acquisition of financial assets</b>	<b>113</b>	<b>-75</b>	<b>223</b>	<b>-361</b>	<b>-108</b>	<b>-111</b>	<b>61</b>	<b>306</b>	<b>332</b>
Domestic assets, of which:	113	-75	223	-361	-108	-111	61	306	332
Currency and deposits	22	-33	256	-420	-189	-167	-15	208	225
Loans	86	-42	-18	58	81	56	75	98	108
Equity and investment fund shares	-8	28	2	0	0	0	0	0	0
<b>Net incurrence of liabilities</b>	<b>152</b>	<b>462</b>	<b>432</b>	<b>28</b>	<b>132</b>	<b>111</b>	<b>291</b>	<b>576</b>	<b>661</b>
Domestic liabilities, of which:	126	289	-356	135	323	291	422	608	653
Debt securities	150	317	-194	-97	84	81	286	421	565
Loans	38	-4	-59	250	255	225	150	200	100
Foreign liabilities	27	173	788	-107	-191	-180	-131	-33	8
Loans	39	185	19	-107	-191	-180	-131	-33	8
Drawings	257	368	214	107	136	171	187	216	227
For budget support	35	331	1	0	0	0	0	0	0
For investment projects	222	37	213	107	136	171	187	216	227
Amortization	217	183	194	214	327	351	319	249	219
Other accounts payable	0	0	0	0	0	0	0	0	0
<b>Statistical discrepancy</b>	<b>-1</b>	<b>-1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Memorandum items</b>									
Net lending excl. externally-financed operations	-79	-540	-197	-367	-211	-187	-192	-225	-281

Sources: BiH authorities; and IMF staff estimates and projections.

Note: MFA was recorded as investment loans in 2021.

**Table 6. Bosnia and Herzegovina: Monetary Survey, 2018–22**

	2018	2019	2020	2021	2022
	Dec.	Dec.	Dec.	Prel.	Proj.
<i>Monetary Survey</i>					
(Million KM, end of period)					
Net foreign assets	12,464	13,949	16,011	19,111	19,263
Net domestic assets	11,600	12,207	12,007	12,394	14,820
Domestic credit	18,570	19,585	19,749	19,189	21,051
Claims on general government (net)	35	-172	495	-796	24
Claims on public nonfinancial corporations	428	509	542	532	582
Claims on private sector	18,107	19,248	18,712	19,453	20,446
Other items (net)	-6,970	-7,378	-7,742	-6,795	-6,232
Broad money (M2)	24,064	26,156	28,017	31,505	34,082
Currency	3,977	4,330	5,044	5,533	6,746
Demand Deposits	8,041	8,744	9,780	12,384	10,594
Other Deposits	12,046	13,081	13,194	13,588	16,742
Time and savings deposits	4,302	2,998	3,035	3,044	6,630
Foreign currency deposits	7,744	10,083	10,159	10,544	10,112
<i>Central Bank of the BiH (CBBH)</i>					
Net Foreign Assets	11,649	12,625	13,895	16,375	16,155
Net Domestic Assets	-582	-704	-665	-1,125	-1,229
Base Money	10,399	11,120	12,305	14,448	14,743
Currency in circulation	4,751	5,200	6,172	6,924	7,399
Banks reserves	5,523	5,744	5,901	7,220	7,006
Other liabilities	126	177	232	305	338
Other items	668	802	926	800	183
<i>Memorandum items:</i>					
<i>Monetary Survey</i>					
(Annual percent change in terms of broad money)					
Net foreign assets	7.6	6.2	7.9	11.1	0.5
Net domestic assets	3.8	2.9	0.4	-2.0	9.1
Domestic credit	3.0	4.2	0.6	-2.0	5.9
Claims on general government (net)	-1.5	-0.9	2.6	-4.6	2.6
Claims on private sector	4.4	4.7	-2.0	2.6	3.2
(Annual percent change)					
Broad money (M2)	8.8	8.7	7.1	12.4	8.2
Reserve money (RM)	10.3	6.9	10.7	17.4	2.0
Credit to the private sector	5.6	6.3	-2.8	4.0	5.1
(Percent)					
Credit to the private sector (in percent of GDP)	54.1	54.5	54.6	52.1	50.1
Broad money (in percent of GDP)	72.0	74.1	81.8	84.4	83.6
Central bank net foreign assets (in percent of reserve money)	112.0	113.5	112.9	113.3	109.6
(Ratio)					
Velocity (GDP/end-of-period M2)	1.4	1.3	1.3	1.2	1.2
Reserve money multiplier (M2/RM)	2.3	2.4	2.3	2.2	2.3

Source: CBBH; and IMF staff estimates and projections.

**Table 7. Bosnia and Herzegovina: Financial Soundness Indicators, 2017–2021**

(In Percent)

	2017	2018	2019	2020	2021 <sup>1</sup>
<i>Capital</i>					
Tier 1 capital to total risk exposure	14.8	16.5	17.5	18.1	18.7
Total regulatory capital ratio	15.7	17.5	18.0	19.2	19.6
Financial leverage ratio (Tier 1 capital to assets) <sup>2</sup>	10.7	10.4	10.8	10.5	10.3
<i>Quality of assets</i>					
Nonperforming loans to total loans	10.0	8.8	7.4	6.1	5.8
Nonperforming assets (NPAs) to total assets	7.1	6.2	5.2	3.4	3.2
Nonperforming loans net of provisions to capital	13.5	11.4	9.6	7.4	7.0
Provisions to nonperforming loans	76.7	77.4	77.0	78.4	78.4
<i>Profitability</i>					
Return on assets	1.4	1.3	1.4	0.7	1.3
Return on equity	9.0	8.5	9.1	5.6	9.6
Net interest income to gross income	58.3	58.8	56.8	56.0	59.2
Noninterest expenses to gross income	62.4	63.2	63.6	65.5	60.1
<i>Liquidity</i>					
Liquid assets to total assets	28.1	29.3	29.2	28.6	30.7
Liquid assets to short-term financial liabilities	59.9	60.4	61.0	51.3	51.3
Short-term financial liabilities to total financial liabilities	55.7	57.2	56.2	65.4	68.8
<i>Foreign exchange risk</i>					
Foreign currency and indexed loans to total loans	60.1	56.7	53.9	53.9	50.2
Foreign currency liabilities to total financial liabilities	55.1	53.3	50.7	48.1	44.4
Net open position	-0.2	2.1	3.4	4.2	4.0

Source: CBBH.

<sup>1</sup> Based on the 2019 IMF FSIs guidelines; periods before have been recalculated in line with 2019 FSIs guide. Previously published data were based on the 2006 IMF guidelines.

<sup>2</sup> The 2021 indicator shows the value for q3, the latest available.

## Annex I. Implementation of Article IV Recommendations

Fund recommendations	Policy actions
<b>Fiscal policy: provide targeted and sustainable fiscal support</b>	
Provide more targeted fiscal support to sectors and households affected by the pandemic.	<b>Partially implemented.</b> Both entity governments provided additional fiscal support to affected sectors.
Develop comprehensive plans to reduce liabilities of the health and Public Enterprise (PE) sectors and accelerate arrears clearance.	<b>Not implemented.</b> Comprehensive plans to reduce liabilities and accelerate arrears clearance in the health and PE sectors have not yet been developed by either entity government.
Expand social assistance to support the most vulnerable.	<b>Not implemented.</b> Several legislative changes for the most vulnerable (child cash benefits and services for the most vulnerable) are in the pipeline, but not yet adopted.
Publish details of pandemic-related contracts while naming the beneficial owners of the contract entities.	<b>Not implemented.</b> Entity governments published lists of companies that received wage subsidies during the lockdown, but details of pandemic-related procurements were not made available.
Adopt a state law on public procurement in line with EU recommendations.	<b>Not implemented.</b> Amendments to the public procurement law were submitted to the BiH parliament but have not been adopted.
Reduce the labor tax wedge by reducing social security contribution rates, broadening the tax base, and making personal income tax more progressive.	<b>Partially implemented.</b> The RS adopted amendments to the personal income tax and social security contribution laws which reduced the labor tax wedge. The FBiH government has signaled its intention to reduce the labor tax wedge, but legislation has not yet been adopted.
Limit real wage growth below economic growth and implement public administration reform.	<b>Not implemented.</b> Both entity governments have announced salary increases that are not limited below the rate of economic growth. Governments are working on a countrywide PFM strategy, but the strategy has not yet been agreed.
Bring current spending back to pre-pandemic levels and reallocate resources to critical investments.	<b>Partially implemented.</b> Current spending declined, largely reflecting less pandemic-related support. There was, however, no reorientation of expenditure from current to capital expenditure, and the execution of investment plans remained low.
Improve fiscal policy coordination at all levels of government.	<b>Not implemented.</b> The Fiscal Council rarely met, and there was little coordination of fiscal policy across different levels of government.
<b>Currency Board arrangement and financial sector policies: preserve stability and support the economy</b>	
Strengthen the CBBH reserve requirement framework by aligning the remuneration of FX reserves with their opportunity cost.	<b>Implemented.</b> The CBBH introduced a new remuneration rate of -60 bps on required reserves linked to banks' FX deposits.

Intensify monitoring and require corrective measures, including credible recapitalization plans for banks under enhanced supervision.	<b>Implemented.</b> The RS Banking Agency intensified its monitoring of banks under enhanced supervision and called for recapitalization.
Refrain from imposing mandatory conversion of any foreign-currency denominated loans into local currency	<b>Implemented.</b> No such mandatory conversion was imposed.
Appoint qualified members to the FBiH Securities Commission.	<b>Implemented.</b> The FBiH parliament appointed new members to the Securities Commission, ending a two-year stalemate.
Design an NPL action plan, including an out-of-court framework.	<b>Not implemented.</b> The authorities have thus far not designed an NPL action plan since the deterioration of asset quality has not materialized as expected.
Adopt a new insolvency law in FBiH.	<b>Implemented.</b> The FBiH parliament adopted a new insolvency law, harmonized with the insolvency laws in the RS and Brčko District.
Improve the utilization of guarantee schemes by increasing government risk coverage, streamlining administrative procedures, and adopting a portfolio approach.	<b>Partially implemented.</b> The FBiH authorities introduced some changes to their guarantee scheme to reduce administrative procedures.
Establish a Financial Stability Fund.	<b>Not implemented.</b> The authorities disagree over whether a Financial Stability Fund should be established at the state level or separately at the entity level.
Hold quarterly meetings of the Standing Committee on Financial Stability (SCFS) and define responsibilities for cooperation in a comprehensive three-pillar Financial Stability MOU (FSMOU).	<b>Not implemented.</b> The RS blockade of state institutions prevented regular SCFS meetings, though SCFS has recently met to discuss the resolution of two Sberbank subsidiaries in BiH. The FSMOU has not been concluded, owing to disagreements over the role that the central bank should play in assessing risks to financial stability.
The Deposit Insurance Agency (DIA) should move to charging risk-based premia once the economy recovers.	<b>Not implemented.</b> DIA expects to finalize, in 2022, a methodology for charging risk-based premia. However, it is debating whether to introduce risk-based premia before reaching the target amount for the deposit insurance fund.
Adopt new strategic statements to align development banks' missions with best international practices and make them financially sustainable.	<b>Implemented.</b> Both entity strategic statements were adopted as a first step toward strengthening governance, supervision, and transparency of entity development banks.
<b>Structural policies: strengthen governance, improve competitiveness, and create job opportunities</b>	
Enhance transparency and oversight of PEs.	<b>Partially implemented.</b> Both entities and Brčko District have taken steps to establish PE oversight units and have started conducting basic financial analysis of key PEs.
Adopt a state-level law on electricity and natural gas in line with the EU third energy package.	<b>Not implemented.</b> The authorities have yet to transpose the Energy Community's core legal framework.

