



REPUBLIC OF CROATIA

2023 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STAFF STATEMENT

June 2023

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2023 Article IV consultation with Republic of Croatia, the following documents have been released and are included in this package:

- A **Press Release**
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on lapse-of-time basis following discussions that ended on May 22, 2023, with the officials of Republic of Croatia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 7, 2023.
- An **Informational Annex** prepared by the IMF staff.

The documents listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: <http://www.imf.org>
Price: \$18.00 per printed copy

International Monetary Fund
Washington, D.C.



IMF Executive Board Concludes 2023 Article IV Consultation with Croatia

FOR IMMEDIATE RELEASE

Washington, DC – June 29, 2023: The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Croatia on a lapse-of-time basis.²

On January 1, 2023, Croatia became the 20th member of the eurozone, a testament to the significant progress achieved since joining the European Union in 2013. The euro adoption has improved sovereign ratings, eased access to capital markets, and significantly reduced exchange rate risks.

Croatia posted another year of strong economic growth in 2022, among the highest in the eurozone. Output expanded by 6.2 percent in 2022, driven by domestic demand and tourism. The fiscal position improved considerably to a small surplus and the public debt declined significantly to about 69 percent of GDP, below pre-pandemic levels. However, surging energy and food prices drove headline inflation to a multi-decade high at year end. The largely foreign-owned banking system has remained profitable, well-capitalized, and extremely liquid.

Economic growth is expected to moderate to 2.4 percent in 2023. Weak external demand, tightening financial conditions, and still high global uncertainty are expected to dampen growth, partially offset by a decline in global commodity prices, resilient tourism, and a buoyant labor market. Growth is projected to gradually recover from 2024 towards its potential. Inflation is projected to recede to an average of 7½ percent in 2023 and fall towards the ECB's 2 percent target in late 2025. The adoption of euro has had a very limited impact on inflation.

The outlook remains subject to significant uncertainty, but risks to growth are broadly balanced. Downside risks include intensification of Russia's war in Ukraine, a renewed surge of commodity prices and inflation, a sharper global or regional recession, and tighter-than-expected financial conditions. On the upside, the euro adoption and entry into the Schengen area could provide a stronger boost to tourism, trade, and investment. Risks to inflation are tilted to the upside.

¹ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

² The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

Executive Board Assessment

The euro adoption marks a momentous milestone for Croatia and is a testament to diligent policymaking and concerted efforts. The economy has also proven resilient in the face of the pandemic and the war in Ukraine and recorded another year of strong growth in 2022. However, surging global energy and food prices pushed headline inflation to a multi-decade high towards year end. While inflation has peaked, it remains elevated and broad-based. The 2022 external position was broadly in line with the level implied by fundamentals and desirable policies.

Growth is set to moderate in 2023. Weak external demand, tightening financial conditions, and still elevated global uncertainty would weigh on growth, partially offset by a decline in global commodity prices, resilient tourism, and a buoyant labor market. Higher growth is anticipated from 2024, underpinned by a recovery in the global economy and reforms under the NRRP. Inflation is expected to be sticky, averaging about 7½ percent in 2023, and to gradually fall towards the ECB's target of 2 percent by late 2025. The outlook remains subject to significant uncertainty.

The near-term fiscal policy needs to complement monetary tightening and avoid adding to aggregate demand. The labor market is tight, core inflation remains elevated, and the euro adoption has mitigated the impact of ECB's tightening. Therefore, an expansionary fiscal stance risks fueling domestic demand and inflation and hurting Croatia's competitiveness. Broad-based support measures—notably energy price caps and tax cuts—need to be reversed.

Maintaining a growth-friendly fiscal consolidation over the medium-term is paramount, by improving tax policy, reducing spending rigidity, and enhancing spending efficiency. Given Croatia's high budget spending rigidity and the need to further reduce public debt, any tax reforms should preserve revenue resources while improving the tax system structure to reduce distortions and support fairness and growth. Modernizing the property tax and reducing favorable taxation on short-term rental income would help dampen housing demand, boost supply, and encourage labor participation. A simplified and transparent public sector pay system that rewards merit and productivity would enhance public services and make the sector more efficient. Worsening healthcare and pension costs due to an aging population call for renewed efforts to lengthen the working life and decisively address healthcare arrears. In addition, enhancing the monitoring and corporate governance of SOEs will reduce potential fiscal risks and maximize their contribution to growth. Efforts to strengthen the public investment management system, including establishing a strong central coordination function in the MOF, should continue.

The financial system is currently stable; continued vigilance is needed given ongoing challenges. The banking system has remained profitable, well-capitalized, and extremely liquid. Although household and corporate vulnerabilities have moderated since the pandemic, a deeper economic slowdown amidst higher interest rates could pose new challenges. In addition to the announced increases of the counter-cyclical capital buffer, explicit borrower-based measures could be considered to contain potential future financial stability risks of housing market pressures, taking into consideration measures already in place and other risk mitigating factors. A comprehensive review of housing support measures should be considered to address the housing affordability challenge.

Advancing structural reforms is key to reap the full benefits of euro adoption and sustaining income convergence. The authorities should continue their commendable and steadfast implementation of the NRRP. Raising productivity, advancing the green and digital transition, and making the best of an aging and declining population are priorities. The currently tight labor market offers an opportunity to carry out further labor market reforms. More ambitious reforms, along with the EU funds, are warranted to address relatively low firm-level productivity and inefficient resource allocation. A comprehensive climate strategy, beyond the NRRP and fully aligned with the energy strategy, will help diversify the energy mix, promote energy savings, improve energy efficiency, and accelerate the green transition. In particular, an economy-wide carbon pricing accompanied by sectoral policies and targeted support to the vulnerable can help promote cost-effective emissions reductions and ensure adherence to the EU-wide targets.

Table 1. Croatia: Selected Economic Indicators, 2019-2028

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
				<i>Prel.</i>	<i>Projections</i>					
				<i>(Percent change, annual average, unless otherwise indicated)</i>						
Output, unemployment, and prices										
Real GDP growth	3.4	-8.5	13.1	6.2	2.4	2.4	2.7	2.9	2.8	2.8
Contributions:										
Domestic demand	2.4	-3.1	6.0	5.4	3.5	2.6	2.2	1.9	2.1	2.1
Net exports	1.0	-5.4	7.1	0.9	-1.1	-0.2	0.5	1.0	0.7	0.7
Unemployment rate	7.8	9.0	8.1	6.8	6.3	5.9	5.6	5.6	5.6	5.6
CPI inflation (avg.)	0.8	0.0	2.7	10.7	7.5	3.8	2.5	2.2	2.2	2.1
Saving and investment (percent of GDP)										
Domestic investment	22.9	24.2	21.9	25.8	25.9	26.1	25.9	25.0	24.5	24.0
Domestic saving	25.8	23.6	23.6	24.2	25.6	25.7	25.2	24.7	24.5	24.3
Government	6.8	-2.0	1.8	4.3	2.5	3.0	3.6	4.0	4.1	4.2
Nongovernment	18.9	25.6	21.8	19.9	23.1	22.6	21.5	20.7	20.4	20.2
Government sector (ESA 2010 definition)										
General government revenue	46.5	46.8	46.2	45.5	45.7	45.2	45.2	45.3	44.8	44.7
General government expenditure	44.3	54.1	48.7	45.1	46.5	46.9	46.3	46.1	45.6	45.2
General government balance	2.2	-7.3	-2.5	0.4	-0.8	-1.8	-1.1	-0.8	-0.8	-0.6
Structural balance 1/	2.1	-5.7	-3.2	-0.5	-1.3	-2.0	-1.2	-0.8	-0.8	-0.6
Structural primary balance	4.2	-3.7	-1.8	0.7	0.3	-0.2	0.3	0.6	0.4	0.5
General government debt 2/	71.0	86.9	78.3	68.8	63.7	62.5	60.9	59.2	57.6	55.9
Balance of payments (percent of GDP)										
Current account balance	2.9	-0.5	1.8	-1.6	-0.3	-0.5	-0.7	-0.3	0.0	0.4
Capital account	1.6	2.1	2.4	2.6	3.0	2.5	2.5	2.2	2.0	1.7
Financial account	-4.5	-1.0	-3.3	1.2	-2.7	-2.0	-1.8	-2.0	-2.0	-2.1
Debt and reserves										
Gross official reserves (<i>billions of euros</i>)	18.6	18.9	25.0	27.9	...	...	...	...	...	...
IMF metric 3/	13.6	10.8	12.7	14.9	...	...	...	...	...	...
IMF metric (percent) 3/	136.2	175.0	197.6	187.1	...	...	...	...	...	...
In months of imports in goods and services (<i>based on next year level</i>)	7.8	9.3	9.8	7.6	...	...	...	...	...	...
Total external debt (<i>percent of GDP</i>)	74.1	81.8	81.1	74.0	66.4	63.3	60.9	59.0	57.3	55.5
Money and credit										
	<i>(End of period unless otherwise indicated, change in percent)</i>									
Broad money (<i>M4</i>)	2.9	9.3	10.7	8.4	...	...	...	...	...	...
Claims on other domestic sectors 4/	2.6	3.3	2.6	10.0	...	...	...	...	...	...
Interest rates										
12-month average T-bill rate (<i>in kuna until 2023, then euros</i>)	0.1	0.1	0.0	0.1	...	...	...	...	...	...
10-year government bond yield	0.7	0.6	0.1	2.8	...	...	...	...	...	...
Exchange rate										
Real effective exchange rate (<i>percent, "-" = appreciation</i>)	-1.3	-1.3	-0.1	0.2	...	...	...	...	...	...
Memorandum items										
Nominal GDP (<i>billions of euros</i>)	54.8	50.5	58.2	66.9	73.8	78.1	82.3	86.5	90.9	95.5

Sources: Croatian authorities; and IMF staff estimates. Unemployment rate is from Croatian Bureau of Statistics and Haver Analytics.

1/ Based on a simplified approach to the cyclically-adjusted balance, in percent of potential GDP. Includes the one-offs related to the COVID-19 package of -3.8 percent of GDP in 2020 and -2.3 percent of GDP in 2021. Includes the one-offs related to the energy crisis of 1.4 percent of GDP in 2022 and 1.6 percent of GDP in 2023.

2/ Gross debt as defined by the EU under the Maastricht Treaty.

3/ IMF, 2015, "Assessing Reserve Adequacy-Specific Proposals" IMF Policy Paper, Washington: International Monetary Fund.

4/ Comprises claims on households and non-financial corporations.



REPUBLIC OF CROATIA

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION

June 7, 2023

KEY ISSUES

Context. On January 1, 2023, Croatia became the 20th member of the eurozone. The country posted another strong growth year in 2022, among the highest in the eurozone. But the momentum started to slow in H2, while inflation rose to a multi-decade high, reflecting indirect impacts from Russia's war in Ukraine. Staff expects growth to moderate to 2.4 percent in 2023 and recover to its potential over the medium term. Inflation is projected to average 7½ percent in 2023 and gradually fall towards the 2 percent target. The outlook is subject to considerable uncertainty. Risks to growth are broadly balanced and risks to inflation are tilted to the upside.

Policy Discussions. Focus was on continuing prudent fiscal, financial, and macroprudential stances to complement the ECB's monetary tightening and build adequate buffers as well as on advancing structural reforms.

- **Fiscal policy:** The near-term fiscal policy advice is to avoid adding to aggregate demand. With declining energy prices, broad-based support measures need to be reversed. A growth-friendly consolidation should continue over the medium-term to build adequate buffers, safeguard sustainability of public finances, and strengthen competitiveness. Staff recommends improving tax policy, reducing spending rigidity, and enhancing spending efficiency. Strengthening the monitoring and corporate governance of state-owned enterprises (SOEs) will reduce potential fiscal risks and maximize their contribution to growth.
- **Financial policy:** The financial system requires continued vigilance. While household and corporate vulnerabilities have moderated since the pandemic, a deeper slowdown amid higher interest rates could pose new challenges. In addition to the announced increases of the counter-cyclical capital buffer, explicit borrower-based measures could be considered to contain potential future financial stability risks of housing market pressures. A comprehensive review of support schemes should be considered to address the housing affordability challenge.
- **Structural policy:** Advancing structural reforms, anchored by the National Recovery and Resilience Plan (NRRP), is key to reap the full benefits of euro adoption and achieve faster income convergence. Raising productivity, including by advancing the digital transition, accelerating the green transition, and making the best of an aging and declining population are priorities.

Approved By
Uma Ramakrishnan
(EUR) and Eugenio
Cerutti (SPR)

Discussions were held in Zagreb during May 9-22, 2023. The team comprised Mses. Y. Sun (head), I. Bunda and X. Zhang, and Messrs. J. Chow and T. Lybek (all EUR). Ms. G. Li (AFR) contributed to the preparation of the report. Mses. E. Cohn Bech and N. Gonzales (both EUR) assisted in the preparation of the report. Mr. Milutinovic (OED) attended some meetings. The mission met with Minister of Finance Mr. Primorac, the Governor of the Croatian National Bank Mr. Vujčić; the Fiscal Policy Committee of the Parliament; officials from key ministries and SOEs; and representatives of the business community, trade unions, banks, think-tanks, and academia.

CONTENTS

CONTEXT	4
RECENT DEVELOPMENTS	5
OUTLOOK AND RISKS	9
POLICY DISCUSSIONS	10
A. Fiscal Policy	10
B. Financial Sector Policies	14
C. Structural Policies	18
STAFF APPRAISAL	21
BOX	
1. Croatia Has Adopted the Euro	4
FIGURES	
1. Real Sector Developments	23
2. Inflation Developments	24
3. Labor Market Developments	25
4. Minimum Wage	27
5. Fiscal Developments and Projections	28
6. Household Energy Prices and Demand	29
7. Tax Revenues	31
8. Government Wage Bill and Employment	32
9. External Sector Developments	33
10. Monetary Stance and Bank Lending to the Private Sector	34
11. Bank Lending to Households and Non-Financial Corporations	35

12. Financial Debt and Assets of Households and Non-Financial Corporations Relative to EU CESEE Countries _____	36
--	----

TABLES

1. Support Measures in Response to the Cost-of-Living Challenge _____	8
2. Selected Economic Indicators, 2019-2028 _____	37
3. Medium-Term Baseline Scenario, 2017-2028 _____	38
4a. Statement of Operations of General Government 2017-2028 (Percent of GDP) _____	39
4b. Statement of Operations of General Government 2017-2028 (Billion of Euros) _____	40
5. Monetary Accounts, 2016-2022 _____	41
6. Financial Soundness Indicators, 2016-2023 _____	42
7. Balance of Payments 2017-2028 _____	43

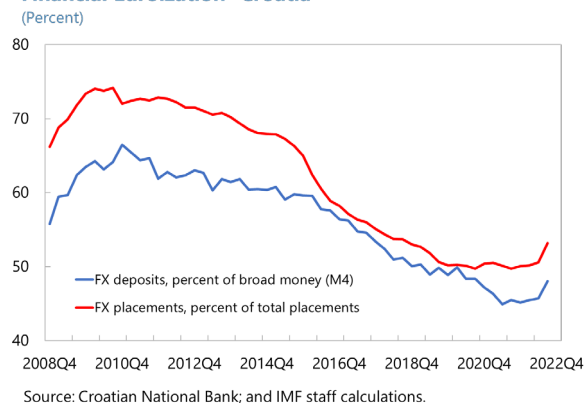
ANNEXES

I. Implementation of 2021 Article IV Recommendations _____	44
II. Risk Assessment Matrix _____	46
III. Summary of the Sovereign Risk and Debt Sustainability Assessment _____	48
IV. External Debt Sustainability Analysis _____	57
V. External Sector Assessment _____	59
VI. Euro Changeover Effect on Inflation _____	61
VII. Croatia's Residential Housing Market _____	63

CONTEXT

1. On January 1, 2023, Croatia became the 20th member of the eurozone, a testament to the considerable progress since joining the EU in 2013. With the euro adoption, the exchange rate risk of this highly euroized economy was largely eliminated (Box 1).¹ Being now part of the eurozone, Croatia must rely on fiscal, financial, macroprudential, and structural policies to address any idiosyncratic shocks and imbalances. Croatia also became the 27th member of the Schengen area.

Financial Euroization – Croatia



2. Advancing structural reforms remains a priority to reap the full benefits of euro adoption and achieve faster income convergence. Croatia has among the lowest income per capita in the eurozone (2/3 of the average). High global uncertainty and further income convergence buttress the importance of having a dynamic economy with adequate buffers. The center-right governing coalition faces elections no later than July 2024. The authorities have implemented several key recommendations from the 2021 Article IV consultation, including debt and deficit reductions and measures to strengthen public procurement (Annex I).

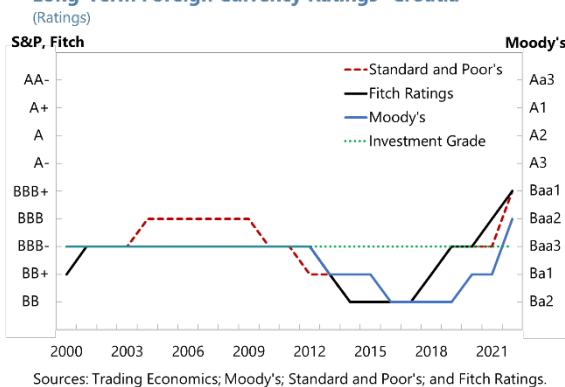
Box 1. Croatia Has Adopted the Euro

Croatia’s euro adoption is a logical step following the EU membership on July 1, 2013, the ERM II membership on July 10, 2020, close bank cooperation, and joining the Single Resolution Mechanism on October 1, 2020. The adoption was expected to reduce interest rate spreads, ease access to capital markets, and attract investment. Croatia also became a member of the [European Stability Mechanism](#) (ESM) that can provide assistance in the event of financial distress.

The convergence criteria and additional commitments were deemed observed by the European Commission (EC) and the European Central Bank (ECB) on June 1, 2022, and the final decision was announced on July 12, 2022.

The inflation criterion was the most challenging, but helped by the rules excluding two outliers. While public debt exceeded 60 percent of GDP, the downward trend was deemed adequate considering the pandemic. The legal framework was assessed consistent with the requirement for the European System of Central Banks. Following the formal decision, rating agencies upgraded Croatia.

Long-Term Foreign Currency Ratings – Croatia



¹ Since 1993, Croatia had operated a de facto exchange rate peg.

Box 1. Croatia Has Adopted the Euro (concluded)

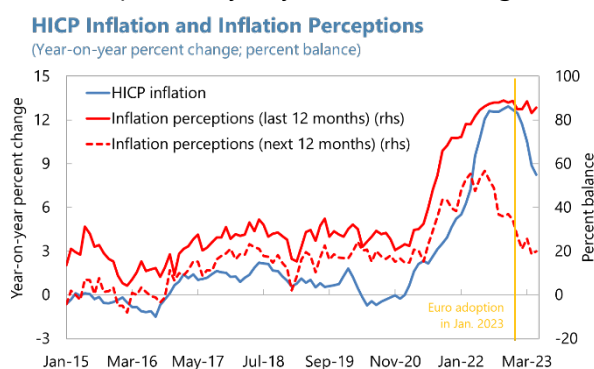
The additional entry commitments were building on commitments made for ERM II membership. They comprised: AML/CFT improvements; reforms of SOEs; reduction of administrative and parafiscal burdens; and measures to enhance the insolvency framework. Both the EC and ECB did note that there was still room for strengthening institutions—including quality of regulation, efficiency of the public administration and the judiciary, as well as the fight against corruption—to catch up to the best euro area performers.

The implementation of the euro adoption generally proceeded smoothly. Prices have been shown in both kuna and euro from September 5, 2022, which will remain till end-2023. Since January 15, 2023, only euros have been used. Kuna coins and bank notes can be exchanged to euros in commercial banks and post offices until end-2023, whereupon they can be exchanged at the Croatian National Bank (CNB).

RECENT DEVELOPMENTS

3. The economy posted another year of strong growth in 2022, although the momentum slowed from mid-year. Driven by strong domestic demand and tourism, real GDP expanded by 6.2 percent in 2022, outpacing many other eurozone countries (Figure 1). Russia’s war in Ukraine has had limited direct impact on Croatia, given its limited energy reliance on Russia and limited trade, investment, and financial ties with Russia and Ukraine. But Croatia felt indirect repercussions through higher global commodity prices, a weakening external environment, and heightened uncertainty, with growth (q-o-q) turning negative in Q3. Since then, the economy has registered positive growth (q-o-q) and real GDP grew by 2.6 percent (y-o-y) in Q1. Leading indicators point to improving sentiments and another strong tourism season.

4. Inflation has peaked but remains elevated and broad-based. Surging energy and food prices drove headline inflation to a multi-decade high of 12.7 percent (y-o-y) at end-2022 (Figure 2). While headline and core inflation have plateaued, they remain elevated. [CNB’s studies](#) suggest that Croatia’s inflation divergence from the eurozone average since 2022 reflects in part the higher share of food and accommodation services in Croatia’s consumption basket. The divergence has started to reverse. The euro adoption has had a very limited impact on inflation, in line with the experiences of other euro adoption countries (Annex VI). Medium-term inflation expectations have remained anchored.

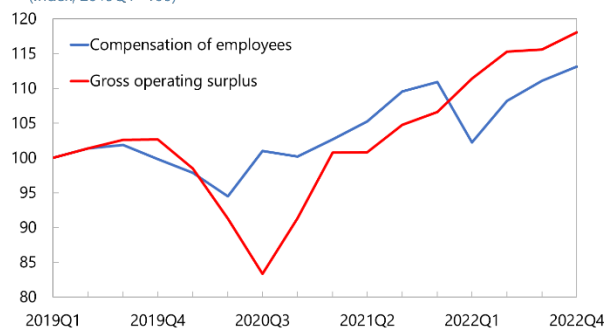


Sources: Eurostat; European Commission Business and Consumer Survey; and Haver Analytics. Note: Percent balance equals percent of respondents reporting an increase minus the percent of respondents reporting a decrease.

5. The labor market is tight and wage pressures have edged up.

Employment and labor force participation rates recovered to above pre-pandemic levels in 2022, albeit still lower than those of its CEE peers (Figure 3). The unemployment rate fell to 6.5 percent in April 2023, among the lowest in more than a decade. Nominal gross wage growth picked up to about 13 percent in early 2023. Real wage growth was negative in 2022 but has turned positive from early 2023. The minimum wage was increased by over 10 percent in 2022 (Figure 4) and 12½ percent at the beginning of 2023. The growth of profits surpassed wage growth in 2022.

Real Compensation of Employees and Real Gross Operating Surplus
(Index, 2019Q1=100)



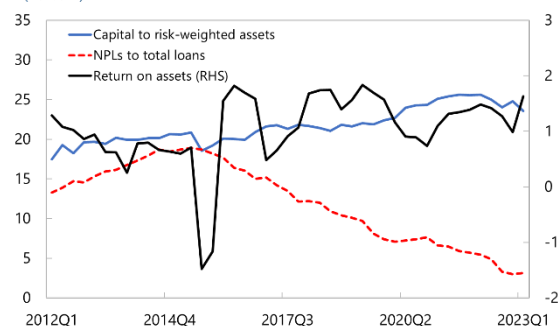
Sources: Eurostat; Haver Analytics; and IMF staff calculations.

6. The euro adoption has mitigated the tightening of financial conditions. Ample excess liquidity before the euro adoption should be seen in the context of ECB's negative overnight deposit rates (until July 2022) with the CNB's overnight deposit rate at zero (Figure 10). The adjustment to the eurozone resulted in a gradual reduction, since mid-2022, of the reserve requirement (from 9 to 1 percent) and the abolishment of the 17 percent minimum foreign currency liquidity requirement. This further increased the liquidity surplus to about 21 percent of GDP at end-2022. The increase in bank lending rates to households may also have been dampened by legal restrictions (variable rates are linked to the national reference rates or Euribor) and loans with longer interest fixation periods. These factors, on top of the reduced exchange rate risk, have mitigated the impact of recent ECB tightening. Although bank lending to the private sector has remained solid, it has thus far not resulted in a lending boom. Following the war, bank lending to non-financial corporations (NFCs) has increased to double-digit figures, likely related to precautionary borrowing and significant input price surges, while credit growth to households have remained relatively stable in nominal terms but became negative in real terms (Figure 11).

7. The largely foreign-owned banking sector has remained profitable, well-capitalized, and extremely liquid.

According to the central bank's monetary statistics, banks have generally had positive net foreign assets since early 2016. At end-2022, the average capital adequacy ratio was 24.8 percent—14.3 percent was the lowest.² The impact of the pandemic, moratorium, and the war have only had a modest impact. NPLs declined in both nominal and relative terms, but this masks an increase in stage 2 loans. Bank profitability has remained comfortable. Banks have benefitted from

Financial Soundness Indicators, 2012Q1-2023Q1
(Percent)



Sources: IMF Financial Soundness Indicators (FSI); Croatian National Bank; and Haver Analytics. Note: Data for 2022Q3-2023Q1 are from the Croatian National Bank.

² The number of credit institutions has declined from 23 at end-2021 to 21. Two small housing savings banks were merged with their parent. [Sberbank Croatia was acquired by the state-owned Postal Bank on March 1, 2022](#). The two banks will be merged during 2023, reducing the number of credit institutions to 20.

increasing net interest margins, with lending rates increasing faster than deposit rates given ample liquidity.

8. Available data suggests that the non-bank financial sector—about 30 percent of the financial system—is solid despite increasing interest rates. This sector is dominated by pension funds and insurance companies. Their assets are primarily invested in fixed-income securities. They have faced some revaluation losses due to increasing interest rates. However, they all observe the regulatory capital requirements according to the non-bank financial regulator ([HANFA](#)). Non-Bank financial institutions have limited direct lending to the economy, for instance real estate, and limited funding from banks.

9. The fiscal balance improved considerably in 2022, reflecting the withdrawal of COVID measures and strong revenue, while new support was introduced to alleviate the cost-of-living challenge. The headline fiscal balance improved from a deficit of 2½ percent of GDP in 2021 to an estimated surplus of 0.4 percent of GDP, and the public debt-to-GDP ratio fell below its pre-pandemic level (Figure 5). With financial tightening, government bond yields have picked up although spreads have so far remained contained and below peers. In response to the cost-of-living challenge, the authorities introduced four support packages during 2022-23 (including price caps, subsidies, transfers, and tax reductions) worth about 6 percent of GDP. Their direct budgetary impact is about 1½ percent of GDP each for 2022 and 2023 (Table 1). Structural impediments (notably the lack of a household registry and property/cadaster information) have prevented quick rollout of better targeted energy support. The state-owned energy company, Hrvatska Elektroprivreda (HEP)³, has taken much of the financial burden of the energy price caps on its own balance sheet and incurred a loss in 2022. The government injected recapitalization of €900 million to shore up HEP's finances.

10. The external position in 2022 was broadly in line with the level implied by fundamentals and desirable policies (Annex V). The current account moved to a deficit of 1.6 percent of GDP, as the negative terms-of-trade shock and large imports (reflecting strong investment) more than offset continued robust tourism (Figure 9). The CPI-based real effective exchange rate has remained stable.

³ The HEP Group was profitable through 2021.

Table 1. Croatia: Support Measures in Response to the Cost-of-Living Challenge

Description of the measure	Fiscal effect in millions of euro		
	in 2022	in 2023	in 2024
Total effect on fiscal revenue (million euro)	-118	-196	-13
Percent of GDP	-0.2	-0.3	0.0
Reduced VAT rate on certain food products, gas and thermal energy, hygiene items, tickets for sports and cultural events from March 2022	-207	-69	
Temporarily reduced VAT rate of 5 percent on the delivery of gas, heating from thermal stations, firewood, pellets, briquettes and wood chips until end-March 2024	-13	-52	-13
Reduction of excise duty on motor fuels (gasoline and diesel) to lower fuel retail price	-134	-30	
One-time excess profit tax	235		
Higher income threshold (from HRK 15,000 to HRK 24,000) up to which someone can be considered a dependent for PIT		-33	
Other revenue measures	1	-12	
Total effect on fiscal expenditure (million euro)	848	1000	110
Percent of GDP	1.3	1.4	0.1
One-time benefit to pensioners	184	64	
One-time monetary payment to social welfare system beneficiaries	20	23	
One-time increase in children's allowance	16	9	
Payment of cash benefits to the unemployed	4	8	
Student grants based on socio-economic status	1	7	7
Fees for vulnerable buyers of energy products	27	57	26
Reimbursement of heating costs and part of housing costs to guaranteed minimum benefit users	3	8	8
Support for offsetting the increase in energy prices in agro-processing sectors	0	20	7
Subsidies for mitigating the negative effects of rising electricity prices (distributors outside HEP Group) and rising thermal energy prices	84	146	
Subsidies to mitigate the negative effects of rising electricity prices (HEP Group)	412	488	
Subsidies to mitigate the rise in natural gas prices for entrepreneurs	11	21	5
Small value support to agricultural producers for the purchase of mineral fertilizer	12	1	
Reimbursement of the cost of diesel fuel used in commercial road passenger transport	2	13	5
Subsidies to airlines	15	19	20
Subsidies to shippers	13	7	7
Subsidies to moderate the rise in household gas prices	35	94	22
Other expenditure measures	9	15	3
Total fiscal effect on the budget	966	1196	123
Percent of GDP	1.4	1.6	0.2
Measures financed by EU funds (million euro)			
Energy renovation of houses and apartment buildings	66	66	
Measures financed by the environmental fund (million euro)			
Energy renovation of houses and residential buildings		29	66
Non-reimbursable grants to entrepreneurs for the energy transition	126	126	
Guarantees/subsidized lending via HBOR (million euro)			
Loans for working capital with subsidized interest for companies in difficulty	252	252	
HBOR guarantees for loans to exporters in difficulty	206	206	

Source: Croatian Ministry of Finance.