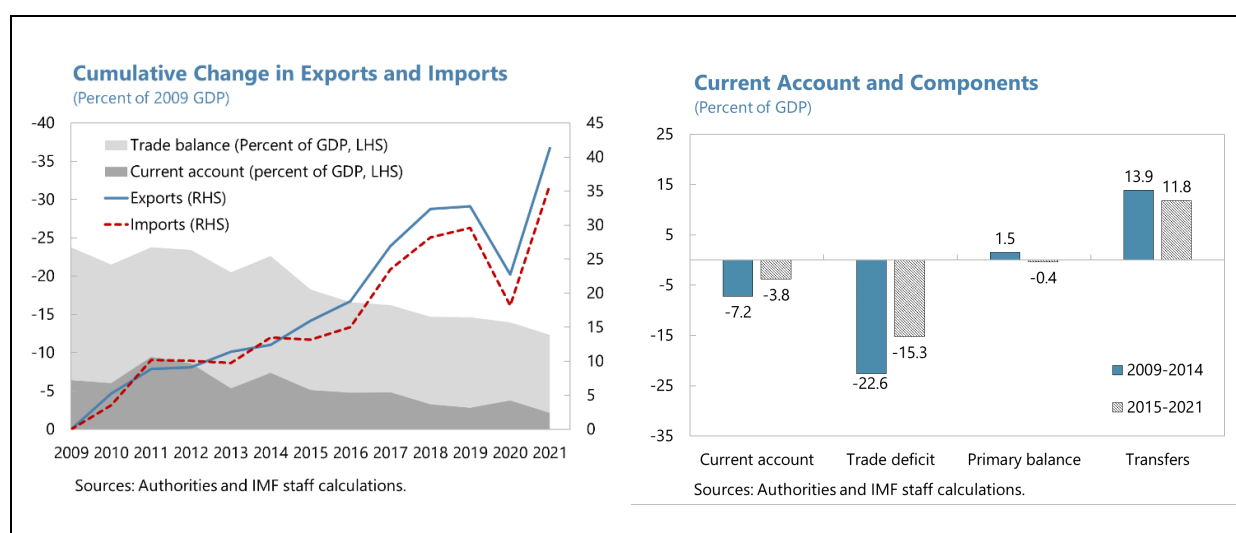
Adopt a new law on electronic identification and trust services for electronic transactions to ensure further alignment with existing EU legislation.	<b>Not implemented.</b> The authorities disagree over whether the supervisor body for trust service providers should reside at the state level, as required by EU legislation, or at the entity level.
Request an IMF Governance Diagnostic Mission and publish its results.	<b>Not implemented.</b> The RS authorities declined to request an IMF Governance Diagnostic Mission in the absence of a Fund-supported program.
Establish, at the CBBH, a country-wide registry of bank accounts of private individuals.	<b>Not implemented.</b> The authorities disagree over whether a registry of bank accounts of private individuals should be maintained at the state or entity level.
Expand affordable childcare, early education programs, and flexible work arrangements to increase labor participation.	<b>Not implemented.</b> This has not been implemented systematically, especially the flexible work arrangements for women.

## Annex II. External Sector Assessment

The external position of BiH was stronger than medium-term fundamentals and desirable policy settings based on estimated data. International reserve coverage is broadly adequate, owing to an export-driven declining current account deficit and strong financial inflows in 2021, including the extraordinary official reserve inflows (SDR allocation and EU macro-financial assistance). That said, the recent boom in exports could prove transitory as the war in Ukraine adds to supply-chain constraints on intermediate inputs necessary for manufacturing and reduces external demand from Europe in the short term. In the medium term there is ample room for economic policies and investments tailored toward more integration with the EU and diversifying some supply-chains from Asia to BiH, including increasing public investments in infrastructure and connectivity. Structural reforms and improved governance can attract private investment and new industries, a valuable resource for building on the transitory gains in export-oriented industries and moving toward higher value-added manufacturing exports. Rising prices and deteriorating external demand from the war in Ukraine are expected to weaken the BiH external position in 2022.

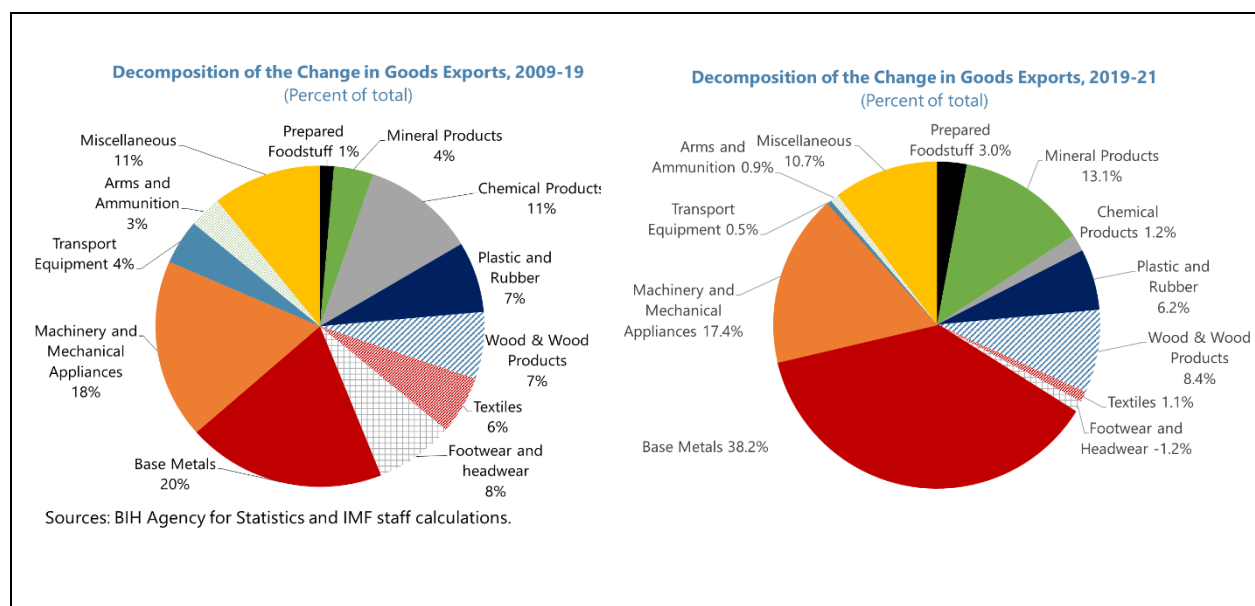
### A. Current Account Assessment

**1. The current account deficit has narrowed moderately in 2021, largely reflecting a declining trade deficit.** Staff estimates that the current account deficit decreased to 2.1 percent of GDP from 3.8 percent in 2020, slightly above the 2.8 percent deficit in 2019. This reflects a narrowing of the trade balance by about 1.7 percent of GDP and higher net remittances by nearly 0.8 percent of GDP. The increase in goods and services exports has therefore been more than enough to offset the increase in imports to more than 56 percent of GDP, from less than 49 percent in 2020, following a rebound in domestic demand.



**2. The current account and trade deficits in 2021 were well below historical averages and followed the pre-pandemic trend.** The improvement in the trade balance since 2017 was a result of both higher exports (of goods and services) and lower imports. Following a contraction in 2020, tourism exports have rebounded in 2021 to continue the pre-pandemic trend of rising service exports. Goods exports have also contributed to the lower trade deficit in 2021, as BiH stood to gain from worldwide supply chain shortages through increased participation in the EU supply chains. While staff expects an increased participation in the EU supply chains over the medium term, goods exports growth to the EU should decline as supply chain constraints due to the war in Ukraine limit the availability of intermediate inputs and hamper manufacturing in 2022. Finally, transfers have returned to the pre-pandemic trend in 2021, and are expected to increase in the medium term, but will likely see a drop in 2022 due to the war's toll on the world and EU economy.

**3. The composition of the export growth relied more on raw materials in 2021 than prior to the pandemic.** The decade prior to the pandemic, from 2009 to 2019, saw substantial growth in goods exports driven by more complex industries, such as manufacturing goods and machinery and mechanical appliances. While goods export growth from 2019 to 2021 saw a similar increase in machinery and mechanical appliances, it was heavily driven by the growth in the value of raw materials exports used in manufacturing, such as base metals.



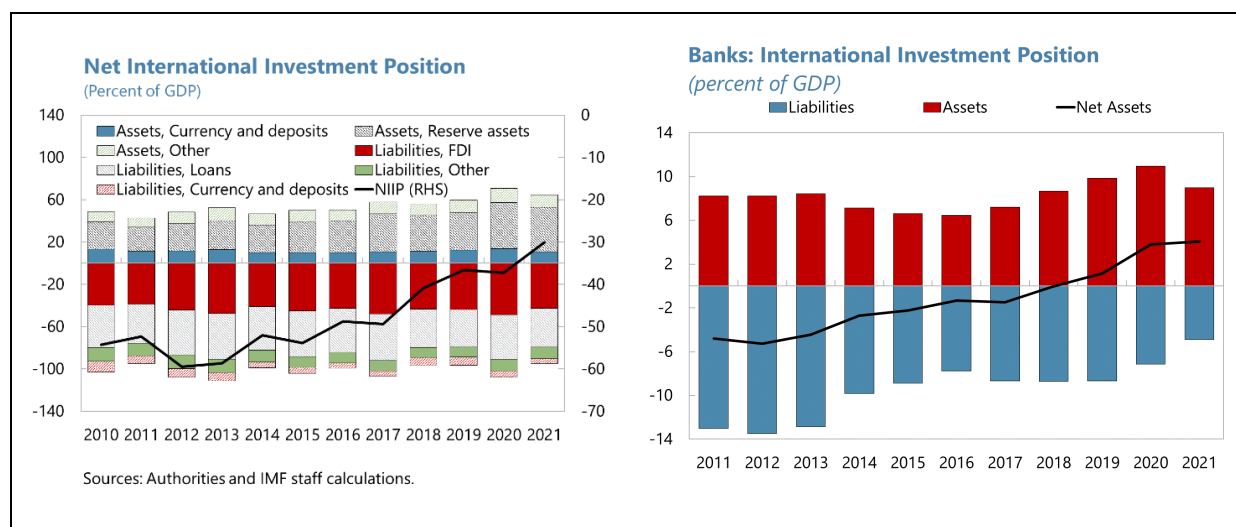
## B. Capital and Financial Accounts

**4. Net private capital inflows continued in 2021, on the back of rising FDI and portfolio investment, and medium-term liabilities.** FDI was mainly driven by reinvested earnings of banks, as in 2020, while portfolio investment mostly comprised the foreign holdings of the RS's EUR 300 million Eurobond issuance. Additionally, the one-off SDR allocation has substantially added to medium-term liabilities of the general government. In 2022, staff projects moderately lower financial inflows, declining short and medium-term liabilities, and stable expected project loan disbursements yet with rising uncertainties about future disbursements. While staff expects declining portfolio

investment, a continued trend of bank reinvested earnings is expected to drive FDI following a strong GDP growth rebound in 2021.

## C. Foreign Asset and Liability Trajectory

### 5. The improving current account since 2017, and especially in 2021, continues to improve the Net International Investment Position (NIIP).

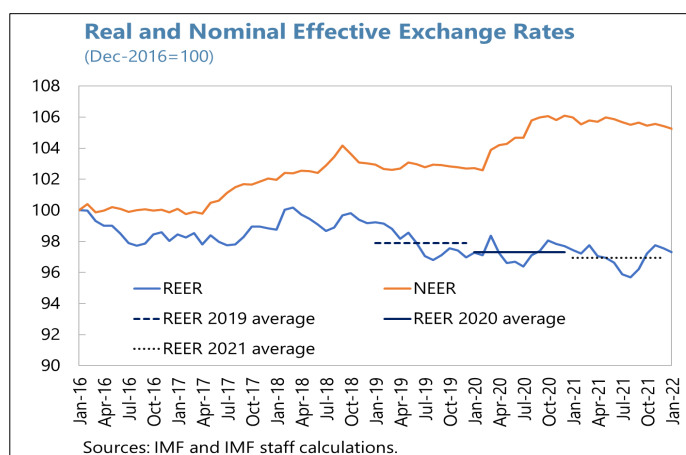


NIIP has improved substantially since 2017, by more than 30 percent of GDP, coinciding with a declining current account deficit over the same period. While NIIP deteriorated slightly in 2020, it has improved in 2021 as reserve assets increased, while loan and other liabilities decreased. The banks' net position has also improved by the end of 2021, mainly due to a reduction in bank liabilities while bank assets remained fairly stable. These improvements are expected to slow in 2022 following an expected deterioration in the current account deficit.

## D. Real Exchange Rate (EBA-lite Assessment)

### 6. The real effective exchange rate (REER) is estimated to have depreciated in 2021 relative to 2020, while the NEER continued to appreciate.

The depreciation in REER is mostly due to the negative inflation differential with the EU trading partners, with a share of total exports of more than 80 percent. The second half of 2021 saw an appreciation of REER and NEER as exports picked up, and inflation in BiH went into positive territory year-on-year and accelerated since July.



## 7. The external position is stronger than medium-term fundamentals and desirable policies based on the EBA-lite current account and REER models.

- **Current account (CA) model:** The multilaterally consistent and cyclically-adjusted CA norm is -3.9 percent of GDP. The norm incorporates a policy gap of 3.6 percent of GDP resulting primarily from fiscal policy (2.9 percent), change in reserves (-0.4 percent), and private sector credit level and growth (0.5 percent) vis-à-vis their medium-term objectives. This implies a current account gap of 2.7 percent of GDP, or a REER undervaluation of 8.1 percent.
- **REER model:** The model estimates a REER gap of -4.2 percent—a modest undervaluation. This includes an adjustment for desired policies to the estimated REER norm of around -2 percent; absent policy gaps vis-à-vis the desired levels and the rest of the world, the undervaluation would have been smaller (-2.2 percent REER gap). The policy gap is the sum of the product of the differences between actual and desired values of policy variables and corresponding model coefficients. The main components of the policy gap include the private credit growth estimated at -0.9 percent and private credit level at -0.7 percent.

<b>Bosnia and Herzegovina: Model Estimates for 2021 (in percent of GDP)</b>		
	<b>CA model</b>	<b>REER model</b>
<b>CA-Actual</b>	<b>-2.1</b>	
Cyclical contributions (from model) (-)	-0.2	
Covid-19 adjustor (+) 1/	0.6	
Additional temporary/statistical factors (+)	0.0	
Natural disasters and conflicts (-)	-0.1	
<b>Adjusted CA</b>	<b>-1.2</b>	
<b>CA Norm (from model) 2/</b>	<b>-3.9</b>	
Adjustments to the norm (+)	0.0	
<b>Adjusted CA Norm</b>	<b>-3.9</b>	
<b>CA Gap</b>	<b>2.7</b>	<b>1.4</b>
o/w Relative policy gap	3.6	
Elasticity	-0.33	
<b>REER Gap (in percent)</b>	<b>-8.1</b>	<b>-4.2</b>
1/ Additional cyclical adjustment to account for the temporary impact of the pandemic on tourism.		
2/ Cyclically adjusted, including multilateral consistency adjustments.		

## E. Reserve Adequacy

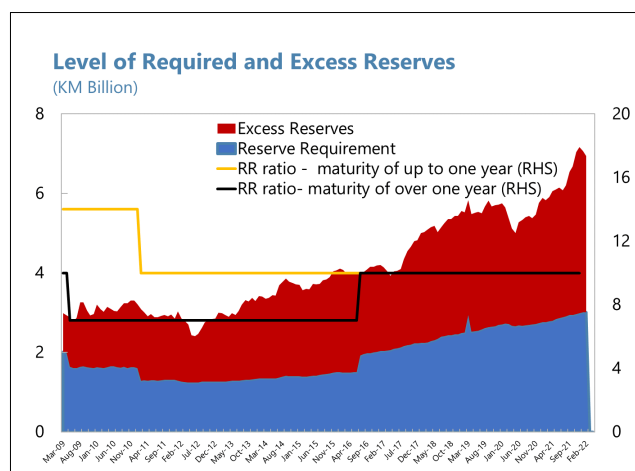
**8. The official reserve coverage is above the 100 percent minimum threshold using the IMF's reserve ARA metric.** Gross international reserves are estimated at 8.1 billion euros at end-2021, covering about 8.4 months of prospective imports of goods and services, 51.9 percent of broad money, and 243 percent of short-term debt at remaining maturity as of end-2021. According to the traditional IMF reserve adequacy metric, the reserve coverage is estimated at 126.7 percent, above the minimum suggested level of 100 percent. Despite extraordinary official reserve inflows, namely the SDR allocation (SDR 255 million) and the first disbursement of the EU Macro-Financial Assistance (Euro 125 million), this coverage increased only slightly relative to 2020.<sup>1</sup>

Reserve Adequacy Ratios for Bosnia and Herzegovina, 2021 1/		
	Minimum threshold	Gross reserves
Reserve/STD (percent)2/	100	243.3
Reserve/Months of prospective import goods and services 3/	3	8.5
Reserve/Broad money (percent) 4/	-	51.9
Reserves/ARA metric (percent) 5/	100	126.7
Reserves/Adjusted ARA metric (percent) 5/	100	123.8

1/ Based on Latest IIP data from the second quarter of 2021.  
 2/ Suggested threshold for adequacy: 100 percent.  
 3/ Suggested range for adequacy: 3-6 months.  
 4/ Suggested threshold for adequacy: 20 percent.  
 5/ Suggested range for adequacy: 100-150 percent, depending on tolerance of exchange rate swings.

**9. Although the coverage of reserves is above the minimum requirement, there are vulnerabilities related to the high level of volatility of banks' excess reserves at the CBBH.**

Banks' excess reserves comprise more than 50 percent of total bank reserves and have been growing at a faster rate than required reserves (38 percent compared to 9 percent in 2021, respectively). Given the high level and volatility of excess reserves, largely depending on the euro area interest rate environment, building higher reserve buffers over time and when conditions allow would help better mitigate future shocks and strengthen the stability of the currency board arrangement (Annex V).



<sup>1</sup> According to the adjusted ARA metric, tailored to address currency board arrangement features, the reserve coverage is estimated at 123.8 percent at end-2021. This metric is explained in the 2020 Article IV (Country Report No. 2021/043).

## Annex III. Risk Assessment Matrix<sup>1</sup>

(Scale—high, medium, or low)			
Source of Risks	Relative Likelihood	Impact If Realized	Recommended Policy Response
<b>Country-specific</b>			
Further concrete steps toward dismantling state institutions and/or setting up parallel entity institutions	<b>Low/ Medium</b>	<p style="text-align: center;"><b>High</b></p> <ul style="list-style-type: none"> <li>• Further fragmentation of the economy</li> <li>• Diminished prospects for structural reforms</li> <li>• Regression on the EU path</li> <li>• Delayed or canceled financing from international financial institutions</li> <li>• Reduced investor confidence, weighing on growth and raising financing costs</li> <li>• Accelerated emigration</li> <li>• Possibility of further economic sanctions from the international community</li> <li>• RS withdrawal from the Indirect Tax Authority would result in revenue losses and could affect the timely servicing of BiH's external debt</li> </ul>	<ul style="list-style-type: none"> <li>• Refrain from dismantling economic institutions at the state level, which is inconsistent with the authorities' objective to join the EU</li> <li>• Explore avenues to minimize economic disruptions and preserve gains from state institutions, pending resolution of political disagreements</li> </ul>
Failed efforts at electoral reform leading to delayed or contested elections	<b>Low/ Medium</b>	<p style="text-align: center;"><b>Medium</b></p> <ul style="list-style-type: none"> <li>• Heightened political uncertainty</li> <li>• Limited capacity for policy implementation and reforms, and weakening economic prospects</li> <li>• Delayed or canceled financing from international financial institutions</li> <li>• Reduced investor confidence, weighing on growth and raising financing costs</li> <li>• Accelerated emigration</li> <li>• Possible constitutional crisis, leading to political and economic instability</li> </ul>	<ul style="list-style-type: none"> <li>• Aim to minimize economic disruptions and preserve macroeconomic stability, including by preserving the role of state institutions</li> <li>• Continue implementing domestically financed capital projects</li> </ul>

<sup>1</sup> The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is 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 of 30 percent or more). The RAM reflects staff views on the source of risks at the time of discussions with the authorities.

<b>Global</b>			
Russia's invasion of Ukraine leads to escalation of sanctions and other disruptions	<b>High</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>• Lower BiH exports to Europe and remittance inflows from Europe due to the economic slowdown in Europe</li> <li>• Higher inflation due to extended supply chain disruptions and higher commodity prices, to further dampen domestic demand and growth prospects</li> <li>• Lower access to market financing and higher financing costs</li> </ul>	<ul style="list-style-type: none"> <li>• Reinstatement of fiscal support to protect vulnerable businesses and households</li> <li>• Scale up public sector investment</li> <li>• Strengthen financial sector supervision and monitoring</li> <li>• Accelerate structural reforms to improve public spending efficiency, enhance governance and transparency, and encourage private sector investment</li> </ul>
Rising and volatile food and energy prices	<b>High</b>	<p><b>Medium</b></p> <ul style="list-style-type: none"> <li>• Deterioration of terms of trade and dampening of domestic consumption</li> <li>• Rising risks of second round effects</li> </ul>	<ul style="list-style-type: none"> <li>• Adopt temporary, targeted support measures to protect vulnerable households</li> <li>• Avoid permanent measures, including permanent increases in the public sector wage bill and pensions</li> <li>• Avoid any changes to the single VAT rate system, and consider/extend the temporary suspension of fuel excises</li> </ul>
Outbreaks of lethal and highly contagious Covid-19 variants	<b>Medium</b>	<p><b>Medium</b></p> <ul style="list-style-type: none"> <li>• Deteriorating health conditions and increased uncertainty about the course of the pandemic</li> <li>• Decline in the demand for exports, particularly of services</li> <li>• Slumping of foreign direct investment and remittances flows</li> <li>• Reduced access to market financing and higher financing costs</li> </ul>	<ul style="list-style-type: none"> <li>• Reinstatement of fiscal support to protect vulnerable businesses and households</li> <li>• Scale up support to the health sector</li> <li>• Strengthen financial sector supervision and monitoring</li> <li>• Accelerate structural reforms</li> </ul>
De-anchoring of inflation expectations in advanced European economies	<b>Low</b>	<p><b>Medium</b></p> <ul style="list-style-type: none"> <li>• Rising domestic inflation given close trade ties with Europe and exchange rate peg within the currency board arrangement framework</li> <li>• Rising interest rates and higher debt service costs, including for public sector debt</li> <li>• Higher Euroization and more persistent inflation</li> </ul>	<ul style="list-style-type: none"> <li>• Increase support to vulnerable households</li> <li>• Improve transparency/targeting of social policies</li> <li>• Avoid permanent measures, including increases in the already high public sector wage bill and pensions</li> <li>• Strengthen financial sector supervision and monitoring</li> </ul>

## Annex IV. Public Debt Sustainability Analysis

*The updated DSA indicates that Bosnia and Herzegovina's government debt remains low and sustainable.<sup>1</sup> However, alternative scenarios and stress tests suggest debt sustainability risks under some adverse scenarios, particularly a real GDP growth shock. The higher capital spending scenario shows that there is room for more absorption of IFI financing for growth-enhancing projects, with limited impact on debt dynamics and financing needs.*

### A. Public Sector DSA

#### 1. The assumptions are fully in line with the macroeconomic framework baseline.

Following a deficit in 2022, the fiscal position is expected to return to positive territory already in 2023 and remain in surplus throughout the projection period. A gradual increase in the average maturity (four years) of domestic debt is also assumed. Financing reflects the favorable long-term financial terms of IFI financing currently provided by the EU (Macro-Financial Assistance), EBRD, and EIB, together with the use of the 2021 SDR allocation by the IMF. The MFA financing and SDR allocation have been used to finance the entities' budgets, while EBRD and EIB loans have continued financing regional infrastructure projects within the Western Balkan Investment Framework (WBIF). There is no IFI budgetary financing assumed for the entire projection period.