OUTLOOK AND RISKS

11. Growth is expected to moderate to 2.4 percent in 2023 and recover to its potential over the medium term. Weak external demand, tightening financial conditions, and still high global uncertainty would weigh on growth in 2023, partially offset by a decline in global commodity prices, resilient tourism, and a buoyant labor market. The output gap is estimated to remain positive in 2023-24. Growth is projected to gradually recover to its potential (about 3 percent) over the medium term, supported by investment and reforms under the NRRP. Key assumptions underpinning the baseline are: (i) the war in Ukraine does not escalate and commodity prices continue to decline in line with the April 2023 WEO assumptions; (ii) the ECB is expected to raise its policy rate by some 150 bps during 2023 as in the April WEO; (iii) supply chain bottlenecks continue to ease; and (iv) the NRRP funds are fully utilized by 2026 and absorption of EU funds continues to improve.

12. Inflation is expected to recede gradually. Headline inflation is projected to average 7½ percent in 2023, driven by falling energy prices and easing supply bottlenecks, and decline toward the ECB's target in late 2025. Core inflation is likely to be stickier, reflecting a tight labor market and estimated positive output gaps, declining toward the target in 2026. Second-round effects on wages are projected to remain limited, given the relatively contained real wage growth, large inflows of foreign workers from non-EU countries, and well-anchored inflation expectations.

13. The outlook is subject to significant uncertainty and risks to growth are broadly balanced (Annex II). Intensification of the war in Ukraine, a renewed surge of commodity prices and inflation, a sharper global or regional recession, and tighter-than-expected financial conditions present major downside risks to growth. Domestically, an abrupt correction in the real estate prices could dampen confidence and economic activity. On the upside, the euro adoption and Schengen membership could provide a stronger impetus to tourism, trade, and investment. Faster investment and structural reforms through the NRRP would also boost growth. Risks to the inflation outlook are tilted to the upside. Positive risks from a stronger pass-through of nominal wage growth are partially offset by negative risks from weaker-than-expected domestic demand.

Authorities' Views

14. The authorities broadly concurred with staff's views on the outlook and risks. They noted that the overall economic situation is better than initially expected, and Croatia's entry into the eurozone and Schengen area has contributed to improved sentiment. They agreed that core inflation would be stickier amid the tight labor market and continued buoyant tourism. The underlying inflationary pressure in services would be particularly strong. They expected corporate profits to normalize this year as economic growth moderates while real wages would catch up to some extent. The authorities concurred with staff's external sector assessment.

POLICY DISCUSSIONS

A. Fiscal Policy

15. The near-term fiscal policy should complement monetary tightening and avoid adding to aggregate demand. The labor market is tight, core inflation remains elevated, and the euro adoption has mitigated the impact of the ECB's tightening. Therefore, an expansionary fiscal stance risks fueling domestic demand and inflation and hurting Croatia's competitiveness. Based on the government's recently revised budget plan and assuming no additional fiscal support, we project a deficit of 0.8 percent of GDP in 2023, which translates to an estimated positive fiscal impulse of about 0.4 percent of GDP after taking into account the projected growth slowdown.

Text Table 1. Croatia: Indicators of Fiscal Performance

(Percent of GDP)

	2021	2022	2023	2024	2025	2026	2027	2028
Level								
Overall balance 1/	-2.5	0.4	-0.8	-1.8	-1.1	-0.8	-0.8	-0.6
Structural balance	-3.2	-0.5	-1.3	-2.0	-1.2	-0.8	-0.8	-0.6
Structural primary balance	-1.8	0.7	0.3	-0.2	0.3	0.6	0.4	0.5
Public Debt	78.3	68.8	63.7	62.5	60.9	59.2	57.6	55.9
Change								
Overall balance	4.8	2.9	-1.2	-1.0	0.7	0.3	0.0	0.2
Structural balance	2.5	2.7	-0.8	-0.7	0.9	0.4	0.0	0.2
Structural primary balance	1.9	2.6	-0.4	-0.5	0.5	0.2	-0.2	0.1
Public Debt	-8.6	-9.5	-5.1	-1.2	-1.6	-1.7	-1.5	-1.7

Sources: Ministry of Finance; and IMF staf calculations.

1/ The recapitalization of 900 million euros to HEP is reflected in the general government fiscal balance of 2022-23.

16. To achieve a tighter fiscal position and given declining energy prices, the support measures need to be better targeted, temporary, and transparent, and price signals should be preserved. Albeit timely, the government's responses to the cost-of-living surge have been largely untargeted. Staff recommends reversing energy price caps and tax cuts, which are broad-based, costly, and disrupt price signals. Temporary targeted cash transfers, vouchers, and discounts to the most vulnerable are preferred. The design of support can be improved by speedily finalizing the household registry and social security reform.⁴ It is important that the overall fiscal stance does not fuel aggregate demand and counter the monetary tightening. Should downside risks materialize, automatic stabilizers should be allowed to work fully. Additional discretionary support should be

⁴ Under the NRRP, by end-2024 the Guaranteed Minimum Benefit will be integrated with other social benefits, and the coverage, adequacy and targeting of social benefits will be improved, with a focus on people experiencing high rates of persistent poverty.

reserved for more severe downside scenarios and targeted to support the most vulnerable. In case of upside risks, higher-than-budgeted revenues should be saved.

17. Fiscal consolidation should continue over the medium-term to build adequate fiscal space while boosting investment for higher sustainable growth. Under the baseline, Croatia is projected to return to a small primary surplus with public debt declining gradually to about 56 percent of GDP in 2028. The Sovereign Risk and Debt Sustainability Framework (SRDSF) points to low level of risks in the medium term, but moderate risks in the long term (Annex III). With demographic-related spending pressures, continued fiscal consolidation is paramount for Croatia to deal with future shocks, including asymmetric ones in the eurozone, safeguard the sustainability of public finances, and strengthen competitiveness.

18. Staff recommends improving tax policy, reducing spending rigidity, and enhancing spending efficiency to achieve a growth-friendly fiscal consolidation.

- *Tax policy reforms (Figure 7).* Given Croatia's high budget spending rigidity and the need to further reduce public debt, any tax reforms should preserve revenue resources while improving the tax system structure to reduce distortions and support fairness and growth. In this context, reforming the current tax regime favoring residential real estate investments would help dampen demand, activate idle residences, and encourage labor participation. Croatia needs a modern, well-designed property tax to replace—fully or in part—the present fragmented system of square meter- and transfer-based taxes and fees, which lacks transparency, fairness, and revenue-raising capability for local governments. The implementation and administration of a value-based property tax requires the existence of comprehensive and accurate registers of ownership and up-to-date recording of property values. Careful preparation, sequencing, and public communication of reform measures are crucial. In the short term, the communal fees and the tax on vacation homes can be transformed into an elementary value-based property tax, with special arrangements in place to protect the most vulnerable and households only with primary residences. Personal income tax (PIT) equity should also be improved, particularly by removing the excessively favorable taxation on short-term rental income.

Text Table 2. Croatia: Statutory Tax Rates for Selected Income Categories

Income category	Rate
Taxable income under personal income tax	20-30%
Owner-occupied immovable property, inheritance	Exempted
Income from renting immovable and movable property	10%
Capital gains on immovable property	20%

Source: European Commission - Taxes in Europe database.

- *Public wage setting and public administration reforms (Figure 8).* Public employment outlays as share of GDP are high, driven by employment levels and wages. The current system has significant equity issues, as similar jobs pay different salaries across the public sector. The lack of

a single and coherent system for pay, grading, and evaluation results in wage inequity. A simplified and transparent public sector remuneration system that rewards merit and productivity would help enhance public services and make the sector more efficient. It is important to finalize the public administration wage reform this year, which aims at streamlining the wage setting system and making it more transparent via hybrid coefficients to include all job-related supplements. It is also important to streamline the public service. In late 2022, the government launched public calls with financial incentives to encourage voluntary functional and real mergers of local government units.

Text Table 3. Croatia: Public Spending Rigidity 1/
(Percent of general government revenue net of grants)

Public Expenditure	2017	2018	2019	2020	2021	2022
Social benefits	36	35	31	41	37	35
Wages	27	27	27	32	30	28
Interest payments	6	5	5	5	4	3
Subsidies	4	4	4	9	6	6
Total	73	71	66	87	78	71

Sources: Eurostat; and IMF staff calculations.

1/ Rigid spending includes wages, social contributions, subsidies, interest payments, and intermediate consumption. Flexible spending includes fixed capital expenditure and other current transfers.

- *Healthcare and pension reforms.* With an aging population, the problem of healthcare and pension costs will become more acute. Health sector arrears at about 1 percent of GDP per year already constitute a sizeable fiscal burden. The reliance on stop-gap measures to clear them needs to be replaced by a deeper overhaul. Efficiency gains could come from better use of economies of scale in drug procurement, merging service provision in underpopulated areas, and strengthening management of hospitals. Pillar 1 (PAYG) pensions are inadequate and the 2018 pension reforms were abolished, which may pressure public finances in the long-term.⁵ Earlier reform efforts to lengthen the working life should be renewed. Particularly, the retirement age increase for women could be accelerated, and early retirement could be tightened. The performance of the statutory funded scheme should be assessed, and the second pillar pension be strengthened. Since Croatia has a much lower healthy life expectancy at 65 than the EU average, better healthcare outcomes should be a priority. It is estimated that, in the absence of timely reforms, healthcare and pension costs would go up considerably beyond 2031, putting pressure on the budget (Annex III).

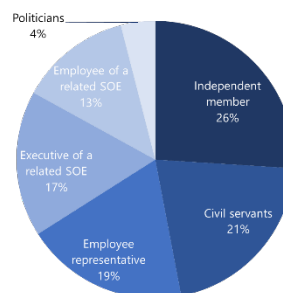
⁵ In October 2019, pension reforms (passed in 2018, and supported by staff), which raised statutory retirement ages and penalties for early retirement, were reversed due to strong political pressures.

- *Enhance public investment management.* Public investment management (PIM) in Croatia is currently fragmented and largely devolved to line ministries and implementing agencies. A strong central coordination function in the Ministry of Finance (MOF) would help ensure that sound practices in line with international standards are consistently followed by line ministries. The coordination function should implement a robust appraisal framework that consistently appraises projects from a national perspective, oversee implementation of major investment projects, identify, manage, and report implementation problems, and support capacity building across public agencies. Climate change adaptation and mitigation should be embedded in reforms to strengthen PIM.

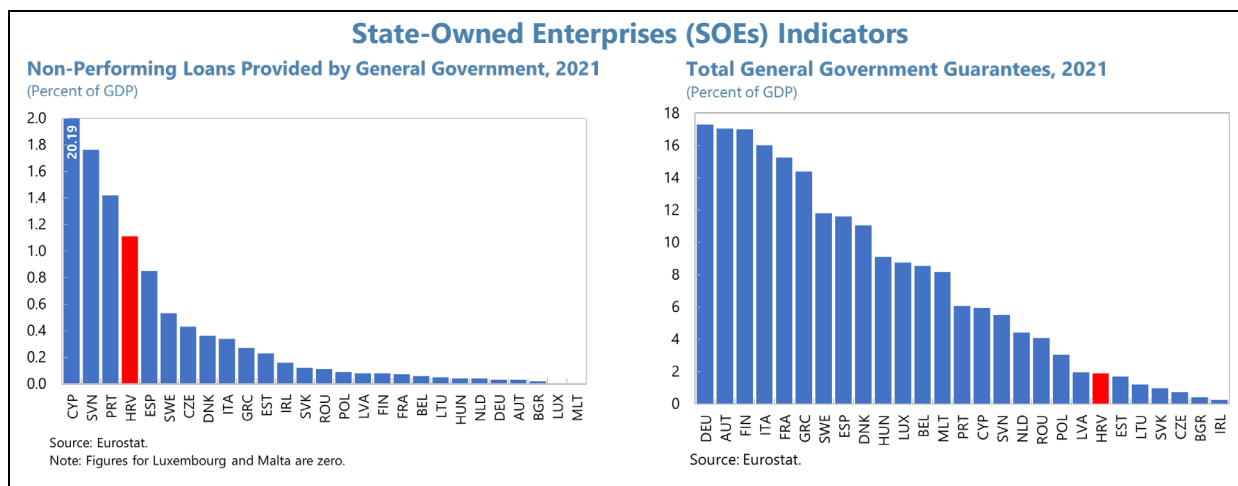
19. Improving the monitoring and corporate governance of SOEs will reduce potential fiscal risks and maximize their contribution to growth.

SOEs in Croatia play a significant role in the economy and job provision⁶ but are less productive overall, with some of them requiring large subsidies and government guarantees. Their underperformance ultimately stems from corporate governance deficiencies.⁷ The 2021 OECD report recommended the establishment of an ownership coordination unit to monitor compliance with state’s governance and disclosure standards for SOEs, evaluate their performance, and engage in regular public reporting.⁸ Under the NRRP, the authorities plan to adopt by 2024 a new single law on SOEs to address several key OECD recommendations. The MOF should also strengthen its capacity in financial oversight of SOEs, including monitoring and management of SOE-related fiscal risks and the assessment of loan and guarantee proposals.

Board Composition in the 11 Largest SOEs in Croatia, 2021
(Percent)



Source: OECD Review of the Corporate Governance of State-Owned Enterprises: Croatia.



⁶ SOEs employed more than 1/3 of public sector employees, or about 10 percent of total employment as of 2021 (ILO).

⁷ See [World Bank \(2021\)](#).

⁸ See [OECD \(2021\)](#).

Authorities' Views

20. The government reiterates its commitment to prudent fiscal policymaking and continued reforms. They agree that the near-term fiscal policy should not counter monetary tightening while highlighting the need to continue to address the cost-of-living challenge. The government expects that the current fiscal plan can accommodate the cost of a new tax package to be implemented in 2024 (estimated at about ½ percent of GDP annually),⁹ thanks to conservative revenue projections. They will also save revenue overperformance for faster debt reduction and hope to bring the public debt to below 60 percent of GDP in 2-3 years. The authorities agree with staff assessment in the SRDSF. While there is growing public consensus on the need to modernize the property tax and reduce the favorable taxation on short-term rental income, such reforms need careful preparation and will take time. The government highlighted a few ongoing reforms: the public administration wage reform will be finalized this year; a working group was established to analyze the multi-pillar pension system with the objective to strengthening its sustainability; all hospitals will be put under the state management to improve their cost-efficiency; and a new single law on SOEs will be adopted in early 2024. Furthermore, work is advancing to implement key 2021 PIMA recommendations and strengthen the financial oversight of SOEs, and the government has requested IMF technical assistance in these areas.

B. Financial Sector Policies

21. Currently, systemic financial risks appear manageable, but the pertinent supervisors must remain vigilant given varying buffers and ongoing challenges. Systemic risks have risen relative to 2021 with tightening financial conditions and increases in corporate lending and housing prices (Annex VII), but there are mitigating factors and handsome buffers. The low loan-to-deposit ratio, high liquidity-coverage ratio, and recent regulatory easing due to the euro adoption will likely continue to temporarily mitigate the impact on lending rates of the ECB tightening, and further increase net interest margins of banks. However, the recently introduced *retail* government bond could, in principle, impose more competition on deposit rates.¹⁰ Lending surveys suggest that bank credit to NFCs is expected to remain strong, but also that banks have tightened their lending standards. Credit growth to households is expected to remain subdued in the near-term. The declining NPL ratios (Figure 11) could reverse somewhat if the economic outlook deteriorates, as stage 2 loans have recently increased a bit. Despite IT costs related to the euro conversion, reduced

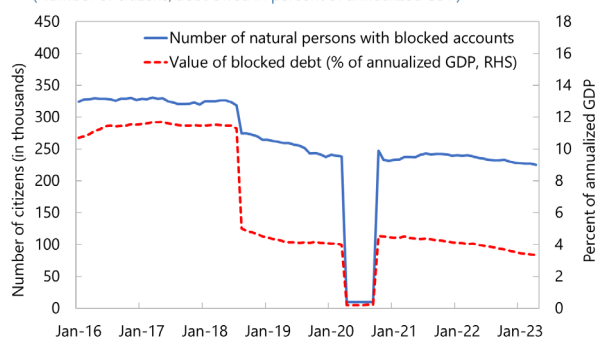
⁹ The package includes (i) an increase in the PIT exemption threshold; (ii) subsidies to pension contributions for low-income earners; and (iii) abolishment of local surtaxes on income while allowing local government units to set income tax rates within a specific range.

¹⁰ The first issuance in March 2023 was 2-year bond of just over €1.8 billion with a 3.65 percent interest rate. Natural persons bought about €1.3 billion, with a tax-free coupon if the bond is kept to maturity, while the rest was bought by institutional investors in a second round with a view to ensure that the listed bond will remain liquid. This issuance should be seen in context of total bank deposits of about €29 billion at end-2022. A few banks have since begun to offer longer placements at more competitive rates.

FX exchange fees, and further evaluation losses of fixed-income securities¹¹, the increase of net interest margins is expected to ensure a reasonable bank profitability.¹² The high capital buffer and recent stress tests suggest the system can withstand severe shocks.¹³ Main challenges include: (i) increased credit risk due to lower growth and increasing interest rates; (ii) need for lower operating costs to compete with Fintech challengers; and (iii) ML/FT risks. Moneyval put Croatia on enhanced-follow up.¹⁴

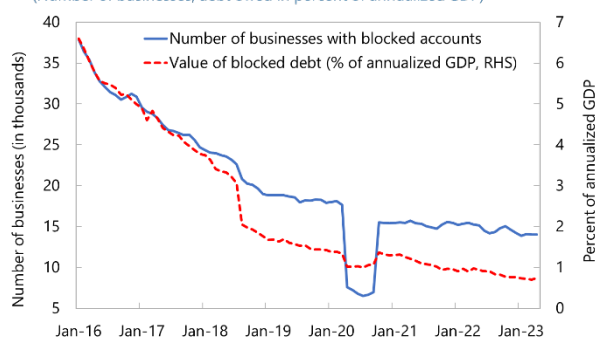
22. While household and corporate vulnerabilities have moderated since the pandemic—according to blocked accounts and main balance sheet indicators—a deeper-than-expected economic slowdown amid higher interest rates could pose new challenges. Data on blocked accounts (due to overdue payments), reveal moderate improvements for both households and NFCs since the pandemic. This underpins the decline in NPLs as well as the still cumbersome albeit improving debt-recovery processes.¹⁵ Main balance sheet indicators remain

Natural Persons with Blocked Accounts, 2016-2023
(Number of citizens; debt owed in percent of annualized GDP)



Sources: FINA; Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.
Note: The decline in 2020 relates to the temporary moratorium during the Covid-pandemic.

Businesses with Blocked Accounts, 2016-2023
(Number of businesses; debt owed in percent of annualized GDP)



Sources: FINA; Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.
Note: The decline in 2020 relates to the temporary moratorium during the Covid-pandemic.

¹¹ At end-2022 (unaudited), Croatian banks hold general government securities of about 9.4 percent of total assets (11.0 percent of GDP) and debt securities of other resident sectors for 0.5 percent of total assets. Debt securities held to maturity accounted for about 5.9 percent of total assets. Bonds held to maturity but included in the LCR are valued at mark-to-market in the LCR.

¹² Some lawsuits against banks related to the retroactive conversion of Swiss franc household loans to variable-rate euro loans in 2015 are still lingering with last remaining deadline in mid-June 2023. Banks have had to provision for these legal risks. In 2021, six banks reached an agreement with the government and withdrew their lawsuits against the government.

¹³ The credit risk stress tests of the Financial Stability Department of the CNB, based on end-2022 data using EBA methodology, show that in case of an extreme shock, one bank would not be able to observe the pillar 1 capital requirement and another bank would not be able to observe the pillar 2 requirement. These two banks account for about one percent of total assets.

¹⁴ The authorities have already or are in the process of addressing the recommendations in the December 2021 [Moneyval Mutual Evaluation Report](#). At the accompanying [Plenary Meeting](#), it was decided that Croatia will report back by December 2023. In May 2022, the Government adopted the *Action Plan for Strengthening the Effectiveness of the Croatian System for Preventing Money Laundering and Terrorist Financing*. Amendments to the AML/CFT law came into force in January, which among other things aim to harmonize customer due diligence and obligate virtual asset service providers to register.

¹⁵ Insolvency legislation has been gradually strengthened over the years, most recently as part of the NRRP. It has also become easier for banks to write-off provisioned NPLs. But more time is needed to see their impact on [previous shortcomings](#). For instance, the regulation to make the early warning systems operational is currently being developed. Furthermore, measures have been introduced to reduce the backlog of court cases.

within historical ranges compared to peers (Figure 12). But averages can be deceitful, as the [distribution also matters](#). Simulations by [Valderrama et al. \(2023\)](#), using micro data, suggest a sizable impact, especially on the less affluent households, of further cost-of-living and interest rates increases.

23. In addition to the recent increase of the counter-cyclical capital buffer, explicit borrower-based measures could be considered to contain potential future financial stability risks of housing market pressures, taking into consideration measures already in place and other risk mitigating factors. The recent increase of the countercyclical buffer was merited partly by housing price developments. Its effectiveness, however, may be superseded by the already sizable capital position of most banks. There are indications that growth of residential prices and transactions may have temporarily paused after a period of rapid increases. However, as disposable income recovers from the current slowdown, inflation still errs on the upside, taxation remains favorable for residential investments, and very liquid banks look for lending opportunities, housing is poised for new pressures. As such, explicit borrower-based limits could be considered to preempt future financial stability risks. Banks already have internal policies and report loan-to-value (LTV) and debt-service-to-income (DSTI) ratios that the CNB monitors. Additionally, they are subject to an indirect DSTI ratio.¹⁶ Although only about half of recent transactions are, allegedly, financed by domestic banks, explicit borrower-based measures can help contain future risks before tensions emerge. Furthermore, the CNB has both the legal basis as well as the detailed data to calibrate mandatory ratios. The CNB estimates that most household debt are to banks. Ideally, the credit registry should include *all* pertinent household debt and not just all bank debt. The CNB notes that the *indirect* DSTI ratio now includes all bank debt, not just housing debt and general-purpose cash loans with five years or longer maturities. Finally, banks should continue to make their clients aware of the sensitivity of payment obligations to changing interest rates.

24. Housing affordability appears to be a more pressing challenge. Although house prices have increased rapidly, on average they have increased broadly in line with net wages since 2010. Moreover, variable-rate loans (up to one year) of households account for 34 percent of housing loans and 30 percent of non-housing loans, and legal restrictions have slowed the increase of interest rates. Borrowers are thus only slowly feeling the pinch. Nevertheless, the young and elderly, with low incomes and unsustainable employment, are effectively excluded from ownership and exert pressure on the rental market. There appears to be a need for a comprehensive review of the housing market by a commission with all pertinent stakeholders and a clear terms-of-reference with explicit deadlines, to identify the most pressing bottlenecks.¹⁷

¹⁶ The Foreclosure Act was amended effective mid-2017, to stipulate the amount that a creditor cannot seize. For below average net salary (published by the Croatian Bureau of Statistics) debtors, this is $\frac{3}{4}$ of their net salary. For other debtors, the salary exempt from seizure is $\frac{2}{3}$ of the average net salary. The CNB began to require banks to apply the same *indirect* debt-service-to-income-ratio but only for housing loans. The CNB has since recommended that it also apply to general-purpose cash loans with a maturity of five years or longer. ¹⁷ The [OECD's Housing Policy Toolbox](#) (2021) offers a useful point of departure for a broader policy review.

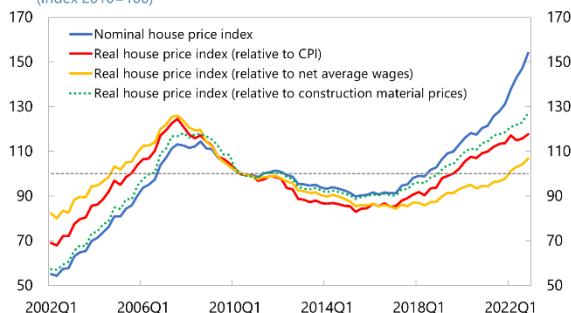
¹⁷ The [OECD's Housing Policy Toolbox](#) (2021) offers a useful point of departure for a broader policy review.

Nominal and Real Residential Prices

Since 2010, residential prices have exceeded construction costs, headline CPI, but only recently net wage increases.

Nominal and Real House Prices, 2002Q1-2022Q4

(Index 2010=100)

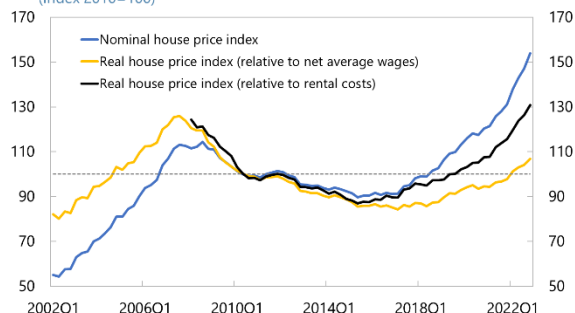


Sources: Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.
Note: Construction material prices are from the domestic producer price index since 2010Q1, while the aggregated PPI is used as a proxy before 2010.

Residential prices have also exceeded rental cost, which recently have accelerated rapidly.

Nominal and Real House Prices, 2002Q1-2022Q4

(Index 2010=100)



Sources: Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.
Note: Rental costs as included in the CPI.

- A review of subsidized house ownership should include the expiring subsidy scheme, current taxation, and supply bottlenecks.** The current law subsidizing young families (Annex VII) will expire by end-2023. The experience should be considered. For instance, the limited budget allocation to be used in short period [appears to have contributed to some cyclicity](#). Generally, any subsidy for housing loans should be well-targeted, focusing on affordable housing to ensure that support is channeled to low-income households. As previously indicated, the current taxation favors residential real estate should be reformed. A [recent study of the euro area](#) found that the most effective way to ensure affordable housing was to support supply, which would also ease inequity concerns of introducing explicit borrower-based measures.
- Careful consideration of various well-intended ideas for additional rental support is needed.** More government investment in subsidized apartments tends to create rationing unless the eligible tenants are clearly defined and limited. Stricter rental regulations can limit the supply and instead amplify the pressure. More broad-based government rental support could result in support to less needy groups and further push rental demand. A well-calibrated balance is thus needed.

Authorities' Views

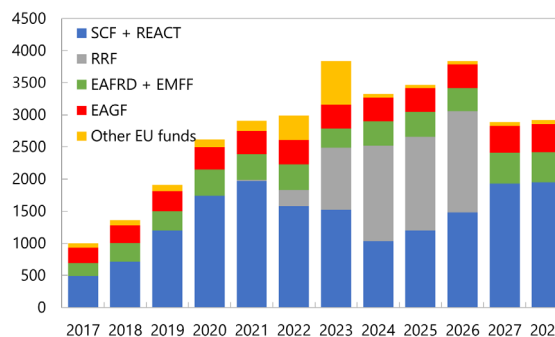
25. The authorities broadly agreed with staff but did not see a need now for explicit borrower-based measures on housing financing. The CNB agreed that the transmission of the recent ECB tightening will initially be more muted in Croatia. This is in part due to the large excess liquidity of the Croatian banking system, further boosted by the regulatory changes related to the euro adoption, as well as legislative measures that delay increasing interest rates for credit to households. Despite the improvement in NPLs and buffers in recent years, stage 2 loans have increased recently, hence risk for new lending, particularly to NFCs, remains moderately elevated.

The CNB does not currently see a need for explicit borrower-based macroprudential limits but indicated its readiness to act if so warranted. About half of the transactions do not use bank credit and a substantial part of the remaining transactions are related to the housing subsidy program of the government. Plus, household indebtedness is low. The authorities have announced that a working group will be appointed to review the residential housing market.

C. Structural Policies

26. The NRRP anchors the authorities’ structural reform agenda. It appropriately focuses on reforms and investments to tackle challenges related to the green and digital transition, education, healthcare, productivity, and business environment. Thanks to steadfast implementation of reform milestones, Croatia has received about 40 percent of total grants (€5.5 billion or 8 percent of 2022 GDP) and the third tranche of €0.7 billion is expected soon. Croatia plans to take up to €3.6 billion loans under RRF and €0.27 billion grants under REPowerEU to finance reforms and investments to eliminate the dependency on Russian fossil fuels and provide clean, affordable, and secure energy. It will be important to maintain reform momentum as well as strong governance and spending accountability.

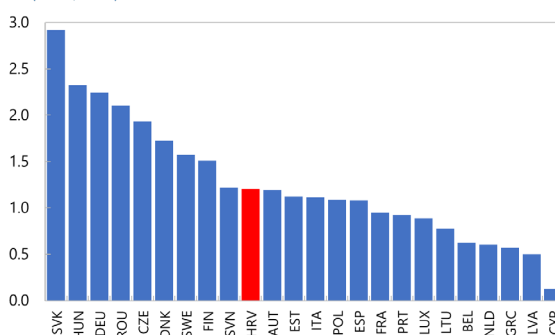
Absorption of EU Funds–Croatia
(Million euros)



Source: Croatian Ministry of Finance.
Note: Other EU funds include IPA, Home Affairs, Centralized EU programs, and EU Solidarity Fund.

27. Croatia needs to raise productivity, which still lags its EU peers despite progress in recent decades. Staff analysis finds that Croatia has demonstrated high goods export competitiveness beyond the tourism sector and has potential to export a larger share of manufactured goods with more skill-intensity (see accompanying SIP on goods exports). Croatia has also shown a comparative advantage in low carbon technology products. Higher productivity will be key to realize these potentials and foster faster income convergence. Relatively low firm-level productivity in Croatia reflects insufficient R&D investment and technology adoption and an inefficient allocation of resources driven by low business dynamism, market frictions, and lagging managerial and organization practices of firms.¹⁸

Comparative Advantage in Low Carbon Technology Products
(Index, 2021)



Source: IMF Climate Change Indicators Dashboard.
Note: Data not available for Bulgaria, Ireland, and Malta.