**2. Debt profiles.** Given the sizable IFI financing in recent years, a large share of the debt has long-term maturity and is denominated in foreign currency (largely euro). The share of foreign-currency denominated debt has increased overtime, supported by the "Berlin process" political commitment (2014), which called for a substantial increase in resources managed by the WBIF. This led to a greater involvement of the EBRD and EIB in financing regional infrastructures, including the so-called Corridor Vc (the highway corridor connecting BiH to Croatia and Serbia).

**3. Debt dynamics have deteriorated due to the pandemic, but debt is expected to remain contained in the medium term.** Following an increase in 2020–21 (to 36.7 percent of GDP), government debt is expected to continue to decline in the near term and remain below 35 percent of GDP in the medium term. This profile largely reflects the recovery from the pandemic-induced output contraction and fiscal deficit. Moreover, lower amounts of externally financed capital spending due to capacity constraints helped prevent a higher accumulation of public debt. However, domestic and external "imputed"<sup>2</sup> public debt of the two entities are on a diverging path, with the RS debt growing at a fast rate given the less favorable fiscal position.

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<sup>1</sup> For data availability reasons, like in the 2020 Article IV consultation, this analysis covers general government debt without arrears and with incomplete public enterprise (PE) coverage. The authorities are working on producing consolidated public debt numbers, but this could take a few years. Given the sizable arrears, including them would raise measured debt levels somewhat but would not materially affect the underlying primary fiscal deficits. Therefore, the dynamics of the DSA for the entire public sector would be similar, even though debt levels would be somewhat higher.

<sup>2</sup> IFIs and the EU have been providing financing at the BiH state, including by requesting state guarantees. This financing is then provided to government entities to on-lend.

**4. External financing will continue to be contracted with IFIs, largely EBRD and EIB, and bilateral agencies in the form of project loans.** At this stage, the RS authorities are planning to only roll-over the two bullet 5-year Eurobonds expiring in 2023 and 2026 with similar issuances, but the foreign jurisdictions where they will be placed remain unknown. The baseline assumes the full roll-over of these Eurobonds. If a rollover is not feasible, a combination of additional domestic and IFI financing may become necessary under the current fiscal stance.

**5. Domestic debt is expected to remain financed primarily by banks,** and to some extent by insurance companies for longer maturity bonds. The authorities' plan is to continue to extend the average maturity, but this requires an even higher share of the euro-denominated debt and/or with euro clause. The recent EU decision on the equivalence of capital requirements applied to EU-based credit institutions might help the subsidiaries of EU banks expand their exposure to entity governments securities. However, this heavily depends on the banks' risk management and the share of sovereign debt securities in their portfolio.

## B. Scenarios and Shocks

**6. The baseline is consistent with subdued growth and fiscal consolidation in the medium term amid exceptionally high uncertainty and limited structural reforms.** Following the sharp rebound in 2021, real GDP growth is projected to stabilize at around potential levels (3 percent) over the medium-term. Further, the primary balance is expected to remain in positive territory throughout the projection period (on average 1.2 percent of GDP). This will lead to a debt-to-GDP ratio of about 32 percent by 2027. Of course, a slowdown of the EU economy could lead to a lower GDP growth in the BiH, through both trade and financial links, while higher gross financing needs could pose some refinancing risks. However, as stressed above, the recent EU decision on the equivalence of EU banks' capital requirements could possibly generate additional room for the absorption of domestic securities. EBRD/EIB financing for regional infrastructures will continue to be provided at favorable conditions, even though at a slower pace given recent domestic political tensions.

**7. Under the historical and constant primary balance scenarios, the debt-to-GDP ratio is projected to remain high.** The paths of debt and gross financing needs would deviate from the baseline, largely due to less favorable GDP growth and weaker fiscal position (smaller primary surplus). The debt ratio would be reaching 40 percent of GDP by the end of the projection period. Under the constant primary deficit scenario, the debt-to-GDP ratio is expected to increase, but by somewhat less than under the historical scenario.

**8. The higher capital spending scenario underscores how debt remains sustainable when IFI financing is used to address infrastructure gaps.** Assuming larger capital spending—additional 0.5 percent of GDP per year compared to the baseline, financed by EBRD/EIB—the debt burden is expected to remain below 35 percent,<sup>3</sup> given the substantial growth dividend stemming from key

<sup>3</sup> A multiplier of 1 is assumed for the increased capital spending.

infrastructure projects. The debt profile will mirror the baseline, with only a marginal increase in the debt-to-GDP ratio despite higher capital spending.

**9. Stress tests suggest that real GDP growth shocks have the largest impact on debt indicators.** An adverse shock to growth, whereby real GDP contracts by 2.7 percentage points<sup>4</sup> in 2023–24, will generate an increase in debt, which will go above 40 percent of GDP in the medium term, with government gross financing needs jumping to 7.5 percent of GDP in 2024, before declining to 6 by 2027. This scenario, however, is based on historical GDP growth which, as noted above, has been characterized by high volatility, and going forward the probability of shocks of similar magnitude is unlikely. Stress tests based on standardized primary balance, real interest, and exchange rate shocks reveal slight deterioration of debt dynamics relative to the baseline. The combined macro-fiscal shock would generate a rapid increase in debt (to 44 percent of GDP in 2024) and gross financing needs (to about 8–8.5 percent of GDP in 2024 and the medium term).

### C. Baseline and Realism of Projections

**10. The baseline projects fiscal surplus over the medium term.** The baseline is underpinned by the following assumptions: (i) the real GDP growth is expected to slow down to 2.4 and 2.3 percent in 2022 and 2023, while remaining at 3 percent over the medium term; (ii) headline inflation is projected to reach 6.7 percent in 2022, due to imported inflation for food and fuel prices, before gradually decelerating to about 2.2 percent in the medium term; and (iii) the fiscal surplus is projected to return to surplus in 2023 (0.6 percent of GDP) and stabilize at this level in the medium term. The baseline includes a somewhat less favorable external disbursement profile, largely from WBIF partners (EU, EIB and EBRD), for the implementation of regional capital projects.

**11. Forecast error analysis suggests no systemic bias in historical forecasts of real GDP growth and inflation.** The analysis shows small forecast errors for GDP growth rate and inflation, while a negative bias in forecasting the primary balance.

### D. Conclusions

**12. The recent external crises (pandemic and war in Ukraine) have shown that a prudent fiscal policy during “good times” can help counter shocks and support spending in human and physical capital.** The BiH entered the pandemic with a strong fiscal position—e.g., fiscal surplus and low public debt—which helped to mitigate the impact of the pandemic. The level of public debt is expected to remain below 35 percent of GDP and gross financing needs reach 4.2 percent of GDP by 2027. The primary surplus is expected to reach 1.3 percent of GDP in 2023 and further improve to 1.5 percent of GDP by 2027. However, despite the current low level, debt sustainability largely depends on sound debt management and continued progress on institutional and structural issues, which would help unlock the economy’s growth potential and reduce its vulnerability to shocks.

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<sup>4</sup> This is equal to one (1) standard deviation shock.

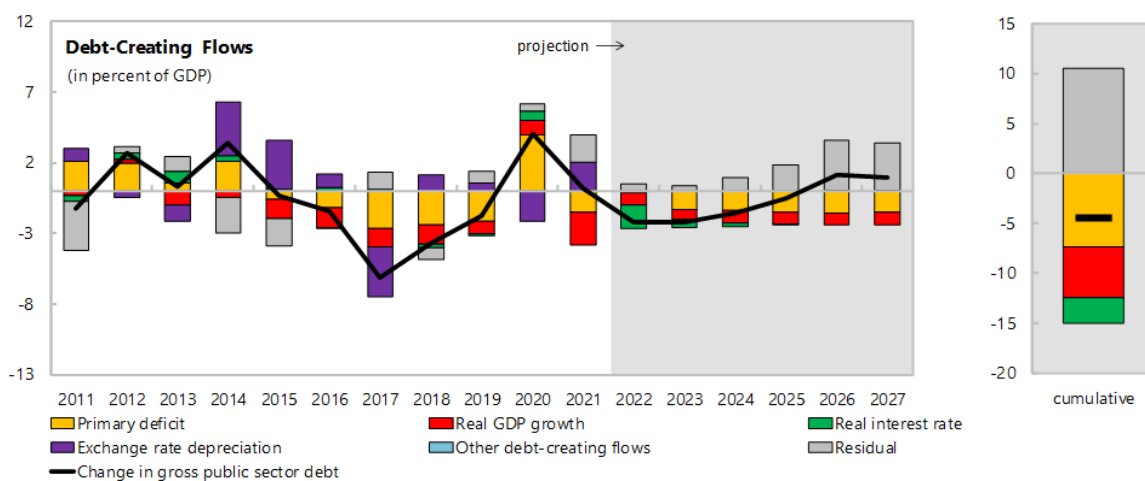
**13. Efforts to improve public debt management should continue.** Notwithstanding positive progress to date, the medium-term debt management strategy should aim at further improvements. Regarding domestic debt, it should aim to strike a balance between further lengthening the average maturity of securities, a higher share of KM-denominated debt, and reduced interest payments in the medium term. Creating a functioning secondary market for securities would help achieve these objectives and allow banks to manage the existing large liquidity. The strategy should also continue to assess the mix of external, largely IFI lending, and domestic financing with a view to maintaining overall macroeconomic stability. Therefore, high-cost and short-maturity external borrowing, including Eurobonds, is strongly discouraged.

### Annex Figure IV.1. Bosnia and Herzegovina: Public Sector Debt Sustainability Analysis (DSA) Baseline Scenario

(in percent of GDP unless otherwise indicated)

	Debt, Economic and Market Indicators <sup>1/</sup>										As of December 31, 2021	
	Actual			Projections								
	2013-2019 <sup>2/</sup>	2020	2021	2022	2023	2024	2025	2026	2027	Sovereign Spreads		
Nominal gross public debt	40.4	36.5	36.7	34.5	32.3	30.7	30.2	31.3	32.3		EMBIG (bp) <sup>3/</sup>	N/A
Public gross financing needs	3.7	7.7	2.2	2.9	2.1	3.0	3.0	3.3	4.2		5Y CDS (bp)	N/A
Real GDP growth (in percent)	2.8	-3.1	7.1	2.4	2.3	3.0	3.0	3.0	3.0	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	1.5	0.2	1.7	6.7	3.3	2.6	2.4	2.3	2.2	Moody's	B3	B3
Nominal GDP growth (in percent)	4.4	-2.9	9.0	9.3	5.6	5.7	5.5	5.3	5.3	S&Ps	B	B
Effective interest rate (in percent) <sup>4/</sup>	2.0	2.2	2.0	1.7	1.7	2.0	2.2	2.4	2.5	Fitch	B	B

	Contribution to Changes in Public Debt										cumulative	debt-stabilizing primary balance <sup>9/</sup>
	Actual			Projections								
	2013-2019	2020	2021	2022	2023	2024	2025	2026	2027			
Change in gross public sector debt	-1.4	4.0	0.1	-2.2	-2.2	-1.6	-0.6	1.1	0.9	-4.4		
Identified debt-creating flows	-1.1	3.5	-1.8	-2.7	-2.6	-2.5	-2.4	-2.4	-2.4	-14.9		
Primary deficit	-0.9	3.9	-1.5	-0.1	-1.3	-1.4	-1.5	-1.6	-1.5	-7.4		
Primary (noninterest) revenue and grants	42.7	41.3	42.4	41.5	42.3	42.3	42.3	42.4	42.4	253.2		
Primary (noninterest) expenditure	41.8	45.2	41.0	41.4	41.0	40.9	40.8	40.9	40.9	245.8		
Automatic debt dynamics <sup>5/</sup>	-0.2	-0.4	-0.3	-2.6	-1.3	-1.1	-1.0	-0.8	-0.8	-7.6		
Interest rate/growth differential <sup>6/</sup>	-0.9	1.7	-2.3	-2.6	-1.3	-1.1	-1.0	-0.8	-0.8	-7.6		
Of which: real interest rate	0.2	0.7	0.1	-1.7	-0.5	-0.2	-0.1	0.0	0.1	-2.5		
Of which: real GDP growth	-1.1	1.0	-2.4	-0.8	-0.7	-0.9	-0.9	-0.9	-0.9	-5.1		
Exchange rate depreciation <sup>7/</sup>	0.8	-2.2	2.0	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
General Govt - Financing - Privatization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual, including asset changes <sup>8/</sup>	-0.3	0.5	1.9	0.5	0.4	0.9	1.9	3.5	3.3	10.5		



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  $[(r - \pi(1+g) - g + ae(1+r)) / (1+g+\pi+g\pi)]$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = 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  $-g$ .

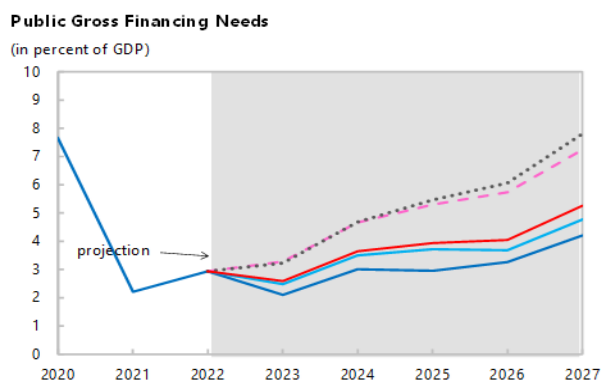
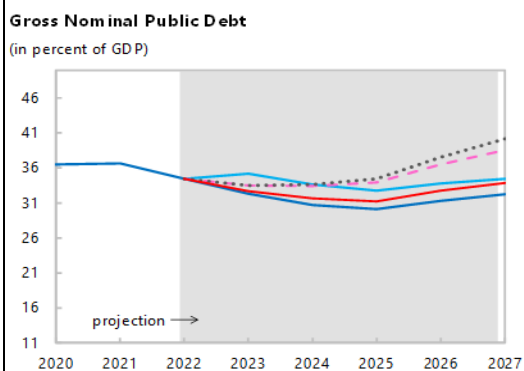
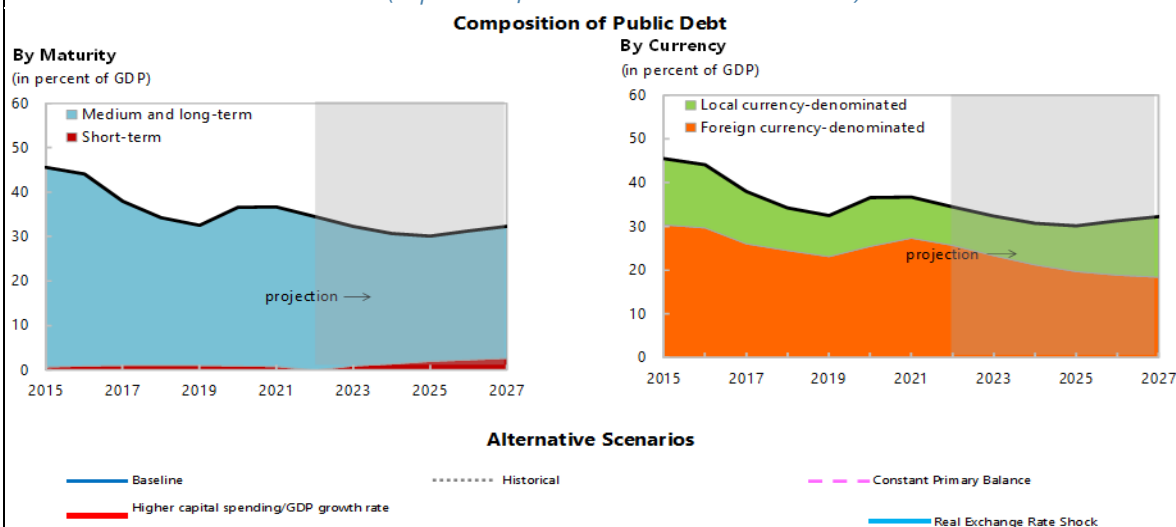
7/ The exchange rate contribution is derived from the numerator in footnote 5 as  $ae(1+r)$ .

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.

### Annex Figure IV.2. Bosnia and Herzegovina: Public DSA Composition of Public Debt and Alternative Scenarios

(in percent of GDP unless otherwise indicated)



**Underlying Assumptions**

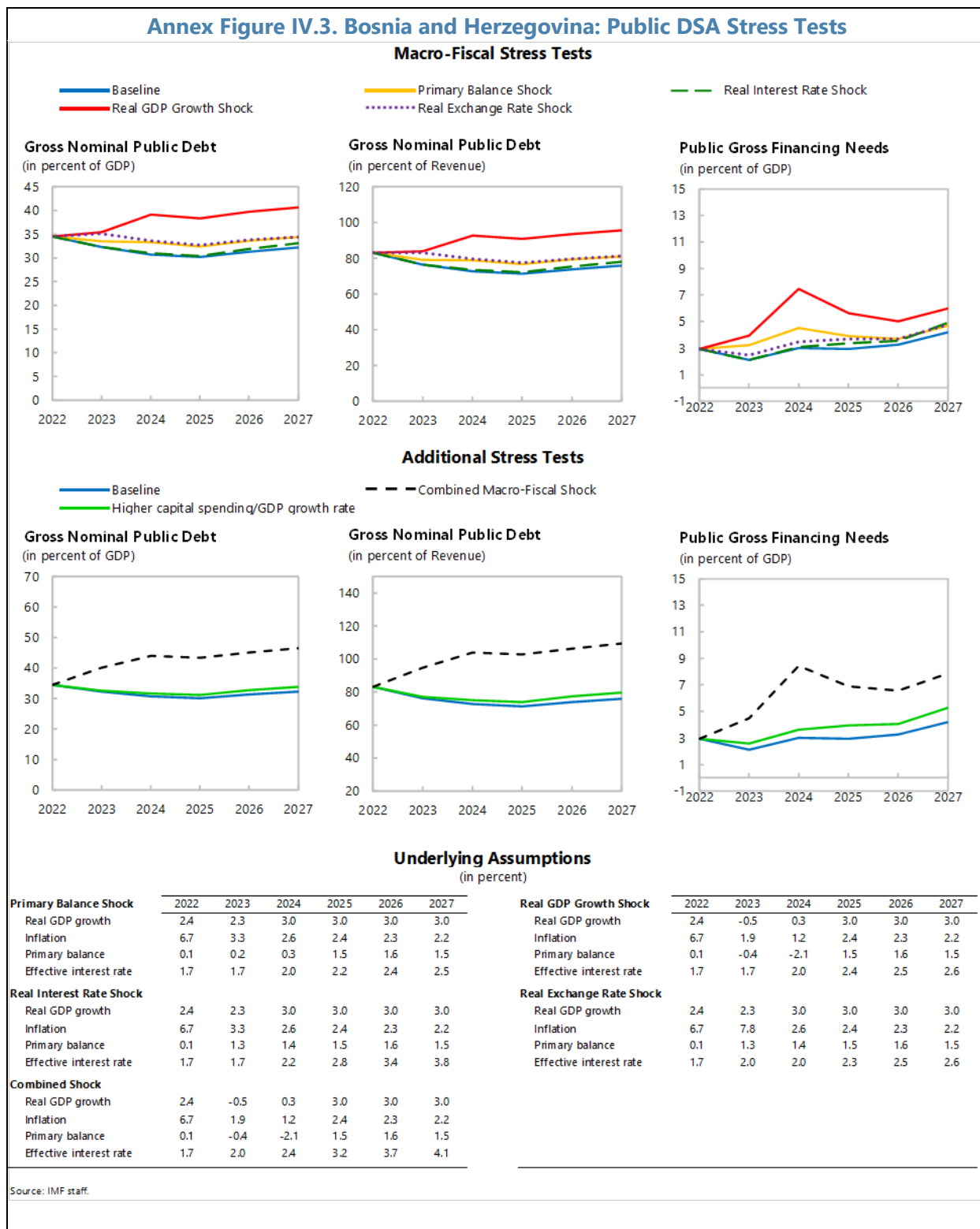
(in percent)

Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	2.4	2.3	3.0	3.0	3.0	3.0
Inflation	6.7	3.3	2.6	2.4	2.3	2.2
Primary Balance	0.1	1.3	1.4	1.5	1.6	1.5
Effective interest rate	1.7	1.7	2.0	2.2	2.4	2.5
<b>Constant Primary Balance Scenario</b>						
Real GDP growth	2.4	2.3	3.0	3.0	3.0	3.0
Inflation	6.7	3.3	2.6	2.4	2.3	2.2
Primary Balance	0.1	0.1	0.1	0.1	0.1	0.1
Effective interest rate	1.7	1.7	2.0	2.2	2.4	2.5
<b>Higher capital spending/GDP growth rate</b>						
Real GDP growth	2.4	2.8	3.5	3.5	3.5	3.5
Inflation	6.7	3.3	2.6	2.4	2.3	2.2
Primary Balance	0.1	0.8	0.9	1.0	1.1	1.0
Effective interest rate	1.7	1.7	2.0	2.3	2.5	2.6