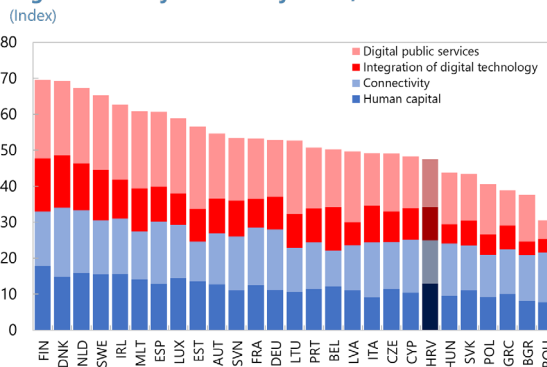
¹⁸ [World Bank \(2023\)](#).

Raising productivity will require more ambitious and comprehensive reforms, along with the EU funds, to address these inefficiencies and constraints. Additionally, institutional quality needs to improve, concerning both public and private sector.

28. Accelerating Croatia’s digital transition would help raise productivity.

Croatia places well on the availability of currently “mainstream” technologies but needs to improve readiness for newer technologies. It ranks low in the deployment of communications infrastructure and quality, and scores below the EU average on connectivity and digital public services. There is a persistent shortage of ICT specialists, reducing firms’ adoption of digital technologies. The NRRP supports the digital transition with investments and reforms in digitalization of the public administration and higher education and digital connectivity of rural areas.

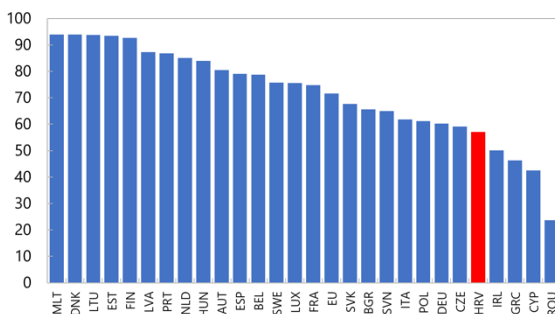
Digital Economy and Society Index, 2022



Source: Digital Scoreboard; and European Commission.

E-Government Indicators: Key Enablers, 2021

(Score, 0 to 100)

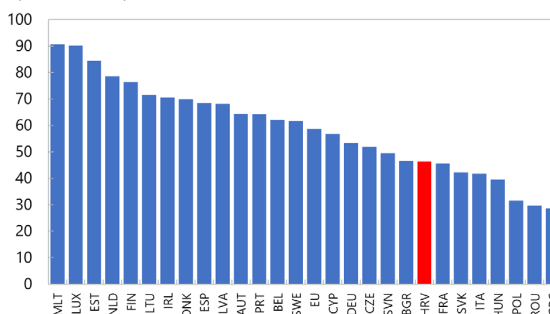


Source: European Commission, Digital Scoreboard.

Note: Key enablers refer to the extent to which main IT enablers (eIDs, eDocuments, Authentic sources, Digital post and security) are available during services processes, which can be used to assess the presence of the technical pre-conditions of the efficient and effective use of online services.

E-Government Indicators: Cross-Border Services, 2021

(Score, 0 to 100)



Source: European Commission, Digital Scoreboard.

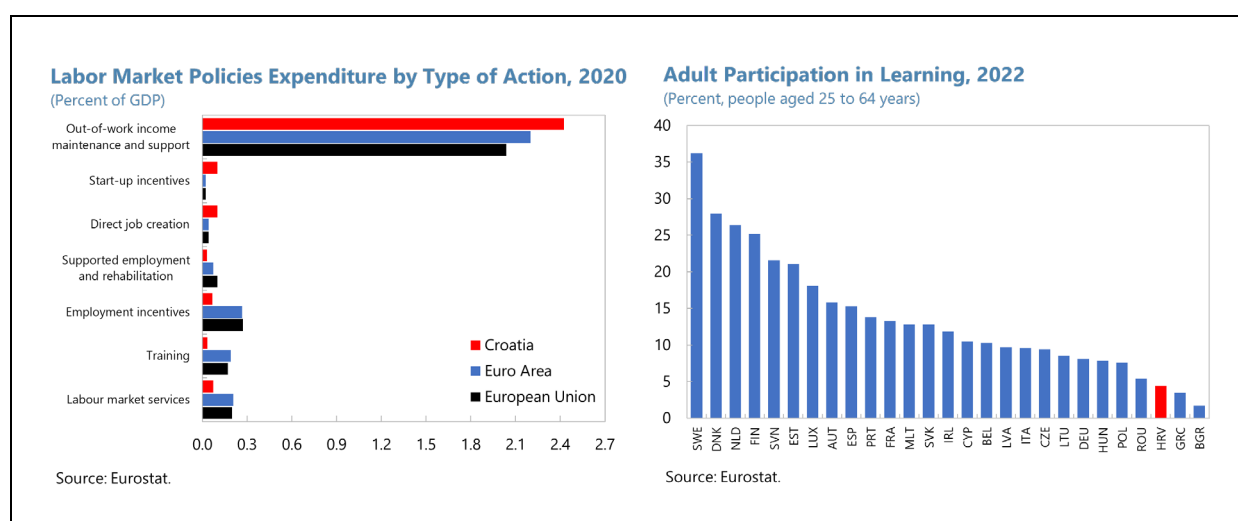
Note: Cross-border services refer to the extent to which information and services are available online, usable, and integrated with eIDs and eDocuments for users from other European countries.

29. The authorities have taken welcome steps to make the labor market more dynamic and flexible to alleviate the tightness given an aging and declining population, but more needs to be done.

- Despite recent improvements, Croatia’s labor market remains among the most rigid in the EU and is highly segmented by the overuse of temporary contracts, which tend to discourage investment in human capital. Youth unemployment rate and the share of the hard to employ are high, while female participation rate is relatively low (Figure 3). Skills acquired through the

education system are often inadequate in the workplace¹⁹ and adult education is limited. There is significant scope for further extending the active labor life.

- The authorities have taken steps to modernize labor market legislation and develop targeted active labor market policies (ALMPs). The 2022 Act amending the Labor Law is a step in the right direction.²⁰ A voucher system for adult education has become operational, with a focus on vulnerable groups. A national plan and an action plan for gender equality were adopted to improve women’s position in the labor market.²¹
- The currently tight labor market offers an opportunity to carry out further labor market reforms. The regulation of permanent work contracts can be streamlined. As job support measures have been phased out, Croatia can introduce more employment incentive schemes targeting vulnerable groups. Higher investment in childcare facilities and part-time contracts can further increase female labor force participation. To facilitate reallocation across sectors and occupations, well-designed subsidies can be used to incentivize workers’ mobility. Managed well, inflows of foreign labor from non-EU countries can alleviate labor shortages.



30. The energy uncertainty in Europe presents an opportunity to accelerate the green transition. Highly exposed to climate change and natural disasters, Croatia is expected to experience adverse impacts across geographic regions and economic sectors. It is important to implement the 2020 National Adaptation Strategy. The authorities also need to continue to diversify the energy mix still dominated by fossil fuels, promote energy savings, improve energy efficiency, and speed up the green transition. Croatia would benefit from developing a comprehensive climate strategy, beyond the NRRP and aligned with its energy strategy, to ensure adherence to the more

¹⁹ [World Bank \(2020\)](#).

²⁰ The Act limits the number of successive temporary contracts, strengthens the right to work for other employers and revises the 65-year retirement clause, encourages additional employment and part-time employment, and includes provisions to allow flexibility in working time and place and reduce the gender pay gap.

²¹ National Plan and Action Plan for Gender Equality, adopted March 2023

ambitious EU-wide mitigation targets. An economy-wide carbon pricing accompanied by sectoral policies and targeted support to the vulnerable could help Croatia promote cost-effective emissions reductions. These include (i) a carbon tax that progressively increases for sectors not covered by the existing EU Emissions Trade Scheme (ETS), to be phased in as international energy prices fall and ahead of the [EU-wide ETS](#) for buildings and transportation; (ii) a domestic price floor for sectors covered by the existing EU ETS, with the floor equal to the non-ETS sector carbon tax; (iii) feebates for power, transportation, and building heating; and (iv) removal of energy price caps (see accompanying SIP on energy security and climate change).

Authorities' Views

31. The authorities highlighted their strong track record in implementing the NRRP.

Strong political leadership, more efficient management and control systems, improved procurement, and capacity building have strengthened EU funds absorption. ALMPs will continue to be rolled out, including the education voucher system, to improve green and digital skills and increase labor flexibility. The authorities highlighted their ongoing efforts to digitalize public services and investment in digital infrastructure. Croatia will incorporate the newly adopted [Fit-for-55](#) legislation into its national development and legislative documents, to be regularly updated with sectoral targets. The authorities are confident that they will be able to meet the EU-wide mitigation targets, albeit not easily. A dialogue at the sectoral level is currently underway. To alleviate the impact on the most vulnerable from the green transition, additional funds from the EU's Social Climate Fund could be tapped. The authorities agreed that in preparation for the adoption of the 2021 revised EU Energy Taxation Directive, fossil fuel taxation should be better aligned with EU's decarbonization goals. The acceleration of renewable uptake, largely financed via the NRRP, is expected to reinforce the green transition.

STAFF APPRAISAL

32. The euro adoption marks a momentous milestone for Croatia and is a testament to diligent policymaking and concerted efforts.

The economy has also proven resilient in the face of the pandemic and the war in Ukraine and recorded another year of strong growth in 2022. However, surging global energy and food prices pushed headline inflation to a multi-decade high towards year end. While inflation has peaked, it remains elevated and broad-based. The 2022 external position was broadly in line with the level implied by fundamentals and desirable policies.

33. Growth is set to moderate in 2023. Weak external demand, tightening financial conditions, and still elevated global uncertainty would weigh on growth, partially offset by a decline in global commodity prices, resilient tourism, and a buoyant labor market. Higher growth is anticipated from 2024, underpinned by a recovery in the global economy and reforms under the NRRP. Inflation is expected to be sticky, averaging about 7½ percent in 2023, and to gradually fall towards the ECB's target of 2 percent by late 2025. The outlook remains subject to significant uncertainty.

34. The near-term fiscal policy needs to complement monetary tightening and avoid adding to aggregate demand. The labor market is tight, core inflation remains elevated, and the euro adoption has mitigated the impact of ECB's tightening. Therefore, an expansionary fiscal stance risks fueling domestic demand and inflation and hurting Croatia's competitiveness. Broad-based support measures—notably energy price caps and tax cuts—need to be reversed.

35. Maintaining a growth-friendly fiscal consolidation over the medium-term is paramount, by improving tax policy, reducing spending rigidity, and enhancing spending efficiency. Given Croatia's high budget spending rigidity and the need to further reduce public debt, any tax reforms should preserve revenue resources while improving the tax system structure to reduce distortions and support fairness and growth. Modernizing the property tax and reducing favorable taxation on short-term rental income would help dampen housing demand, boost supply, and encourage labor participation. A simplified and transparent public sector pay system that rewards merit and productivity would enhance public services and make the sector more efficient. Worsening healthcare and pension costs due to an aging population call for renewed efforts to lengthen the working life and decisively address healthcare arrears. In addition, enhancing the monitoring and corporate governance of SOEs will reduce potential fiscal risks and maximize their contribution to growth. Efforts to strengthen the public investment management system, including establishing a strong central coordination function in the MOF, should continue.

36. The financial system is currently stable; continued vigilance is needed given ongoing challenges. The banking system has remained profitable, well-capitalized, and extremely liquid. Although household and corporate vulnerabilities have moderated since the pandemic, a deeper economic slowdown amidst higher interest rates could pose new challenges. In addition to the announced increases of the counter-cyclical capital buffer, explicit borrower-based measures could be considered to contain potential future financial stability risks of housing market pressures, taking into consideration measures already in place and other risk mitigating factors. A comprehensive review of housing support measures should be considered to address the housing affordability challenge.

37. Advancing structural reforms is key to reap the full benefits of euro adoption and sustaining income convergence. The authorities should continue their commendable and steadfast implementation of the NRRP. Raising productivity, advancing the green and digital transition, and making the best of an aging and declining population are priorities. The currently tight labor market offers an opportunity to carry out further labor market reforms. More ambitious reforms, along with the EU funds, are warranted to address relatively low firm-level productivity and inefficient resource allocation. A comprehensive climate strategy, beyond the NRRP and fully aligned with the energy strategy, will help diversify the energy mix, promote energy savings, improve energy efficiency, and accelerate the green transition. In particular, an economy-wide carbon pricing accompanied by sectoral policies and targeted support to the vulnerable can help promote cost-effective emissions reductions and ensure adherence to the EU-wide targets.

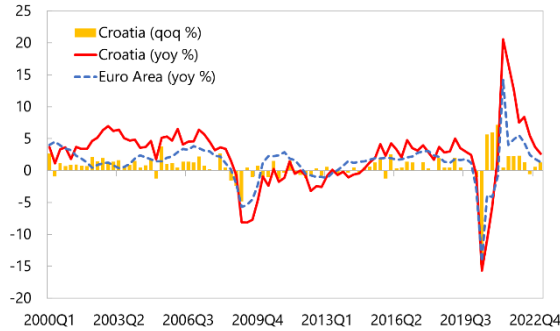
38. It is recommended that the next Article IV consultation takes place on the standard 12-month cycle.

Figure 1. Croatia: Real Sector Developments

Growth rebounded strongly after the COVID-19 pandemic...

Real GDP Growth

(Year-on-year percent change; quarter-on-quarter percent change)

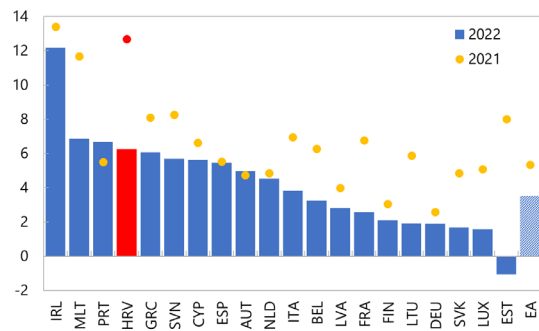


Sources: Eurostat; and Haver Analytics.

...performing better than many countries in the eurozone.

Real GDP Growth Comparison

(Year-on-year percent change)

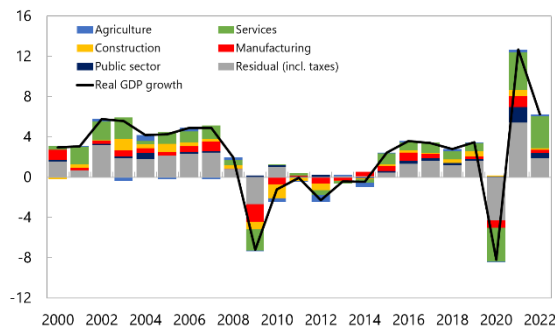


Sources: Eurostat; and Haver Analytics.

The recovery has been supported by strong services sectors.

Real GDP Growth: Production Side

(Percent, gross value added)

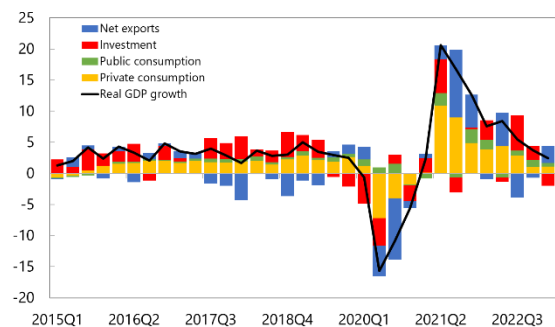


Sources: Eurostat; Haver Analytics; and IMF staff calculations.

The pace of economic expansion slowed in 2022 H2, although domestic demand remained resilient.

Contribution to Real GDP Growth

(Year-on-year percent change)

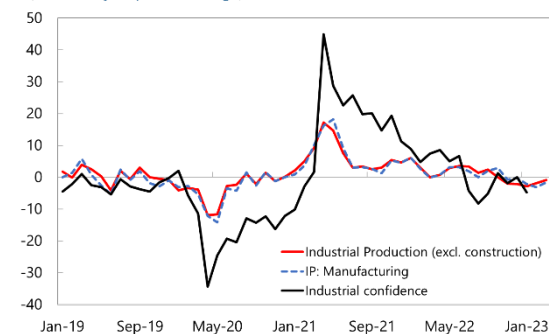


Sources: Eurostat; Haver Analytics; and IMF staff calculations.

The war in Ukraine and high inflation had adversely affecting industrial production...

Industrial Production and Confidence

(Year-over-year percent change)

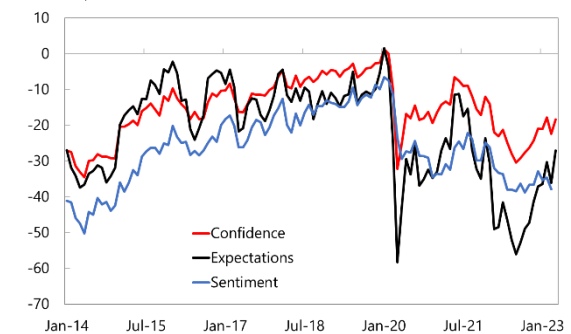


Sources: Eurostat; Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.

...and consumer confidence.

Consumer Confidence

(Index, percent balance)

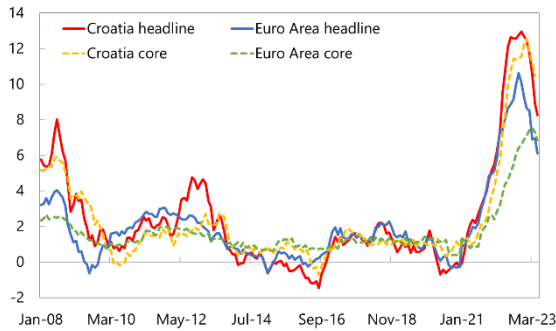


Sources: European Commission; Ipsos Puls; Croatian National Bank; and Haver Analytics.

Figure 2. Croatia: Inflation Developments

Croatia's headline and core inflation have peaked.

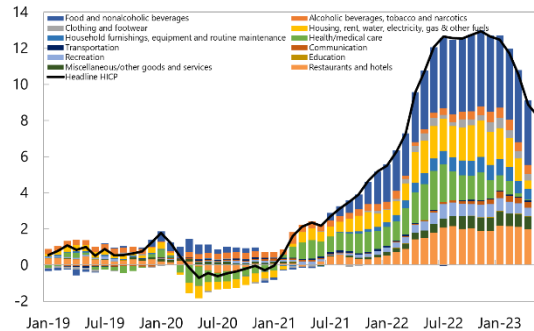
HICP Headline and Core Inflation
(Year-on-year percent change)



Sources: Eurostat; and Haver Analytics.

Headline inflation has been largely driven by food and energy prices...

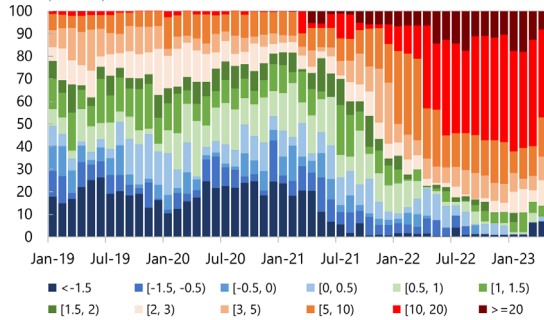
Contribution to HICP Inflation
(Year-over-year percent change)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.

...but has become broadly-based.

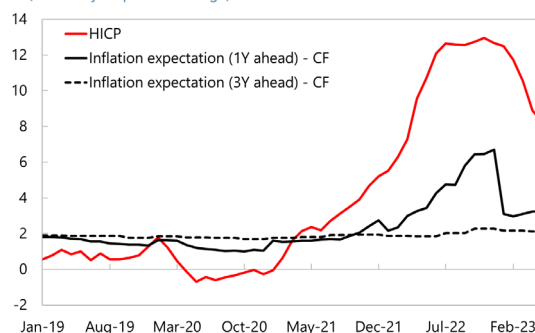
HICP Inflation Dispersion 1/
(Percent)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.
1/ Share of consumption basket within each inflation band.

The 1-year-ahead inflation expectations have declined sharply in early 2023, while 3-year ahead expectations remain stable around 2 percent.

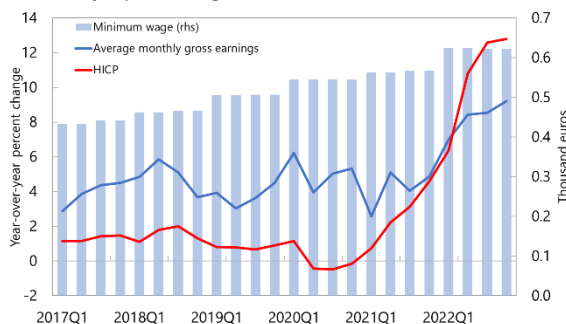
HICP Headline Inflation vs. Inflation Expectations
(Year-on-year percent change)



Sources: Consensus Forecast (CF); Eurostat; Croatian Bureau of Statistics; and Haver Analytics.

Wages are picking up...

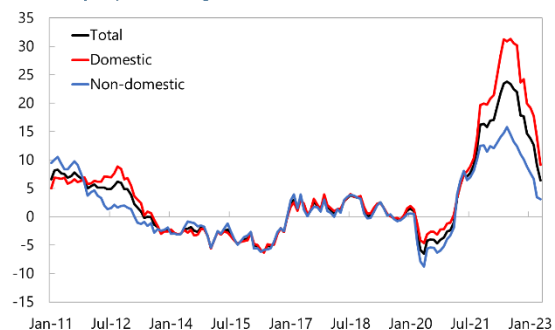
Inflation and Wages
(Year-on-year percent change; thousand Euros)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.

...and producer price indexes have peaked.

Producer Price Index
(Year-on-year percent change)

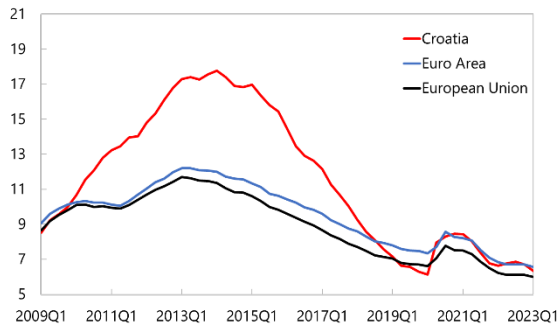


Sources: Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.

Figure 3. Croatia: Labor Market Developments

The unemployment rate has fallen below the pre-pandemic level in 2022.

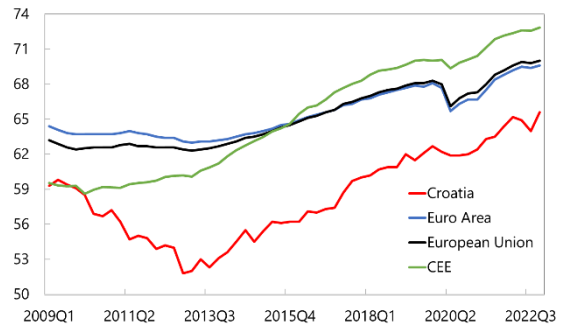
Unemployment Rate
(Percent)



Sources: Eurostat; and Haver Analytics.

The employment rate has also been growing, although still lower than that in the euro zone.

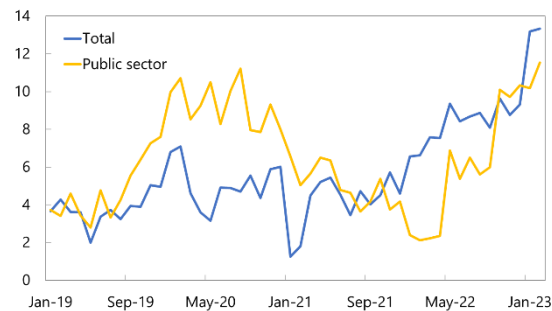
Employment Rate
(Percent)



Sources: Eurostat; and Haver Analytics.
Note: CEE is Central and Eastern Europe including Czech Republic, Hungary, Poland, Slovakia, and Slovenia.

Nominal wages have picked up across sectors in 2022.

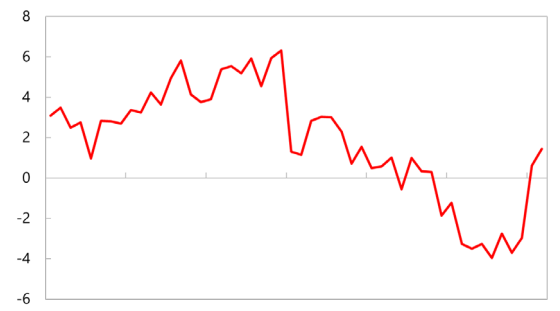
Nominal Average Wage Growth
(Year-on-year percent change; seasonally adjusted)



Sources: Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.
Note: Public sector refers to public administration and defense, compulsory social security, education, and human health and social work activities.

Real wage growth was negative in 2022 but has turned positive since early 2023.

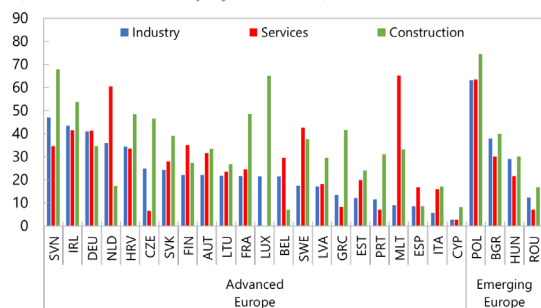
Average Real Wage
(Year-on-year percent change)



Sources: Croatian Bureau of Statistics; Eurostat; Haver Analytics; and IMF staff calculations.

The labor market remains tight.

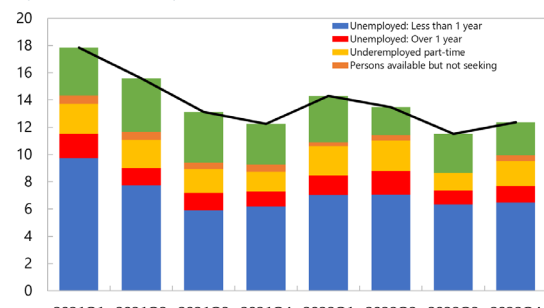
Labor Shortages
(Percent balance; seasonally adjusted; 2022Q4)



Source: European Commission Business and Consumer Survey; and IMF staff calculations.
Note: Percent balance corresponds to the percent of respondents claiming that labor is a factor limiting production/business minus the percent of respondents reporting that it is not.

Employment shortfall has decreased for all categories.

Labor Market Slack
(Percent of labor force)

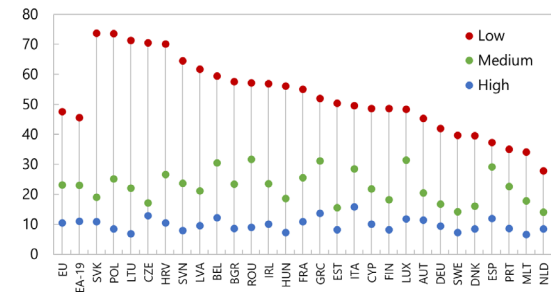


Sources: Croatian Bureau of Statistics; Eurostat; Haver Analytics; and IMF staff calculations.
Note: Data not available from source for category Persons available to work but not seeking in 2022Q3.

Figure 3. Croatia: Labor Market Developments (concluded)

On average, Croatia has a larger share of inactive population, particularly for people with low education.

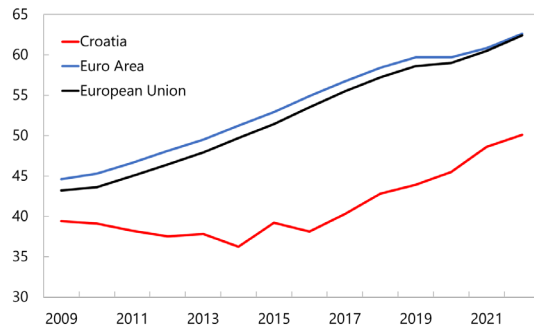
Share of Inactive Population by Educational Attainment, 2022
(Percent of total population aged 15-64 for each level of education)



Sources: Eurostat; and IMF staff calculations.
Note: Inactive population refers to people outside the labor force. Low level: less than primary, primary and lower secondary education; Medium level: upper secondary and post-secondary non-tertiary education; and High level: tertiary education.

Despite recovering since 2017, elderly employment is still lower than the EA and EU average.

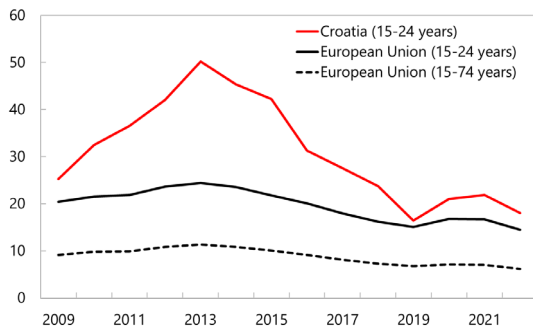
Total Employment, 55-64 years
(Percent of total population)



Source: Eurostat.

Youth unemployment rate...

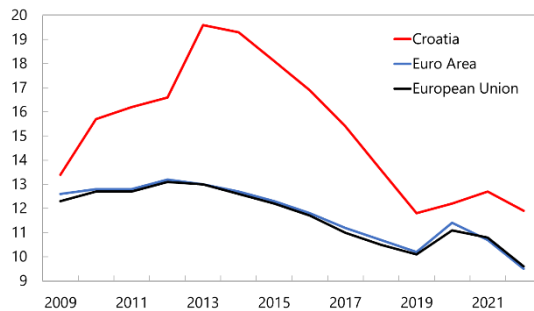
Youth Unemployment Rate
(Percent, 15-24 and 15-74 years of age)



Sources: Eurostat; and Haver Analytics.

...and the share of youth (15-24) with a vulnerable status are higher than that of peers.

Youth Neither in Employment Nor in Education or Training
(Percent of total population; youth group: 15-24 years of age)

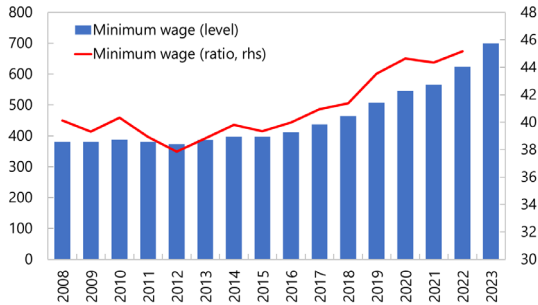


Source: Eurostat.
Note: Chart shows not employed youth population (15-24 years of age) neither in employment nor in education or training (NEET).

Figure 4. Croatia: Minimum Wage

Minimum wage in Croatia has increased over the past decade...

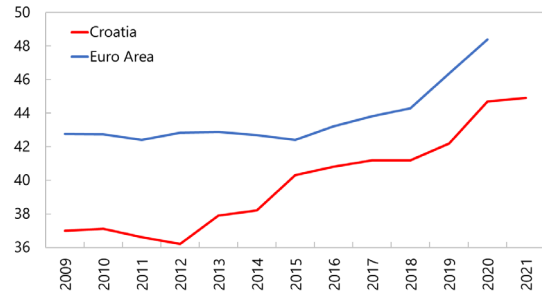
Statutory Minimum Wage Evolution in Croatia
(Euros; ratio compared to average wage)



Sources: Eurostat; Croatian Bureau of Statistics (CBS); and IMF staff calculations.
Note: Years 2008 and 2023 refer to minimum wage in the second and first half-year, respectively, due to availability.

...with a significant increase in the minimum-average wage ratio.

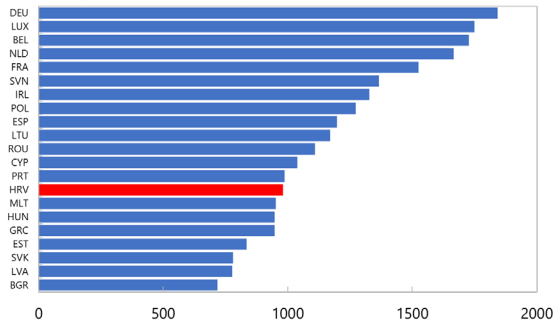
Minimum Wage Growth
(Percent of average wage)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.
Note: Euro Area weighted aggregate excludes Austria, Belgium, Cyprus, Finland, Germany, Greece, and Italy. For cross-country comparison, this measure considers only the economic activities under Industry, construction and services (except activities of households as employers and extra-territorial organisations and bodies).

By the purchasing power standard, Croatia has relatively low minimum wage in the EU.

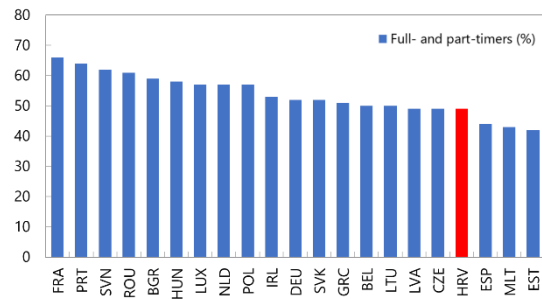
Monthly Minimum Wage, 2023S1
(Purchasing power standards [PPS] per month)



Source: Eurostat.
Note: Data refer to the second semester of the reference year starting in July 1.

The minimum-median wage ratio is less than 60 percent, according to the latest survey.

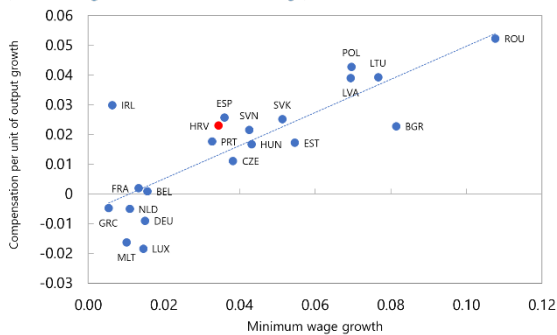
Minimum Wages as a Proportion of Median Gross Earnings, 2018
(Percent)



Sources: Eurostat and Structure of Earnings Survey 2018.
Note: Median earnings refer to the level of earnings, which divides the employees into equal groups: half earn less than the median and half earn more. Data refer to the gross monthly earnings covering the wages and salaries earned by full-time and part-time employees in the reference month before any tax and social security contributions are deducted.

Minimum wage growth is positively correlated with real compensation per unit of output among the EU countries.

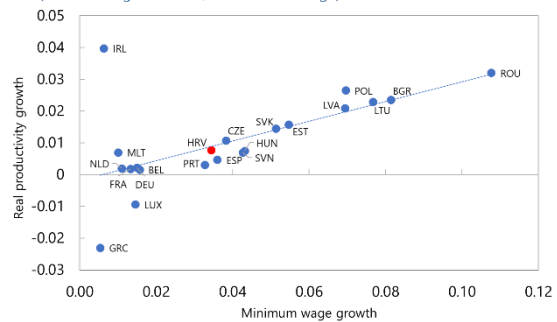
Minimum Wage and Compensation per Unit of Output Growth
(Both axis: log difference, 2008-2020 average)



Sources: Eurostat; International Labor Organization; Haver Analytics; and IMF staff calculations.

The ratio of real productivity growth and minimum wage growth in Croatia has been broadly in line with that of the eurozone countries, while the average productivity growth is relatively low in Croatia.

Minimum Wage and Real Productivity Growth
(Both axis: log difference, 2008-2020 average)

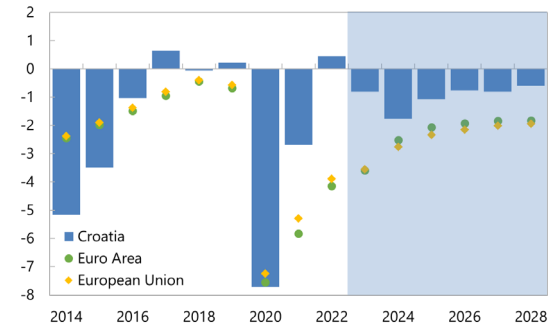


Sources: Croatian Bureau of Statistics (CBS); Eurostat; Haver Analytics; and IMF staff calculations.

Figure 5. Croatia: Fiscal Developments and Projections

Fiscal balance improved considerably in 2021-22 as the COVID support measures were phased out and the economy rebounded strongly.

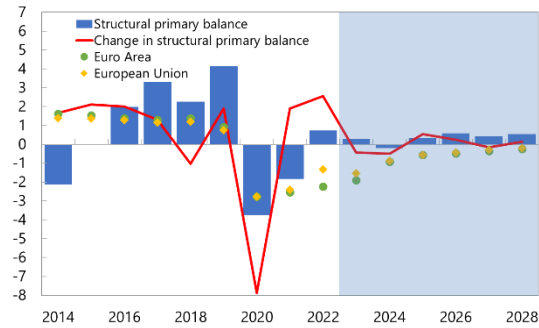
General Government Overall Balance
(Percent of GDP)



Sources: Eurostat; Haver Analytics; IMF World Economic Outlook; and IMF staff calculations.

Structural primary balance has also improved and entered positive territory in 2022, despite the cost-of-living support measures.

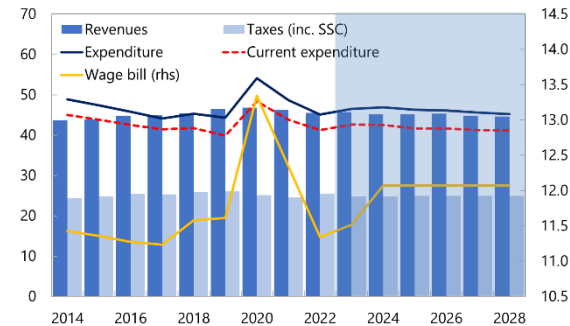
Structural Primary Balance
(Percent of Potential GDP)



Source: IMF World Economic Outlook; and IMF staff calculations.

As fiscal support measures phase out eventually, expenditure is expected to come down to pre-pandemic levels...

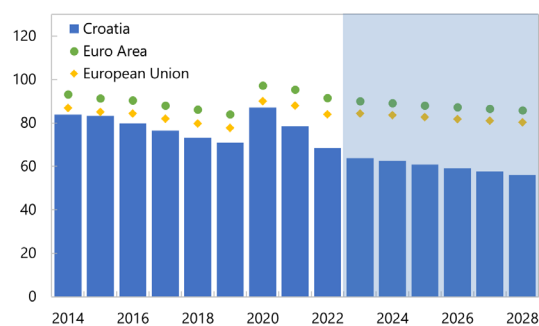
Revenues and Expenditures
(Percent of GDP)



Sources: IMF World Economic Outlook; and IMF staff calculations.

...and government debt continues to decline.

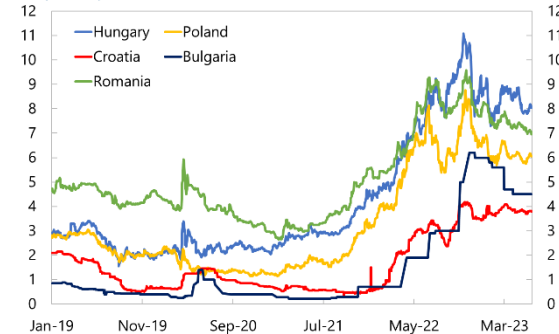
General Government Gross Debt
(Percent of GDP)



Sources: Eurostat; and IMF World Economic Outlook.

Government bond yields have remained lower than peer EU countries...

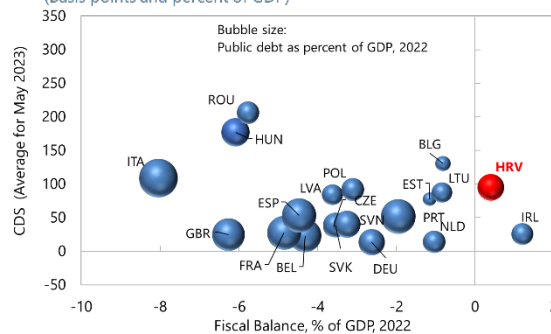
Benchmark Government Bond Yields (10-year)
(Percent)



Sources: Refinitiv; and Haver Analytics. Data through May 31, 2023.

...and so have credit default swaps.

Sovereign 5Y CDS and Fiscal Balance
(Basis points and percent of GDP)

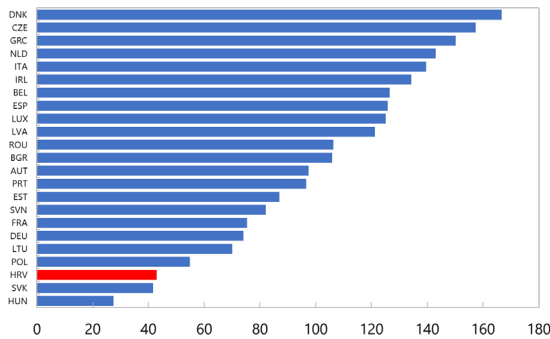


Sources: IMF World Economic Outlook; Bloomberg L.P.; and IMF staff calculations.

Figure 6. Croatia: Household Energy Prices and Demand

Household gas prices in Croatia were the second lowest in the EU as of the first half of 2022...

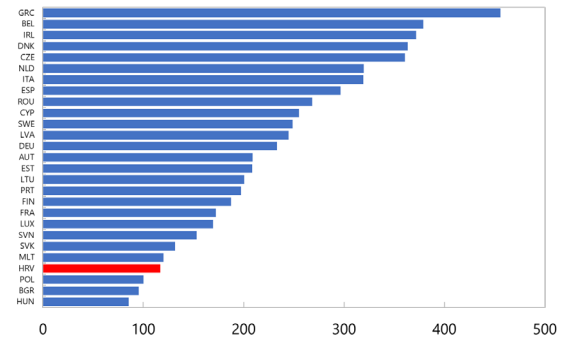
Household Gas Prices, 2022:H2
(Euros per MWh)



Source: Eurostat (excludes taxes and levies).

...while electricity prices paid by households were fifth lowest in the EU.

Household Electricity Prices, 2022:H2
(Euros per MWh)

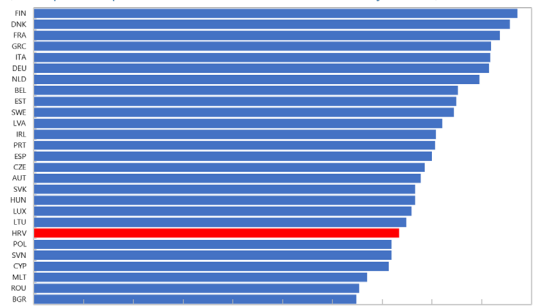


Source: Eurostat (excludes taxes and levies).

The 95-octane petrol prices have been kept under control by a combination of lower excises and price caps.

Gasoline Prices (Euro-super 95)

(Euros per liter; prices with taxes in force on week of May 8, 2023)

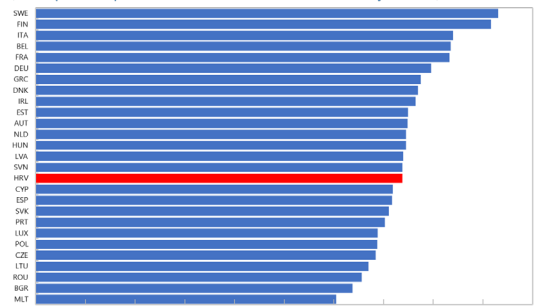


Source: European Commission.

Prices have been frozen every fortnight also for gas oil (diesel) and blue diesel, except for motorways. Premium fuels were sold at market prices.

Gas Oil Prices (Diesel)

(Euros per liter; prices with taxes in force on week of May 8, 2023)

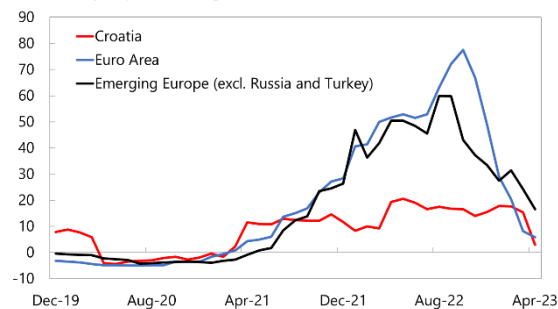


Source: European Commission.

In April 2022 natural gas price increases were limited to a maximum of 20 percent...

HICP Gas Inflation

(Year-over-year percent change)

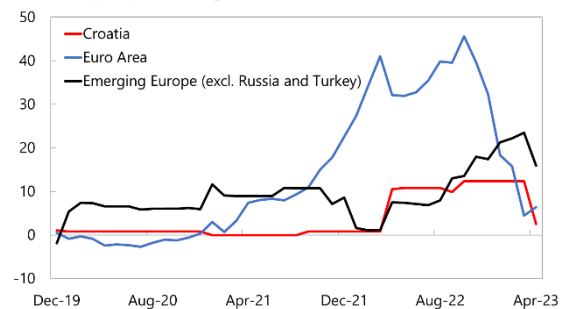


Sources: Eurostat; Haver Analytics; and IMF staff calculations.
Note: Emerging Europe includes Bulgaria, Croatia, Hungary, North Macedonia, Poland, Romania and Serbia.
HICP indicators for Belarus, Moldova and Montenegro are not available.

...while the hike in electricity price was limited to 9.6 percent, with a two-band tariff as of October 2022.

HICP Electricity Inflation

(Year-over-year percent change)

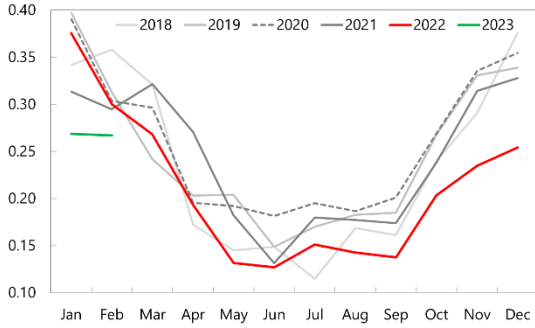


Sources: Eurostat; Haver Analytics; and IMF staff calculations.
Note: Emerging Europe includes Bulgaria, Croatia, Hungary, North Macedonia, Poland, Romania and Serbia.
HICP indicators for Belarus, Moldova and Montenegro are not available.

Figure 6. Croatia: Household Energy Prices and Demand (concluded)

Mild weather and potential price effects for the non-household sectors delayed the start of peak winter season...

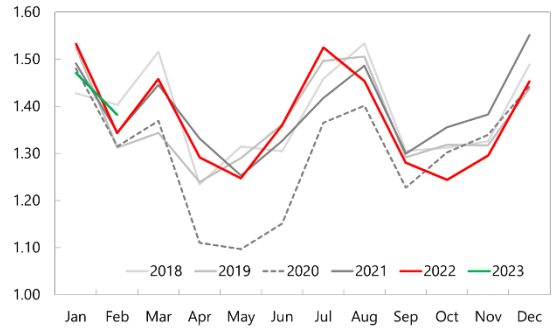
Gas Consumption
(Billion cubic meters)



Sources: Eurostat; and IMF staff calculations.

...with a reduced consumption of natural gas and electricity.

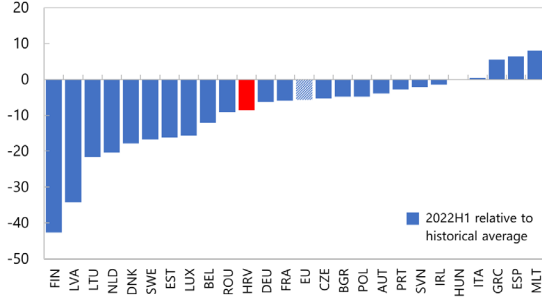
Electricity Consumption
(Billion gigawatt-hour)



Sources: Eurostat; and IMF staff calculations.

Overall 2022H1 has seen lower demand for natural gas in Croatia, while most EU countries also scaled back...

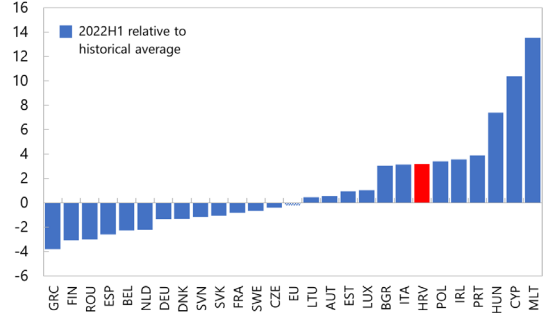
Change in Gas Consumption
(Percent)



Sources: Eurostat; and IMF staff calculations.
Note: Historical average refers to H1 averages over prior five years (2017-2021).
Data not available for Cyprus.

...however, the demand for electricity has gone up relative to its historical average.

Change in Electricity Consumption
(Percent)

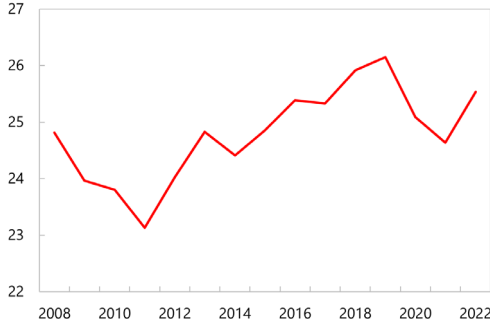


Sources: Eurostat; and IMF staff calculations.
Note: Historical average refers to H1 averages over prior five years (2017-2021).

Figure 7. Croatia: Tax Revenues

Total tax revenue has been around 25 percent of GDP on average during 2008-2022...

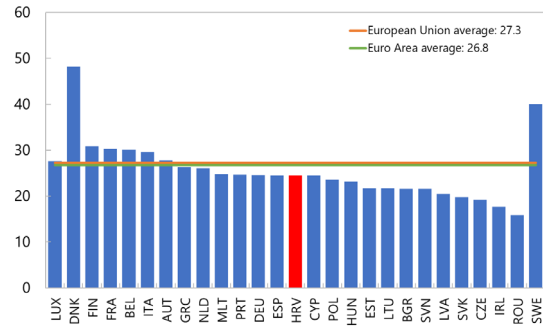
General Government Revenue: Taxes
(Percent of GDP)



Sources: Eurostat; and IMF staff calculations.

...with the tax-to-GDP ratio slightly falling below the EU and EA average following the 2017-19 tax reform.

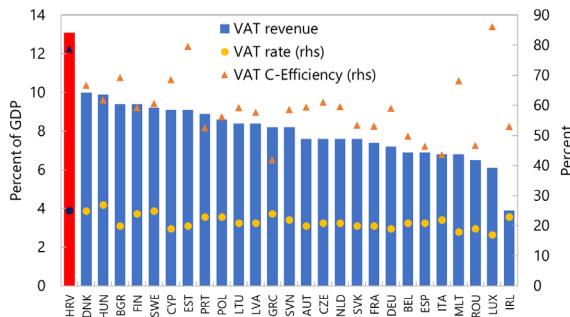
General Government Total Tax Receipts, 2021
(Percent of GDP)



Source: Eurostat.

VAT accounts for about 3/4 of total tax revenues in Croatia with high c-efficiency.

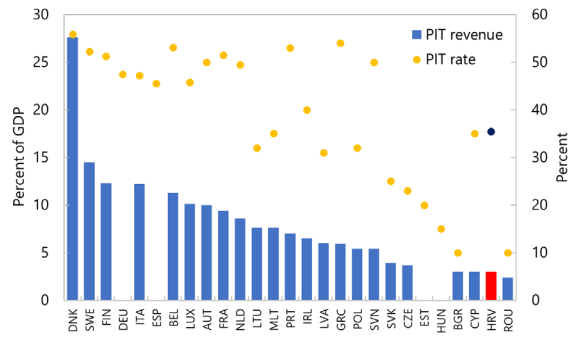
VAT Revenue, Standard Rate and C-Efficiency, 2021
(Percent of GDP; percent)



Sources: Eurostat; European Commission; IMF World Economic Outlook; and IMF staff calculations. Note: C-Efficiency is calculated as (VAT revenue) / ((VAT rate) * (Total consumption)).

Revenues from the taxation of income and wealth are considerably lower than peers', with lower productivity.

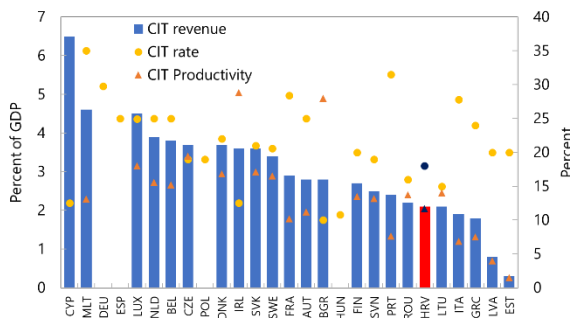
PIT Revenue and Top Combined Rate, 2021
(Percent of GDP; percent)



Sources: Eurostat; European Commission; IMF World Economic Outlook; and IMF staff calculations.

Corporate income tax also has low productivity, reflecting multiple rates and exemptions.

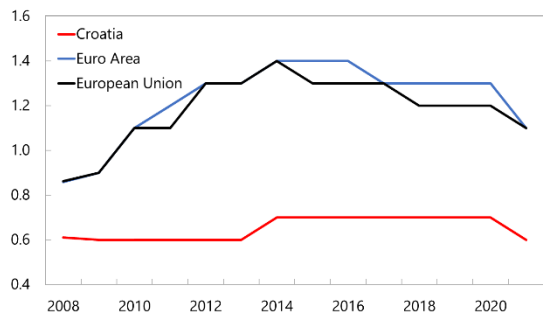
CIT Revenue, Top Combined Rate and Productivity, 2021
(Percent of GDP; percent)



Sources: Eurostat; European Commission; IMF World Economic Outlook; and IMF staff calculations. Note: CIT productivity is calculated as (CIT revenue) / ((CIT rate) * (GDP)).

The current fragmented system of volume-based property taxation has relatively low revenue-raising capability.

Taxes on Property 1/
(Percent of GDP)

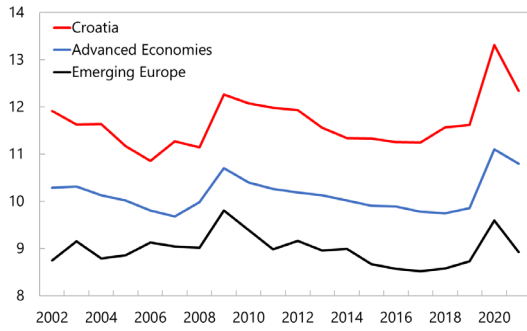


Source: Eurostat; and European Commission. 1/ Recurrent taxes on immovable property.

Figure 8. Croatia: Government Wage Bill and Employment

Croatia has a high public wage bill.

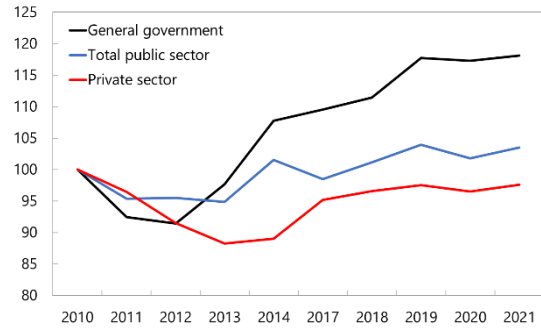
Wage Bill
(Percent of GDP)



Source: IMF FAD Harmonized Wage Bill and Employment Dataset.

General government workforce has increased, whereas private sector workforce has been broadly stable.

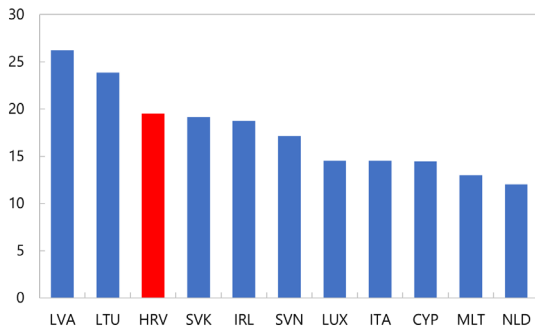
Number of Employees
(Percent relative to 2010)



Sources: International Labor Organization; and IMF staff calculations.

Croatia's share of public sector employment is among the highest in the EU.

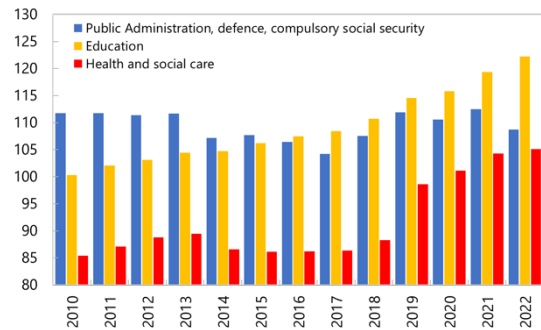
General Government Employment, 2021
(Percent of total employment)



Sources: International Labor Organization; and IMF staff calculations.

The increase has been driven by education and healthcare sectors.

Number of Employees
(Thousand persons)



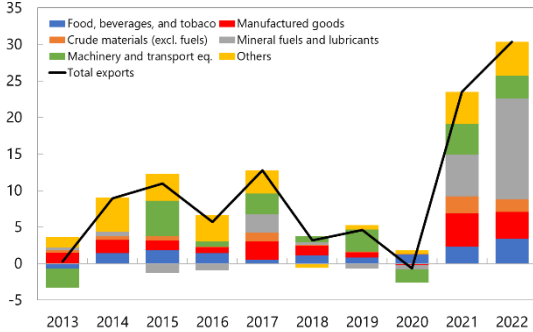
Sources: Croatian Bureau of Statistics; and Haver Analytics.

Figure 9. Croatia: External Sector Developments

Goods export continued to accelerate in 2022, supported by higher external demand, particular from Europe...

Contribution to Export Goods Growth

(Year-on-year percent change; percent)

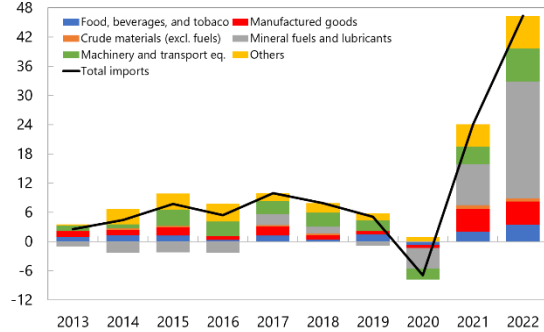


Sources: Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.

...higher energy and food prices also precipitated an increase in goods imports.

Contribution to Import Goods Growth

(Year-on-year percent change; percent)

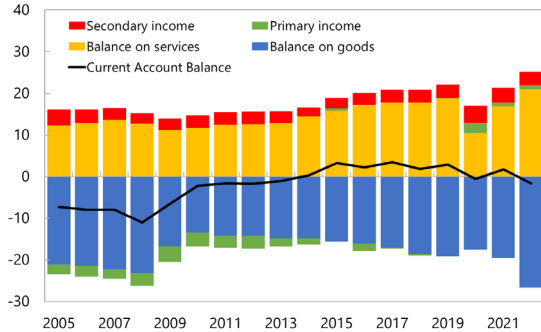


Sources: Croatian Bureau of Statistics; Haver Analytics; and IMF staff calculations.

A widening of the trade deficit led to a decline in the current account balance...