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	2.4	2.3	2.3	2.3	2.3	2.3
Inflation	6.7	3.3	2.6	2.4	2.3	2.2
Primary Balance	0.1	0.2	0.2	0.2	0.2	0.2
Effective interest rate	1.7	1.7	2.2	2.6	3.0	3.3
<b>Real Exchange Rate Shock</b>						
Real GDP growth	2.4	2.3	3.0	3.0	3.0	3.0
Inflation	6.7	7.8	2.6	2.4	2.3	2.2
Primary Balance	0.1	1.3	1.4	1.5	1.6	1.5
Effective interest rate	1.7	2.0	2.0	2.3	2.5	2.6

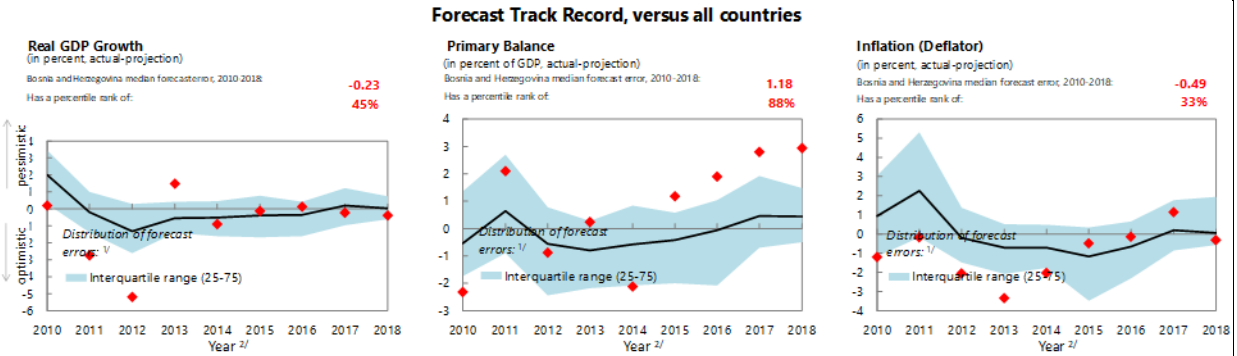
Source: IMF staff.

### Annex Figure IV.3. Bosnia and Herzegovina: Public DSA Stress Tests



Source: IMF staff.

**Annex Figure IV.4. Bosnia and Herzegovina: Public DSA Realism of Baseline Assumptions**



**Bosnia and Herzegovina - Public DSA Risk Assessment**

Debt level <sup>1/</sup>

Gross financing needs <sup>2/</sup>

Debt profile <sup>3/</sup>

Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.  
Lower and upper risk-assessment benchmarks are:

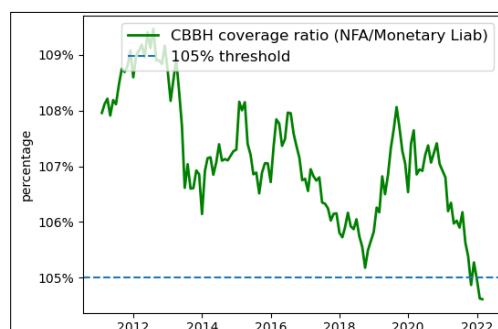
200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

## Annex V. Assessing the Resilience of the Currency Board<sup>1</sup>

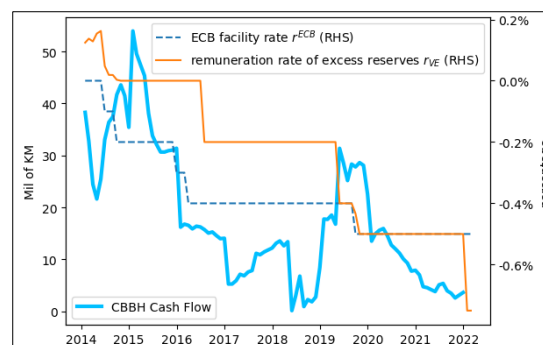
This annex provides an assessment of the Central Bank of Bosnia and Herzegovina profitability (breakeven policy rate and policy space) and Currency Board Arrangement coverage ratio under various scenarios of ECB policy rate hikes and capital outflows for 2022.

### A. Background

**1. The BiH Currency Board Arrangement (CBA) follows an “orthodox” approach.**<sup>2</sup> There is a 100 percent required coverage of specified monetary liabilities by net foreign exchange (FX) reserves. Monetary liabilities to be covered are currency in circulation issued by the Central Bank of Bosnia and Herzegovina (CBBH), commercial banks’ deposits at the CBBH, and BiH central government deposits.<sup>3</sup> The domestic currency (KM) is pegged to the Euro (1.95583 KM per Euro). The overarching objective of the CBA is to ensure monetary stability, which requires fiscal discipline and does not allow for independent monetary policy. Since late 2021, the CBBH coverage ratio has been mostly below the 105 percent (indicative) threshold, which is considered the minimum to preserve a comfortable buffer above the hard 100 percent limit.



**2. The CBBH’s profitability and coverage ratio have been declining in recent years as its balance sheet has expanded.** CBBH balance sheet has grown at a rate of 8.5 percent on average per year, which is more than double the country’s GDP growth rate (3.5 percent on average per year) over the last decade, owing to a search for yield of foreign-owned banks in the euro area, after the euro zone money market moved into negative interest rate territory. CBBH’s returns on FX assets have been declining amid the negative interest rates in the euro area, against the fixed remuneration of zero percent on currency in circulation, which accounts for 40 percent of the balance sheet. The sizeable capital inflows in recent years (see increases of



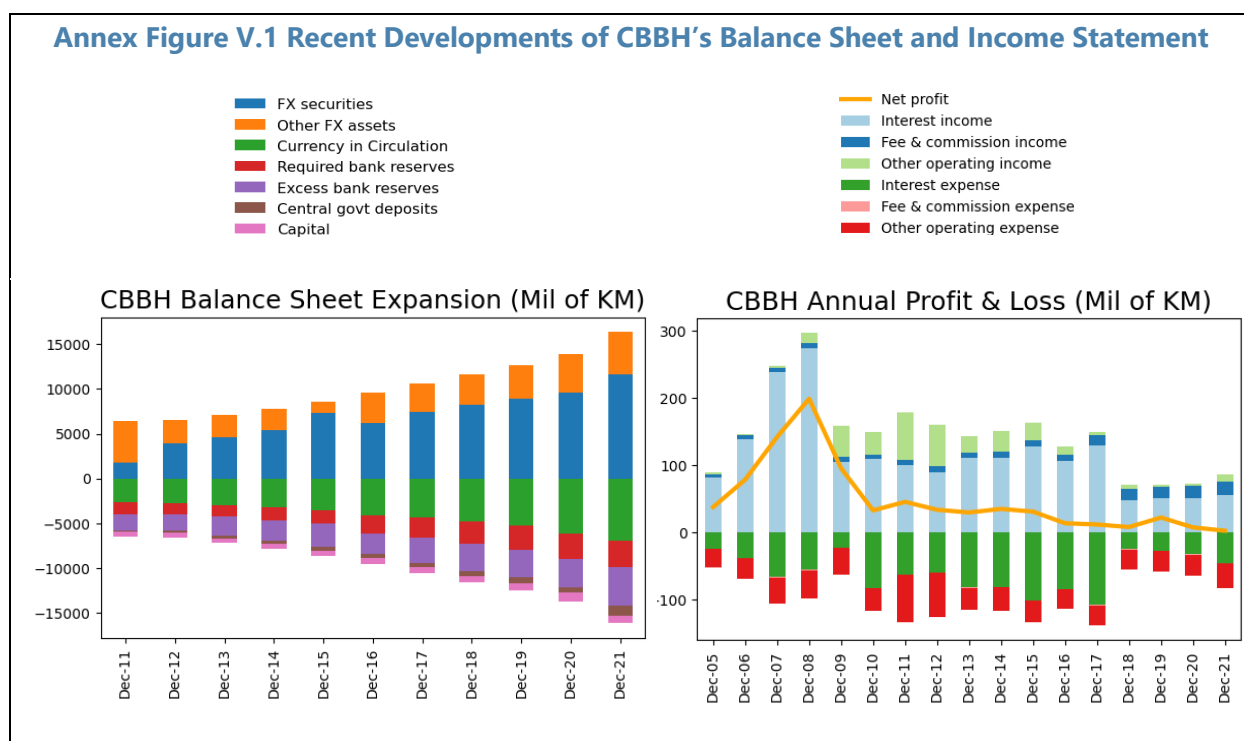
<sup>1</sup> Prepared by Cecilia Melo Fernandes (MCMCO), Giuseppe Cipollone, and Yuan “Monica” Gao Rollinson (MCMCO). The authors benefited from insightful contributions from Darryl King and Romain Lafarguette (MCMCO).

<sup>2</sup> According to Art. 1 of CBBH law: “There is hereby established a Central Bank of Bosnia and Herzegovina, ... will be headed by a Governing Board and it may not extend credit by creating money, operating in this respect as a currency board.” Furthermore, Art. 74h states that: ““currency board” for the purposes of this Law means an operational rule for issuing domestic currency, whereby domestic currency is issued only against purchases of convertible foreign exchange with full backing by net foreign exchange reserves.”

<sup>3</sup> Among currency boards, BiH is the only case currently where central government deposits are included in monetary liabilities to be covered.

“excess bank reserves” in Figure V.1) generated additional interest income as CBBH fully aligned its remuneration rate of excess reserves (the effective domestic interest rate in BiH) to the ECB facility rate in 2019 (-0.5 percent). However, this was still insufficient to compensate for the loss of interest income on FX assets. As a result, CBBH’s cash flows, i.e., net profit of the central bank, has been steadily declining in recent years, with a sharp drop in 2019. If the CBBH were to make losses, the coverage ratio could fall further below the 105 percent threshold and its capital position could be undermined.

**3. This annex assesses the resilience of the CBA.** It assesses various scenarios for increases in international interest rates and the consequent impact on the coverage ratio of the CBA. It also estimates the degree to which domestic interest rates can rise while retaining a net positive cash flow<sup>4</sup> of the CBBH. More specifically, it assesses by how much the country risk premium can deteriorate while keeping the CBA viable. Another relevant approach is to estimate the capital flows balancing rate (CFBR) under the “equilibrium stance”, which is the level of the effective domestic interest rate that would result in zero net capital flows in equilibrium. However, estimating the CFBR is challenging, due to the absence of an observable relationship between the country risk premium and capital flows, resulting from: (i) fragmented financial markets with scarce or non-existent wholesale funding; and (ii) underdeveloped debt instruments and stock markets, operating separately in the two entities and with different liquidity conditions.



<sup>4</sup> Cash flows are used as a proxy for CBBH’s net profit.

## B. The Resilience of the BiH Currency Board Arrangement

**4. A resilient CBA has sufficient FX reserves and room to adjust interest rates (i.e., policy space) to accommodate shocks.** When facing an economic or a financial shock, a resilient currency board should be able to: 1) adjust its remuneration rates to meet its policy goals while preserving its profitability and capital, and 2) ensure the full convertibility of the anchor currency into domestic currency and vice-versa on demand and unlimitedly by retaining sufficient FX reserves. In the case of BiH, these are essential conditions for the CBBH to pursue its objective of “achieving and maintaining the stability of the domestic currency by issuing it according to the rule known as a currency board.”<sup>5</sup> While profitability is not considered an objective per se, it does have a direct impact on the coverage ratio.