Current Account Balance

(Percent of GDP)

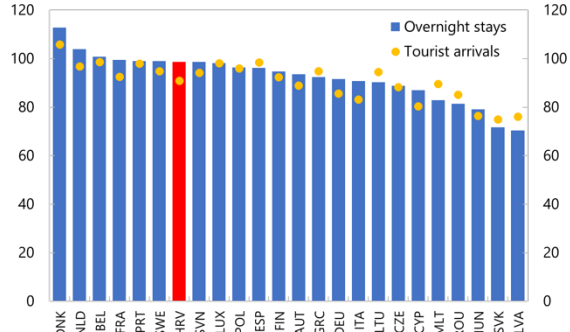


Sources: IMF World Economic Outlook; and IMF staff calculations.

...but strong inbound tourism continued to support services exports

Tourist Arrivals and Overnight Stays, 2022

(Share of 2019 level)

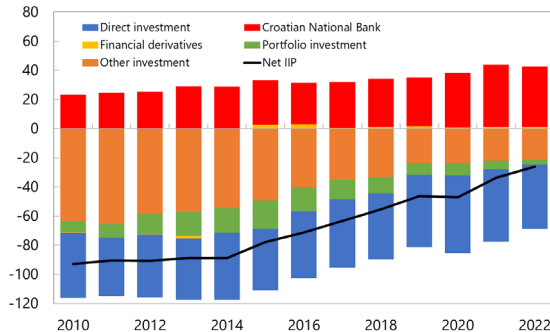


Sources: Eurostat; Haver Analytics; and IMF staff calculations.

The NIIP continues to improve as the holdings of foreign assets increase while portfolio liabilities narrow...

Net International Investment Position

(Percent of GDP)

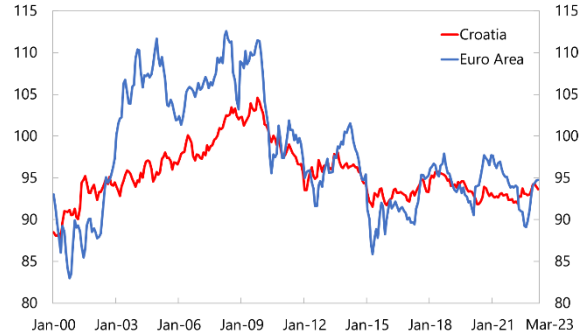


Sources: Eurostat; Haver Analytics; and IMF staff calculations.

...while the consumer price-based REER remains broadly stable.

Real Effective Exchange Rate

(Index, based on Consumer Price Index)

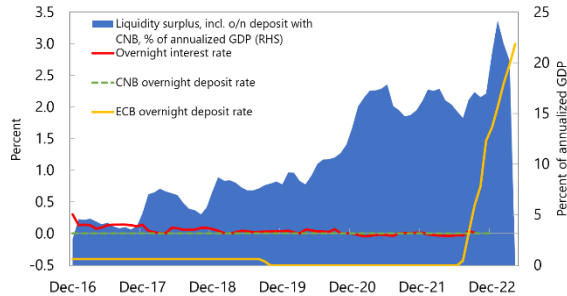


Sources: IMF Information Notice System database (INS).

Figure 10. Croatia: Monetary Stance and Bank Lending to the Private Sector

The already ample excess liquidity has increased further.

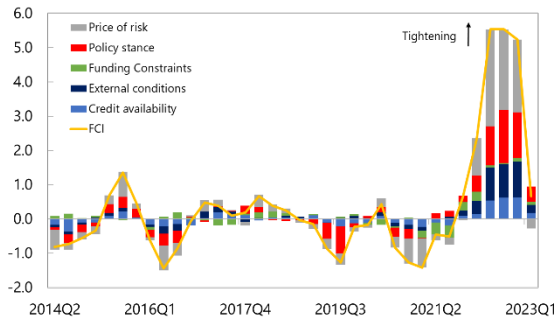
Bank Liquidity and Overnight Interest Rate
(Percent; percent of annualized GDP)



Sources: Croatian National Bank; Haver Analytics; and IMF staff calculations.
Note: Liquidity surplus is the difference between the balance in bank settlement accounts with the CNB and the amount the banks are required to hold in their account after the calculation of reserve requirements. The interest rate refers to the overnight interbank demand deposit trading. Annualized GDP is 12 months cumulated GDP of quarterly GDP split equally into month.

Financial conditions tightened in 2022, but the euro adoption announced in July mitigated some of the effects.

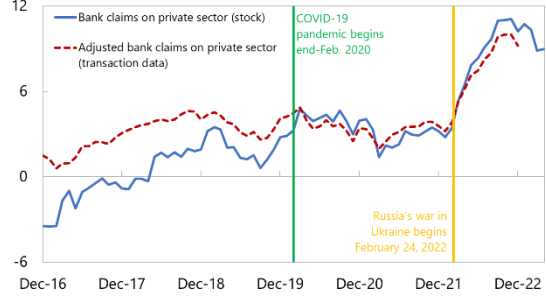
FCI Changes, 2014Q2-2023Q1
(Contribution to quarter-on-quarter first difference of FCI)



Sources: IMF staff calculations.
Note: FCI is not scaled.

Bank lending to the private sector has remained solid albeit it has declined in real terms.

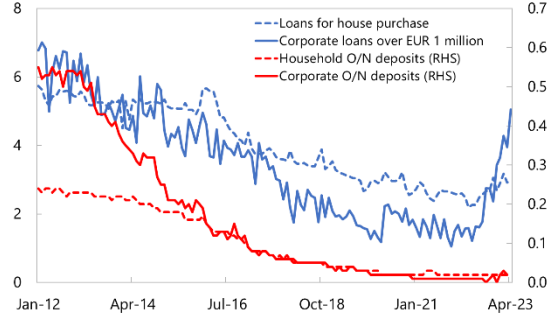
Bank Claims on Private Sector, 2016-April 2023
(Annual percentage change)



Sources: Croatian National Bank; and IMF staff calculations.
Note: Claims on private sector include claims on households, non-financial corporations, and local governments. 1/ Dotted line based on transaction data, i.e. adjusted for exchange rate changes, sales and write-offs of NPLs. For details, see Annex 1 in CNB Monthly Bulletin No. 221, February 2016, Croatian National Bank.

Lending rates of new loans are increasing but deposit rates remain subdued.

Lending and Deposit Rates of Banks
(Percent, weighted monthly averages, new loans)

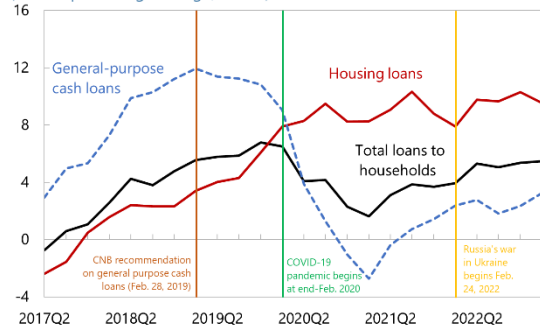


Source: Croatian National Bank.
Note: Starting on January 2023, all data refer only to deposits and loans in euro.

Figure 11. Croatia: Bank Lending to Households and Non-Financial Corporations

Bank lending to households has remained solid since the recovery from the pandemic.

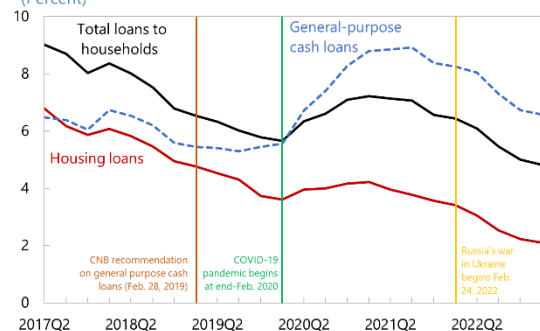
Growth Rates of Different Loans to Household, 2017-2023Q1
(Annual percentage change, stocks)



Sources: Croatian National Bank (CNB); and IMF staff calculations.

The NPL ratio for bank lending to households has declined since the pandemic but remains higher for general-purpose cash loans.

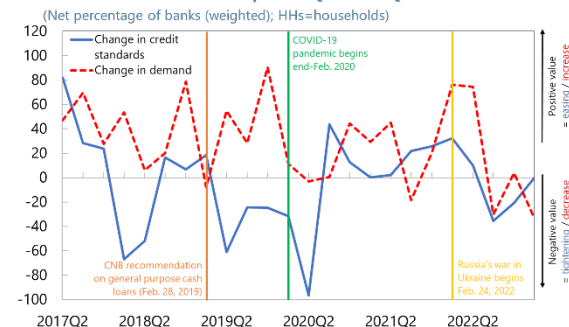
NPL Ratios of Different Loans to Household, 2017-2023Q1
(Percent)



Sources: Croatian National Bank (CNB); and IMF staff calculations.

Since the war in Ukraine households' loan demand has declined and banks' lending standards tightened...

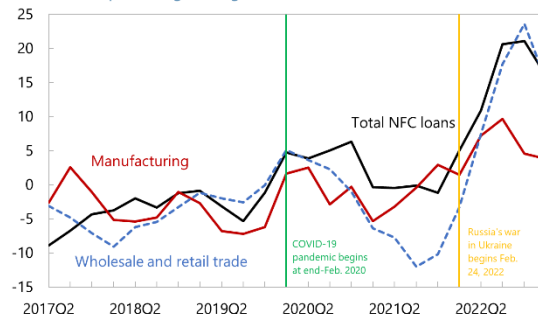
Change in Credit Standards and Demand for Loans for House Purchase to HHs, 2017Q2-2023Q1
(Net percentage of banks (weighted); HHs=households)



Source: Croatian National Bank: Bank Lending Survey.

Bank lending to NFCs has increased significantly since the war in Ukraine.

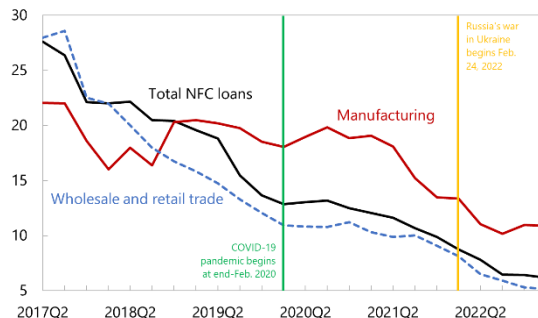
Growth Rates of Different Loans to NFCs, 2017-2023Q1
(Annual percentage change, stocks)



Sources: Croatian National Bank (CNB); and IMF staff calculations.
Note: Loans to manufacturing and trade account for 20% and 19% of total NFC loans, respectively.

The NPL ratios for bank lending to NFCs has declined in recent years.

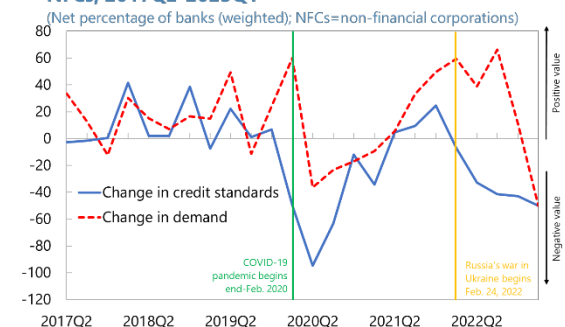
NPL Ratios of Different Loans to NFCs, 2017-2023Q1
(Percent)



Sources: Croatian National Bank (CNB); and IMF staff calculations.
Note: Loans to manufacturing and trade account for 20% and 19% of total NFC loans, respectively.

...NFCs' loan demand has increased further, while banks have tightened lending standards.

Change in Credit Standards and Demand for Loans to NFCs, 2017Q2-2023Q1
(Net percentage of banks (weighted); NFCs=non-financial corporations)

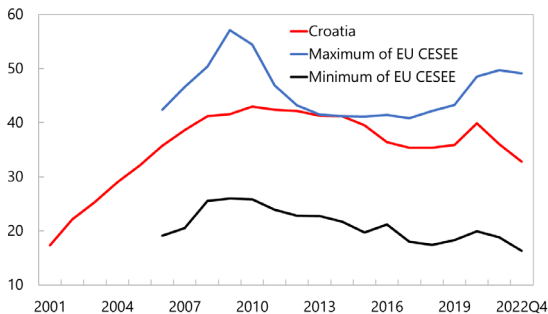


Source: Croatian National Bank: Bank Lending Survey.

Figure 12. Croatia: Financial Debt and Assets of Households and Non-Financial Corporations Relative to EU CESEE Countries

Total debt of Croatian households has declined, in percent of GDP, since 2013.

Debt of Households
(Percent of GDP)

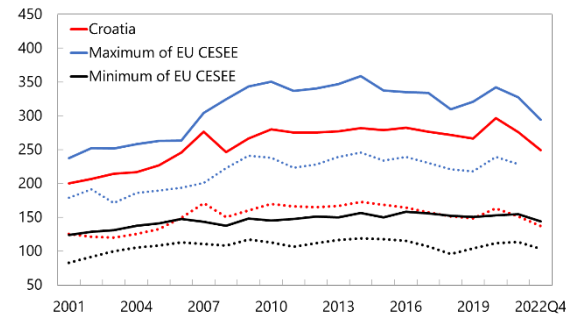


Sources: Eurostat and IMF staff calculations. Note: Occasional data breaks, as indicated by Eurostat. Data from 2021 and 2022Q4 are preliminary. EU CESEE countries include Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia.

Debt of Croatian NFCs, in percent of GDP, has remained relatively stable, with a pickup during the COVID.

Debt of Non-Financial Corporations

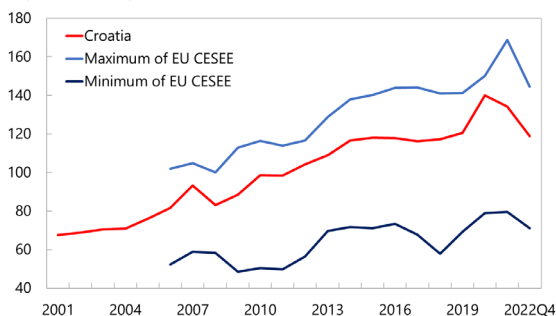
(Percent of GDP; solid lines=unconsolidated data; dotted lines=consolidated data)



Sources: Eurostat and IMF staff calculations. Note: Occasional data breaks, as indicated by Eurostat. Data from 2021 and 2022Q4 are preliminary. EU CESEE countries include Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia.

Financial assets of Croatian households, in percent of GDP, have, like peers, increased since the GFC.

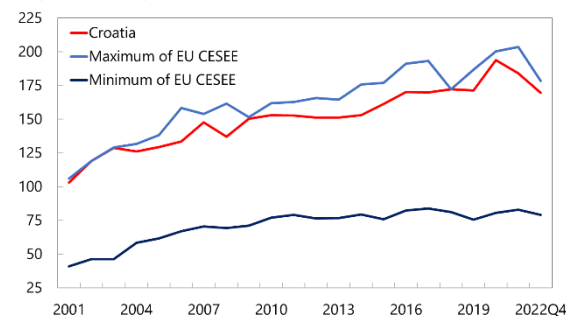
Financial Assets of Households
(Percent of GDP)



Sources: Eurostat and IMF staff calculations. Note: Occasional data breaks, as indicated by Eurostat. Data from 2021 and 2022Q4 are preliminary. EU CESEE countries include Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia.

Financial assets of Croatian NFCs appear high compared to peers, but mask significant heterogeneity.

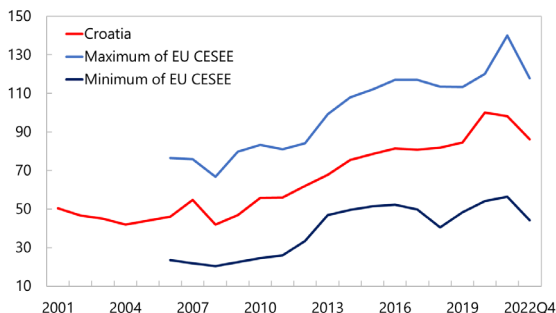
Financial Assets of Non-Financial Corporations
(Percent of GDP)



Sources: Eurostat and IMF staff calculations. Note: Occasional data breaks, as indicated by Eurostat. Data from 2021 and 2022Q4 are preliminary. EU CESEE countries include Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia.

Net financial assets of Croatian households have increased, in line with peers, since the GFC.

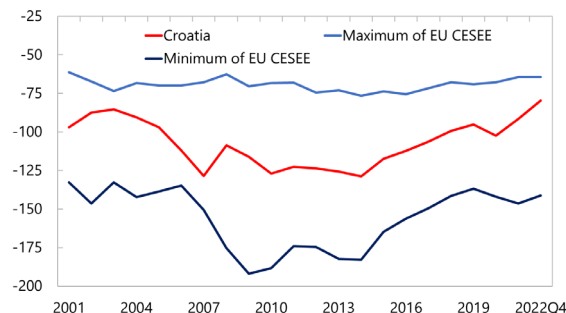
Net Financial Assets of Households
(Percent of GDP; difference between above charts)



Sources: Eurostat and IMF staff calculations. Note: Occasional data breaks, as indicated by Eurostat. Data from 2021 and 2022Q4 are preliminary. EU CESEE countries include Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia.

Net financial assets of Croatian NFCs have improved since 2013.

Net Financial Assets of Non-Financial Corporations
(Percent of GDP; difference between above charts)



Sources: Eurostat and IMF staff calculations. Note: Occasional data breaks, as indicated by Eurostat. Data from 2021 and 2022Q4 are preliminary. EU CESEE countries include Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia.

Please note that the former Agrokor conglomerate with over 60,000 employees in the region and almost 40,000 in Croatia, began reconstruction in 2017. The main creditors at the time were two Russian banks, of which one took over the company. The sale of restructured part has been delayed following the sanctions on Russia.

Table 2. Croatia: Selected Economic Indicators, 2019-2028

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
				Prel.		Projections				
<i>(Percent change, annual average, unless otherwise indicated)</i>										
Output, unemployment, and prices										
Real GDP growth	3.4	-8.5	13.1	6.2	2.4	2.4	2.7	2.9	2.8	2.8
Contributions:										
Domestic demand	2.4	-3.1	6.0	5.4	3.5	2.6	2.2	1.9	2.1	2.1
Net exports	1.0	-5.4	7.1	0.9	-1.1	-0.2	0.5	1.0	0.7	0.7
Unemployment rate	7.8	9.0	8.1	6.8	6.3	5.9	5.6	5.6	5.6	5.6
CPI inflation (avg.)	0.8	0.0	2.7	10.7	7.5	3.8	2.5	2.2	2.2	2.1
Saving and investment (percent of GDP)										
Domestic investment	22.9	24.2	21.9	25.8	25.9	26.1	25.9	25.0	24.5	24.0
Domestic saving	25.8	23.6	23.6	24.2	25.6	25.7	25.2	24.7	24.5	24.3
Government	6.8	-2.0	1.8	4.3	2.5	3.0	3.6	4.0	4.1	4.2
Nongovernment	18.9	25.6	21.8	19.9	23.1	22.6	21.5	20.7	20.4	20.2
Government sector (ESA 2010 definition)										
General government revenue	46.5	46.8	46.2	45.5	45.7	45.2	45.2	45.3	44.8	44.7
General government expenditure	44.3	54.1	48.7	45.1	46.5	46.9	46.3	46.1	45.6	45.2
General government balance	2.2	-7.3	-2.5	0.4	-0.8	-1.8	-1.1	-0.8	-0.8	-0.6
Structural balance 1/	2.1	-5.7	-3.2	-0.5	-1.3	-2.0	-1.2	-0.8	-0.8	-0.6
Structural primary balance	4.2	-3.7	-1.8	0.7	0.3	-0.2	0.3	0.6	0.4	0.5
General government debt 2/	71.0	86.9	78.3	68.8	63.7	62.5	60.9	59.2	57.6	55.9
Balance of payments (percent of GDP)										
Current account balance	2.9	-0.5	1.8	-1.6	-0.3	-0.5	-0.7	-0.3	0.0	0.4
Capital account	1.6	2.1	2.4	2.6	3.0	2.5	2.5	2.2	2.0	1.7
Financial account	-4.5	-1.0	-3.3	1.2	-2.7	-2.0	-1.8	-2.0	-2.0	-2.1
Debt and reserves										
Gross official reserves (billions of euros)	18.6	18.9	25.0	27.9	...	...	...	...	...	...
IMF metric 3/	13.6	10.8	12.7	14.9	...	...	...	...	...	...
IMF metric (percent) 3/	136.2	175.0	197.6	187.1	...	...	...	...	...	...
In months of imports in goods and services (based on next year level)	7.8	9.3	9.8	7.6	...	...	...	...	...	...
Total external debt (percent of GDP)	74.1	81.8	81.1	74.0	66.4	63.3	60.9	59.0	57.3	55.5
Money and credit										
<i>(End of period unless otherwise indicated, change in percent)</i>										
Broad money (M4)	2.9	9.3	10.7	8.4	...	...	...	...	...	...
Claims on other domestic sectors 4/	2.6	3.3	2.6	10.0	...	...	...	...	...	...
Interest rates										
12-month average T-bill rate (in kuna until 2023, then euros)	0.1	0.1	0.0	0.1	...	...	...	...	...	...
10-year government bond yield	0.7	0.6	0.1	2.8	...	...	...	...	...	...
Exchange rate										
Real effective exchange rate (percent, "-" = appreciation)	-1.3	-1.3	-0.1	0.2	...	...	...	...	...	...
Memorandum items										
Nominal GDP (billions of euros)	54.8	50.5	58.2	66.9	73.8	78.1	82.3	86.5	90.9	95.5

Sources: Croatian authorities; and IMF staff estimates. Unemployment rate is from Croatian Bureau of Statistics and Haver Analytics.

1/ Based on a simplified approach to the cyclically-adjusted balance, in percent of potential GDP. Includes the one-offs related to the COVID-19 package of -3.8 percent of GDP in 2020 and -2.3 percent of GDP in 2021. Includes the one-offs related to the energy crisis of 1.4 percent of GDP in 2022 and 1.6 percent of GDP in 2023.

2/ Gross debt as defined by the EU under the Maastricht Treaty.

3/ IMF, 2015, "Assessing Reserve Adequacy-Specific Proposals" IMF Policy Paper, Washington: International Monetary Fund.

4/ Comprises claims on households and non-financial corporations.

Table 3. Croatia: Medium-Term Baseline Scenario, 2017-2028

(Percent of GDP, unless otherwise indicated)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
						<i>Prel.</i>			<i>Projections</i>			
Real GDP (<i>percent change</i>)	3.4	2.8	3.4	-8.5	13.1	6.2	2.4	2.4	2.7	2.9	2.8	2.8
CPI inflation (<i>average</i>)	1.3	1.6	0.8	0.0	2.7	10.7	7.5	3.8	2.5	2.2	2.2	2.1
CPI inflation (<i>end-of-period</i>)	1.3	0.9	1.4	-0.3	5.2	12.7	5.0	3.0	2.2	2.2	2.1	2.1
CPI Core inflation (<i>average</i>)	1.4	1.1	1.1	0.8	1.8	9.1	7.9	4.0	2.7	2.3	2.2	2.1
GDP deflator (<i>percent change</i>)	1.2	2.0	2.0	0.8	2.0	8.2	7.7	3.3	2.6	2.2	2.2	2.2
Real sector (<i>percent change</i>)												
Domestic demand	4.5	5.4	2.3	-3.1	5.5	5.3	3.5	2.6	2.2	1.9	2.1	2.1
Consumption, total	2.9	3.1	3.8	-2.7	8.0	4.6	2.2	2.8	1.8	1.8	1.9	2.0
Gross fixed capital formation, total	1.6	3.9	9.0	-5.0	4.7	0.5	3.6	8.4	4.1	7.2	4.2	2.0
Saving and investment												
Domestic investment	21.7	23.2	22.9	24.2	21.9	25.8	25.9	26.1	25.9	25.0	24.5	24.0
Domestic saving	25.2	25.0	25.8	23.6	23.6	24.2	25.6	25.7	25.2	24.7	24.5	24.3
Balance of payments												
Current account balance	3.5	1.8	2.9	-0.5	1.8	-1.6	-0.3	-0.5	-0.7	-0.3	0.0	0.4
Exports of goods, f.o.b.	23.6	23.5	23.4	23.8	25.4	30.5	30.0	29.8	29.8	29.9	30.1	30.2
Imports of goods, f.o.b.	40.7	42.1	42.6	41.4	45.0	57.4	56.3	55.6	55.0	54.5	53.4	51.9
Capital and financial account	-3.7	-2.2	-2.8	1.1	-0.9	3.8	0.3	0.5	0.7	0.3	0.0	-0.4
<i>Of which</i> : FDI, net	2.2	1.6	6.3	1.4	4.8	5.6	3.0	3.4	2.8	2.5	2.5	2.5
Gross official reserves	31.7	33.6	33.9	37.5	43.0	41.6	...	...	...	...	...	...
Gross external debt	88.6	82.4	74.1	81.8	81.1	74.0	66.4	63.3	60.9	59.0	57.3	55.5
General government finances												
Revenue	45.0	45.4	46.5	46.8	46.2	45.5	45.7	45.2	45.2	45.3	44.8	44.7
Expenditure	44.2	45.3	44.3	54.1	48.7	45.1	46.5	46.9	46.3	46.1	45.6	45.2
Balance	0.8	0.1	2.2	-7.3	-2.5	0.4	-0.8	-1.8	-1.1	-0.8	-0.8	-0.6
Government debt	76.5	73.2	71.0	86.9	78.3	68.8	63.7	62.5	60.9	59.2	57.6	55.9
Memorandum items												
Nominal GDP (<i>billions of euros</i>)	49.5	51.9	54.8	50.5	58.2	66.9	73.8	78.1	82.3	86.5	90.9	95.5
Output gap	-0.2	-0.2	0.3	-4.2	2.1	2.6	1.5	0.7	0.3	0.0	0.0	0.0
Potential GDP growth	3.0	2.8	3.0	-4.2	6.1	5.6	3.5	3.2	3.2	3.1	2.8	2.8

Sources: Central Bureau of Statistics; Croatian National Bank; Ministry of Finance; and IMF staff estimates.

Table 4a. Croatia: Statement of Operations of General Government, 2017-2028

(Percent of GDP, ESA 2010)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
						<i>Prel.</i>			<i>Projections</i>			
Revenue	45.0	45.4	46.5	46.8	46.2	45.5	45.7	45.2	45.2	45.3	44.8	44.7
Taxes	25.3	25.9	26.1	25.1	24.6	25.5	24.8	24.8	24.9	24.9	24.9	24.9
Income tax	5.6	5.8	5.9	5.9	5.1	5.5	5.1	5.1	5.1	5.1	5.1	5.1
VAT	12.9	13.2	13.3	12.5	13.1	13.3	13.2	13.2	13.2	13.2	13.2	13.2
Excise	4.4	4.5	4.4	4.2	4.2	4.0	3.7	3.7	3.8	3.8	3.8	3.8
Import duties	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other taxes	2.4	2.4	2.5	2.4	2.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Social contributions	11.5	11.5	11.3	11.6	11.1	10.9	11.3	11.4	11.4	11.5	11.5	11.5
Other revenue	3.9	3.6	4.5	6.0	6.3	5.5	5.8	5.1	5.1	5.1	4.6	4.4
Grants 1/	3.0	2.8	3.7	5.2	5.5	4.7	5.0	4.3	4.3	4.3	3.8	3.6
Property income	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
<i>Of which</i> : interest receivable	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Sales of goods and services	4.2	4.4	4.5	4.1	4.1	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Expenditure	44.2	45.3	44.3	54.1	48.7	45.1	46.5	46.9	46.3	46.1	45.6	45.2
Expense	41.4	41.8	39.9	48.4	43.9	41.2	42.6	42.6	41.7	41.6	41.3	41.1
Compensation of employees	11.2	11.6	11.6	13.3	12.3	11.3	11.5	12.1	12.1	12.1	12.1	12.1
Use of goods and services	7.9	8.0	8.1	8.5	8.2	7.8	7.7	7.6	7.6	7.6	7.6	7.6
Interest, payable	2.6	2.3	2.2	2.0	1.5	1.4	1.8	2.0	1.7	1.5	1.4	1.3
Subsidies	1.5	1.6	1.5	3.7	2.6	2.3	2.3	1.6	1.5	1.5	1.5	1.5
Current grants 2/	1.9	1.9	1.9	2.3	2.4	2.1	3.1	2.2	2.0	2.2	1.9	1.9
Social benefits	15.1	15.0	13.1	17.0	15.2	14.2	14.4	14.4	14.4	14.4	14.4	14.4
Other expenses	1.1	1.5	1.5	1.5	1.5	2.2	1.9	2.7	2.4	2.5	2.5	2.5
Net acquisition of nonfinancial assets	2.7	3.5	4.4	5.7	4.8	3.9	3.9	4.4	4.6	4.4	4.3	4.1
Overall Balance	0.8	0.1	2.2	-7.3	-2.5	0.4	-0.8	-1.8	-1.1	-0.8	-0.8	-0.6
Memorandum items												
General government gross debt 3/	76.5	73.2	71.0	86.9	78.3	68.8	63.7	62.5	60.9	59.2	57.6	55.9
General government net debt 4/	64.5	61.3	58.0	69.9	63.2	53.5	49.8	49.4	48.4	47.3	46.3	45.1
Structural balance 5/	0.9	0.2	2.1	-5.7	-3.2	-0.5	-1.3	-2.0	-1.2	-0.8	-0.8	-0.6
Primary balance	3.2	2.2	4.2	-5.5	-1.1	1.6	0.8	0.0	0.4	0.6	0.4	0.5
Structural primary balance 5/	3.3	2.3	4.2	-3.7	-1.8	0.7	0.3	-0.2	0.3	0.6	0.4	0.5

Sources: Eurostat; and IMF staff estimates.

1/ Mostly EU structural and investment funds.

2/ Non-capital transfers financed by the EU structural funds and national co-financing.

3/ Gross debt as defined by the EU under the Maastricht Treaty.

4/ Net debt is calculated as gross debt minus deposits, loans and debt securities as reported by Eurostat.

5/ Based on a simplified approach to the cyclically-adjusted balance, in percent of potential GDP, includes capital transfers to public enterprises, one-off investment retrenchment in 2015, payment of guarantees of Uljanik shipyards in 2018/19; the Covid-19 fiscal package in 2020-21, energy support measures in 2022-23 and capital transfers to HEP in 2023.

Note: Components of expenditures and revenues may not add to the total due to rounding.

Table 4b. Croatia: Statement of Operations of General Government, 2017-2028

(Billion of Euros, ESA 2010)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
						<i>Prel.</i>	<i>Projections</i>					
Revenue	22.3	23.6	25.5	23.6	26.9	30.5	33.7	35.2	37.2	39.2	40.7	42.7
Taxes	12.5	13.5	14.3	12.7	14.3	17.1	18.3	19.3	20.5	21.5	22.6	23.8
Income tax	2.8	3.0	3.3	3.0	3.0	3.7	3.8	4.0	4.2	4.4	4.6	4.9
VAT	6.4	6.8	7.3	6.3	7.6	8.9	9.7	10.3	10.8	11.4	12.0	12.6
Excise	2.2	2.3	2.4	2.1	2.4	2.7	2.7	2.9	3.1	3.3	3.5	3.6
Import duties	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other taxes	1.2	1.3	1.4	1.2	1.3	1.9	2.1	2.2	2.3	2.5	2.6	2.7
Social contributions	5.7	6.0	6.2	5.9	6.5	7.3	8.3	8.9	9.4	10.0	10.5	11.0
Other revenue	1.9	1.9	2.5	3.0	3.7	3.7	4.2	4.0	4.2	4.4	4.2	4.2
Grants 1/	1.5	1.4	2.0	2.6	3.2	3.2	3.7	3.4	3.5	3.7	3.4	3.5
Property income	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7
<i>Of which</i> : interest receivable	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sales of goods and services	2.1	2.3	2.5	2.1	2.4	2.6	2.8	3.0	3.2	3.3	3.5	3.7
Expenditure	21.9	23.5	24.3	27.3	28.3	30.2	34.3	36.6	38.1	39.9	41.5	43.2
Expense	20.5	21.7	21.9	24.4	25.5	27.6	31.5	33.2	34.3	36.0	37.5	39.3
Compensation of employees	5.6	6.0	6.4	6.7	7.2	7.6	8.5	9.4	9.9	10.4	11.0	11.5
Use of goods and services	3.9	4.1	4.4	4.3	4.8	5.2	5.7	5.9	6.2	6.5	6.9	7.2
Interest, payable	1.3	1.2	1.2	1.0	0.9	0.9	1.3	1.5	1.4	1.3	1.3	1.2
Subsidies	0.7	0.8	0.8	1.9	1.5	1.5	1.7	1.3	1.2	1.3	1.3	1.4
Current grants 2/	1.0	1.0	1.1	1.2	1.4	1.4	2.3	1.7	1.7	1.9	1.8	1.8
Social benefits	7.5	7.8	7.2	8.6	8.9	9.5	10.6	11.2	11.8	12.4	13.1	13.7
Other expenses	0.5	0.8	0.8	0.8	0.9	1.4	1.4	2.1	2.0	2.2	2.3	2.4
Net acquisition of nonfinancial assets	1.3	1.8	2.4	2.9	2.8	2.6	2.9	3.4	3.8	3.8	3.9	3.9
Overall Balance	0.4	0.1	1.2	-3.7	-1.4	0.3	-0.6	-1.4	-0.9	-0.7	-0.7	-0.6
Memorandum items												
General government gross debt 3/	37.9	38.0	38.9	43.9	45.6	46.1	47.0	48.8	50.1	51.2	52.4	53.4
General government net debt 4/	31.9	31.8	31.8	35.3	36.8	35.8	36.8	38.5	39.8	40.9	42.1	43.1
Structural balance 5/	0.4	0.1	1.2	-2.9	-1.9	-0.3	-1.0	-1.6	-1.0	-0.7	-0.7	-0.6
Primary balance	1.6	1.1	2.3	-2.8	-0.6	1.1	0.6	0.0	0.4	0.5	0.4	0.5
Structural primary balance 5/	1.6	1.2	2.3	-1.9	-1.1	0.5	0.2	-0.2	0.3	0.5	0.4	0.5

Sources: Eurostat; and IMF staff estimates.

1/ Mostly EU structural and investment funds.

2/ Non-capital transfers financed by the EU structural funds and national co-financing.

3/ Gross debt as defined by the EU under the Maastricht Treaty.

4/ Net debt is calculated as gross debt minus deposits, loans and debt securities as reported by Eurostat.

5/ Based on a simplified approach to the cyclically-adjusted balance, in percent of potential GDP, includes capital transfers to public enterprises, one-off investment retrenchment in 2015, payment of guarantees of Uljanik shipyards in 2018/19; the Covid-19 fiscal package in 2020-21, energy support measures in 2022-23 and capital transfers to HEP in 2023.

Table 5. Croatia: Monetary Accounts, 2016-2022

(End of period, billion of Euros, unless otherwise indicated)

	2016	2017	2018	2019	2020	2021	2022			
							Q1	Q2	Q3	Q4
Monetary survey										
Net foreign assets	13.9	16.2	17.2	18.7	19.9	24.4	22.7	24.2	27.1	26.4
Croatian National Bank	12.6	14.7	15.8	17.7	18.8	23.0	22.5	23.1	23.3	26.0
Deposit money banks	1.3	1.5	1.4	1.0	1.1	1.3	0.3	1.1	3.8	0.4
Net domestic assets	26.0	24.6	25.8	25.5	28.5	29.2	30.5	31.6	31.3	31.6
Domestic credit 1/	29.4	29.1	29.6	30.5	31.7	32.6	33.4	34.4	35.4	35.7
Consolidated domestic credit	39.1	37.1	38.0	38.3	41.7	43.0	44.3	44.9	45.0	45.5
<i>Of which</i> : Claims on central government, net	9.7	8.0	8.4	7.8	10.0	10.3	10.9	10.5	9.7	9.8
Claims on other domestic sectors	28.5	28.3	28.8	29.6	30.8	31.8	32.7	33.7	34.6	35.0
Broad money (M4)	39.9	40.8	43.0	44.2	48.4	53.5	53.2	55.8	58.4	58.0
Narrow money (M1)	11.1	13.2	15.9	18.2	21.3	25.1	25.0	26.3	26.7	27.5
Currency outside banks	3.0	3.4	3.7	4.1	4.5	4.8	4.6	4.7	4.0	2.0
Demand deposits	8.1	9.8	12.2	14.1	16.8	20.3	20.4	21.7	22.7	25.5
Quasi money	28.9	27.6	27.1	26.0	27.1	28.4	28.2	29.5	31.7	30.5
Kuna-denominated	6.3	5.8	5.5	4.4	4.3	4.2	4.0	4.0	3.7	3.9
Foreign currency-denominated	22.5	21.8	21.5	21.6	22.8	24.2	24.2	25.5	28.0	26.6
Balance sheet of the Croatian National Bank										
Net foreign assets	12.6	14.7	15.8	17.7	18.8	23.0	22.5	23.1	23.3	26.0
Net international reserves	12.6	14.7	15.8	17.7	18.4	22.4	21.9	22.2	21.9	24.4
Net domestic assets	-2.9	-3.4	-2.5	-3.3	-2.2	-3.3	-2.3	-3.5	-4.3	-6.2
Claims on central government (<i>net</i>)	-0.5	-0.6	-0.5	-0.9	0.1	0.0	0.8	0.1	-1.1	-0.6
Claims on banks	0.1	0.0	0.0	0.3	0.6	0.4	0.4	0.4	0.4	0.4
Claims on other domestic sectors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other items (<i>net</i>)	-2.6	-2.8	-2.1	-2.6	-2.9	-3.7	-3.5	-3.9	-3.6	-5.9
Reserve money (<i>CNB definition</i>) 2/	9.7	11.5	13.5	14.4	16.6	19.7	20.1	19.6	18.9	19.8
<i>Of which</i> :										
Currency outside credit institutions	3.0	3.4	3.7	4.1	4.5	4.8	4.6	4.7	4.0	2.0
Kuna deposits of credit institutions	6.0	7.3	8.9	9.2	11.0	13.8	14.4	13.6	13.4	16.3
<i>Of which</i> :										
Settlement accounts	3.2	4.3	5.7	5.9	8.4	10.8	11.4	10.5	11.6	16.3
Statutory reserves in kuna	2.9	2.9	3.1	3.3	2.6	3.0	3.0	3.1	1.8	0.0
Year-on-year percent changes										
Monetary survey:										
Net domestic assets	1.1	-5.5	4.7	-0.9	11.5	2.4	7.6	7.3	13.9	8.3
Domestic credit 1/	-3.7	-1.2	2.0	2.8	3.9	3.0	4.5	7.8	10.5	9.5
Claims on central government, net	11.6	-17.2	5.0	-7.1	28.7	3.1	10.7	-5.0	5.7	-5.4
Claims on other domestic sectors	-3.5	-0.8	1.9	2.8	3.9	3.2	5.3	8.3	11.0	10.2
Broad money (M4)	4.7	2.1	5.5	2.9	9.3	10.7	8.6	10.7	10.4	8.4
Quasi money	0.3	-4.4	-1.8	-3.9	4.0	4.9	4.6	8.8	12.1	7.5
Balance sheet of the Croatian National Bank										
Reserve money (<i>CNB definition</i>) 2/	14.9	17.9	17.8	6.5	15.5	18.6	11.6	4.7	3.9	0.5
Memorandum items										
Nominal GDP (<i>yearly total</i>) 3/	47.3	50.5	78.1	54.8	50.5	58.2	59.9	62.4	64.9	66.9
Broad money (<i>percent of GDP</i>)	84.4	80.8	55.1	80.7	95.8	91.9	88.8	89.4	90.0	86.7
Foreign currency (<i>percent of broad money</i>)	56.4	53.4	50.1	48.9	47.2	45.2	45.5	45.7	48.0	45.9
Claims on other domestic sectors: stock (<i>percent of GDP</i>)	60.2	56.0	36.9	54.1	61.0	54.5	54.6	53.9	53.4	52.3
Claims on private sector (<i>transactions, annual change, percent</i>) 4/ 5/	1.6	3.2	3.9	4.0	3.0	2.6	2.8	2.9	2.9	3.2

Sources: Croatian National Bank; and IMF staff estimates.

Note: As of January 2015, the Croatian National Bank started publishing monetary statistics in line with ESA 2010.

1/ Domestic credit comprises credit institutions' claims on other domestic sectors, other financial intermediaries, financial auxiliaries, as well as insurance companies and pension funds.

2/ Excludes statutory reserves in foreign currency.

3/ Quarterly annualized GDP is the sum of nominal GDP the last four quarters, not seasonally adjusted.

4/ Comprises claims on households and enterprises. Excludes other banking institutions (household savings banks, savings and loan cooperatives, and investment funds) and other financial institutions.

5/ Transaction data exclude the effects of exchange rate changes, securities price adjustments and write-offs, including sale of placements in the amount of their value adjustments.

Table 6. Croatia: Financial Soundness Indicators, 2016-2023

(Percent, unless otherwise indicated)

	2016	2017	2018	2019	2020	2021	2022				2023
							Q1	Q2	Q3	Q4	Q1
Regulatory capital to risk-weighted assets	22.5	23.2	22.9	23.2	24.9	25.6	25.6	25.0	24.0	24.6	23.6
Regulatory Tier I capital to risk-weighted assets	20.9	21.8	21.8	22.4	24.3	25.1	25.2	24.6	23.5	24.0	23.0
Nonperforming loans net of loan-loss provisions to capital	19.4	14.2	12.9	5.6	5.4	3.5	3.2	2.1	0.4	-0.4	...
Nonperforming loans to total gross loans 1/	13.6	11.2	9.7	7.0	7.2	5.7	5.4	4.9	4.3	4.3	...
Nonperforming loans to total gross loans 2/	12.2	8.8	7.6	5.5	5.4	4.3	4.2	3.8	3.3	3.0	3.2
Loan-loss provision to nonperforming loans 1/	70.1	70.1	70.3	81.8	83.3	...	...	...	...	...	...
Return on assets	1.6	1.1	1.4	1.6	0.7	1.4	1.5	1.4	1.5	1.2	1.6
Return on equity	11.8	7.4	9.6	11.3	7.2	8.7	9.5	9.5	10.2	8.2	14.0
Interest margin to gross income	57.7	60.1	56.6	52.5	61.2	54.1	57.1	54.6	53.1	53.5	...
Noninterest expenses to gross income	53.4	56.5	54.3	51.8	59.2						
Liquid assets to total assets 3/	29.6	33.0	34.4	34.4	36.2	32.1	31.5	31.0	33.5	38.1	...
Liquid assets to short-term liabilities 3/	42.6	47.3	47.1	46.7	48.1	37.5	36.8	35.7	38.6	43.6	...
Net open position in foreign exchange to capital	3.8	3.3	5.1	5.0	6.2	3.5	1.2	2.0	4.1	4.9	...
Residential real estate prices, end of period (<i>annual increase</i>)	0.8	7.6	4.7	10.0	6.4	9.1	13.5	13.6	14.8	17.3	...

Sources: Croatian National Bank and the IMF's Financial Soundness Indicators (FSI).
Note: The classifications used in the table are consistent with the IMF's FSIs Database. However, figures in *italics* are most current figures provided by the CNB or the Croatian Bureau of Statistics.
1/ Total loan-loss provisions in percent of gross loans as defined by the FSIs.
2/ Total loan-loss provisions in percent of gross loans as defined by the ECB.
3/ Liquid assets are on a net basis. They include deposits at banks and at the central bank, short-term government and central bank paper and overnight loans extended; less required reserve funds, central bank loans received, and overnight loans received.

Table 7. Croatia: Balance of Payments, 2017-2028 ^{1/}

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
						Prel.		Projections				
Current account	1,719	931	1,577	-268	1,022	-1,064	-240	-379	-578	-233	-12	355
Merchandise trade balance	-8,467	-9,668	-10,494	-8,856	-11,403	-17,981	-19,448	-20,085	-20,709	-21,290	-21,197	-20,773
Exports f.o.b.	11,685	12,196	12,819	12,028	14,803	20,439	22,111	23,280	24,544	25,901	27,355	28,824
Imports f.o.b.	20,151	21,864	23,313	20,884	26,206	38,420	41,560	43,366	45,253	47,191	48,553	49,597
Services Trade Balance	8,800	9,225	10,288	5,306	9,821	14,179	16,266	16,673	17,700	18,622	18,820	18,833
Export of services	12,915	13,874	15,375	8,927	14,314	19,870	22,333	23,189	24,560	25,843	27,239	28,634
Imports of services	4,114	4,648	5,087	3,622	4,493	5,691	6,067	6,516	6,860	7,221	8,419	9,801
Primary income balance	-109	-207	50	1,248	524	608	94	241	163	196	227	254
Secondary income balance	1,494	1,581	1,732	2,033	2,081	2,130	2,848	2,792	2,268	2,239	2,138	2,041
Capital account	460	674	904	1,075	1,407	1,721	2,244	1,963	2,085	1,944	1,817	1,606
Financial account	-2,292	-1,797	-2,453	-521	-1,921	794	-2,004	-1,584	-1,507	-1,711	-1,806	-1,961
Direct investment	1,111	844	3,427	704	2,798	3,748	2,238	2,680	2,330	2,190	2,302	2,419
Portfolio investment	-403	-1,014	-1,347	67	68	-1,798	-1,552	-1,674	-1,355	-1,551	-1,604	-1,320
Financial derivatives	369	-85	111	340	265	492	366	374	411	383	389	395
Other investment	-777	4	-3,654	-1,027	979	1,301	1,695	1,579	1,420	1,352	1,244	949
Net errors and omissions	114	193	-27	-286	-508	-1,451	0	0	0	0	0	0
Gross reserves (- = increase)	-2,592	-1,545	-990	-603	-6,031	-2,949	-4,751	-4,544	-4,313	-4,086	-4,137	-4,403
Memorandum items												
Current account (percent of GDP)	3.5	1.8	2.9	-0.5	1.8	-1.6	-0.3	-0.5	-0.7	-0.3	0.0	0.4
Exports of Services (percent of GDP)	26.1	26.7	28.1	17.7	24.6	29.7	30.3	29.7	29.9	29.9	30.0	30.0
Export goods volume growth	9.0	3.1	4.5	-0.7	21.3	23.6	-6.5	2.0	3.0	3.0	2.0	2.0
Import goods volume growth	7.4	6.7	6.3	-8.8	17.1	26.3	-3.0	3.0	2.0	1.0	1.0	1.0
Gross official reserves	15,706	17,439	18,563	18,945	25,022	27,877						
Percent of short-term debt	113.6	148.5	51.2	133.9	183.2	139.4						
Months of next year's imports	7.8	7.9	7.8	9.3	9.8	7.6						
External debt to GDP 2/	88.6	82.4	74.1	81.8	81.1	74.0	66.4	63.3	60.9	59.0	57.3	55.5
Terms of Trade (percent change)	0.3	0.6	0.8	-1.7	-4.4	-4.0	2.1	0.2	0.3	-0.7	-0.4	-0.2
GDP	49,518	51,932	54,786	50,476	58,244	66,941	73,796	78,053	82,259	86,535	90,924	95,550

Sources: Croatian National Bank; and IMF staff estimates.

1/ Partially based on BMP5.

2/ Since end-2008, external debt is reported based on the new reporting system (INOK).

Annex I. Implementation of 2021 Article IV Recommendations

	2021 Article IV Advice	Actions since 2021 Article IV
Balance the pandemic recovery with fiscal prudence while remaining vigilant to support the nascent recovery	Gradually resume the pre-crisis decline in the deficit and debt.	The public debt ratio decreased significantly to about 69 percent of GDP in 2022, on the back of a strong economic recovery as well as the phasing out of COVID-19- related spending.
	Conserve revenues and avoid further tax cuts.	In February 2022 VAT was reduced on gas and thermal energy, electricity, staple food, and other items, while excises on gasoline and diesel were also cut. Most measures were announced as temporary.
	Rebuild resilient and sustainable tourism.	The new Sustainable Tourism Development Strategy until 2030, aligned with the National Development Strategy and the NRRP, was adopted in December 2022. Public calls for the green and digital transition of existing public tourism infrastructure and their development beyond the main tourist and coastal areas were launched.
Accelerate the implementation of structural reforms	Strengthen the absorption capacity of EU funds.	The Act on the institutional framework for EU funds was adopted at end-2021, to strengthen the capacity to prepare and implement EU projects. EU funds absorption for the 2014-20 financial perspective stood at 78 percent in January 2023.
	Improve public investment management practices.	Measures to strengthen public procurement are ongoing. In 2022Q3, the public procurement legislative framework was amended to introduce e-appeal as a mandatory means of obtaining redress in the public procurement system.
	Advance healthcare, public sector remuneration, and pension reforms.	Under the NRRP, reforms are planned by 2026 to (i) strengthen the resilience and sustainability of the health care system, (ii) introduce new wage and work models in the civil service, and (iii) increase pension adequacy and sustainability.
	Leverage the National Recovery and Resilience Plan (NRRP) to prioritize green investments and digitalization.	About 40 percent of the plan supports climate objectives and 20 percent fosters the digital transition. Croatia received the second NRRP tranche based on the end-2022 assessment, representing 40 percent of the allocated funds.

	2021 Article IV Advice	Actions since 2021 Article IV
Anchor stability through monetary and financial policies	Remain vigilant regarding growth of household borrowing.	The CNB has continued to closely monitor household borrowing, including housing loans and general-purpose cash loans.
	Remain vigilant over credit developments in the real estate market and stand ready to deploy additional macroprudential measures if necessary.	The CNB has announced an increase of the countercyclical buffer (originally at zero) by 0.5 percent effective end-March 2023, and another increase by 0.5 percent effective end-December 2023.
	Improve the AML/CFT framework.	Several measures have already been implemented, as additional conditions for ERM II membership and euro adoption, while the remaining Moneyval recommendations are in the works.

Annex II. Risk Assessment Matrix

Source of Risks and Likelihood	Impact on Croatia	Recommended Policy Response
Conjunctural risks		
Intensification of regional conflict(s). Escalation of Russia's war in Ukraine and resulting economic sanctions disrupt trade (e.g., energy, food, tourism, and/or critical supply chain components), remittances, refugee flows, FDI and financial flows, and payment systems. High	Croatia has limited direct trade and financial exposure to Russia and Ukraine but is indirectly exposed via higher global energy prices and weaker trading partners' growth. Medium	Provide temporary targeted fiscal support to protect the most vulnerable; moderately tighten overall fiscal policy stance if inflation remains high; speed up the green transition to increase energy efficiency and renewable energy; strengthen structural reforms to improve competitiveness
Social discontent. Supply shocks, high inflation, real wage drops, and spillovers from crises in other countries worsen inequality, trigger social unrest, and give rise to financing pressures. This exacerbates imbalances, slows growth, and triggers market repricing. High	Social discontent increases as inflation dampens household dispensable income and consumption, particularly hurting vulnerable groups. Low	Closely monitor inflation development; provide temporary targeted support to the most vulnerable while ensure fiscal policy stance consistent with the need to reduce inflation; clearly communicate the pros of policy measures and seek broad buy-in; further strengthen institutions and rule of law
Commodity price volatility. A succession of supply disruptions (e.g., due to conflicts and export restrictions) and demand fluctuations (e.g., reflecting China reopening) causes recurrent commodity price volatility, external and fiscal pressures, and social and economic instability. Medium	Croatia's energy external dependence is below the EU average. However, high international energy prices will have implications through domestic inflation and dampen real dispensable income. Medium	Provide temporary targeted fiscal support to protect the most vulnerable; tighten overall fiscal policy stance if higher inflation threatens second-round effects and risks de-anchoring inflation expectations; speed up the green transition to increase energy efficiency and renewable energy;
Abrupt global slowdown or recession. In Europe, intensifying fallout from the war in Ukraine, worsening energy crisis and supply disruptions, and monetary tightening exacerbate economic downturns and housing market corrections. High	A sharp recession in Europe would significantly impact Croatia's tourism and exports and lead to a contraction of consumption and investment. High	Provide temporary targeted fiscal support to protect the most vulnerable; allow automatic stabilizer to fully work; continue with good implementation of RRF investment and reforms; closely monitor and manage risks to financial stability, including through recalibrating macroprudential policy stance; advance structural reforms to strengthen competitiveness.
Structural risks		
Deepening geo-economic fragmentation. Broader and deeper conflict(s) and weakened international cooperation lead to a more rapid reconfiguration of trade and FDI, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial systems, and lower potential growth. High	Geo-economic fragmentation may cause some economic disruption to trade, investment, and financial flows, disorderly migration, and higher energy insecurity. Medium	Advance structural reforms to diversify the economy and strengthen competitiveness; build fiscal buffers; continue with good implementation of RRF investment and reforms

Source of Risks and Likelihood	Impact on Croatia	Recommended Policy Response
Structural risks		
Extreme climate events. Extreme climate events cause more severe than expected damage to infrastructure (especially in smaller vulnerable economies) and loss of human lives and livelihoods, amplifying supply chain disruptions and inflationary pressures, causing water and food shortages, and reducing growth. Medium	More severe and extreme climate events hurt economic activities and can cause severe economic damage. High	Build fiscal buffers; implement the RRF green investments to mitigate and adapt to climate change; continue to invest in climate transition and resilience; implement the recommendations of PIMA/Climate module.
Cyberthreats. Cyberattacks on critical domestic and/or international physical or digital infrastructure (including digital currency and crypto ecosystems) trigger financial and economic instability. Medium	Risks on critical infrastructure, institutions, and financial systems that trigger systemic financial instability or widespread disruptions in socio-economic activities are Medium .	Continue to enhance infrastructure and reduce cyber risks; strengthen preparedness
Domestic risks		
Delays in public investment and reforms. Capacity constraints in combination with supply chain problems and labor shortages delay the implementation of key public investment projects and reforms. Medium	The execution of NGEU-funded projects is an important driver of growth. High	Accelerate reforms to improve absorption and invest in new technologies and improve labor force skills.
Negative demographics. Demographic change will result in a slower-growing and aging population. This negative trend will likely put downward pressure on the growth of potential output and the natural rate of unemployment. High	Aging will continue impact the labor force, wages, and the sustainability of social welfare and healthcare system. Medium	Implement structural reforms to increase productivity; further labor market reform; increase labor force participation; invest in improving human capital; build fiscal buffers
Real estate market correction. A sharp correction of housing prices could temporarily weaken households and banks' balance sheets and trigger abrupt housing market correction. Medium	A large decline in house prices could adversely affect the quality of banks' loan portfolio and tighten lending standards to the rest of the economy. An abrupt housing market correction could adversely affect selected households' balance sheets, hit construction activity, and weaken confidence and domestic demand. Medium to low	Continue close monitoring of housing market developments and implement necessary macro prudential policies as needed; build fiscal buffers

Annex III. Summary of the Sovereign Risk and Debt Sustainability Assessment

AIII. Figure 1. Croatia: Summary of the Sovereign Risk and Debt Sustainability Assessment

Horizon	Mechanical signal	Final assessment	Comments
Overall	...	Moderate	The overall risk of sovereign stress is moderate, reflecting low level of vulnerability in the medium-term on the basis of relatively solid economic fundamentals, a sound debt management strategy to lower interest rates and extend maturities, as well as the euro adoption on January 1 st , 2023, and moderate level of vulnerability in the long-term horizon due to the age-related expenditure pressures.
Near term 1/	n.a.	n.a.	
Medium term	Low	Low	Medium-term risks are assessed as low, consistent with the mechanical low signal.
Fanchart	Moderate	...	
GFN	Low	...	
Stress test	...	...
Long term	...	Moderate	Long-term risks are moderate as aging-related expenditures on health and social security feed into debt dynamics. Croatia's pension system faces unfavorable demographic trends, mainly driven by population aging and shrinking prime-age workforce. A continuation of these trends would create additional pressure on the system of generational solidarity, which will impact the long run sustainability of public finances. Healthcare and pension/social security are currently included in general government expenditure, in line with best practices. Moreover, with the addition of Pillar 2 pensions (defined contributions mandatory, funded) in 2002, Croatia has issued debt upfront for its funding, as reflected in net assets accumulated in Pillar 2 of 28 percent of GDP in 2022. Pillar 3 pensions (voluntary, funded, privately- managed) will provide additional support. However, in the absence of significant immediate reforms, demographic pressures and non-demographic healthcare costs will put pressure on the budget starting with 2031.
Sustainability assessment 2/	n.a.	n.a.	
Debt stabilization in the baseline			Yes

DSA summary assessment

Commentary: After increasing at the onset of the pandemic, Croatia's debt-to-GDP ratio declined sharply in 2021 and 2022 as the economy recovered strongly and inflation surprised on the upside. Going forward, public debt is expected to remain on a downward path and gross financing needs are low, conditional on staying the course with fiscal policy consolidation. Medium-term risks are moderate based on the Fanchart but low based on the GFN Finiability Module. Long-term risks are assessed as moderate. Over the longer run, Croatia should continue with reforms to tackle risks arising from population aging on healthcare, social security, and the pension system. However, the long time horizon at which these risks would materialize and the authorities' planned reforms under the NRRP will help contain risks.

Source: Fund staff.

Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.

1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.

2/ A debt sustainability assessment is optional for surveillance-only cases and mandatory in cases where there is a Fund arrangement. The mechanical signal of the debt sustainability assessment is deleted before publication. In surveillance-only cases or cases with IMF arrangements with normal access, the qualifier indicating probability of sustainable debt ("with high probability" or "but not with high probability") is deleted before publication.