**5. The resilience of the CBA is assessed through scenario-based analyses of the CBBH’s profitability and coverage ratio.** In the current environment of high inflation, the ECB may soon tighten the monetary policy rate, which would come at a time when the full impact of the new reserves requirement (RR) framework (introduced in June/December 2021) is uncertain.<sup>6</sup> An increase in the ECB policy rate would generate higher income from the net FX assets. It would also increase interest expenses, as the domestic remuneration rate on excess reserves would have to be increased by the same magnitude, assuming unchanged country risk premium. Adjustments in ECB policy rate are likely better anticipated—because of ECB communications and expectations built into the yield curve—while changes in the country risk premium, and the associated impact on capital flows, are considerably harder to predict because of geopolitical uncertainties.

**6. Increases in ECB’s policy rate will have different valuation and size impacts on the CBBH’s profitability and the coverage ratio.** In the short run, an increase in the ECB policy rate (and an associated upward shift in the yield curve) would result in revaluation losses of FX assets<sup>7</sup>, *ceteris paribus*, reducing the coverage ratio (the negative short run valuation effect). However, once revalued, income will accrue at a higher rate while the proceeds from maturing investments will also be reinvested similarly at a higher rate, with positive impact on cashflows and the coverage ratio over the longer run (the positive longer run valuation effect). When capital outflows are triggered by the ECB policy rate hike (e.g., a decline in excess reserves on the liability side), CBBH’s FX reserves on the asset side decline by the same amount (the size effect). The size effect has always a positive impact on the coverage ratio because the ratio is bounded by 100 percent. The size effect has a negative (positive) impact on the breakeven policy rate when the remuneration rate on excess reserves is negative (positive), due to a loss of interest income (a reduction of interest expense) from capital outflows.

<sup>5</sup> See Art. 2 of the Law on the Central Bank.

<sup>6</sup> Required reserves on banks’ domestic currency liabilities continue to be remunerated at zero percent, while required reserves on banks’ foreign currency liabilities are remunerated at -60 bps from June 2021. Excess reserves, regardless of the currency denomination of related bank liabilities, are remunerated at -75 bps from January 2022.

<sup>7</sup> Approximately 70 percent of the foreign assets in the CBBH’s balance sheet consist of FX securities.

## C. Methodology

### Derivation of the Breakeven Policy Rate

**7. The resilience of the CBBH currency board is assessed under various scenarios of ECB policy rates and capital outflows.** The primary aim is to provide projections of the CBBH cash flows and coverage ratios under various scenarios, combining no or potential increases of the ECB policy rates with capital outflows of different magnitude. In each scenario, the breakeven policy rates (the maximum remuneration rate on excess reserves required to ensure zero cash flows) and available policy space (by how much the CBBH can change its remuneration rates on excess reserves without deteriorating profitability) are derived.

**8. The reverse stress test methodology is used to estimate the “breakeven policy rate”.** As stated above, the breakeven policy rate is the maximum remuneration rate on excess reserves at which cash flow (net profit) equals zero. When this threshold is exceeded, net profit is negative. According to the CBBH income statement, in cash flow equation (1), net profit is defined as the sum of net income (gross income minus gross expense) for four categories: (i) interest, (ii) fee and commission, (ii) other operating activities, (iv) adjustment of expected credit provisions – with the net interest income being the largest component. Based on the CBBH balance sheet structure, net interest income is the difference between interest income of net foreign assets holding ( $B^* \times r^*$ ), and interest expense from the required reserves ( $VR \times r_{VR}$ ), excess reserves ( $VE \times r_{VE}$ ), and central government deposit ( $G \times r_G$ ), as illustrated in Table V.1 below. By setting net profit equal to zero and substituting the breakeven rate for the remuneration rate on excess reserves ( $r^{\widehat{BE}} = r_{VE}$ ) in the cash flow equation (1), the equation of the breakeven policy rate is derived as shown in (2).

<b>Assets</b>	<b>Liabilities</b>
Net Foreign Assets ( <b>B*</b> ), $r^*$	Currency in Circulation ( <b>CiC</b> ), 0
	Required Reserves ( <b>VR</b> ), $r_{VR}$
	Excess Reserves ( <b>VE</b> ), $r_{VE}$
	Central Government Deposit ( <b>G</b> ), $r_G$
	Capital ( <b>C</b> ), 0

(1) Cash flow equation:

$$Net\ profit = B^* \times r^* - (VR \times r_{VR} + VE \times r_{VE} + G \times r_G) + \Delta$$

(2) Breakeven policy rate equation:

$$\widehat{r}^{BE} = \frac{B^* \times r^* - VR \times r_{VR} - G \times r_G}{VE} + \frac{\Delta}{VE}$$

Where  $\Delta$  represents other items that include (i) net income of fee and commissions, (ii) net income of other operating activities, (iii) adjustment of expected credit provisions. The average ratio of  $\frac{\Delta}{VE}$  for 2018-21 is -0.32 percent, therefore it has a minor impact on the net profit.

## Scenarios and Assumptions

**9. The three scenarios for ECB policy rate are based on assessments of the current euro area inflationary and macroeconomic environment.** They are: (i) unchanged ECB facility rate at the current level<sup>8</sup> (-0.5 percent) until the end of the year—assuming that the ECB will not tighten monetary policy using interest rates this year amid fading inflationary supply shocks and high macroeconomic uncertainty; (ii) a gradual increase, of 25 bps in June and another 25 bps in September 2022;<sup>9</sup> (iii) a more rapid increase, of 50 bps in June and another 50 bps in September 2022. In both (ii) and (iii), a parallel shift in the yield curve is assumed, while keeping unchanged spreads across different securities. It is important to highlight that these are somewhat conservative assumptions, as in reality the CBBH might benefit from different spreads and a steeper yield curve.

**10. Three scenarios for capital outflows were developed using the pre-expansion CBBH balance sheet size as reference.** The scenarios are: (i) no capital outflows; (ii) mild capital outflows: a linear reduction from the current level (as of February 2022) to the mid-point of the “pre-expansion” level by December 2022, implying a total reduction of 21 percent;<sup>10</sup> (iii) severe capital outflows: a linear reduction from the current level to the “pre-expansion” level by December 2022, implying a total reduction of 46 percent.<sup>11</sup>

**11. The model assumes an unchanged structure of the FX portfolio.** The maturing securities are assumed to be reinvested to keep the portfolio duration unchanged, while the revaluation effects are based on the assumption of a parallel shift up in the yields curve equal to the change in the ECB policy rate. In addition, a full pass-through of any ECB policy rate hike to the return of CBBH net FX assets is assumed. For example, a 25 bps increase in the ECB policy rate implies an increase of

<sup>8</sup> As of April 15, 2022.

<sup>9</sup> The assumptions do not take into consideration the official ECB forward guidance on the increase of interest rates: “Any adjustments to the key ECB interest rates will take place sometime after the end of the Governing Council’s net purchases under the APP and will be gradual.” (see <https://www.ecb.europa.eu/press/pressconf/shared/pdf/ecb.ds220310~c4c5a52570.en.pdf>). The purpose is to consider more extreme scenarios.

<sup>10</sup> Excess reserves decline from KM 4.09 bn to 3.22 bn. The “pre-expansion” level is defined as the average level of excess reserves during Dec 2012-15, prior to the expansion in 2016.

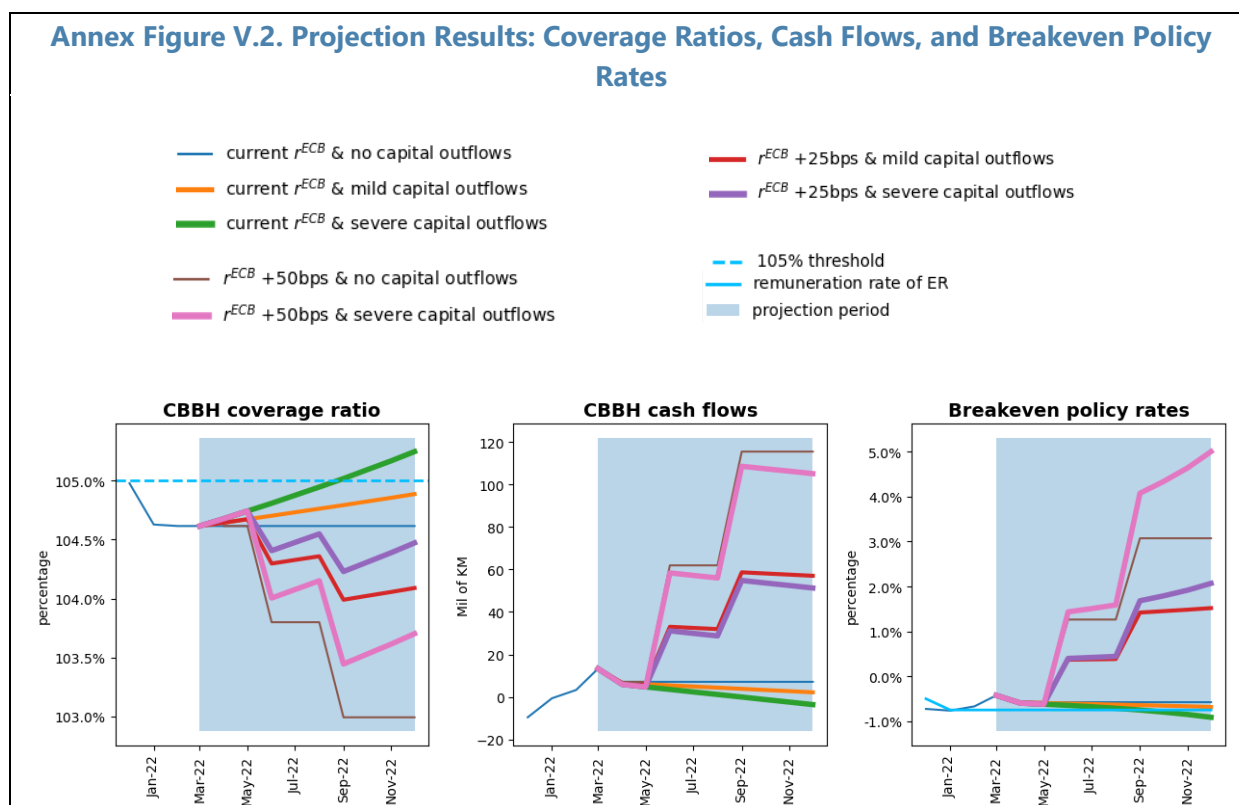
<sup>11</sup> Excess reserves drop from KM 4.09 bn to 2.21 bn.

25 bps on the returns of the net foreign assets, as well as an increase of 25 bps of the remuneration on excess reserves.

## D. Results

### Coverage Ratio

**12. The coverage ratio deteriorates as the ECB policy rate increases, but it improves as capital outflows take place.** The coverage ratio exhibits two distinct growth patterns (Figure V.2): (i) it increases linearly due to the size effect of monthly capital outflows when the ECB policy rate remains unchanged; (ii) it deteriorates over time with a downward stair-step pattern when the ECB policy rate increases. In contrast to the short run valuation effect of the ECB policy rate hike, which results in immediate fair value losses on FX securities, the long run valuation effect generates higher profitability through reinvestment in securities with higher yields. Combining the size and (short and long run) valuation effects, the coverage ratio first improves slightly, then deteriorates, and then improves again (pink, red, and purple lines). By contrast, in the absence of capital outflows, the coverage ratio declines after each ECB rate hike without improving overtime (brown line).



**13. The lowest coverage ratio ("peak pressure point") would be reached in September 2022** (Table V.2).<sup>12</sup> The peak pressure points are generated by the immediate revaluation losses of FX assets stemming from the ECB policy rate hikes assumed in the third quarter (September 2022). The coverage ratio is predicted to reach the lowest level of 103 percent in September 2022, should the ECB raise its policy rate by 100 bps (in two steps of 50 bps) with no capital outflows. However, it will marginally drop to 104.2 percent under the assumption of a 50 bps (in two steps of 25 bps) increase of the ECB policy rate and severe capital outflows.

	No capital outflows		Mild capital outflows		Severe capital outflows	
	excess reserves remain 4.09 Bil of KM (as of Feb 2022)		excess reserves reduce to 3.22 Bil of KM (in Dec 2022)		excess reserves reduce to 2.21 Bil of KM (in Dec 2022)	
	Coverage ratio	Policy space	Coverage ratio	Policy space	Coverage ratio	Policy space
<b>Current ECB policy rate (as of March 2022)</b>						
Jun-22	104.6%	0.17%	104.7%	0.14%	104.8%	0.10%
Sep-22	104.6%	0.17%	104.8%	0.11%	105.0%	0.00%
Dec-22	104.6%	0.17%	104.9%	0.07%	105.2%	-0.16%
<b>ECB policy rate +25bps in June and Sept 2022</b>						
Jun-22	104.2%	0.85%	104.3%	0.87%	104.4%	0.90%
Sep-22	103.8%	1.51%	104.0%	1.67%	104.2%	1.93%
Dec-22	103.8%	1.51%	104.1%	1.77%	104.5%	2.32%
<b>ECB policy rate +50bps in June and Sept 2022</b>						
Jun-22	103.8%	1.51%	103.9%	1.59%	104.0%	1.69%
Sep-22	103.0%	2.82%	103.2%	3.20%	103.4%	3.83%
Dec-22	103.0%	2.82%	103.3%	3.43%	103.7%	4.75%

## Policy Space

**14. Higher ECB policy rate improves both cash flows and breakeven policy rates, while capital outflows have varying effects depending on the ECB policy rate scenario.** A higher ECB policy rate leads to larger cash flows, higher breakeven policy rates, and therefore larger policy space (Figure V.2). On the other hand, the impact of capital outflows differs depending on the ECB policy rate scenarios (and the sign of the remuneration rate of excess reserves, which is assumed to follow ECB policy rate changes). When capital outflows are triggered by ECB rate hikes, the increased returns on net FX assets outweigh the interest income losses from capital outflows, (as stressed above, the net FX assets decline by the same magnitude of capital outflows), leading to an improved policy space. However, due to the current negative remuneration rates on excess reserves (-0.75 percent), if the ECB policy rate remains unchanged while monthly capital outflows occur, there

<sup>12</sup> End-September 2022, after the valuation and size effect take place.

is a significant loss of interest income from capital outflow when returns on net FX assets do not improve—hence cash flow and policy space deteriorate.

**15. The combined scenario of ECB policy rate hikes and severe capital outflows yields the largest policy space** (4.75 percent). This scenario assumes a cumulative increase of 100 bps in the ECB policy rate combined with severe capital outflows, yielding a policy space amounting to 4.75 percent by December 2022 (space between pink line and blue dashed line, Figure V.2). This implies that the CBBH could increase its corresponding remuneration rate of excess reserves (e.g., 0.25 percent as of December 2022) by 475 bps while retaining positive cash flows.

**16. The combined scenario of no ECB rate hike and severe capital outflows generates the lowest policy space** (-0.16 percent). Under the assumption of severe capital outflows, an unchanged ECB policy rate (-0.50 percent) and remuneration rates on excess reserves at current levels (-0.75 percent) would lead to a decline in cash flows, as a result of diminished returns on net FX assets as well as a loss of interest income from capital outflows, leading to a deteriorated policy space.

## E. Policy Implications

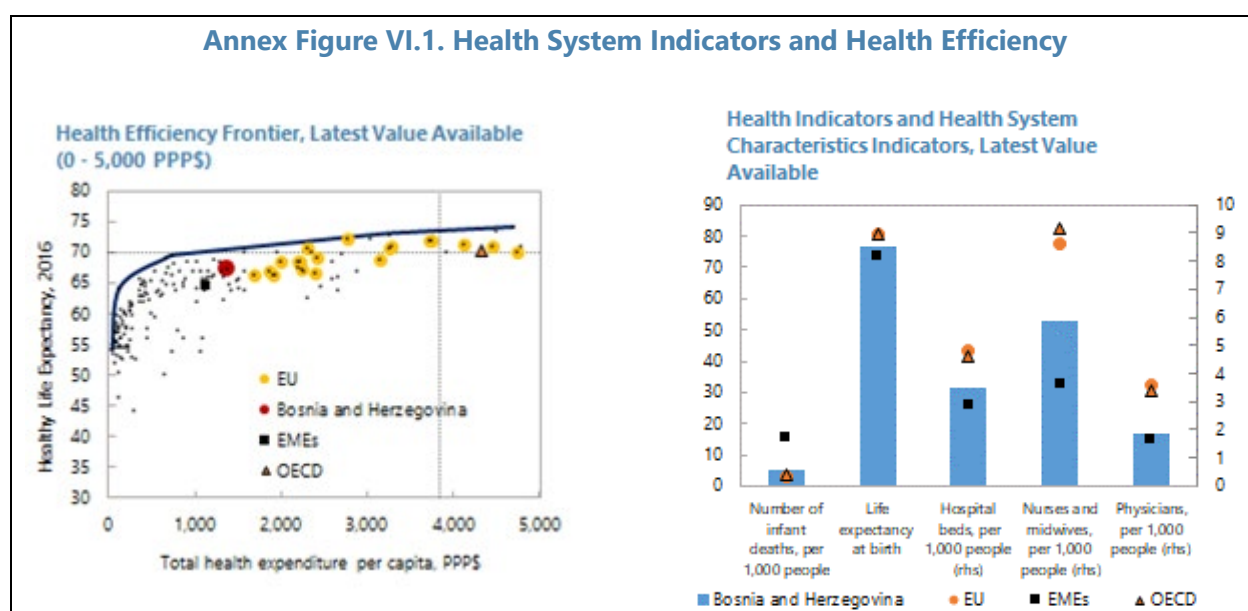
**17. The CBBH should institutionalize procedures for periodic stress testing of its balance sheet.** To strengthen the assessment of the currency board resilience, the BIH should refine the risk-based model for projecting its balance sheet. It should also institutionalize procedures for assessing scenarios and producing risk-based projections to provide an early warning of potential vulnerabilities.

**18. A review of the investment guidelines for the foreign exchange reserves should be motivated by the results of the stress-testing of CBBH balance sheet.** The risk-based stress test of the CBBH balance sheet will provide the scenarios when the resilience is most at risk. Such results allow for the portfolio to be *optimized* to mitigate the risks. The investment guidelines should be revised to incorporate the optimization. While ordinarily central banks review their investment guidelines about every four years, given the critical nature of the investment policy to a CBA, investment guidelines in BIH could be reviewed more frequently, perhaps every two years.

## Annex VI. An Overview of the Health Sector

**1. The health system in Bosnia and Herzegovina (BiH) is extremely fragmented and complex.** In the Federation of Bosnia and Herzegovina (FBiH), it comprises 11 ministries, 11 insurance funds, 11 health institutes, 18 hospitals, 80 primary health care centers, and various other institutions at the entity, cantonal, and municipal levels. In the Republika Srpska (RS), it is run primarily by the central government and consists of one ministry, one insurance fund, an institute of public health, a university clinical center, 12 hospitals, 55 primary health care institutions (at the municipal level), and 6 health institutes. Brčko District has a department of health, one insurance fund, one hospital, and one primary health care institution. There is a medicines agency at the state level, but its authority has been recently challenged by the RS government.

**2. BiH's health indicators are in line with regional peers but fall well short of the EU average** (Figure 1). Total health expenditures per capita in BiH is \$1,378, slightly higher than the average in Western Balkans but just one third of the EU average. Healthy life expectancy, at 67.2 years, is in line with Western Balkans but below 70 in the EU. When it comes to infant deaths, hospital beds, nurses and midwives, and physicians per capita, BiH lags far behind the EU, and trails some regional peers.



**3. All citizens who have registered their employment status (employed, unemployed, pensioner, disabled, etc.) have the right to free (or nearly free) health care.** Those registered pay nothing, or a small percentage of the actual cost of the service provided, depending on the service. Health insurance coverage is the same for everyone, without limits on the number of services used or the total cost, regardless of individual contributions.<sup>1</sup> Registered insureds make up

<sup>1</sup> However, for the FBiH, the scope of rights to health care varies between cantons.

about 87 percent of the FBiH population and 80 percent of the RS population, of which, in both entities, 69 percent are active contributors and 31 percent are members of their families.

**4. The health sector is financed by social security contributions, government transfers, and health care institutions' own income.** *Contributions* are made by: (i) employees,<sup>2</sup> (ii) voluntarily insured persons, (iii) farmers, (iv) pensioners (pension fund), (v) foreign insureds, and (vi) unemployed persons (unemployment fund, only in the FBiH). *Budget transfers* help cover the cost of insuring those who do not contribute to the system, such as unemployed persons (only in the RS), disabled war veterans, and refugees. Health care institutions also generate their own income through *donations and participation fees*. Donations are mostly in kind, in the form of equipment, while participation fees are paid by patients in cash when receiving services. In 2020, contributions amounted to 7.4 percent of FBiH GDP and 5.1 percent of RS GDP, whereas budget transfers, donations, and participation fees amounted to 2.5 percent of FBiH GDP and 1.0 percent of RS GDP.

**5. The composition of insureds is not favorable to the long-term sustainability of the health sector.** Unemployed insureds and pensioners account for around half of total insureds but contribute nothing and around 6 percent of average costs, respectively. Only employees and foreign insured contribute enough to cover their costs, but jointly they represent less than half of all insured.

**6. Payments from the RS Health Insurance Fund are not sufficient to cover the expenditures of health institutions, resulting in ever-growing losses.** The Health Insurance Fund collects social security contributions, together with government transfers, and makes payments to health institutions for services rendered. However, total expenditures of health institutions regularly exceed payments received from the Health Insurance Fund, resulting in accumulated losses of KM 527.6 million. The bulk of these losses are in the hospitals. The Health Insurance Fund itself has been running surpluses for several years. In the FBiH, the accumulated net loss of public health institutions is much lower and amounts to around KM 83 million.

**7. Arrears in the health sector are large.** Total liabilities of the BiH health sector are KM 1.5 billion, of which around KM 512 million are in arrears. Most of these arrears consist of unpaid taxes and social security contributions owed by health institutions—mainly hospitals. Other liabilities include long-term loans (14 percent of total liabilities) and debt to suppliers (21 percent). Moreover, health institutions are illiquid.<sup>3</sup> Without government intervention or changes in the level and structure of their revenues and expenditures, health institutions are not always able to make timely debt payments. To contain further growth in liabilities, the FBiH Parliament has recently adopted a Law on Financial Consolidation and Restructuring of Public Health Institutions, based on which the FBiH budget will allocate a total of KM 225 million in 2022–24 to pay outstanding liabilities of public health institutions.

<sup>2</sup> In practice, employers make contribution payments on behalf of their employees. These payments are deducted from employees' gross salary.

<sup>3</sup> Health institutions have an average liquidity ratio (i.e., the ratio of current assets to current liabilities) of 0.44. This ratio should be at least 1, and preferably higher, depending on the structure and liquidity of current assets.