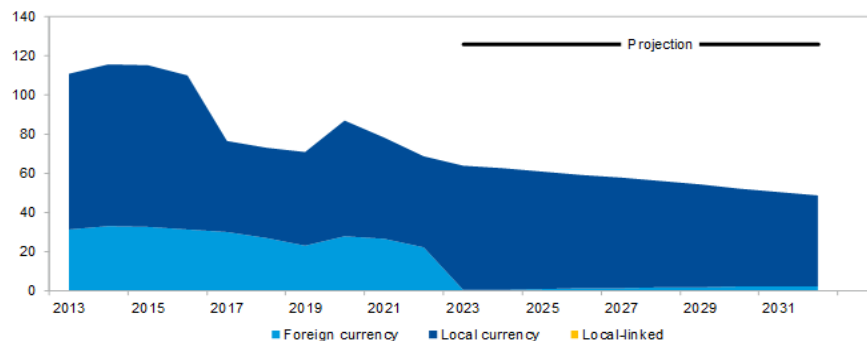
All. Figure 2. Croatia: Debt Coverage and Disclosures

Croatia: Debt coverage and disclosures						Comments						
1. Debt coverage in the DSA: 1/					CG		GG	NFPS	CPS	Other		
1a. If central government, are non-central government entities insignificant?					n.a.							
2. Subsectors included in the chosen coverage in (1) above:												
Subsectors captured in the baseline						Inclusion						
CPS	NFPS	GG: expected	CG	1	Budgetary central government	Yes						
				2	Extra budgetary funds (EBFs)	Yes						
				3	Social security funds (SSFs)	Yes						
				4	State governments	Yes						
				5	Local governments	Yes						
				6	Public nonfinancial corporations	No						
				7	Central bank	No						
				8	Other public financial corporations	No						
3. Instrument coverage:				Currency & deposits	Loans	Debt securities	Oth acct payable 2/	IPSGs 3/				
4. Accounting principles:				Basis of recording		Valuation of debt stock						
				Non-cash basis 4/	Cash basis	Nominal value 5/	Face value 6/	Market value 7/				
5. Debt consolidation across sectors:				Consolidated		Non-consolidated						
Color code: ■ chosen coverage ■ Missing from recommended coverage ■ Not applicable												
Reporting on intra-government debt holdings												
		Holder		Budget central govt	Extra-budget funds (EBFs)	Social security funds (SSFs)	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin. corp	Total
		Issuer										
CPS	NFPS	GG: expected	CG	1	Budget. central govt							0
				2	Extra-budget. funds							0
				3	Social security funds							0
				4	State govt.							0
				5	Local govt.							0
				6	Nonfin pub. corp.							0
				7	Central bank							0
				8	Oth. pub. fin. corp							0
Total				0	0	0	0	0	0	0	0	0
<p>1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector. 2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable. 3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities. 4/ Includes accrual recording, commitment basis, due for payment, etc. 5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes). 6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity. 7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.</p>												
<p>Commentary: Croatia's debt coverage and disclosure are consistent with standard recommendations. Debt guaranteed by the government is not included in public debt.</p>												

AIll. Figure 3. Croatia: Public Debt Structure Indicators

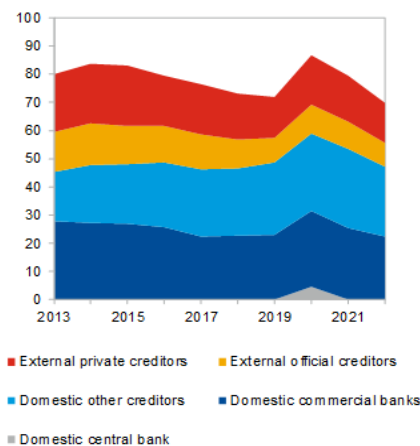
Croatia: Public debt structure indicators

Debt by currency (percent of GDP)



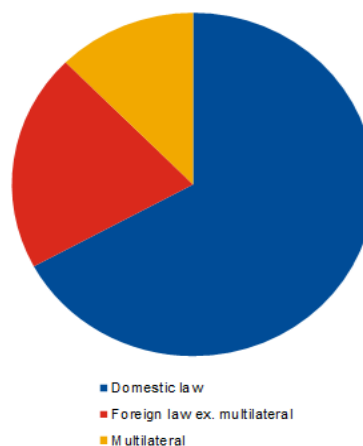
Note: The perimeter shown is general government.

Public debt by holder (percent of GDP)



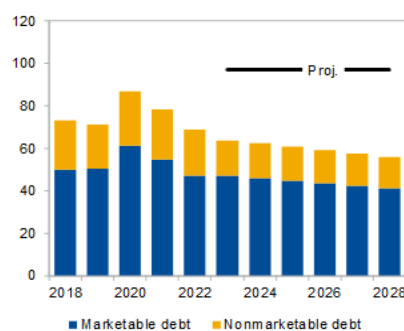
Note: The perimeter shown is general government.

Public debt by governing law, 2022 (percent)



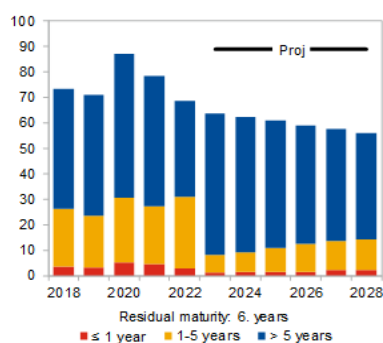
Note: The perimeter shown is general government.

Debt by instruments (percent of GDP)



Note: The perimeter shown is general government.

Public debt by maturity (percent of GDP)



Note: The perimeter shown is general government.

Commentary: The majority of public debt is owned by EU residents. In recent years, the authorities succeeded in extending the average maturity of public debt, and this is expected to continue going forward. More than 95 percent of outstanding debt matures beyond one year (the average maturity of domestic bonds placed since 2019 has been more than 6 years and more than 11 years for eurobonds). Unlike the past, Croatia has borrowed at longer maturity in sovereign bond markets since 2019, as the February 2022 11-19 year €2 billion Eurobond and the 20-year April 2022 €1.25 billion Eurobond have shown.

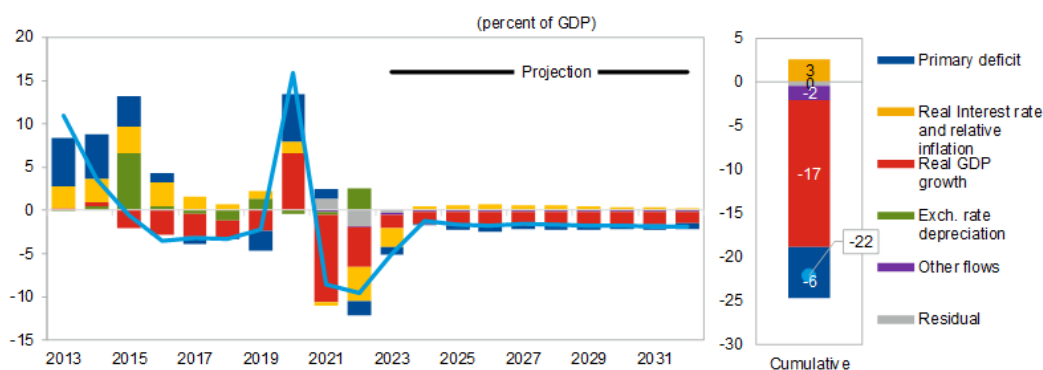
AIII. Figure 4. Croatia: Baseline Scenario

Croatia: Baseline scenario

(percent of GDP unless indicated otherwise)

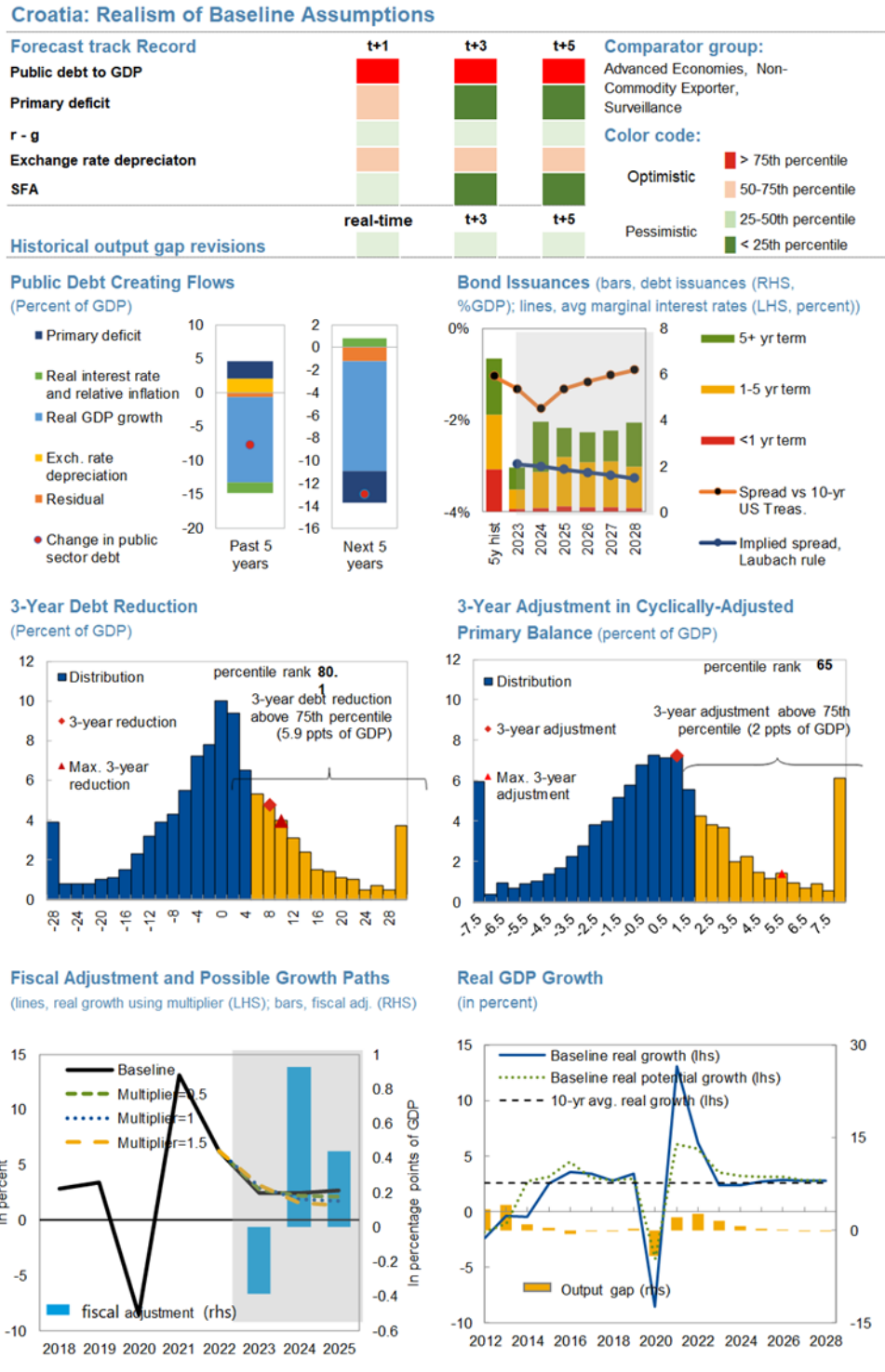
	Actual	Medium-term projection						Extended projection			
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Public debt	68.8	63.7	62.5	60.9	59.2	57.6	55.9	54.1	52.4	50.5	48.7
Change in public debt	-9.5	-5.1	-1.2	-1.6	-1.8	-1.5	-1.7	-1.8	-1.8	-1.9	-1.8
Contribution of identified flows	-7.7	-4.8	-1.2	-1.6	-1.7	-1.5	-1.7	-1.8	-1.8	-1.8	-1.8
Primary deficit	-1.6	-0.8	0.0	-0.4	-0.6	-0.4	-0.5	-0.6	-0.5	-0.6	-0.6
Noninterest revenues	45.4	45.5	45.0	45.0	45.1	44.6	44.5	45.0	45.4	45.2	45.1
Noninterest expenditures	43.7	44.7	44.9	44.6	44.6	44.2	44.0	44.5	44.9	44.5	44.5
Automatic debt dynamics	-6.0	-3.8	-1.0	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-1.1	-1.1
Real interest rate and relative inflation	-4.0	-2.2	0.5	0.6	0.7	0.6	0.6	0.5	0.4	0.4	0.3
Real interest rate	-4.2	-3.0	0.5	0.6	0.7	0.6	0.6	0.5	0.4	0.3	0.3
Relative inflation	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real growth rate	-4.6	-1.6	-1.5	-1.6	-1.7	-1.6	-1.6	-1.5	-1.5	-1.4	-1.4
Real exchange rate	2.6	...	...	...	...	...	...	...	...	...	...
Other identified flows	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other transactions	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Contribution of residual	-1.8	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross financing needs	1.1	2.0	3.4	3.0	2.8	2.8	3.2	3.1	3.7	3.3	3.2
of which: debt service	2.9	2.9	3.6	3.6	3.6	3.4	3.9	3.8	4.4	4.1	4.0
Local currency	2.3	2.7	3.5	3.6	3.5	3.4	3.8	3.8	4.3	4.1	3.9
Foreign currency	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memo:											
Real GDP growth (percent)	6.2	2.4	2.4	2.7	2.9	2.8	2.8	2.8	2.8	2.8	2.8
Inflation (GDP deflator; percent)	8.2	7.7	3.3	2.6	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Nominal GDP growth (percent)	14.9	10.3	5.8	5.4	5.2	5.1	5.1	5.1	5.1	5.1	5.1
Effective interest rate (percent)	2.0	2.8	4.1	3.6	3.5	3.3	3.3	3.1	3.0	2.9	2.9

Contribution to change in public debt



Staff commentary: Public debt is projected to remain on a firm downward path, driven by continued growth and contained funding costs, reflecting expectations of a narrowing of primary deficits and stable economic conditions.

AIII. Figure 5. Croatia: Realism of Baseline Assumptions



Commentary: The realism analysis does not point to major concerns: past forecast errors do not reveal any systematic biases and the projected fiscal adjustment and debt reduction are well within norms. Baseline assumptions of most debt drivers do not point to a systematic bias in the forecast track record, which is broadly in line with those observed in peer surveillance countries. Debt reduction projections are in the 20th percentile of cross-country database. The projected decline in public debt relies on continued growth, fiscal prudence, and favorable financing conditions.

AIII. Figure 6. Croatia: Medium-Term Risk Analysis

Croatia: Medium-term risk analysis

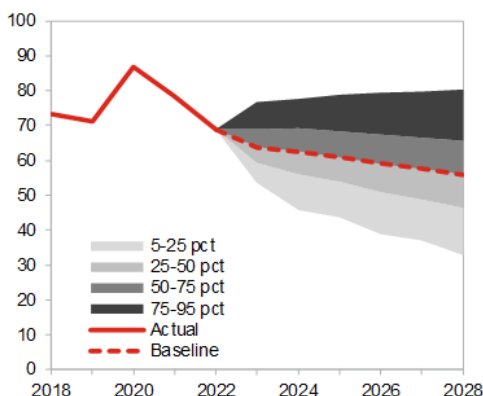
Debt fancart and GFN financeability indexes

(percent of GDP unless otherwise indicated)

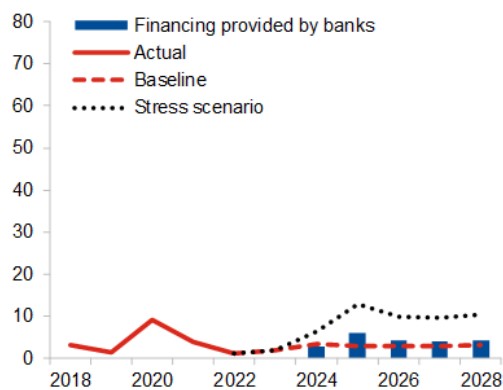
Module	Indicator	Value	Risk index	Risk signal	Adv. Econ., Non-Com. Exp. Program				
					0	25	50	75	100
Debt fancart module	Fanchart width	47.3	0.7	...					
	Probability of debt not stabilizing (pct)	24.2	0.2	...					
	Terminal debt level x institutions index	33.3	0.7	...					
Debt fancart index		...	1.6	Moderate					
GFN financeability module	Average GFN in baseline	2.9	1.0	...					
	Bank claims on government (pct bank assets)	0.1	0.0	...					
	Chg. in claims on govt. in stress (pct bank assets)	12.8	4.3	...					
GFN financeability index		...	5.3	Low					

Legend: Interquartile range Croatia

Final fancart (pct of GDP)



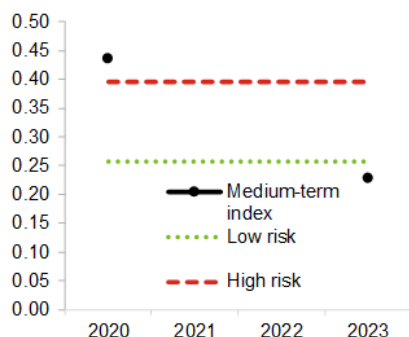
Gross Financing Needs (pct of GDP)



Triggered stress tests (stress tests not activated in gray)

Medium-term index

(index number)



Medium-term risk analysis

	Low risk threshold	High risk threshold	Weight in MTI	Normalized level
Debt fancart index	1.1	2.1	0.5	0.4
GFN financeability index	7.6	17.9	0.5	0.1
Medium-term index (MTI)	0.3	0.4	...	0.2, Low

Prob. of missed crisis, 2023-2028 (if stress not predicted): 9.1 pct.

Prob. of false alarm, 2023-2028 (if stress predicted): 48.9 pct.

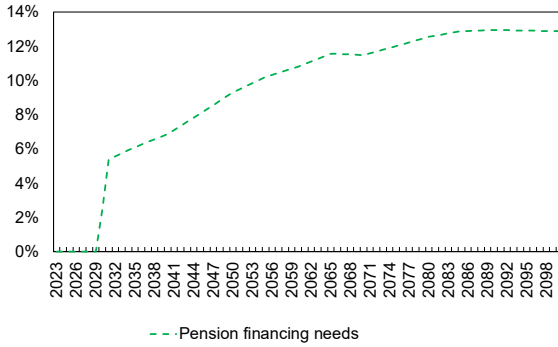
Commentary: Of the two medium-term tools, the Debt Fanchart Module is pointing to medium level of risk, while the GFN Financeability Module suggests a low level of risk. Public guarantees are estimated at 3 percent of GDP.

AIll. Figure 7. Croatia: Long-Term Risk Analysis

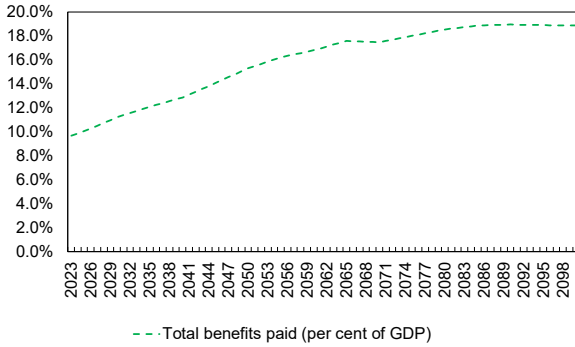
Demographics: Pension

Permanent adjustment needed in the pension system (pp of GDP per year)	To keep pension assets positive for:		
	30 years	50 years	Until 2100
	5.51%	7.71%	9.37%

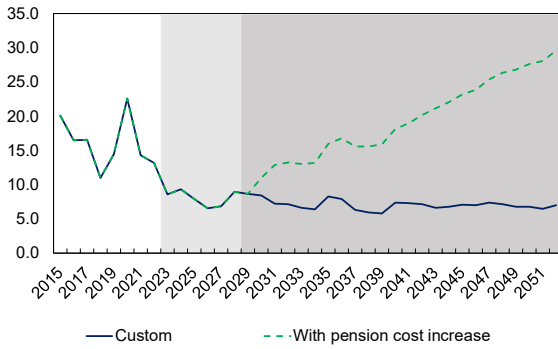
Pension Financing Needs



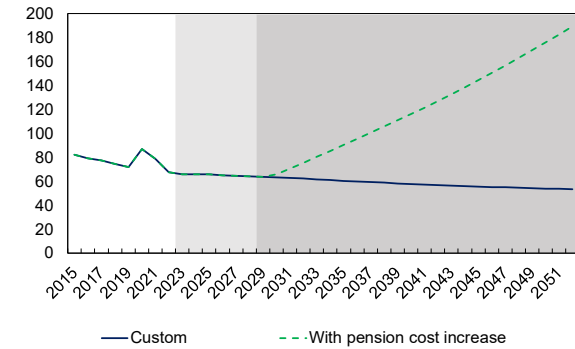
Total benefits paid



GFN-to-GDP ratio

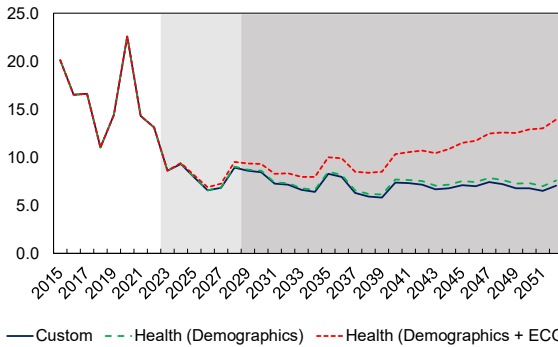


Total public debt-to-GDP ratio

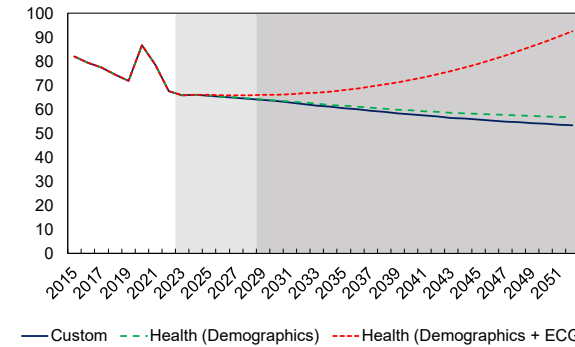


Demographics: Health

GFN-to-GDP ratio



Total public debt-to-GDP ratio



III. Figure 7. Croatia: Long-Term Risk Analysis (continued)

Authorities' projections

The authorities' projections are based on different growth rates of healthcare and public pension spending than the SRDSF model, in line with a reform scenario. Healthcare and pension expenditure growth rates are assumed to decline sharply by 2035. PAYG pension contributions are expected to gradually increase from 5.9 percent in 2021 to 7.1 percent of GDP by 2030 and stabilize until 2070. Hence transfers from the state budget to cover the deficit will be gradually reduced from the current 4.2 percent to about 2.4 percent of GDP by 2070. Expenditure on Pillar 2 will gradually increase to 0.4 percent by 2070. As a result, total expenditure on mandatory state pensions is expected to decline from 10.1 to 9.8 percent of GDP in 2070 (Figures and chart).

Healthcare and Pension Expenditure Projections (Croatian authorities)

(Percent of GDP)

	2019	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
Healthcare spending 1/ <i>implied annual growth rate</i>	5.9	6	6.1	6.3	6.4	6.4	6.5	6.6	6.6	6.6	6.6
		7.1%	5.3%	3.4%	3.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.8%
Public pension expenditure, gross <i>implied annual growth rate</i>	10.2	10.9	11	10.8	10.4	10.1	9.9	9.7	9.7	9.6	9.5
		7.9%	5.2%	2.4%	2.0%	2.2%	2.4%	2.4%	2.8%	2.6%	2.6%

Source: European Commission: The 2021 Ageing Report.

1/ Reference scenario.

Expenditures for Pensions and Pension Contributions in the Period 2021-2070

(Percent of GDP)

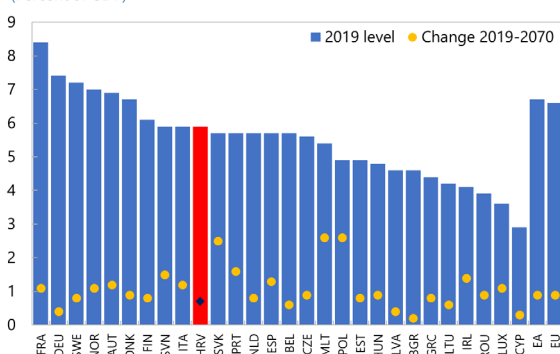
	2021	2030	2040	2050	2060	2070
Expenditure on pensions						
Expenditures of pension Pillar 1 (PAYG)	10.1	11	10.4	9.9	9.7	9.5
Old-age and early retirement pensions	6.8	7.9	7.7	7.5	7.5	7.4
Disability pensions	1.7	1.4	1.1	0.8	0.7	0.7
Family pensions	1.6	1.7	1.6	1.5	1.5	1.4
Expenditures of pension Pillar 2	0	0.2	0.3	0.3	0.3	0.4
Total expenditures of the pension system	10.1	11.1	10.7	10.2	10.0	9.8
Pension contributions						
Contributions paid in pension Pillar 1 (PAYG)	5.9	7.1	7.2	7.1	7.1	7.1
Contributions paid in pension Pillar 2	1.7	1.7	1.7	1.8	1.8	1.8
Total contributions paid	7.6	8.9	9	9	8.9	8.9

Source: Ministry of Labor and Pension System.

Note: Data for 2021 are presented in accordance with the realized revenues and expenditures for pensions in the State Budget of the Republic of Croatia for 2021 and the GDP estimate for 2021 published by the CBS, while for the period 2022-2070 GDP growth rates were used from the 2021 Ageing Report.

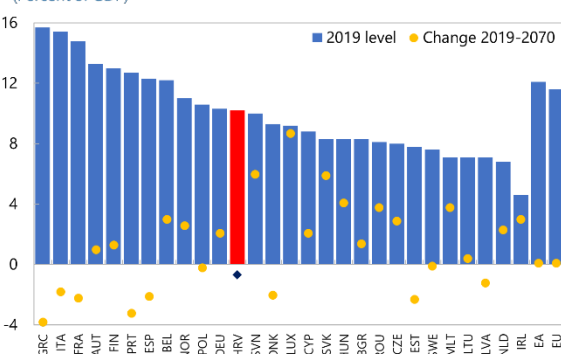
AIII. Figure 7. Croatia: Long-Term Risk Analysis (concluded)

Age-Related Spending: Health Care, 2019-2070
(Percent of GDP)



Source: European Commission.

Age-Related Spending: Pensions, 2019-2070
(Percent of GDP)



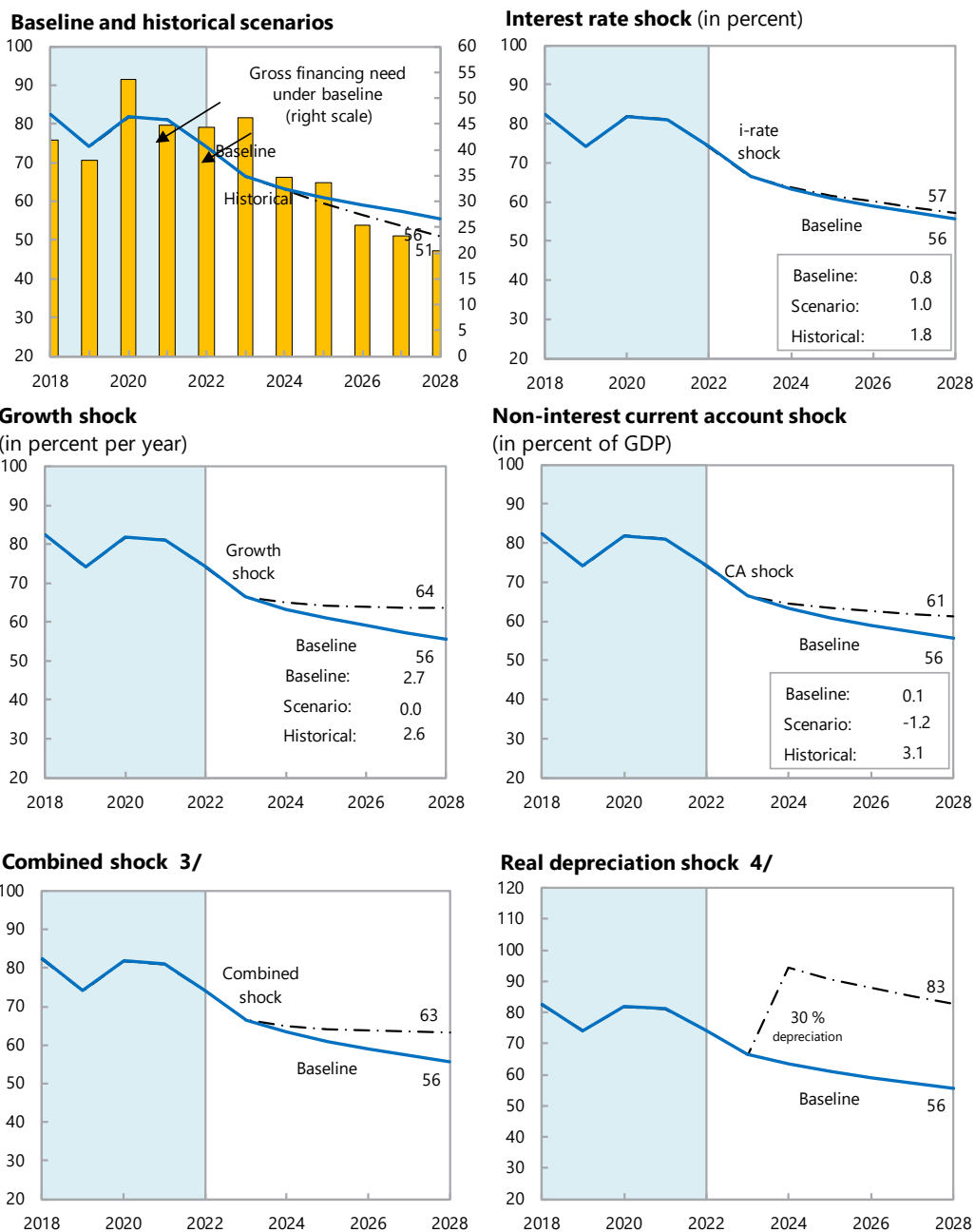
Source: European Commission.

The healthcare reform scenario includes reforms and investments under the NRRP: (i) streamline the hospital system to optimize healthcare and reduce overspending; (ii) functional integration of hospitals to improve the quality of healthcare and reduce expensive acute inpatient hospital capacity; (iii) re-categorization of hospital healthcare institutions to improve human resources; (iv) improve the system of joint public procurement of medicines and consumables and the use of digital monitoring of medicines to achieve significant savings in the consumption of medicines in hospitals. NRRP investments will strengthen preventive medicine and emergency medical care. Moreover, the consolidation of social benefits in the social welfare system will be carried out by merging the existing social benefits.

The pension spending projections are based on Croatia’s mixed pension system features and recent pension adjustments (2019). From 2030 the number of retirees to receive a basic pension from Pillar 1 and a supplementary pension from Pillar 2 will increase significantly. Hence budget expenditure on Pillar 1 pensions will gradually decline. The forecast also considers the pension supplement to the basic pension introduced in 2019 to improve adequacy, given that pensions earned from Pillars 1 and 2 were lower compared to Pillar 1-only pensions. A key measure to improve the efficiency of the pension system is to encourage a longer working life, which has been initiated by allowing beneficiaries to work and receive a pension, and gradually equalizing the age for early retirement for women and men to 60 and 65 respectively (equalization achieved starting with 2030).

Annex IV. External Debt Sustainability Analysis

AIV. Figure 1. Croatia: External Debt Sustainability: Bound Test ^{1/ 2/}
(External debt in percent of GDP)



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

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

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

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

4/ One-time real depreciation of 30 percent occurs in 2022.

AIV. Table 1. Croatia: External Debt Sustainability Framework, 2018-2028

(In percent of GDP, unless otherwise indicated)

	Actual					Projections						Debt-stabilizing non-interest current account 6/ -4.4	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Baseline: External debt	82.4	74.1	81.8	81.1	74.0	66.4	63.3	60.9	59.0	57.3	55.5		
Change in external debt	-6.2	-8.3	7.7	-0.7	-7.0	-7.6	-3.1	-2.3	-1.9	-1.8	-1.7		
Identified external debt-creating flows (4+8+9)	-11.3	-9.1	4.2	-19.9	-5.8	-4.2	-4.4	-3.7	-3.9	-4.1	-4.4		
Current account deficit, excluding interest payments	-3.7	-3.4	0.0	-2.1	1.2	-0.1	0.1	0.4	0.0	-0.2	-0.6		
Deficit in balance of goods and services	0.9	0.4	7.0	2.7	5.7	4.3	4.4	3.7	3.1	2.6	2.0		
Exports	50.2	51.5	41.5	50.0	60.2	60.2	59.5	59.7	59.8	60.0	60.1		
Imports	51.1	51.8	48.5	52.7	65.9	64.5	63.9	63.4	62.9	62.7	62.2		
Net non-debt creating capital inflows (negative)	-1.6	-6.2	-1.1	-4.8	-5.6	-3.0	-3.4	-2.8	-2.5	-2.5	-2.5		
Automatic debt dynamics 1/	-5.9	0.5	5.3	-13.0	-1.5	-1.2	-1.2	-1.3	-1.4	-1.4	-1.4		
Contribution from nominal interest rate	1.9	0.5	0.5	0.4	0.3	0.4	0.4	0.4	0.2	0.2	0.2		
Contribution from real GDP growth	-2.3	-2.8	6.7	-8.9	-4.9	-1.6	-1.5	-1.6	-1.7	-1.6	-1.5		
Contribution from price and exchange rate changes 2/	-5.6	2.8	-2.0	-4.5	3.0	...	...	...	...	...	...
Residual, incl. change in gross foreign assets (2-3) 3/	5.1	0.7	3.5	19.2	-1.2	-3.4	1.3	1.3	2.0	2.3	2.7		
External debt-to-exports ratio (in percent)	164.2	144.0	197.0	162.2	122.9	110.3	106.3	102.1	98.8	95.4	92.4		
Gross external financing need (in billions of US dollars) 4/	25.6	23.3	30.9	30.8	31.3	36.6	28.7	29.4	23.2	22.3	20.2		
in percent of GDP	41.8	38.0	53.6	44.7	44.4	10-Year	10-Year	46.2	34.5	33.6	25.3	23.3	20.3
Scenario with key variables at their historical averages 5/						66.4	63.0	59.5	56.4	53.6	50.9	-3.2	
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation						
Real GDP growth (in percent)	2.8	3.4	-8.5	13.1	6.2	2.6	5.5	2.4	2.4	2.7	2.9	2.8	2.8
GDP deflator in US dollars (change in percent)	6.7	-3.3	2.7	5.8	-3.6	-0.1	6.7	9.6	2.6	2.3	1.8	1.7	1.1
Nominal external interest rate (in percent)	2.3	0.6	0.6	0.6	0.4	1.8	1.1	0.6	0.6	0.6	0.4	0.4	0.3
Growth of exports (US dollar terms, in percent)	10.9	2.5	-24.2	44.1	23.3	7.4	18.1	12.2	3.9	5.3	5.0	5.0	4.1
Growth of imports (US dollar terms, in percent)	14.3	1.5	-12.0	29.9	27.9	7.5	14.3	9.9	4.0	4.1	4.0	4.2	3.1
Current account balance, excluding interest payments	3.7	3.4	0.0	2.1	-1.2	3.1	2.5	0.1	-0.1	-0.4	0.0	0.2	0.6
Net non-debt creating capital inflows	1.6	6.2	1.1	4.8	5.6	2.9	2.1	3.0	3.4	2.8	2.5	2.5	2.5

1/ Derived as $[r - g - r(1+g) + ea(1+r)]/(1+g+r+gr)$ times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

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

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

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

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

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

Annex V. External Sector Assessment

Overall Assessment: *The external position of Croatia in 2022 is broadly in line with the level implied by fundamentals and desirable policies. The current account (CA) balance turned negative in 2022 reflecting a negative terms-of-trade shock and strong domestic demand. Over the medium term, the current account is set to recover toward the positive range.*

Potential Policy Responses: *Building adequate fiscal buffers and structural reforms to raise productivity and enhance competitiveness will help to improve the external position over the medium term. RRF foresees investments and reforms in these areas and continued good implementation will ensure the success.*

Foreign Assets and Liabilities: Position and Trajectory

Background. Overall external indebtedness as a share of GDP decreased to 74 percent in 2022, while the gross external debt in nominal terms stood at €49.6 billion. While the gross debt of all sectors increased in nominal terms, the level as a share of GDP decreased due to the sharp rise in nominal GDP. The NIIP improved significantly to -26.1 percent of GDP.

Assessment. External vulnerabilities have been reduced with the strengthening of the NIIP in recent years. The NIIP is substantially stronger than in 2010 when the NIIP stood at around -97.3 percent of GDP. The improvement was due to sustained current account surpluses, EU funds absorption, and strong GDP growth before the pandemic and during 2021-22. The current path of the NIIP does not imply risks to external sustainability or a need for substantial adjustment.

2022 (% GDP)	NIIP: -26.1	Gross Assets: 89.4	Debt Assets: 49.6	Gross Liab.: 115.5	Debt Liab.: 74
--------------	-------------	--------------------	-------------------	--------------------	----------------

Current Account

Background. The overall current account (CA) balance turned negative in 2022 from a surplus of 2021. The overall CA deficit was 1.6 percent of GDP in 2022. The significant deterioration of the goods trade deficit, driven primarily by the rising prices of energy products and other raw materials and a surge of imports, was partially offset by the strong growth of net exports of services, spurred by continued tourism recovery. The overall balance on goods and services declined from -2.7 percent of GDP in 2021 to -5.7 percent of GDP in 2022, with exports of goods (plus services) at 30.5 (60.2) percent of GDP and import of goods (plus services) at 57.4 (65.9) percent of GDP in 2022. In 2023, the current account balance is projected to improve significantly to about -0.3 percent of GDP, reflecting strong tourism revenues and improved terms of trade. In 2024 and 2025, the deficit is anticipated to widen slightly on the back of higher imports of goods related to RRF implementation. However, over the medium term, the current account is projected to move towards a small surplus, underpinned by a gradual increase in exports as trade and tourism broadly benefit from the euro adoption and Schengen entry.

Assessment. The current account in 2022 is broadly consistent with fundamentals and medium-term policies. Adjusting for cyclical contributions, the adjusted CA is estimated to be -0.9 percent against the EBA-lite derived CA norm of -1.4 percent. This implies a slight positive CA gap of 0.5 percent of GDP.

Croatia: EBA-lite Model Results, 2022		
	CA model 1/	REER model 1/
	(in percent of GDP)	
CA-Actual	-1.6	
Cyclical contributions (from model) (-)	-0.7	
Adjusted CA	-0.9	
CA Norm (from model) 2/	-1.4	
Adjustments to the norm (-)	0.0	
Adjusted CA Norm	-1.4	
CA Gap	0.5	0.2
o/w Relative policy gap	2.0	
Elasticity	-0.3	
REER Gap (in percent)	-1.9	-0.7
1/ Based on the EBA-lite 3.0 methodology		
2/ Cyclically adjusted, including multilateral consistency adjustments.		
Real Exchange Rate		
Background. In 2022, the CPI-based REER remains broadly stable around its 2021 level.		
Assessment. The various models yield consistent empirical results regarding the real exchange rate valuation. The REER gap implied by the CA model points to an undervaluation of 1.9 percent (after adjustments). The REER index model suggests a slight undervaluation of 0.7 percent. Since the NIIP has improved sizably and is considerably above -60 percent of GDP, staff does not view external sustainability as a concern.		
Capital and Financial Accounts: Flows and Policy Measures		
Background. The capital and financial account stood at 3.8 percent of GDP in 2022. Rising disbursements of NGEU funds have underpinned the capital account movements. Inward FDI flows reflect rising real estate activities and profits of banks and non-financial corporations in foreign ownership. Nominal gross external debt increased slightly.		
Assessment. Owing to the significant growth in nominal GDP, the external debt decreased to 74 percent of GDP and is projected to continue the downward trajectory. The government has been able to borrow on favorable terms benefiting from its euro adoption and improved credit ratings. Croatia remains the position of low financial vulnerability.		
FX Intervention and Reserves Level		
Background. In 2022 gross official reserves continued to increase gradually to €27.9 billion.		
Assessment. This increase kept official reserves above the ARA metric in 2022 and improved the already comfortable margins relative to short-term debt as well as the ratio of months of next year's imports of goods and nonfactor services. With the euro adoption in 2023, Croatia's currency now has the status of a global reserve currency.		

Annex VI. Euro Changeover Effect on Inflation

- 1. Surveys revealed some concerns about the possibility of price increases related to the euro adoption.** A survey conducted by the [European Commission \(2022\) found](#) that about 62 percent of Croatian citizens were concerned that the euro adoption would lead to an increase in inflation. Another [EC survey](#) conducted in January 2023 found that 56 percent of respondents believed price rounding was correctly implemented, and 78 percent felt dual price displays were correct, with a good level of satisfaction on the implementation.
- 2. Historical experiences have shown a mild impact on inflation after the euro adoption.** In the literature, estimates of effects are, on average, around 0.37 percentage points on HICP in the period of a half year before and after the euro adoption ([Pufnik, A., 2017](#)).¹ Furthermore, as the rounding of prices may center on a small group of products, mainly in the services sector, the overall inflation impact would be mild. [The European Commission \(2017\)](#) found that annual inflation rate in Slovenia fell after the euro adoption, suggesting that the rounding-up impact on some prices, although noticeable, was too small to drive up overall inflation.

AVI. Table 1. Croatia: Estimated Effect of the Conversion of National Currencies to the Euro on the Inflation Rate			
(Percentage points (p.p.))			
Paper	Country	Period	Estimated effect on total HICP (p.p.)
Old Member States			
Eurostat (2003)	Euro area	12/2001-1/2002	0.09-0.28
Hüfner and Koske (2008)	Euro area	7/2001-7/2002	0.34
Sturm et al. (2009)	Euro area	12/2001-1/2002	0.05-0.23
Attal-Toubert et al. (2002)	France	12/2001-4/2002	0.2
Banco de España (2003)	Spain	12/2001-6/2002	0.4
Deutsche Bundesbank (2004)	Germany	1/2002	0.3
Folkersma et al. (2002)	Netherlands	1/2002	0.2-0.4
Mostacci and Sabbatini (2008)	Italy	12/2001-12/2002	0.1-0.6
National Bank of Belgium (2002)	Belgium	6/2001-4/2002	0.2
Santos et al. (2002)	Portugal	1/2002-3/2002	0.21
New Member States			
Eurostat (2007)	Slovenia	12/2006-1/2007	0.3
Eurostat (2009)	Slovenia	12/2008-2/2009	do 0.3
Eurostat (2011)	Estonia	12/2010-3/2011	0.2-0.3
Eurostat (2014)	Latvia	12/1/2013-1/2014	0.12-0.21
Eurostat (2015)	Lithuania	12/2014-1/2015	0.04-0.11
IMAD (2007)	Slovenia	12/2006-2/2007	0.24
Room and Urke (2014)	Estonia	7/2010-6/2011	0.0-0.5
Sources: given in the first column.			

¹Estimates presented by [Pufnik, A. \(2017\)](#) using [Hüfner and Koske \(2008\)](#) methodology. Research shows that a more pronounced increase in prices due to conversion was registered for a small number of products, mostly in the services sector, such as services in restaurants and cafés, accommodation services, hairdressing services, various repairs, dry-cleaning services, recreational and sporting services, etc.

3. **Analysis by the ECB and the Croatian National Bank suggests that Croatia's euro adoption only had a small impact on prices.** Despite currently elevated inflation in the eurozone, the rounding impact on inflation in Croatia is estimated at about 0.3 to 0.4 percentage points, in line with the literature. The [ECB-CNB](#) analysis using micro data from Croatian retailers reveals that prices of $\frac{2}{3}$ products did not change following the euro conversion. The Croatian authorities have implemented effective measures to manage the euro conversion process. Studies show appropriate information campaign and good communication with the public as important measures to increase transparency about price developments and to bring inflation perceptions closer to officially recorded inflation rates ([Eife and Coombs, 2007](#) and [Lolić et al. 2017](#)). The recent survey ([EC 2023](#)) indicates that Croatian citizens found the dual displays of prices useful (78 percent) and feel well informed about the euro adoption (88 percent).

Annex VII. Croatia's Residential Housing Market

- 1. Croatian housing prices have increased well above headline inflation in recent years.** As in many [peer countries](#), this should be seen in context of, until recently, increasing real income, and more recently climbing construction costs. Housing appears to have a high income-elasticity. This is underpinned by the high share of ownership—90.5 percent in 2021, compared to the EU average of 69.9 percent—and some studies (e.g., [Lovrinčević and Vizek, 2008](#)). The highest price increases have been in the capital area and on the Adriatic coast. From mid-2021 to mid-2022, slightly more than a third of the transactions were related to non-residents, likely furthered by the expected euro adoption and Schengen membership. In recent years, only about half of the transactions have been financed by domestic banks and the rest is by foreign or domestic savings. Low interest rates—even negative in the euro area—may have been one among many contributing factors (according to [Box 6 in the CNB 2022 Financial Stability Report](#)). Moreover, the tax regime favors real estate investments. Some observers expect the market to temporarily pause, given lower disposable income and higher interest rates. They note that recently, the number of transactions has slowed, an average home takes longer to sell, and selling prices have occasionally been below asking price. The models used by the ESRB ([Figure 3.12, Risk Dashboard, March 2023, based on Q3 2022 data](#)) suggest that the evaluation of real estate is broadly in line with fundamentals. The two main challenges appear to be: (i) possible financial stability risks; and (ii) affordability.
- 2. In early 2022, house price developments made the ESRB issue a warning for Croatia.** The CNB followed up by announcing an increase of the countercyclical capital buffer from zero, in two steps by each 0.5 percent effective on March 31, 2023, and December 31, 2023. The communication of the announcement stressed concerns about real estate prices, although the measure appear broad-based and modest amid the already high capital cushions.
- 3. To improve housing affordability, the government provides a housing subsidy scheme for young families buying a residence for the first time.** The Croatian Real Estate Agency (APN) have since 2017 provided, once or twice a year, subsidized credit of first-time buyers, who are Croatian citizens, not older than 45 years, and meet the banks' qualification requirements. The subsidy is for residence prices up to €1,500 per m², the maximum loan amount is €100,000, and with a loan maturity of at least 15 years. At the recent round, participating banks had to commit that lending rate will not exceed 3.75 percent the first five years and 10 percent for the following two years. Eligible borrowers can then apply for a loan from these banks within a narrow window until the allocation is used (in the recent case €9.3 million or about 5,800 requests). The subsidy is only for the first five years but can be extended by two years for a live born or adopted child during the subsidy period, and for one year if a family member gets a disability of 50 percent or more. The subsidy depends on the development index of the location of the property and ranges from 30 to 51 percent of the loan installment amount. Since 2017, about 33,500 housing loans (including full use of the 2023 allocation) have been subsidized. Many observers, underpinned by a [CNB working paper](#), argue that the requests usually exceeds the budget allocation and contribute to some pro-cyclicality. This law will expire by end-2023.



REPUBLIC OF CROATIA

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

June 7, 2023

Prepared By

European Department in Consultation with Other
Departments

CONTENTS

FUND RELATIONS	2
WORLD BANK RELATIONS	6
STATISTICAL ISSUES	7

FUND RELATIONS

(As of April 30, 2023)

Membership Status: Joined: December 14, 1992; Article VIII

General Resources Account:	<u>SDR Million</u>	<u>%Quota</u>
<u>Quota</u>	717.40	100.00
<u>Fund holdings of currency (Exchange Rate)</u>	717.04	99.95
<u>Reserve Tranche Position</u>	0.37	0.05

SDR Department:	<u>SDR Million</u>	<u>%Allocation</u>
<u>Net cumulative allocation</u>	1,034.94	100.00
<u>Holdings</u>	991.95	95.85

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

<u>Type</u>	<u>Date of Arrangement</u>	<u>Expiration Date</u>	<u>Amount Approved (SDR Million)</u>	<u>Amount Drawn (SDR Million)</u>
Stand-By	Aug 04, 2004	Nov 15, 2006	99.00	0.00
Stand-By	Feb 03, 2003	Apr 02, 2004	105.88	0.00
Stand-By	Mar 19, 2001	May 18, 2002	200.00	0.00

Projected Payments to Fund¹

(SDR Million; based on existing use of resources and present holdings of SDRs):

	<u>Forthcoming</u>				
	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Principal					
Charges/Interest	1.18	1.63	1.62	1.62	1.62
Total	1.18	1.63	1.62	1.62	1.62

¹ When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Rate Arrangement:

The exchange rate arrangement of the euro area is free floating. Croatia participates in a currency union (EMU) with 19 other members of the EU and has no separate legal tender. The euro, the common currency, floats freely and independently against other currencies. Croatia has accepted the obligations of Article VIII, Sections 2, 3, and 4, and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions, other than restrictions maintained solely for security reasons, which have been notified to the Fund pursuant to Executive Board Decision No. 144 (52/51).

Anti-Money laundering and Financing of Terrorism:

The 5th Anti-Money Laundering Directive of the EU was transposed in 2019. Measures are continuously being made to strengthen enforcement and address the recommendations in the December 2021 [Moneyval Report](#). At the accompanying [Plenary Meeting](#), it was decided to put Croatia on enhanced-follow-up and that Croatia will report back by December 2023.

Article IV Consultation:

The previous Article IV consultation with Croatia was concluded on September 10, 2021 (IMF Country Report No. 2021/205: [Republic of Croatia: 2021 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Croatia \(imf.org\)](#)). Croatia is on the 12-month consultation cycle.

FSAP:

An FSAP Update mission took place in October–November 2007. The FSSA Update was published (IMF Country Report No. 160: <http://www.imf.org/external/country/hrv/index.htm>).

The original FSAP was concluded with the completion of the 2002 Article IV consultation on August 5, 2002, on the basis of missions that took place in April 2001 and September 2001. The FSSA was published (IMF Country Report No. 02/180: <http://www.imf.org/external/country/hrv/index.htm>).

Technical Assistance 2000–present:²

Department	Timing	Purpose
FAD	April 2000	Implementation of Single Treasury Account
	May 2000	Tax Policy
	September 2001	Fiscal Decentralization
	March 2002	Fiscal Management (with STA)
	September 2003–	A Resident Advisor on Fiscal Reporting
	March 2004	

² Technical assistance during 1992–99 is listed in Annex I of IMF Country Report No. 03/27.

February 2004	Public Debt Management Program (with World Bank)
May 2004	Public Expenditure Management
May 2004	Fiscal ROSC
April 2005	Review of Indirect Tax Performance and Tax Administration
June 2006	Regional Public Financial Management (PFM) Advisor
February–March 2007, July 2008, February– March 2009	Revenue Administration (with World Bank)
April 2007	Public-Private Partnerships
May 2007	Tax Policy (with World Bank)
January–February 2008	Short-Term Expenditure Rationalization
February 2010	PFM (long-term advisor visit)
October 2010	Regional expert participation on seminar on Croatian budget management and fiscal policy
March 2011	Short-term expert visit on Tax Administration Reform
June 2011	Short-term expert participation at OECD meeting
June 2012	Options for Modernizing the Property Tax Government Opportunities for Strengthening the Tax Administration (HQ mission)
October 2012	Short-term expert visit on phasing in a modern Compliance Risk Management Model
October 2012	Short-term expert visit on improving tax administration governance and organization structures
April 2013	Public Financial Management: Budget Procedure
April–May 2013	Fiscal Rules
June 2013	Strengthening Tax Administration Governance
December 2014	Workshop on Public Expenditure Review (Expert visit)
October 2019	International Public Sector Accounting Standards Gap Analysis and Budgetary Linkages
September 2021	Public Investment Management Assessment (PIMA) and Climate-PIMA pilot

STA	March 2000	Quarterly National Accounts
	September 2000	Balance of Payments
	October 2000	Real Sector Statistics
	April 2001	Monetary and Banking Statistics
	November 2001	Regional Visit on Reserves Data Template
	October 2002, June 2004	Government Finance Statistics
		Monetary and Financial Statistics
	September 2006	LTE: Government Finance Statistics
	December 2007	
	MCM	May–June 2000	Coordination between CNB and the Ministry of Finance, Central Bank Law, Banking Law, and Money and Securities Markets
March–April 2001		Central Bank Accounting
December 2001		Monetary Policy Instruments
April 2003		Stress Testing and FX Reserve Management
		Monetary Policy Instruments
February 2004		Macro-Financial Modeling and Forecasting
January 2007– continuing		Macro-Financial Modeling and Forecasting
May 2007		Modeling and Forecasting
June 2007		Modeling and Forecasting
September 2007		FSAP Update
October 2007		Modeling and Forecasting
November 2007		Modeling and Forecasting
March 2008		Macro-Financial Modeling and Forecasting
August 2008		Macro-Financial Modeling and Forecasting
February 2009		Macro-Financial Modeling
July 2009		Monetary Policy and Modeling
May 2010		Macro-Financial Modeling and Forecasting
November 2011		Macro-Financial Modeling and Forecasting
March 2013		Macro-Financial Modeling and Forecasting
LEG		January 2010–April 2011	AML/CFT—Risk based supervision in non-financial sectors
	May 2011–April 2012	AML/CFT—Strengthening the FIU and risk-based supervision in non-financial sectors
	December 2011–April 2013	AML/CFT—Preliminary National Risk Assessment

WORLD BANK RELATIONS

Croatia has been collaborating with the World Bank Group.

Further information can be obtained from the following hyperlink.

International Financial Institution	Hyperlink
The World Bank Group	https://www.worldbank.org/en/country/croatia

STATISTICAL ISSUES

Croatia: Statistical Issues (As of May 2023)
I. Assessment of Data Adequacy for Surveillance
General: Data is broadly adequate for surveillance purposes.
National Accounts: The national accounts have strengthened in recent years, but further improvement is needed. The Central Bureau of Statistics (CBS) publishes constant and current price data compiled in accordance with the ESA 2010 standard. However, a breakdown of gross fixed capital formation into private and public components is not published as this is not required by Eurostat. Minor discrepancies exist between nominal government consumption in national accounts and government consumption reported in government ESA 2010 accounts; but they are being resolved.
Wages and Employment: The CBS produces data on average net and gross earnings per person and employment by sector. Currently, the CBS is in the process of reviewing the data series. Earnings data include bonuses (in sums that are subjects to contributions, taxes, and surtaxes), sick pay, and meal allowances. They are based on data from the report on Income, Income Tax and Surtax as well as Contributions for Mandatory Insurances (JOPPD form). The number of registered unemployed overstates the actual level of unemployment. However, the discrepancy has significantly diminished in 2014. A preliminary Labor Force Survey, which meets ILO standards, was conducted for the first time in 1996 on 7,200 households. The sample was subsequently expanded and the survey is now being conducted on a regular basis. Semi-annual results have been released since 1998, and quarterly results since 2007, with a lag of about four months.
Price Statistics: The CBS produces a monthly consumer price index, with expenditure weights derived from the 2019 Household Budget Survey. These weights are price-updated annually to December of the previous year. A flash estimate of the CPI is produced within one week of the end of the reference month, with the final results provided within three weeks of the end of the reference month. The price collection is confined to nine metropolitan areas, but the weights are based on a sample of households in the whole country.
A harmonized index of consumer prices (HICP) is also calculated in line with Eurostat methodology. The CBS releases a monthly industrial producer price index (PPI), with weights based on the 2021 Survey of Industrial Production. A quarterly house price index is also disseminated.

Government Finance Statistics: The authorities have started presenting some budget plans based on the ESA 2010 framework. However, the State Budget and the local budgets are based on the national Chart of Accounts. Historical general government data based on ESA 2010 definitions are published nationally by the Croatian Bureau of Statistics and by Eurostat, but are frequently revised due to methodological and data source improvements. Additional analysis has been initiated in order to assess whether some enterprises owned by local government units should be included in the government sector according to the ESA 2010 criteria.

Budget execution (cash) data are produced on a monthly basis on the GFSM framework (GFS 2001) and are available in the monthly *Statistical Review* of the Ministry of Finance (MOF) and in the time-series database, both published on the website of the MOF. Central government data normally come with a lag of about six weeks, but end-of-year data often with much longer lags. Revenue data are reliable, and expenditure data on a cash basis are available according to GFS classifications (economic and functional) for the central budget and extra-budgetary funds. However, changes of institutions included in the central government are not always clearly indicated, hence central government figures are not fully comparable over time.

Cash data for the operations of local governments and the consolidated general government are available on a quarterly basis, but for end-of-year data with long lags. Starting from the January-March 2015 period, data for local and regional self-government units (local units), instead of former 53 largest, include all 576 local units and the local units' extra-budgetary users - county road administrations.

According to the latest *Agreement on cooperation in the field of national accounts of general government and related statistics* (signed on January 31, 2020 between the Croatian Bureau of Statistics, Croatian National Bank (CNB), and Ministry of Finance), the CNB is responsible for the compilation of general government debt statistics. The CNB is compiling general government debt according to ESA 2010 and EDP definitions and publishes these data on the CNB website. Data showing the level of general government guaranteed debt are presented as a part of the reporting table I.3 on the same website.

Monetary and Financial Statistics: Beginning 2023, the CNB started publishing monetary statistics in line with ECB guidance. Before, beginning in 2015, the CNB published monetary statistics using the *ESA 2010* framework and the national residency approach, with some backward revisions of historical data series. The IMF's Statistics Department receives monthly monetary statistics on Croatia using the standardized report forms (SRFs) for the CNB and other depository corporations (ODCs) directly from the European Central Bank since July 2013. Prior to this date, data were reported by the CNB. Data on other financial corporations (OFC), are currently not available. The CNB reports data on some key series of the Financial Access Survey (FAS), including mobile and internet banking, and the two indicators (commercial bank branches per 100,000 adults and ATMs

per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

Financial Sector Surveillance: The CNB is the banking sector supervisor and reports quarterly financial soundness indicators (FSIs) to the IMF's *Financial Soundness Indicator Database*. The reported FSIs comprise the core (12) and 7 encouraged FSIs for deposit takers and 11 additional FSIs for other sectors. A general description of the stress testing methodologies used on the Croatian banking system is included in the *Financial Stability Report*, published by the CNB once a year.

The Croatian Financial Services Supervisory Agency (HANFA) publishes monthly reports and monthly summary statistics on the sectors it regulates and supervises (capital markets, investment funds, private pension sector, insurance, leasing, and factoring companies).

External Sector Statistics: Quarterly balance of payments and international investment position data are compiled broadly in accordance with the sixth edition of the IMF's *Balance of Payments Manual (BPM6)*. Data are generally available with a lag of three months and are subject to revisions in subsequent releases. Net errors and omissions have ranged from -2 to +1 percent of GDP since 2005. The coverage and quality of portfolio investment data are reasonably complete and accurate.

Croatia participates in the *Coordinated Direct Investment Survey (CDIS)* and plans to participate in the *Coordinated Portfolio Investment Survey (CPIS)* after the new security database becomes operational. Data on the International Reserves and Foreign Currency Liquidity (Reserves Data Template) are available with a lag of one to two months.

Croatia compiles external debt data according to the requirements of *External Debt Statistics: Guide for Compilers and Users, 2013*.

II. Data Standards and Quality

Croatia subscribed to the Fund's Special Data Dissemination Standard (SDDS) on May 1996 and has met all SDDS requirements since March 2001. Croatia publishes data on its [National Summary Data Page \(NSDP\)](#). Metadata are posted on the [Dissemination Standards Bulletin Board](#).

No data ROSC has been published.

Croatia: Table of Common Indicators Required for Surveillance

(As of May 22, 2023)

	Date of latest observation	Date received	Frequency of data 6/	Frequency of reporting 6/	Frequency of publication 6/
Exchange Rates	May 19, 2023	May 19, 2023	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities 1/	April 2023	May 15, 2023	M	M	M
Reserve/Base Money	March 2023	May 5, 2023	M	M	M
Broad Money	March 2023	May 5, 2023	M	M	M
Central Bank Balance Sheet	March 2023	May 16, 2023	M	M	M
Consolidated Balance Sheet of the Banking System	March 2023	April 28, 2023	M	M	M
Interest Rates 2/	April 2023	May 10, 2023	M	M	M
Consumer Price Index	April 2023	May 17, 2023	M	M	M
Revenue, Expenditure, Balance and Composition of Financing 3/—General Government 4/	2022Q4	April 2023	Q	Q	Q
Revenue, Expenditure, Balance and Composition of Financing 3/— Central Government	2022Q4	April 2023	Q	Q	Q
Stocks of Central Government and Central Government-Guaranteed Debt 5/	January 2023	April 28 2023	M	M	M
External Current Account Balance	2022Q4	March 2023	Q	Q	Q
Exports and Imports of Goods and Services	February 2023	May 2023	M	M	M
GDP/GNP	2022Q4	April 2023	Q	Q	Q
Gross External Debt	2022Q4	April 2023	Q	Q	Q
International Investment Position	2022Q4	April 2023	Q	Q	Q

1/ Reserve assets that are pledged of otherwise encumbered are specified separately. Data comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means. Gross international reserves are available on a weekly basis on the [National Summary Data Page \(NSDP\)](#).

2/ Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

3/ Foreign, domestic bank, and domestic nonbank financing.

4/ The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

5/ Including currency and maturity composition.

6/ Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA).