



HNB

Standard presentation format

3rd quarter 2022



HNB

Agenda

Central bank's objectives and structure

Real sector

Monetary policy

External sector

Banking sector

Central bank's objectives and tasks

- **Stability of prices**
- **Supporting the general economic policies of the European Union, without prejudice to its primary objective**
- Management of the international reserves
- Issuing banknotes and coins
- Issuing and revoking licenses for banks and bank supervision
- Regulating, improving and supervising the payment system
- Maintaining the stability of the country's financial system
- Performance of operations on behalf of the Republic of Croatia, as provided by law

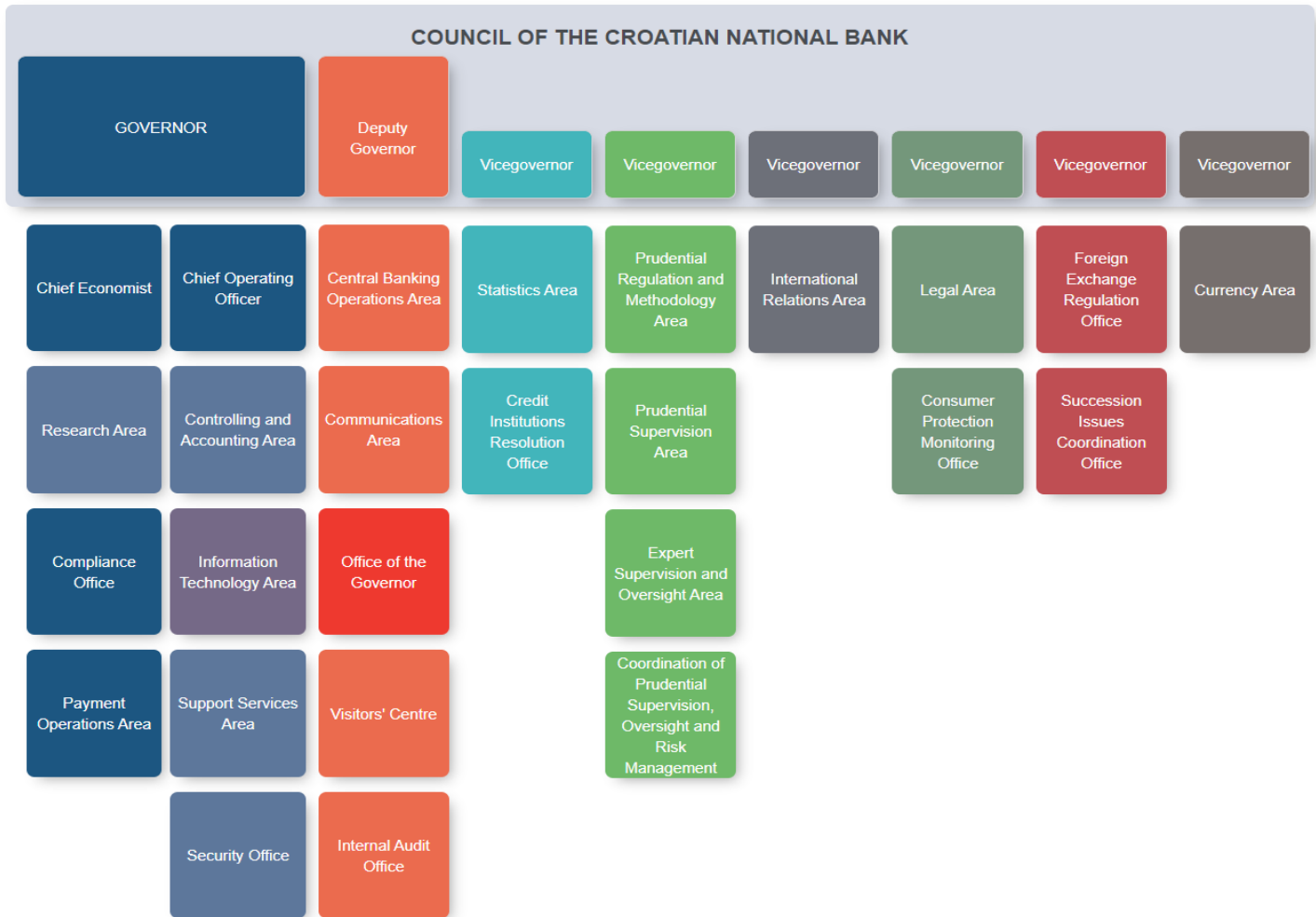
Independence of the CNB

- Institutional: decisions are reached independently of other institutions' influence
- Functional: clear by defined goal and independence in choosing the instruments and measures for achieving that goal
- Personal: guarantees the protection of the Governor and the Council members from various kinds of pressure, precisely determines the conditions for the appointment and removal from office, and guards against the conflict of interest
- Financial: revenues and expenditures of the CNB are solely determined by the nature of the monetary and exchange rate policies

Structure of the CNB



Organizational chart of the CNB





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Real sector

Aggregate demand and supply

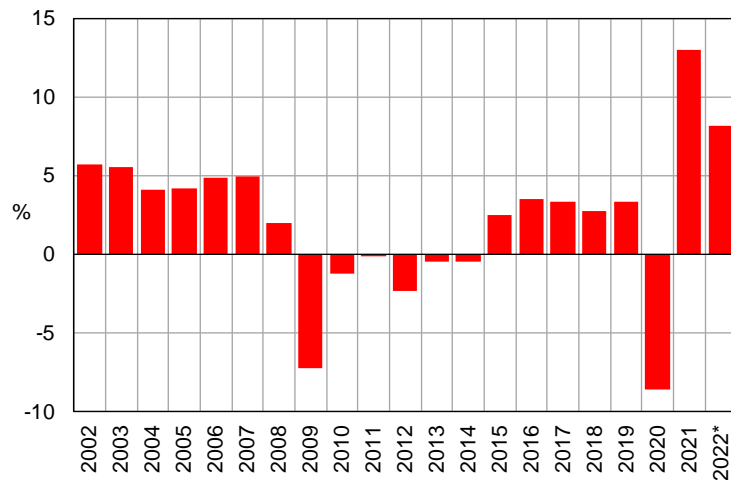
Labour market

Prices

Fiscal policy

Real GDP rates of change

Croatia

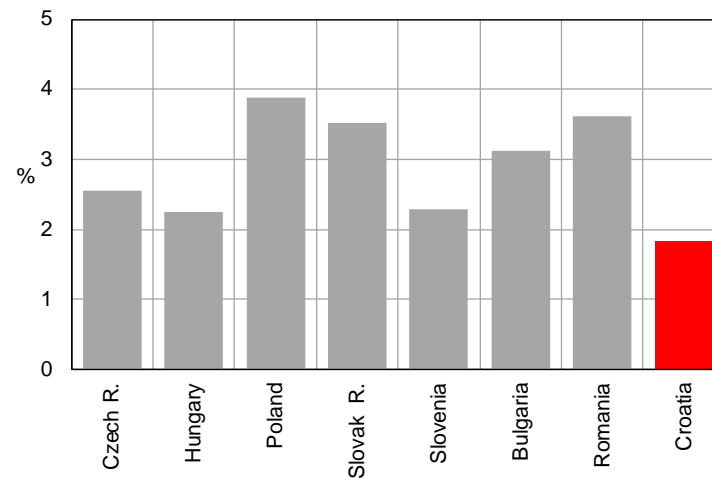


*The data refer to the first two quarters of 2022.

Note: The data are according to ESA 2010 methodology, from 2019 are provisional. More information can be found on www.dzs.hr.

Source: CBS.

Peer countries



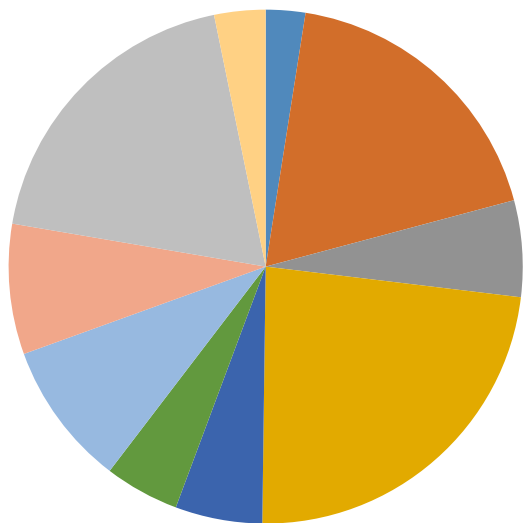
Average annual growth rate, 2003 – 2021

Note: The data are according to ESA 2010 methodology.

Sources: Eurostat and CBS.

Gross value added structure

In current prices, 2022



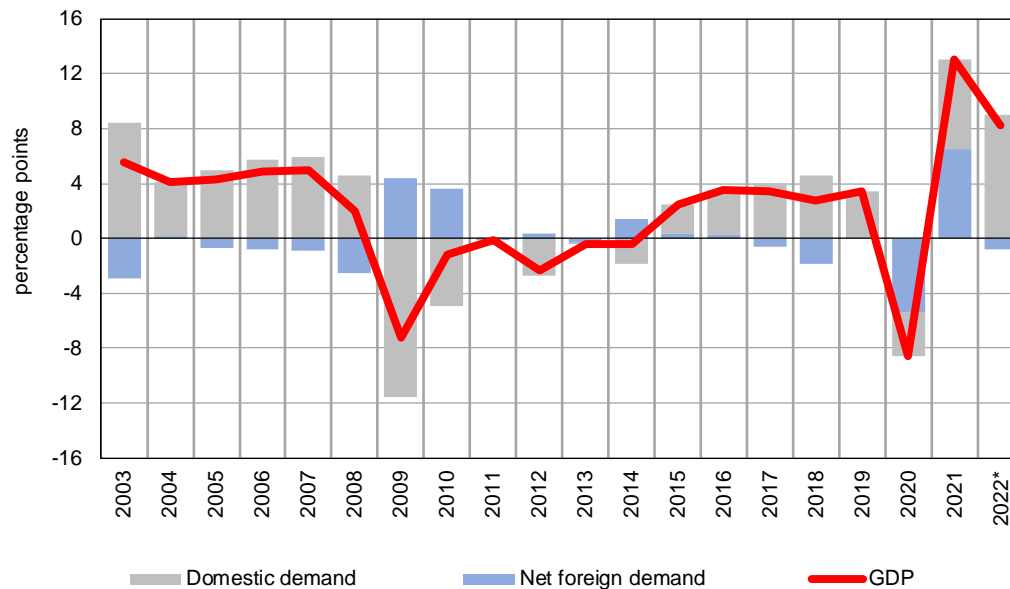
- A
- B, C, D, E
- F
- G, H, I
- J
- K
- L
- M, N
- O, P, Q
- R, S, T, U

- A Agriculture, forestry and fishing
- B Mining and quarrying
- C Manufacturing
- D Electricity, gas, steam and air conditioning supply
- E Water supply; sewerage, waste management and remediation activities
- F Construction
- G Wholesale and retail trade; repair of motor vehicles and motorcycles
- H Transportation and storage
- I Accommodation and food service activities
- J Information and communication
- K Financial and insurance activities
- L Real estate activities
- M Professional, scientific and technical activities
- N Administrative and support service activities
- O Public administration and defence; compulsory social security
- P Education
- Q Human health and social work activities
- R Arts, entertainment and recreation
- S Other service activities
- T Activities of households as employers; undifferentiated goods and services producing activities of households for own use
- U Activities of extraterritorial organisations and bodies

*The data refer to the first two quarters of 2022.

Source: CBS.

Contributions of domestic and net foreign demand to GDP growth

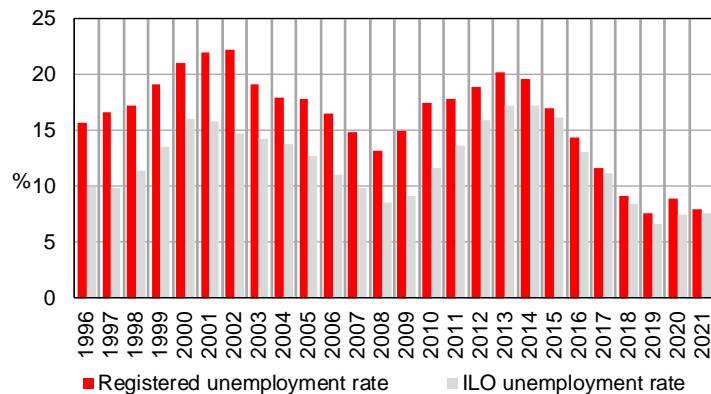


*The data refer to the first two quarters of 2022.

Source: CBS.

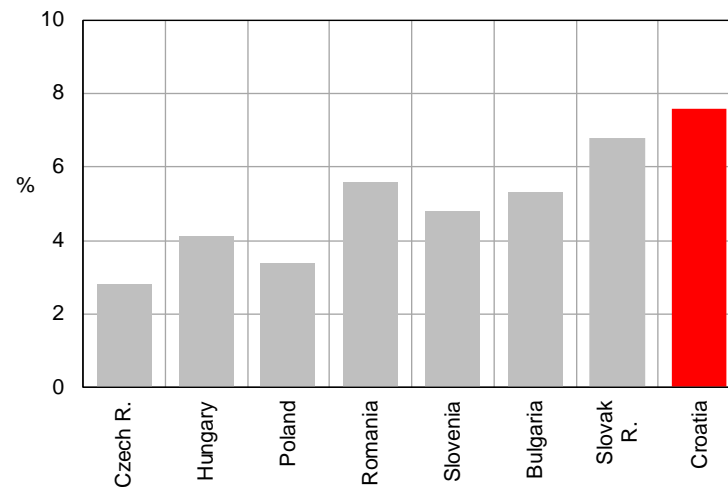
Unemployment rate

Croatia



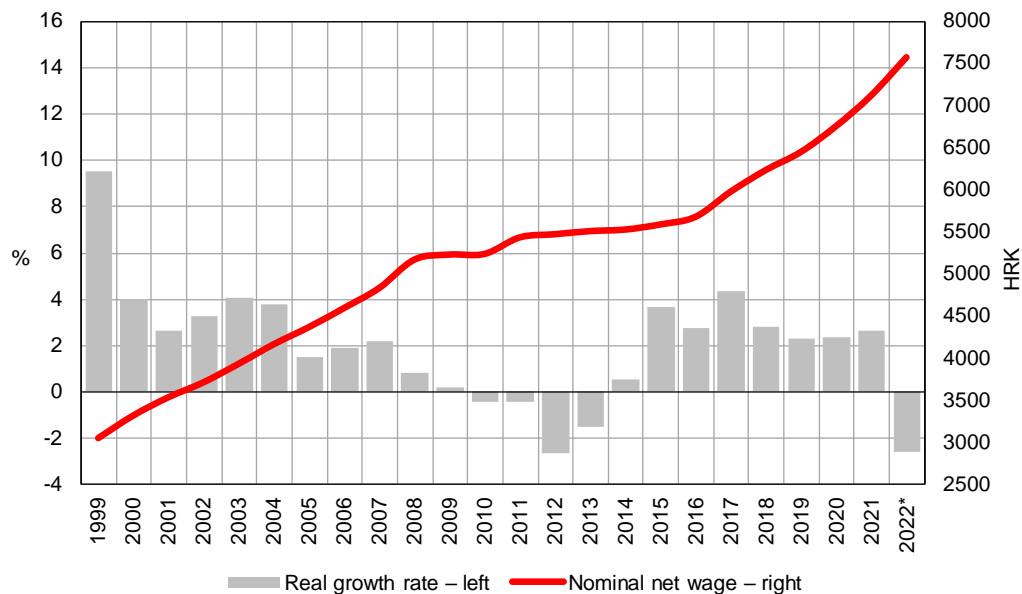
Note: Since the beginning of 2007 results from the Labour Force Survey have been published in quarterly dynamics. ILO unemployment rate refers to persons aged 15 years and over. Data on ILO unemployment rate for 2021 refers to the first three quarters. Data on ILO unemployment rate for period 2007-2014 have been harmonised with the results of the Census of Population, Households and Dwellings in 2011, and are not comparable with data for period 2000-2006. Data for 2015 and 2016 have been revised due to availability of new estimates of the total population in Republic of Croatia. Data from the first quarter of 2021 is according to the new methodology. Data on administrative unemployment rate is revised for the period between January 2016 until December 2020. Source: CBS.

ILO unemployment rate, peer countries, 2021



Note: ILO unemployment rate refers to persons aged 15 – 74. Source: Eurostat.

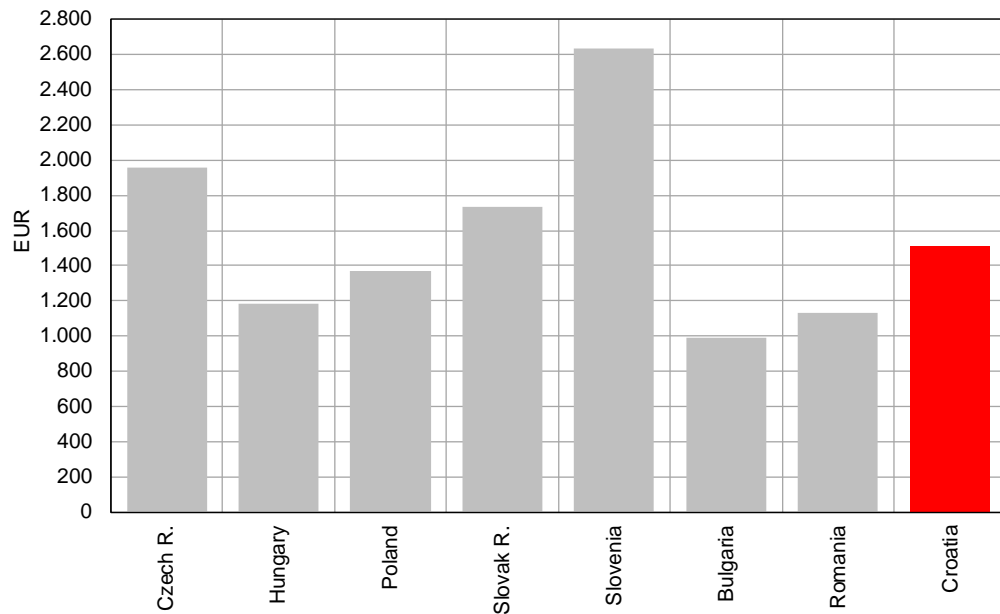
Nominal and real net wages



*Last available data is for wages paid for August.
 Note: Data on average wages paid for January 2020 were reported in full-time equivalent, in contrast with the previous periods, when average wages were calculated by dividing total disbursements by the number of employees who received these disbursements, excluding all those who worked fewer than 80 hours per month.

Sources: CBS and CNB.

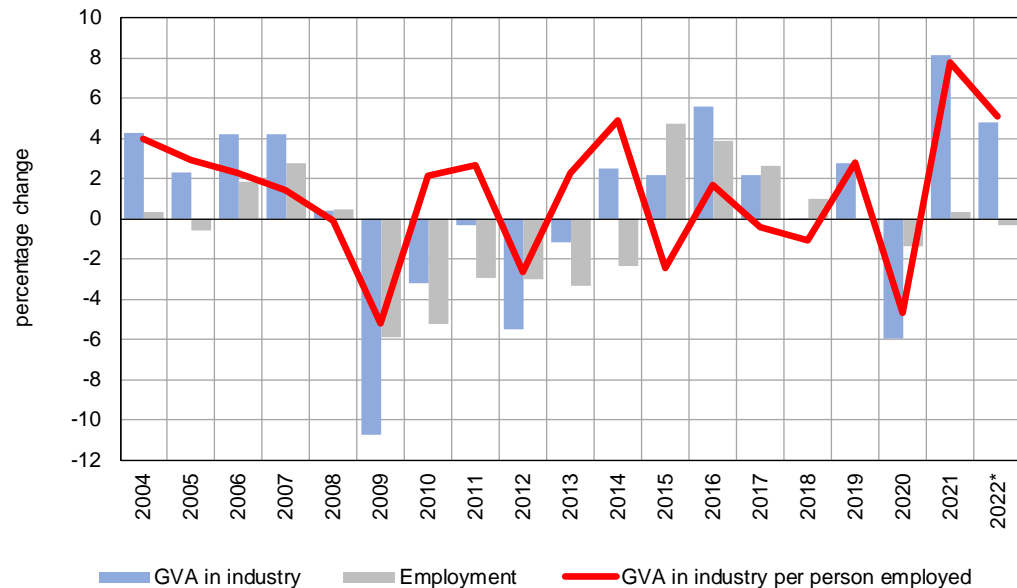
Average monthly compensation per employee in economy, 2021



Note: Average monthly compensation per employee in economy is calculated as a ratio of total monthly compensation paid to employees and number of employees.

Source: Eurostat.

Gross value added in industry per person employed

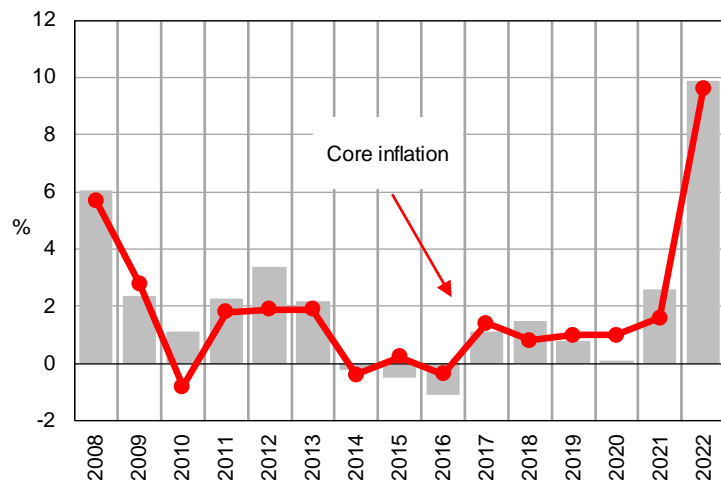


*The data refer to the first two quarters of 2022.

Source: CBS.

Inflation

Croatia

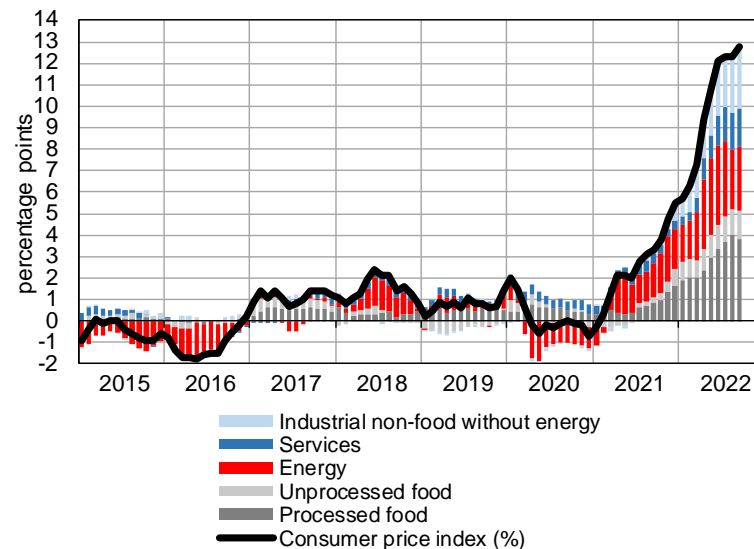


*Data for 2022 refer to January-September.

Note: CPI inflation and core inflation, average year-on-year rate of change.

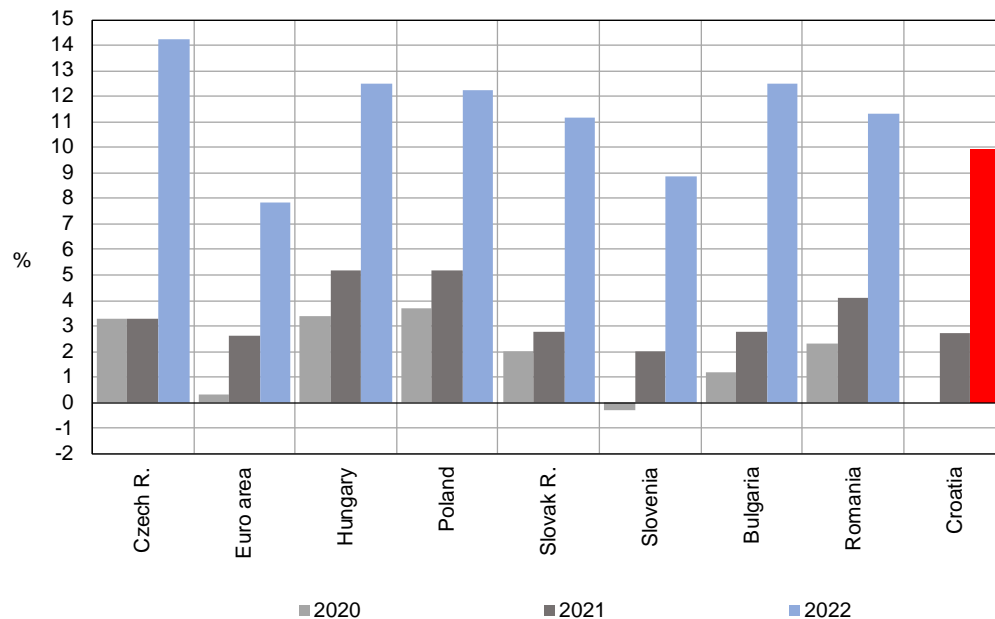
Source: CBS.

Year-on-year inflation rates and components' contribution to consumer price inflation in Croatia



Sources: CBS and CNB's calculation.

Inflation in Croatia, euro area and peer countries

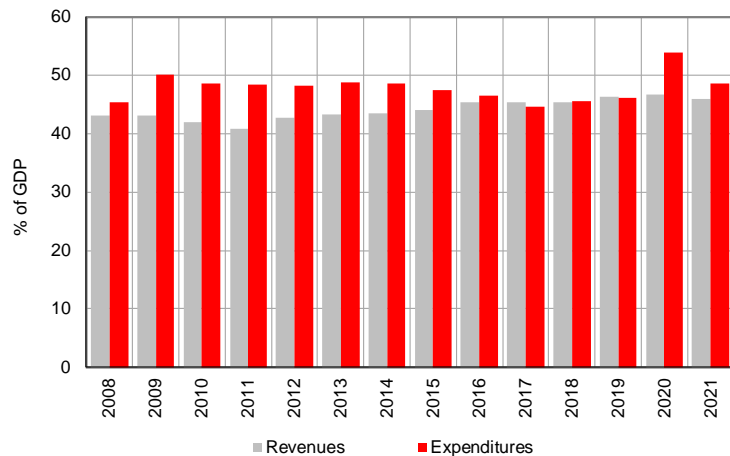


Note: Average year-on-year rate of change. Inflation is measured by harmonized consumer price index. Data for 2022 refer to January-September.

Source: Eurostat.

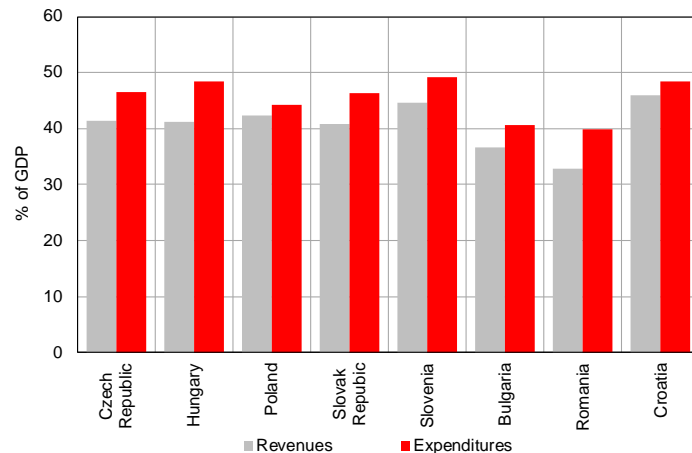
Consolidated general government revenues and expenditures

Croatia



Note: According to the ESA 2010 methodology.
Sources: Eurostat and CBS.

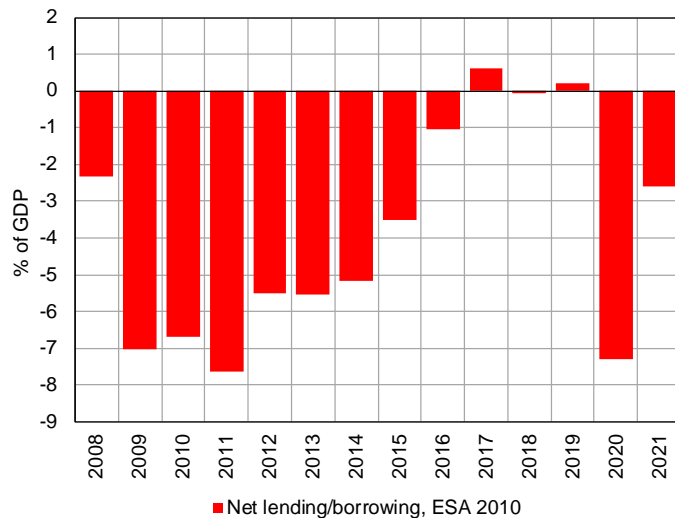
Peer countries, 2021



Note: According to the ESA 2010 methodology.
Sources: Eurostat and CBS.

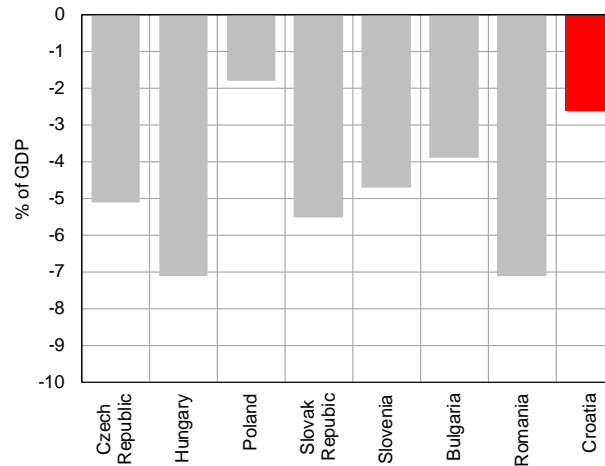
Consolidated General Government Balance

Croatia



Note: According to the ESA 2010 methodology.
Sources: Eurostat and CBS.

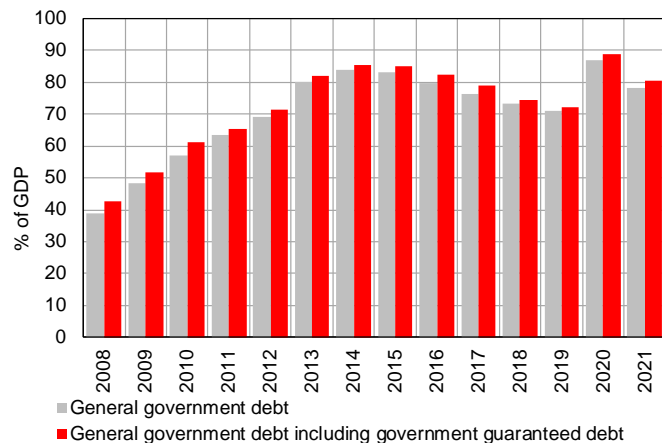
Peer countries, 2021



Note: According to the ESA 2010 methodology.
Sources: Eurostat and CBS.

General government debt

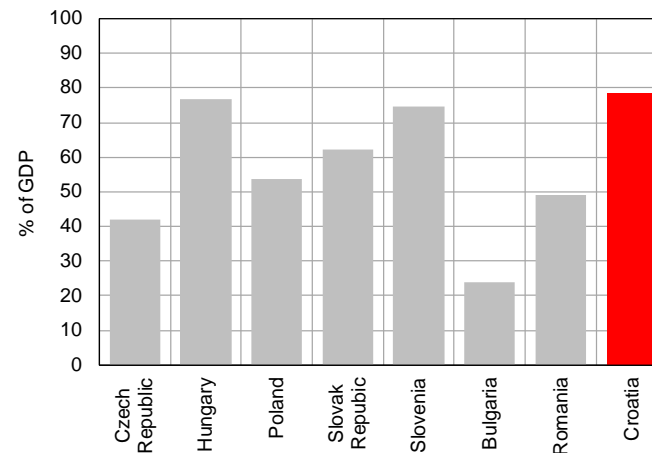
Croatia



Note: The data has been revised since December 2001 due to the additional harmonization of coverage of general government sector to ESA 2010 standard.

Sources: Eurostat and CBS.

Peer countries, 2021



Note: The data for Croatia has been revised since December 2001 due to the additional harmonization of coverage of general government sector to ESA 2010 standard.

Sources: Eurostat and CBS.



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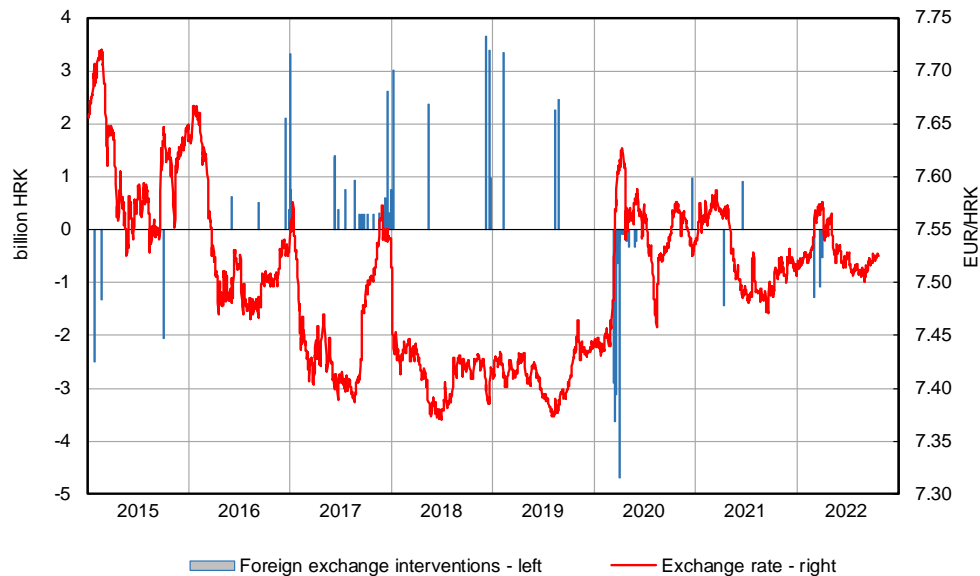
Monetary policy

Central bank's policy

Monetary developments

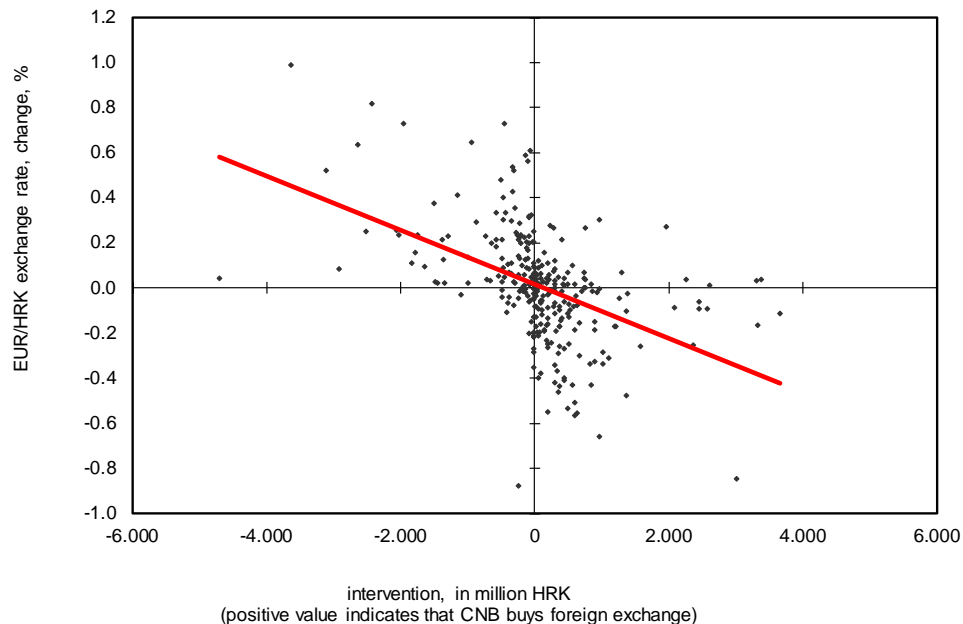
Interest rates

Foreign exchange interventions and exchange rate



Source: CNB.

Exchange rate movements before CNB intervention and amount of intervention, 2015 – 2022



Exchange rate of the intervention day relative to exchange rate 4 days prior to intervention (y-axis) and the intervention amount (x-axis).

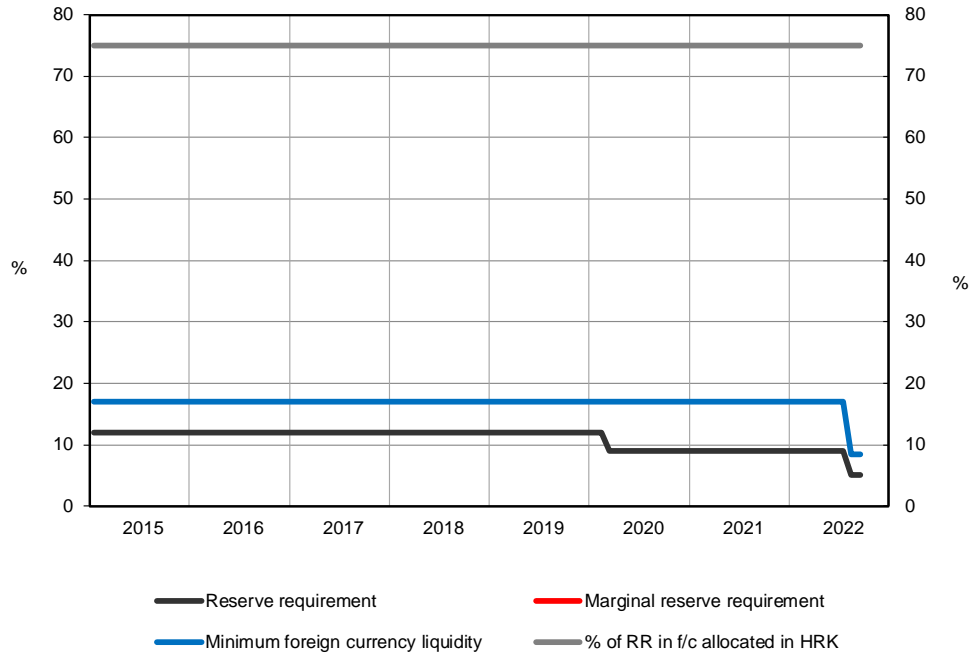
Source: CNB.

Creation and withdrawal of reserve money



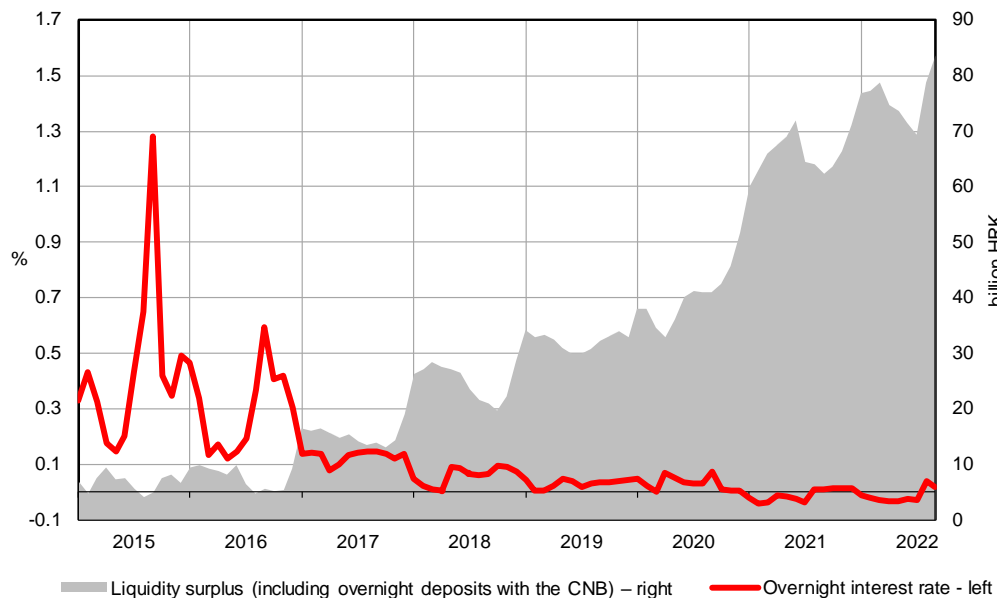
Note: The possibility of using Lombard credits was abolished, while the possibility of using overnight credits was introduced on 28 September 2017. Values for the regular and structural operations, as well as lombard/overnight credits are shown as change in one quarter. Foreign exchange transactions include purchases and sales of foreign currency by the CNB with credit institutions, MF, EC and swap agreements. Positive values reflect the purchase of foreign currency. Source: CNB.

Reserve requirements and minimum f/c liquidity



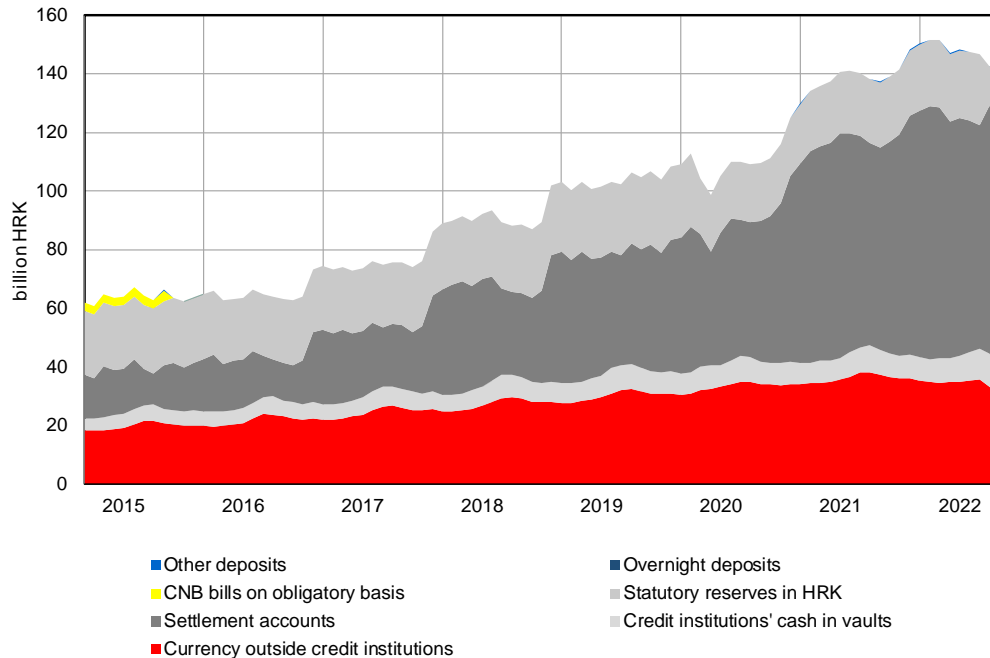
Source: CNB.

Liquidity surplus and overnight interest rate



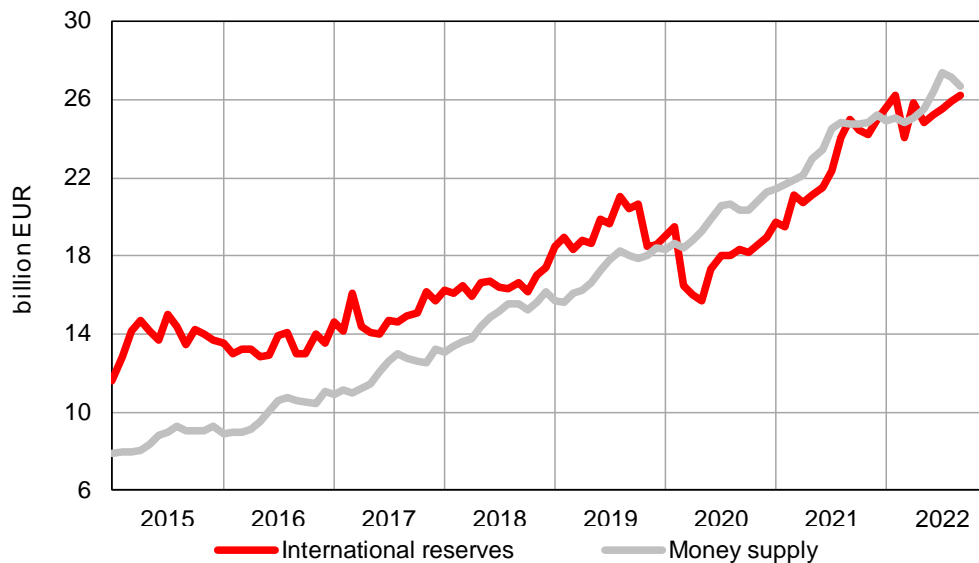
Note: Until the end of 2015 the overnight interest rate refers to the interbank overnight interest rate, while from the beginning of 2016 it refers to the interest rate on overnight interbank demand deposit trading.
Source: CNB.

Base money M0



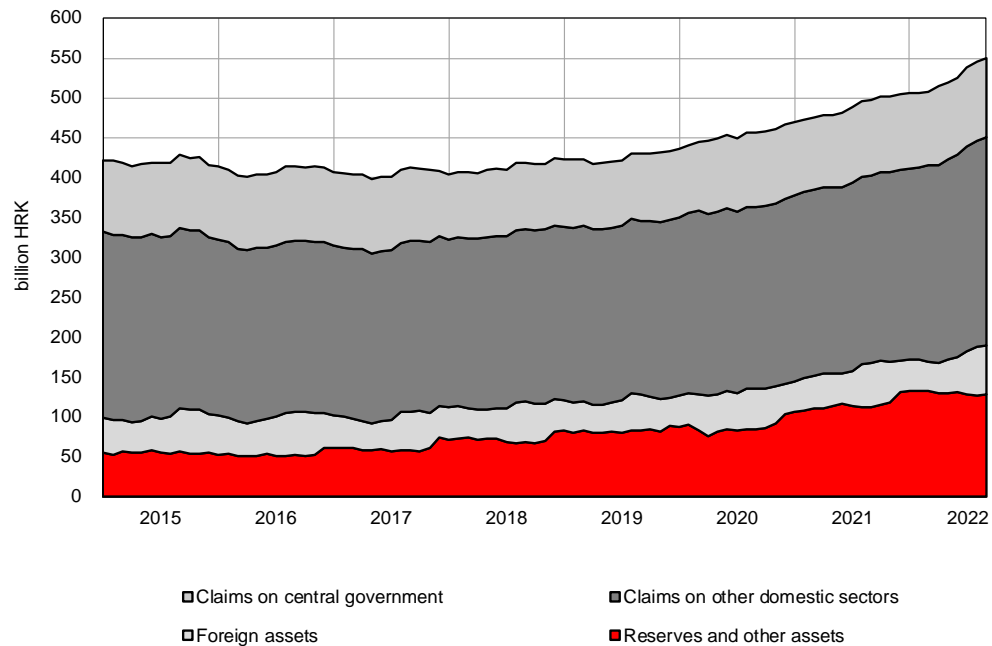
Source: CNB.

CNB's international reserves and money supply



Source: CNB.

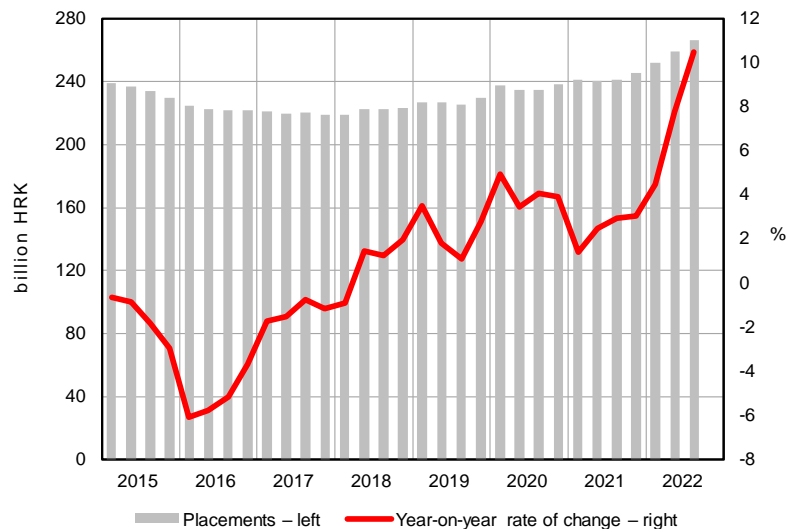
Other monetary financial institutions' assets



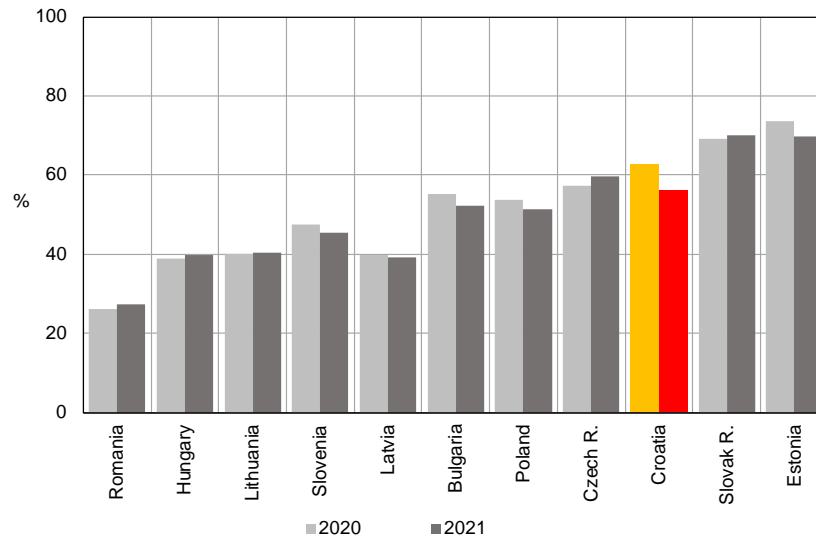
Source: CNB.

Placements to other domestic sectors (excluding government)

Placements to other domestic sectors



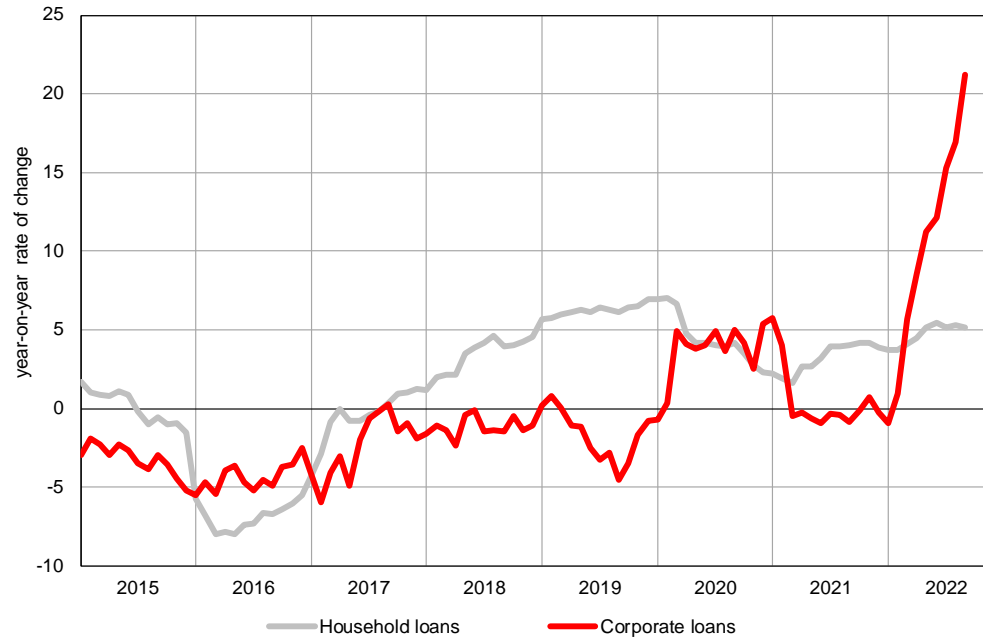
Placements-to-GDP ratio



Note: One-off effects substantially decreased the stock of placements and in 2015 and 2016 they relate to partial write-off of loans to households indexed to the Swiss Franc.
Source: CNB.

Sources: Eurostat, ECB, CNB and CBS.

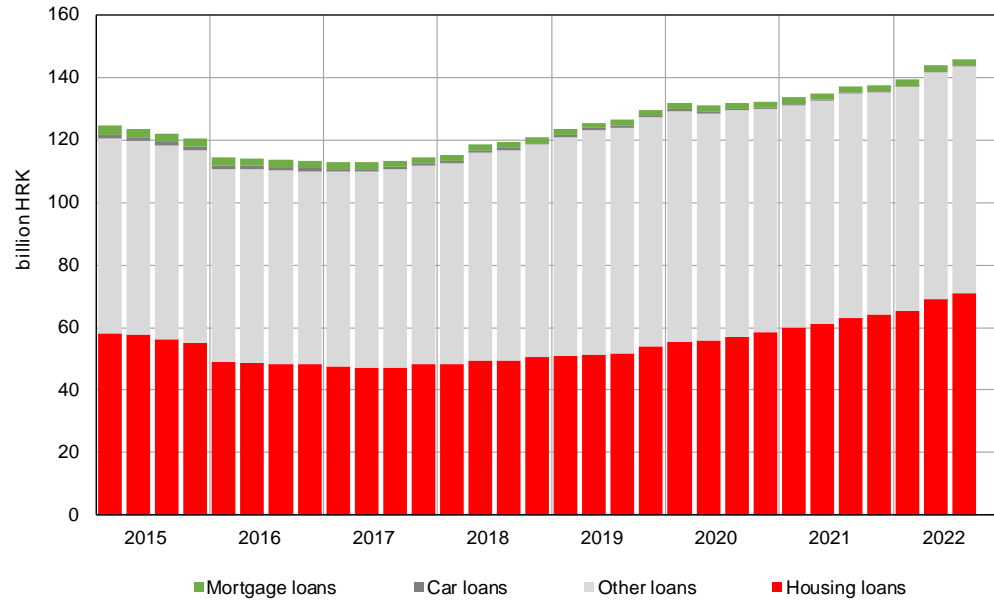
Loans of other monetary financial institutions



Note: One-off effects substantially decreased the stock of placements in 2015 and 2016 they relate to partial write-off of loans to households indexed to the Swiss Franc.

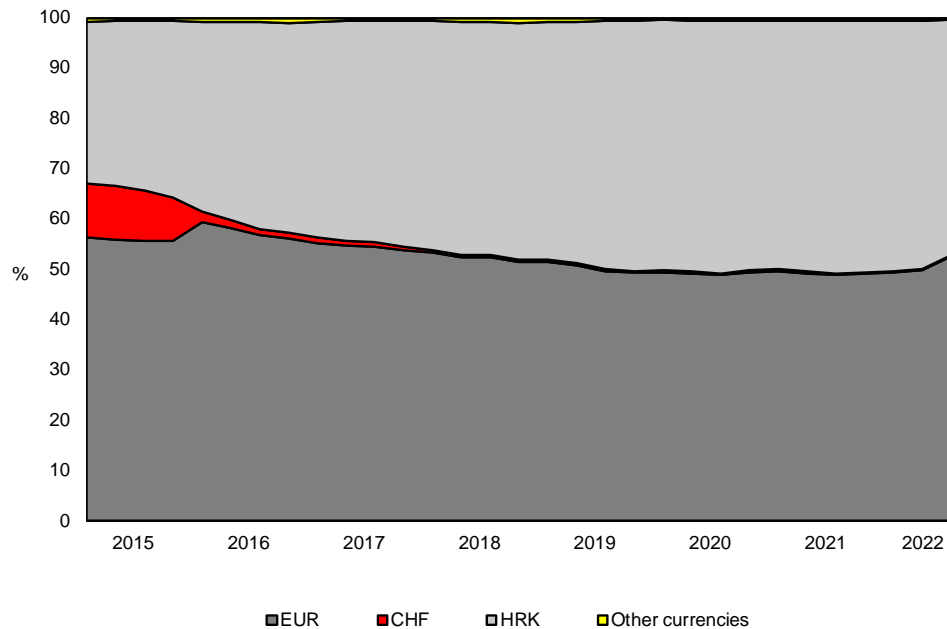
Source: CNB.

Loans to households - structure



Source: CNB.

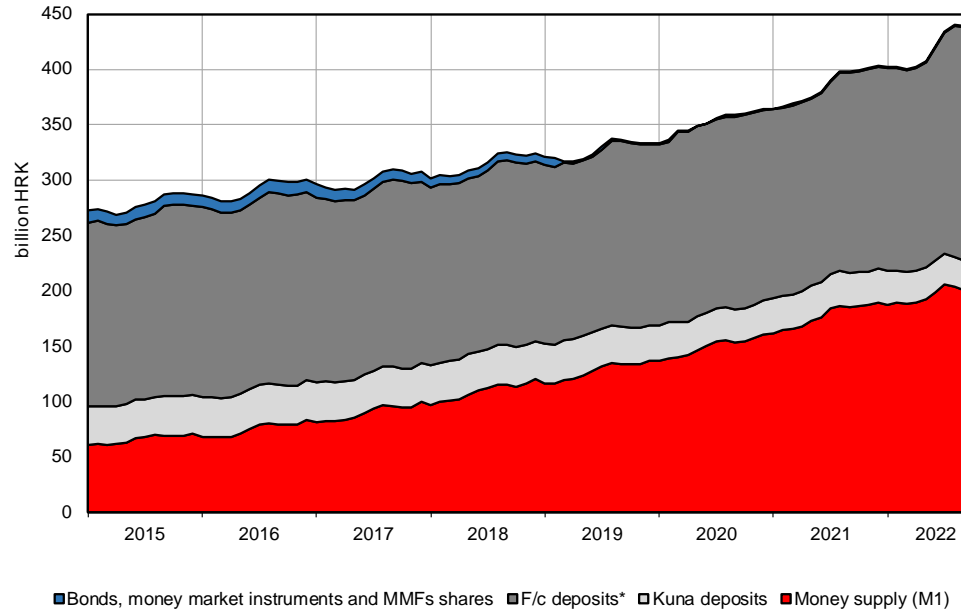
Currency structure of other monetary financial institutions' placements



Note: Loans in foreign currency include loans denominated in that currency and loans indexed to that currency.

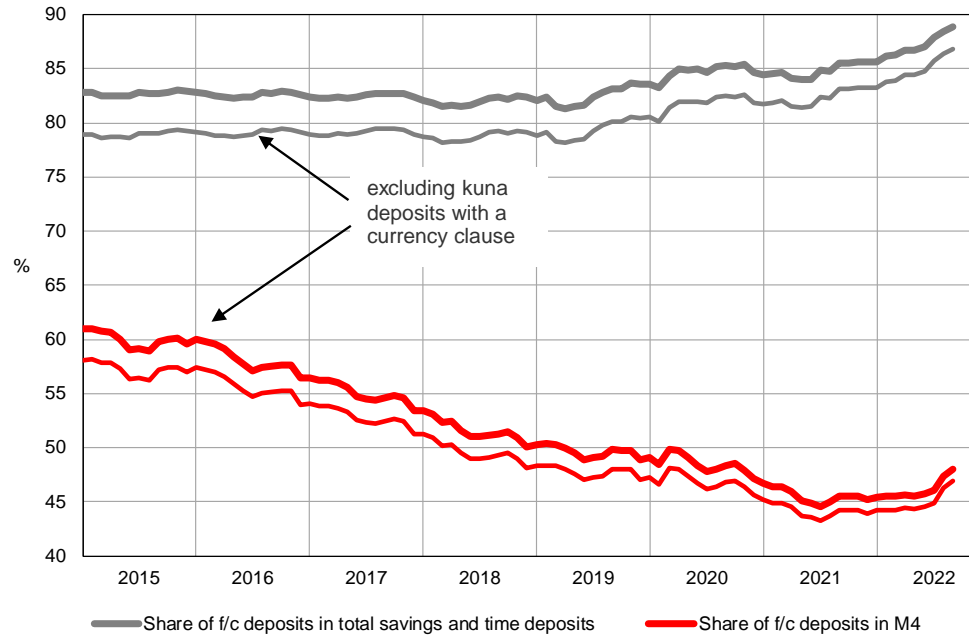
Source: CNB.

Broad money (M4)



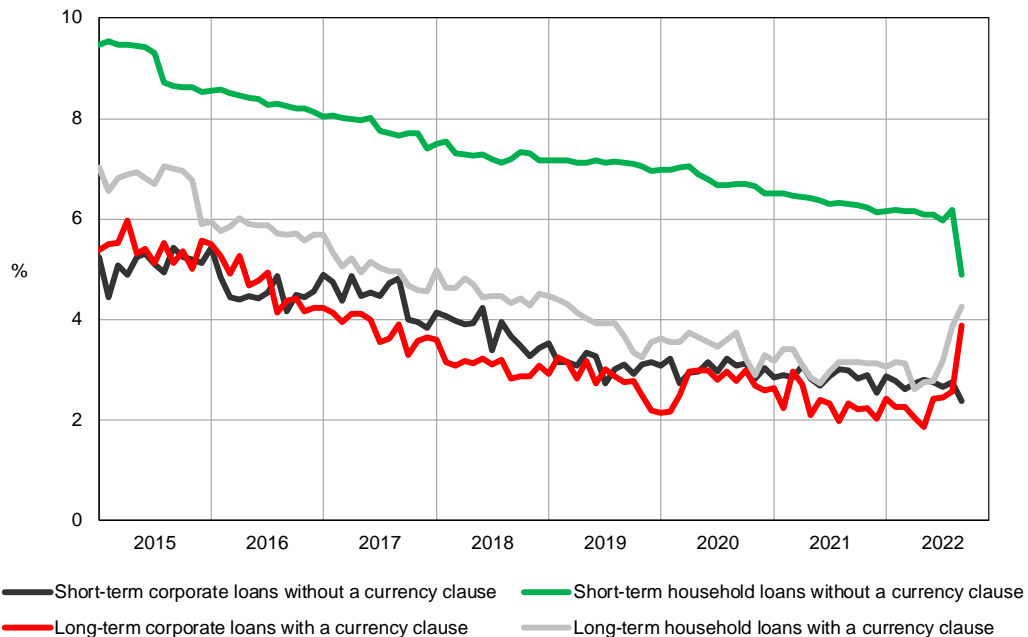
Source: CNB.

Euroisation



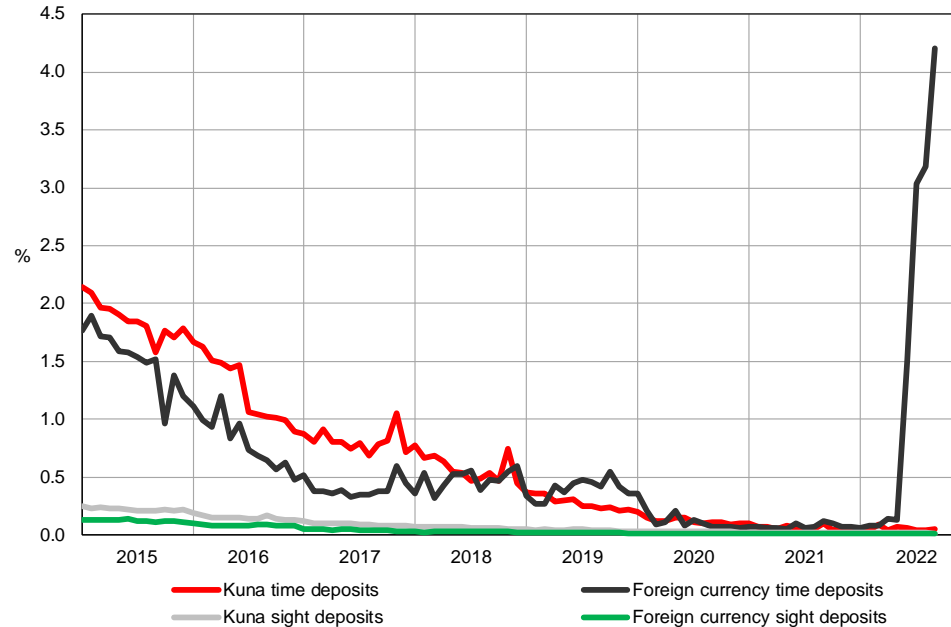
Source: CNB.

Average lending interest rates



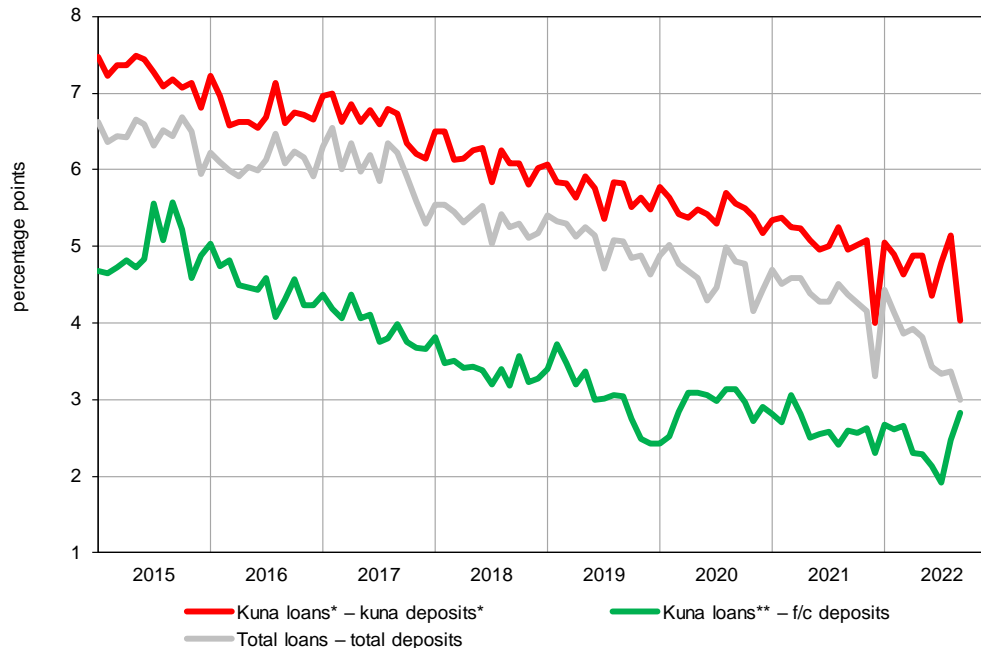
Note: Details about the new interest rate statistics:
Bulletin 204, June 2014
(<http://www.hnb.hr/publikac/bilten/arhiv/bilten-204/hbilt204.pdf>).
Source: CNB.

Average deposit interest rates



Note: Details about the new interest rate statistics:
Bulletin 204, June 2014
(<http://www.hnb.hr/publikac/bilten/arhiv/bilten-204/hbilt204.pdf>).
Source: CNB.

Interest rate spread



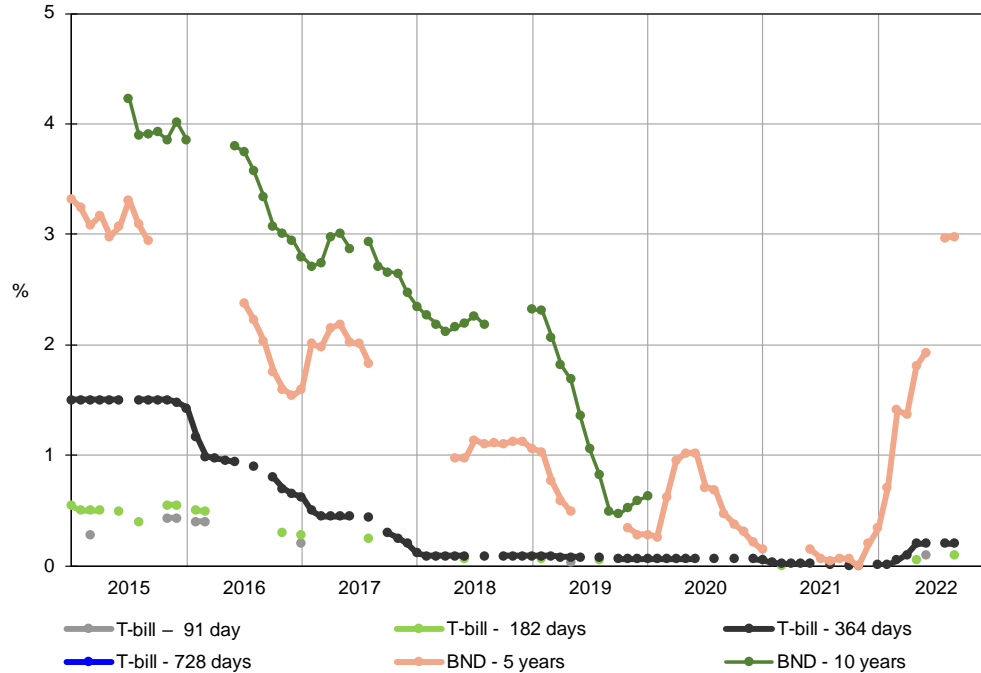
* without a currency clause

** with a currency clause

Note: Details about the new interest rate statistics:
Bulletin 204, June 2014
(<http://http://www.hnb.hr/publikac/bilten/arhiv/bilten-204/ebilt204.pdf>).

Source: CNB.

Yield on T-bills and kuna government bond



T-bills, bonds - average price in a month.
Sources: MoF and ZSE.

Bonds listed on the ZSE

Issuer	Year of issue	Original maturity	Currency	Nominal value (millions)	Nominal interest rate
State					
Republic of Croatia	2013	11 years	EUR	1.400	5.750%
Republic of Croatia	2015	10 years	HRK	6.000	4.500%
Republic of Croatia	2015	11 years	HRK	10.000	4.250%
Republic of Croatia	2017	11 years	HRK	5.500	2.875%
Republic of Croatia	2017	15 years	HRK	3.000	3.250%
Republic of Croatia	2017 and 2018	6 years	HRK	11.300	1.750%
Republic of Croatia	2018 and 2019	11 years	HRK	10.000	2.375%
Republic of Croatia	2019	5 years	HRK	3.500	0.250%
Republic of Croatia	2019	15 years	HRK	7.500	1.000%
Republic of Croatia	2020	5 years	HRK	5.000	0.250%
Republic of Croatia	2020	20 years	EUR	800	1.250%
Republic of Croatia	2020	7 years	EUR	1.445	0.750%
Republic of Croatia	2021	7 years	HRK	9.000	0.500%
Republic of Croatia	2022	8 years	HRK	1.000	1.250%
Republic of Croatia	2022	4 years	EUR	400	2.125%
Republic of Croatia	2022	10 years	EUR	800	3.375%

Stock as at October 18th 2022
Source: ZSE.

Issuer	Year of issue	Original maturity	Currency	Nominal value (millions)	Nominal interest rate
Corporate					
Dalekovod d.d.	2014	15.3 years	HRK	16	4.000%
Dalekovod d.d.	2014	15.3 years	EUR	1	4.000%
Zagrebački holding d.o.o.	2016	7 years	HRK	2.300	3.875%
LANIŠTE d.o.o.	2016	16.2 years	EUR	55	4.500%
Erste&Steiermärkische banka d.d.	2017	5 years	EUR	50	1.813%
Erste&Steiermärkische banka d.d.	2018	5 years	HRK	300	1.500%
Jadran Galenski laboratorij d.o.o.	2019	5 years	HRK	130	1.750%
Samoborka d.d.	2019	5 years	EUR	7	5.900%
Atlantic Grupa d.d.	2020	5 years	HRK	300	0.875%
HOK-OSIGURANJE d.d.	2020	5 years	HRK	17	3.750%
Erste&Steiermärkische banka d.d.	2021	5 years	EUR	45	0.750%
M San Grupa d.o.o	2021	5 years	HRK	200	2.000%
INA d.d.	2021	5 years	HRK	2.000	0.875%
SAMOBORKA d.d.	2021	5 years	EUR	2	5.500%
Agro Invest Grupa d.o.o.	2022	7 years	HRK	170	3.500%
Meritus ulaganja d.d.	2022	5 years	EUR	40	4.250%

Municipal

Stock as at October 18th 2022
Source: ZSE.



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External sector

Exchange rate

Foreign trade

Current account

External debt

FDI

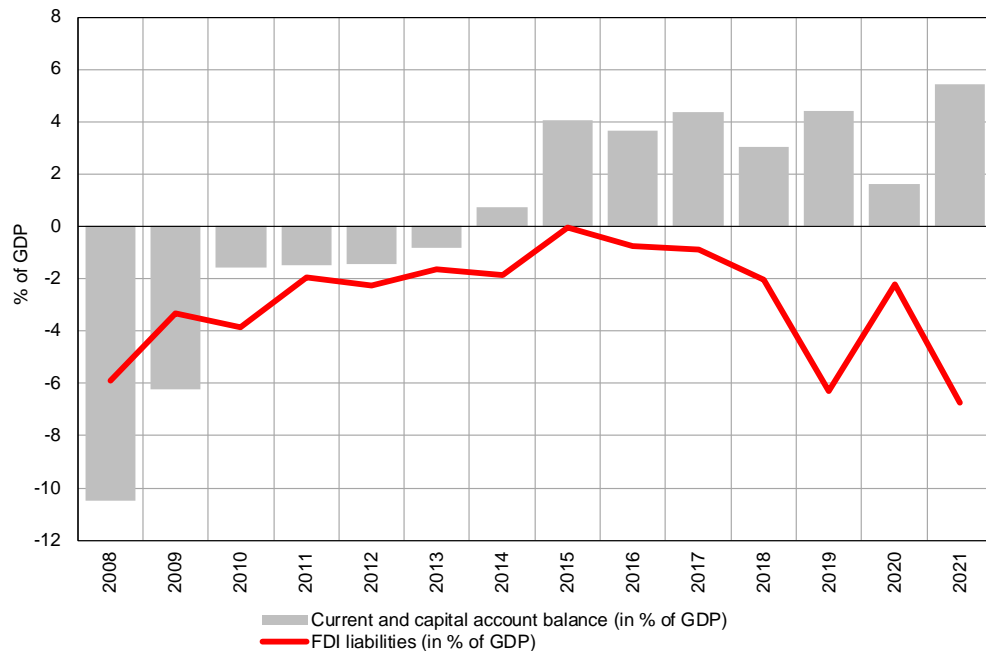
Exchange rate policy

- Managed floating
- Exchange rate is market determined and based on supply and demand
- Central bank intervenes on the forex market through forex auctions, but it does not defend any predetermined rate or band

Foreign exchange market

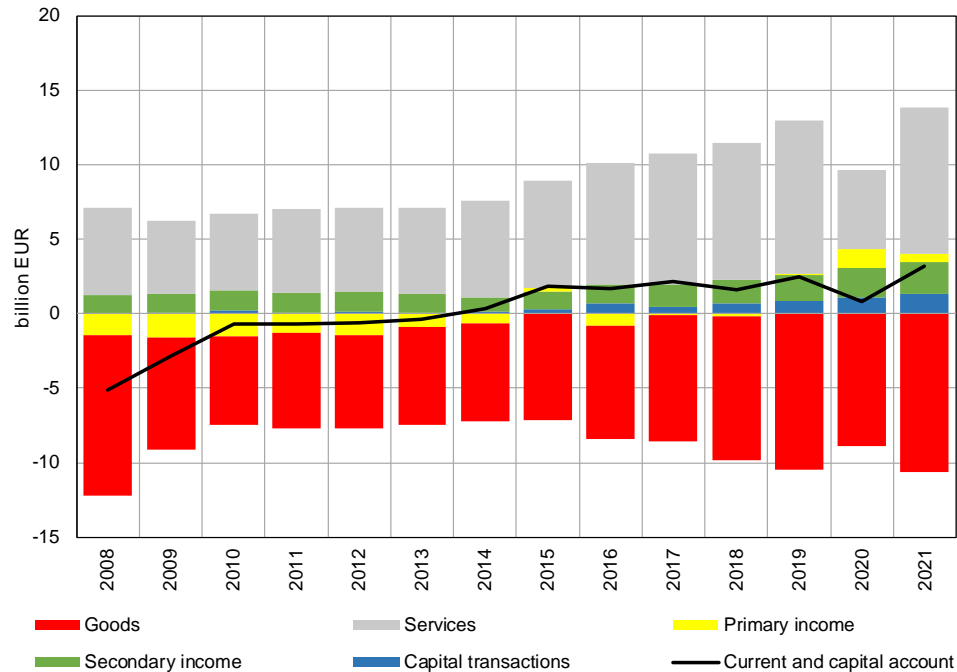
- Kuna is fully convertible
- No restrictions on repatriation of profits and liquidation of investments
- Banks freely determine the exchange rate, engage in the foreign exchange operations and conduct international payment transactions

Current and capital account balance and FDI liabilities



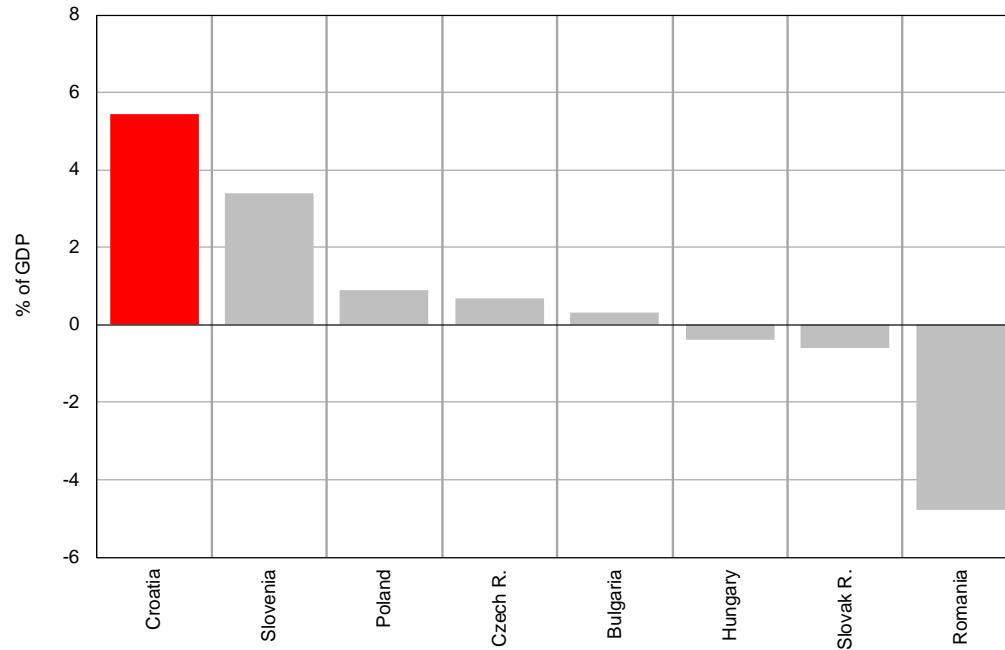
Note: According to BPM6 and ESA 2010 methodology. The FDI liabilities data doesn't include round tripping. Negative values of FDI liabilities indicate inflow of FDI. Source: CNB.

Structure of the current and capital account balance



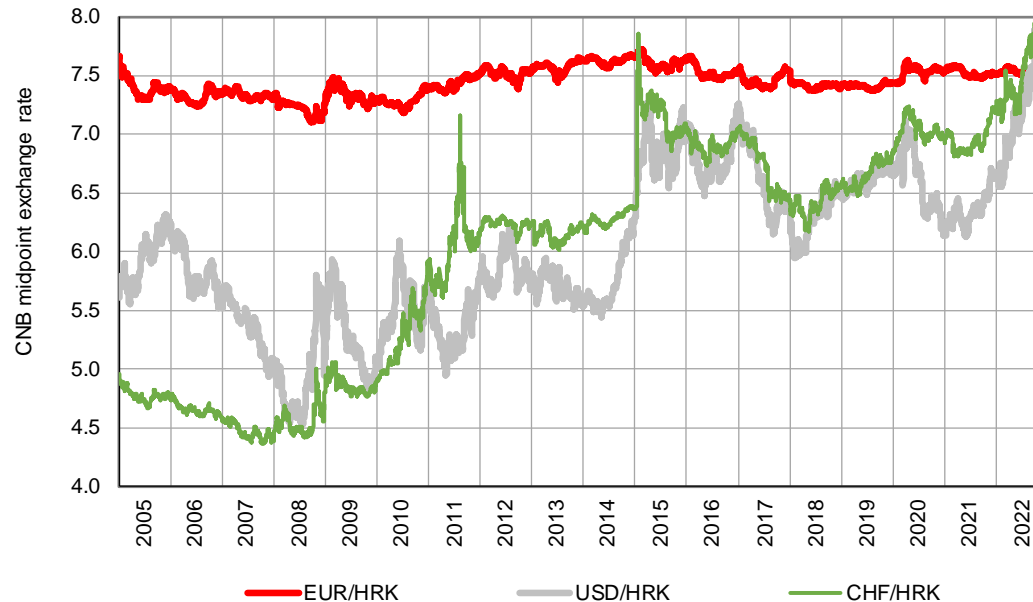
Source: CNB.

Current and capital account balance by countries, 2021



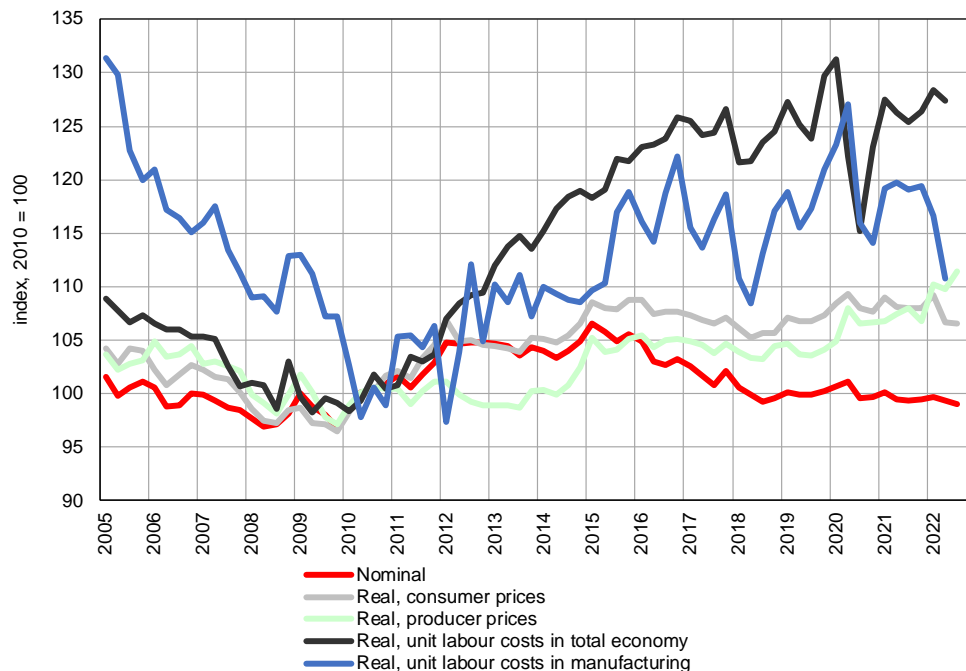
Sources: Eurostat and CNB.

Daily nominal exchange rates HRK vs. EUR, USD and CHF



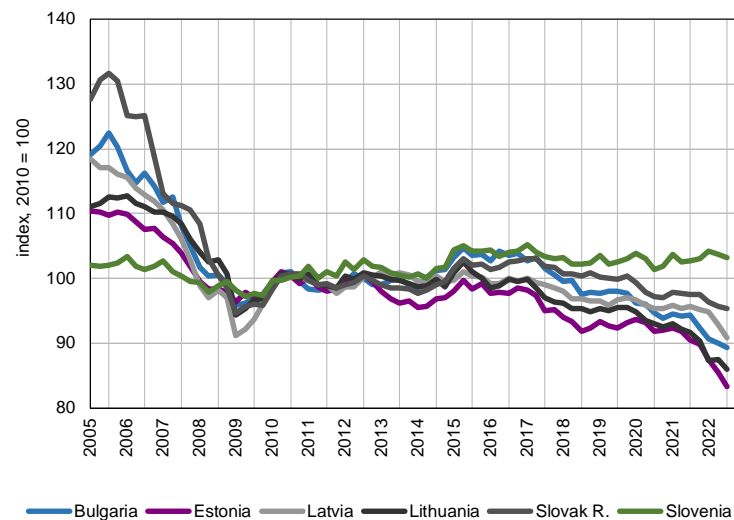
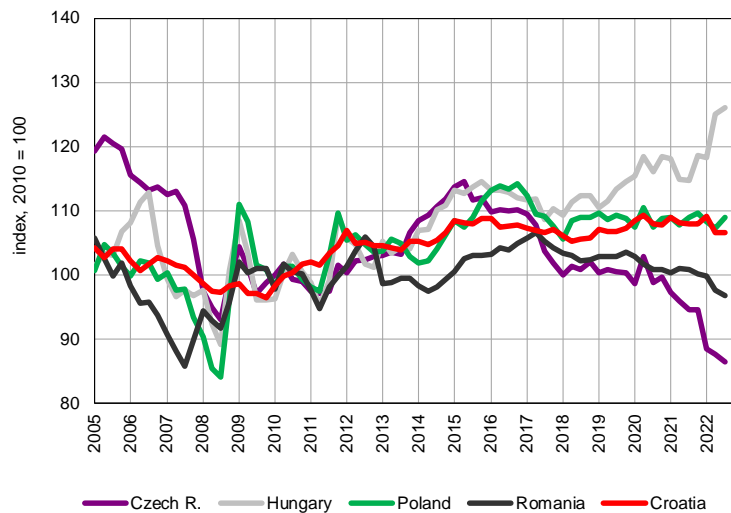
Source: CNB.

Index of nominal and real effective kuna exchange rate



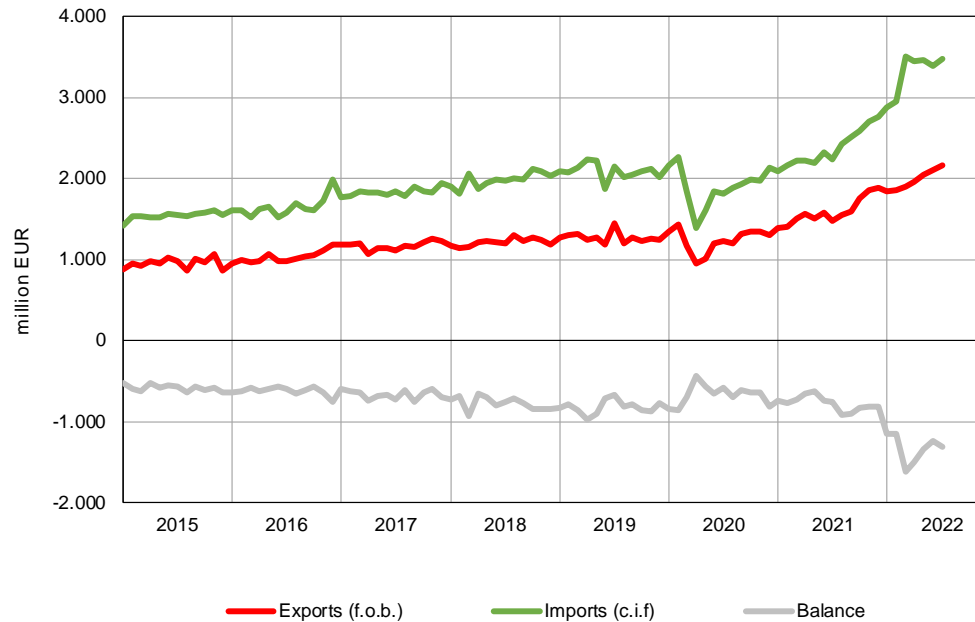
Note: The real effective exchange rate of the kuna deflated by producer prices is based on the Croatian index of industrial producer prices on the total market. The unit labour cost (ULC) is defined as the ratio of labour costs to labour productivity (expressed as GDP per employee).
Source: CNB.

Index of real effective exchange rate deflated by CPI



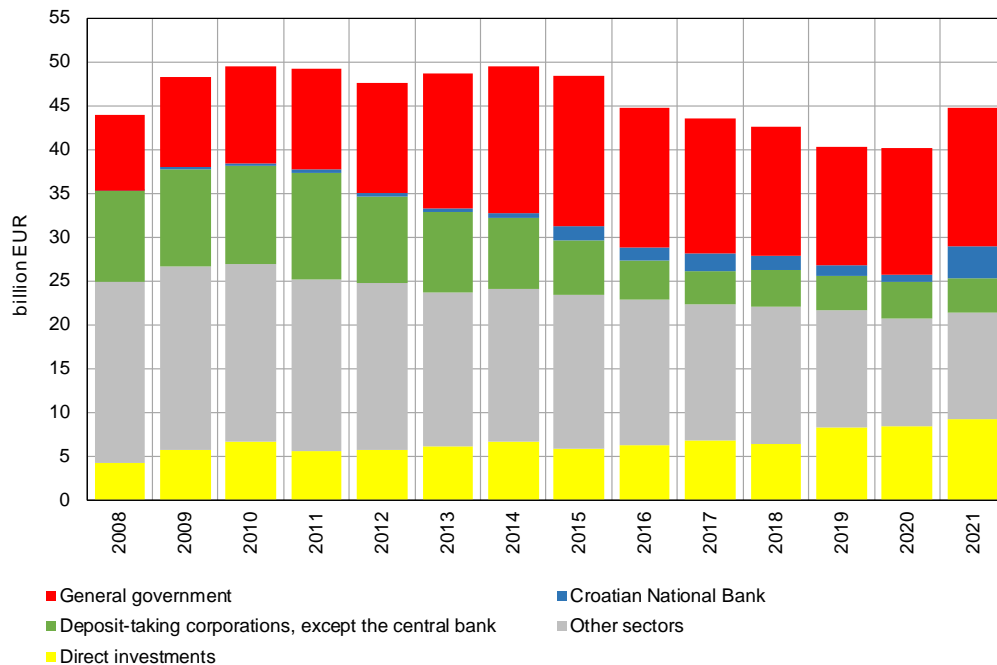
Note: The fall of index denotes real effective appreciation.
Sources: BIS and CNB.

Merchandise trade



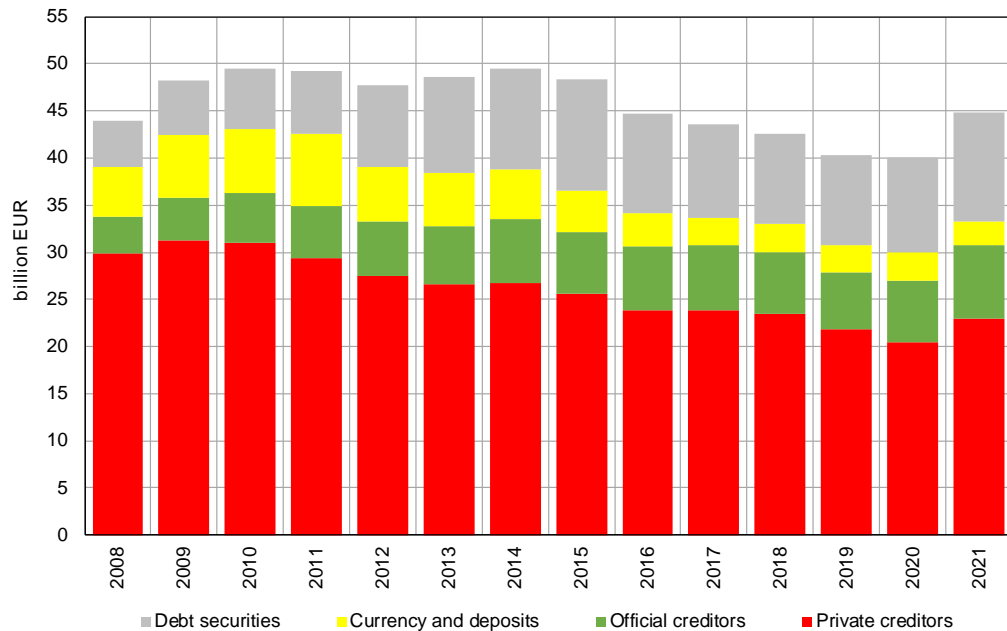
Note: Seasonally adjusted data.
Sources: CBS and CNB.

Gross external debt by debtors



Note: According to BPM6 and ESA2010 methodology.
Source: CNB.

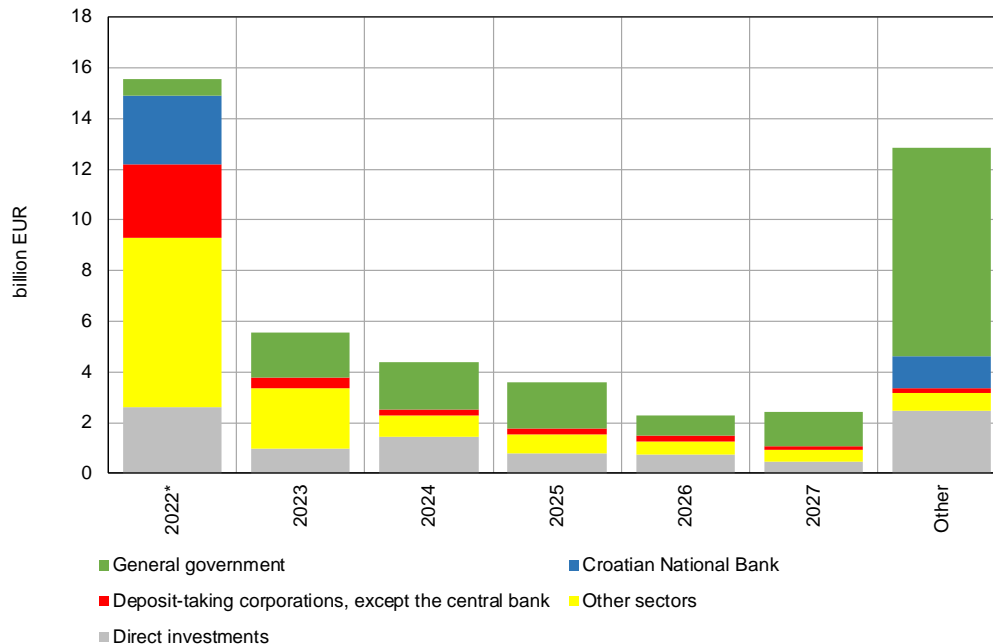
Gross external debt by creditors



Source: CNB.

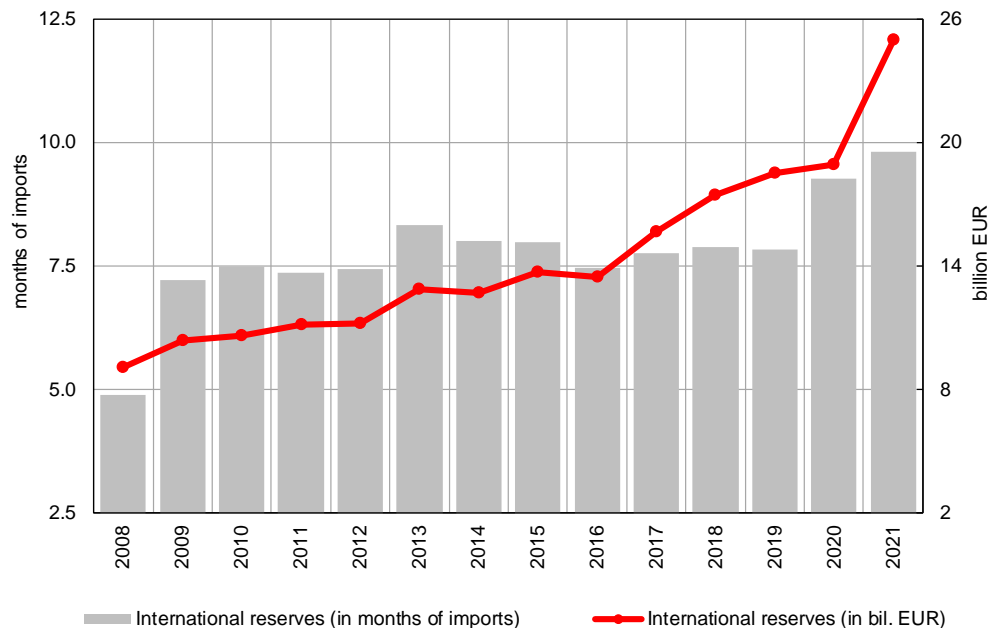
Estimated future principal and interest payments

by debtors



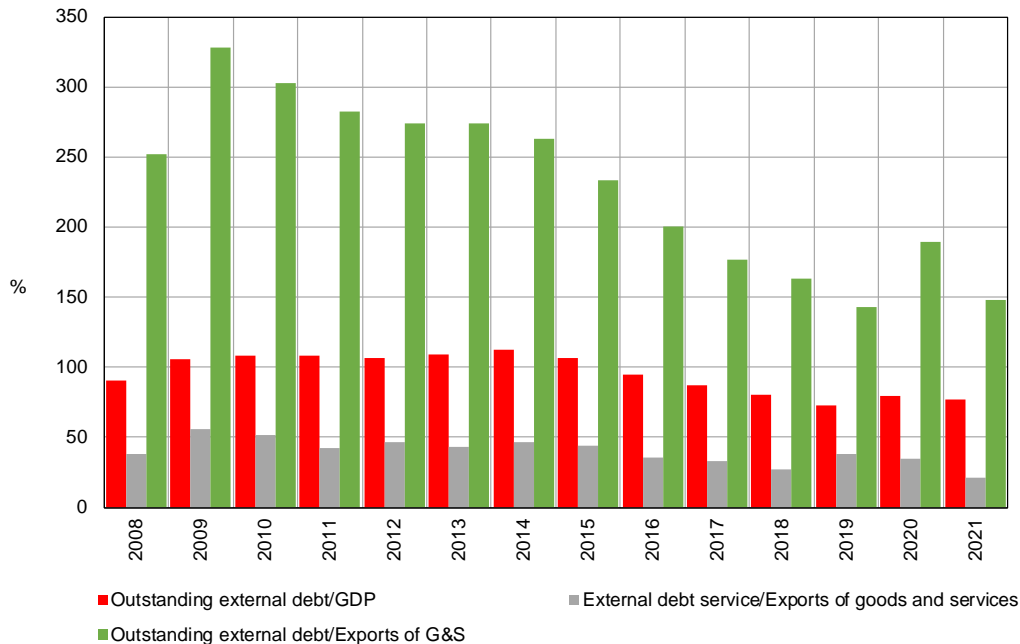
* Data for 2022 refer to projected repayments from the beginning of July to the end of December.
 Notes: According to gross external debt data as at end-June 2022. Data doesn't include arrears.
 Source: CNB.

International reserves in EUR and in months of imports of goods and services



Source: CNB.

External debt ratios

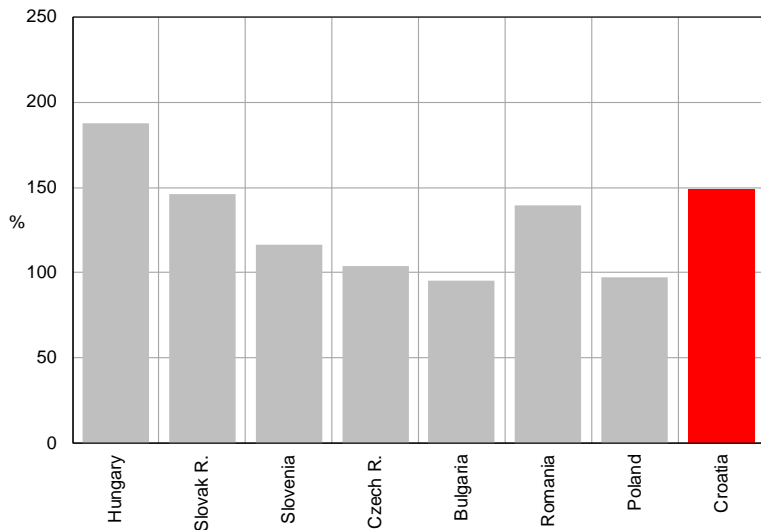


Note: External debt service includes principal payments on bonds, long-term trade credits and long-term loans (excluding liabilities to affiliated enterprises), as well as total interest payments (including FISIM), without interest payments on direct investment.

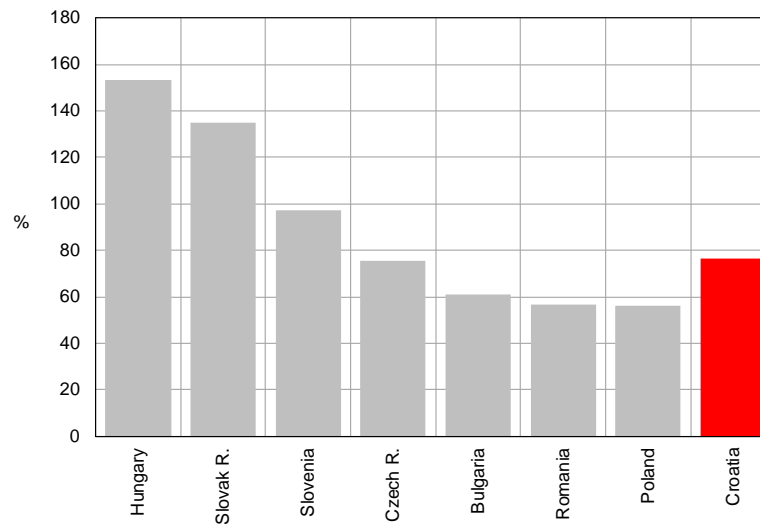
Source: CNB.

External debt ratios by countries, 2021

Outstanding external debt/Exports of G&S

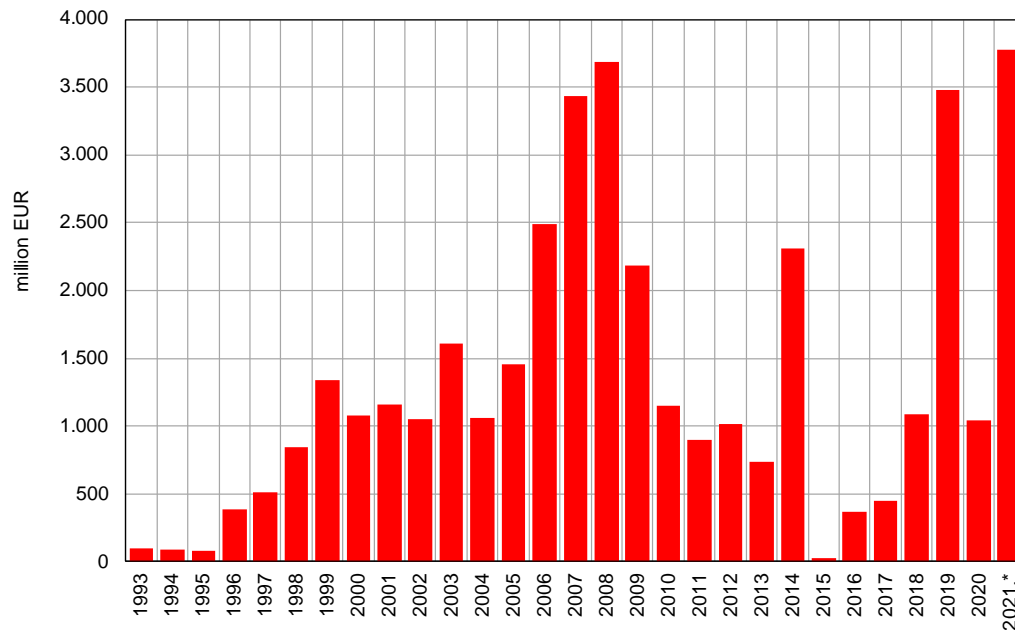


Outstanding external debt/GDP



Sources: Eurostat and CNB.

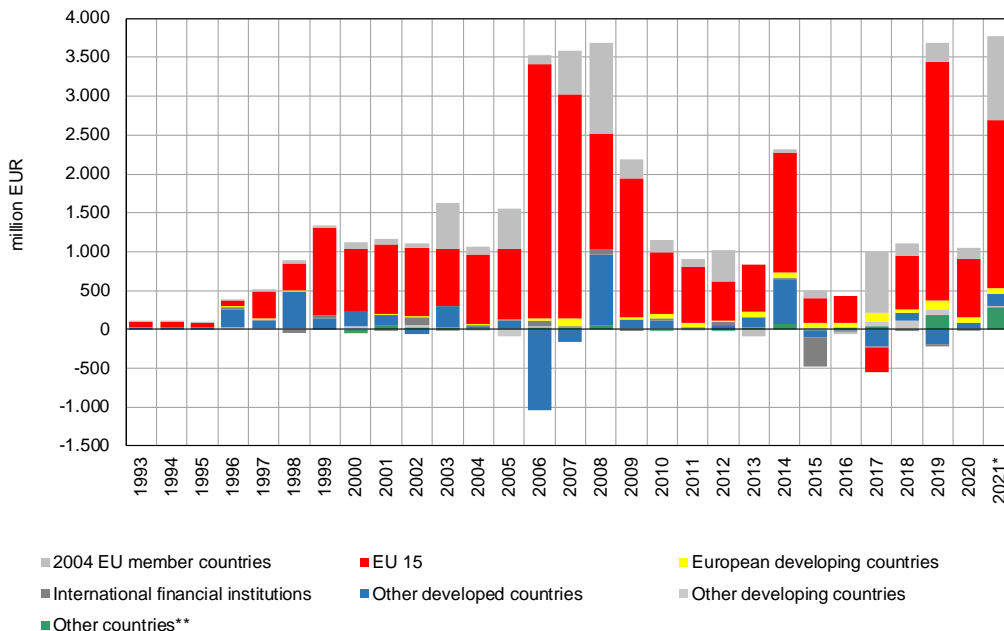
Foreign direct investment, Net incurrence of liabilities



* Preliminary data.

Source: CNB.

Foreign direct investment, Net incurrence of liabilities by country of origin



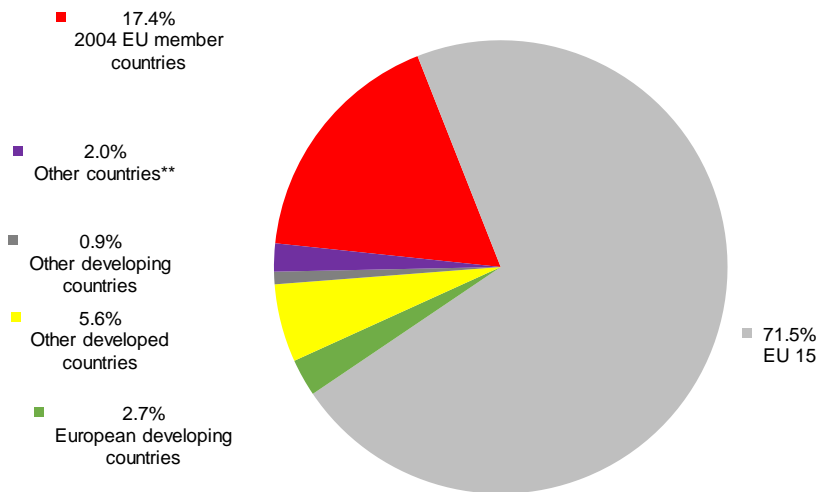
* Preliminary data.

** Refers to unknown countries and total population adjustment

Source: CNB.

Foreign direct investment, Net incurrence of liabilities

1993 - 2021* (38.879,4 million EUR)



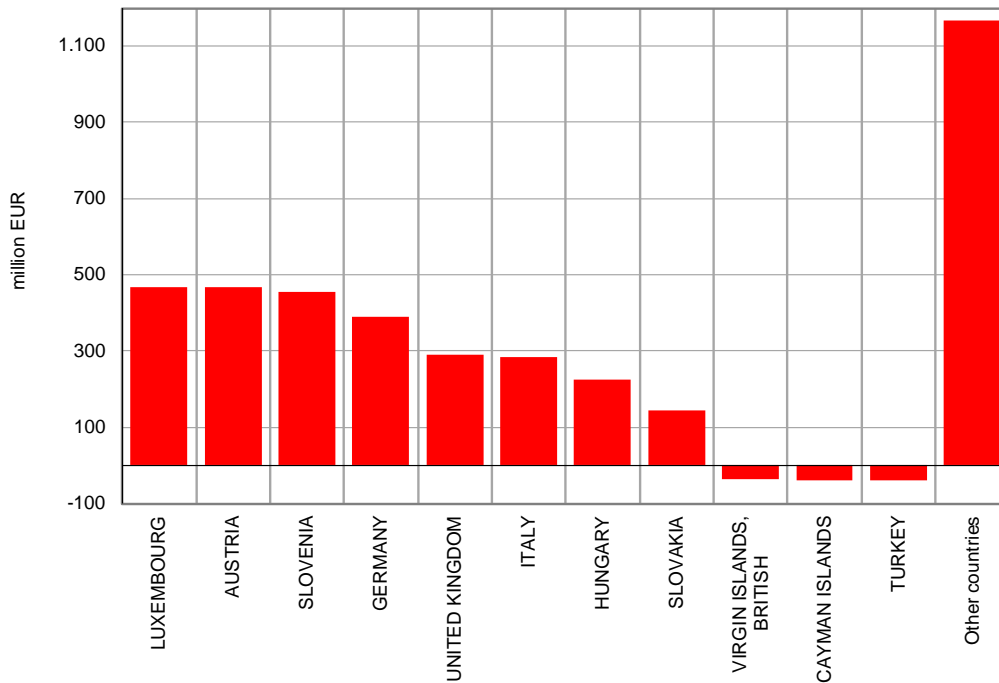
* Preliminary data.

** Refers to unknown countries and total population adjustment

Source: CNB.

Foreign direct investment, Net incurrence of liabilities

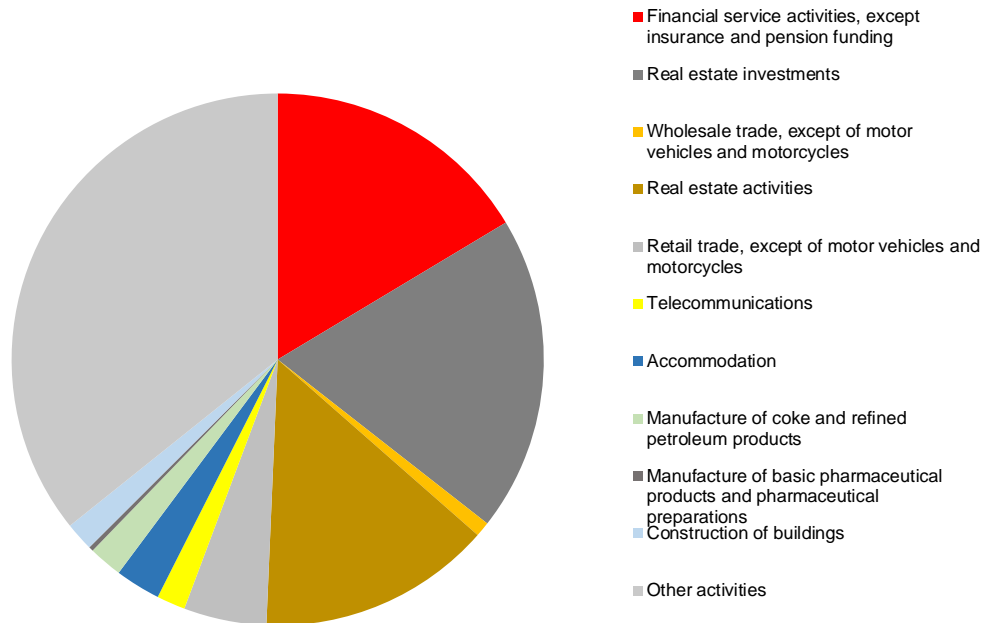
2021* (3.776,5 million EUR)



* Preliminary data.
Source: CNB.

Foreign direct investment, Net incurrence of liabilities

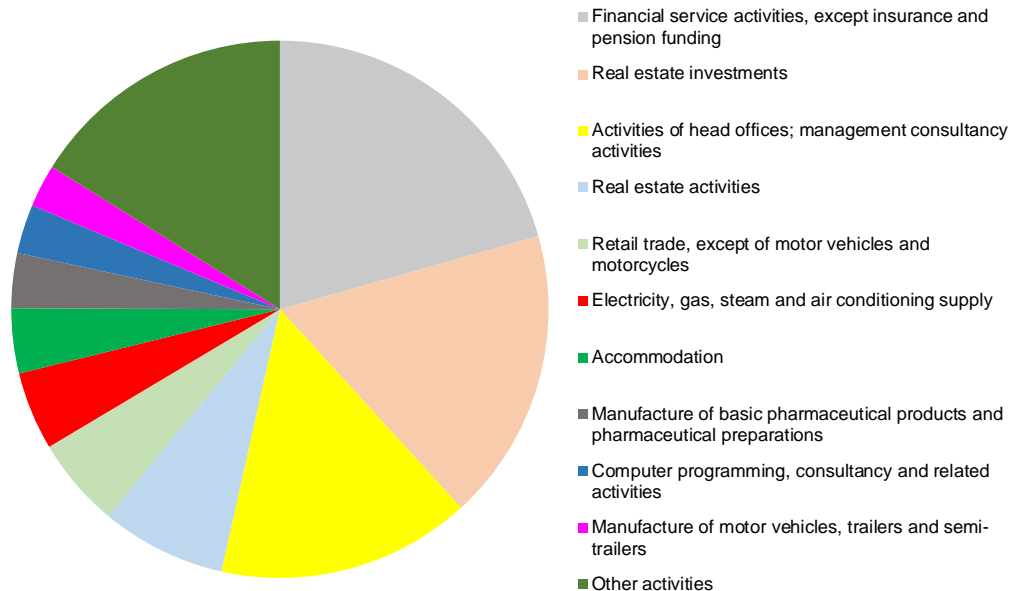
1993 - 2021* (38.879,4 million EUR)



* Preliminary data.
Source: CNB.

Foreign direct investments, Net incurrence of liabilities

2021* (3.776,5 mil. EUR)



* Preliminary data.
Source: CNB.



HNB

Banking sector

Size, structure and concentration

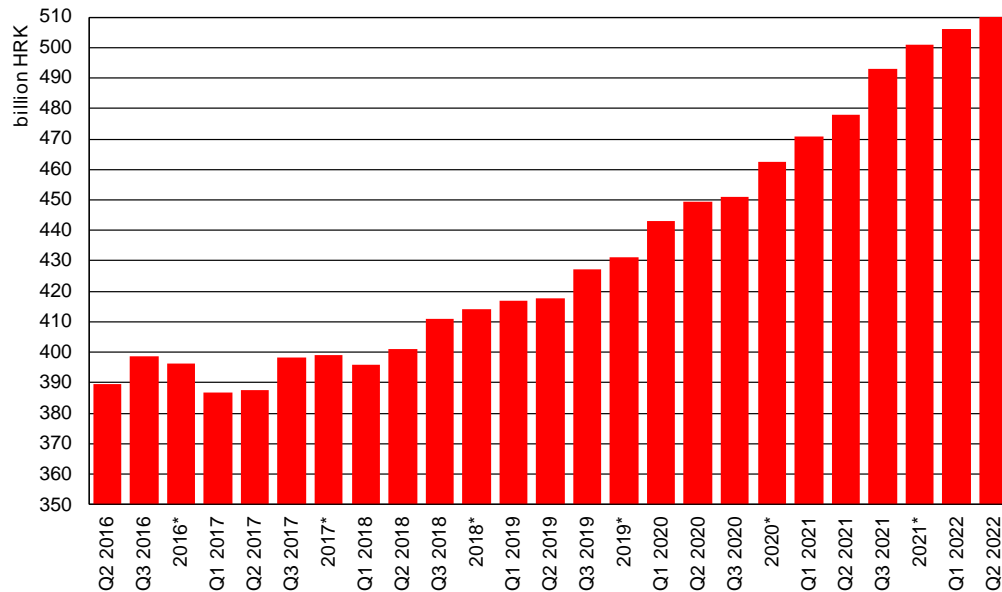
Leverage ratio and capital adequacy

Profitability

Quality of exposures

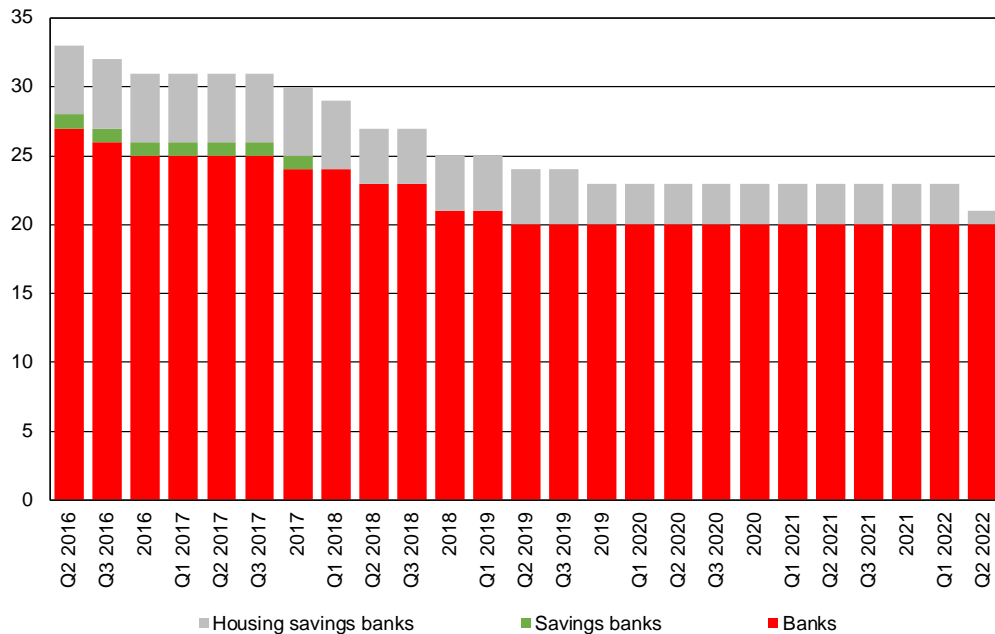
Structure of loans and deposits by institutional sectors

Total assets of credit institutions



*Audited data.
Source: CNB.

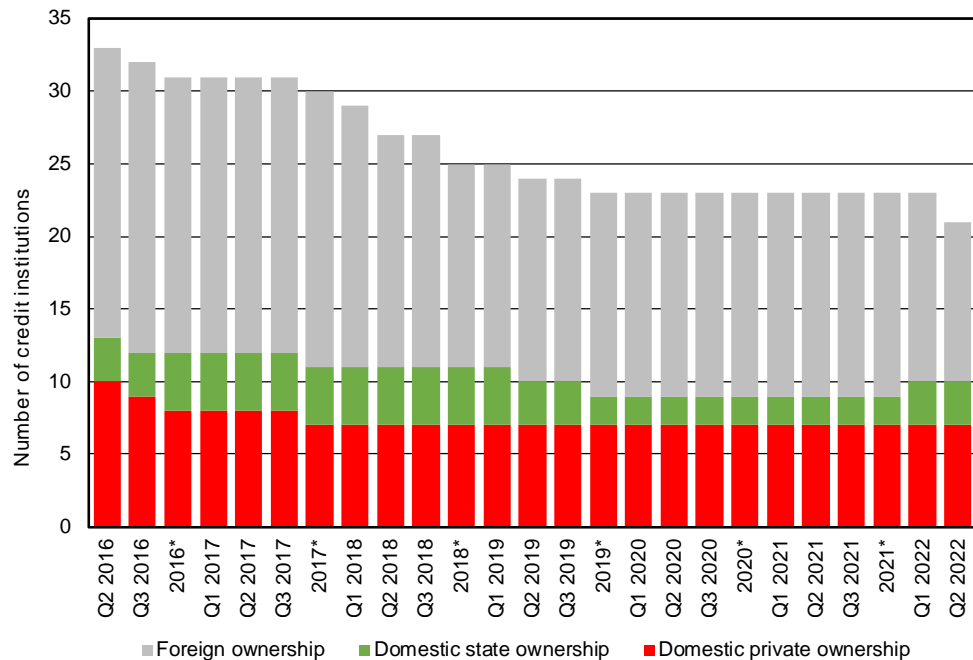
Number of credit institutions



Source: CNB.

Ownership structure of credit institutions

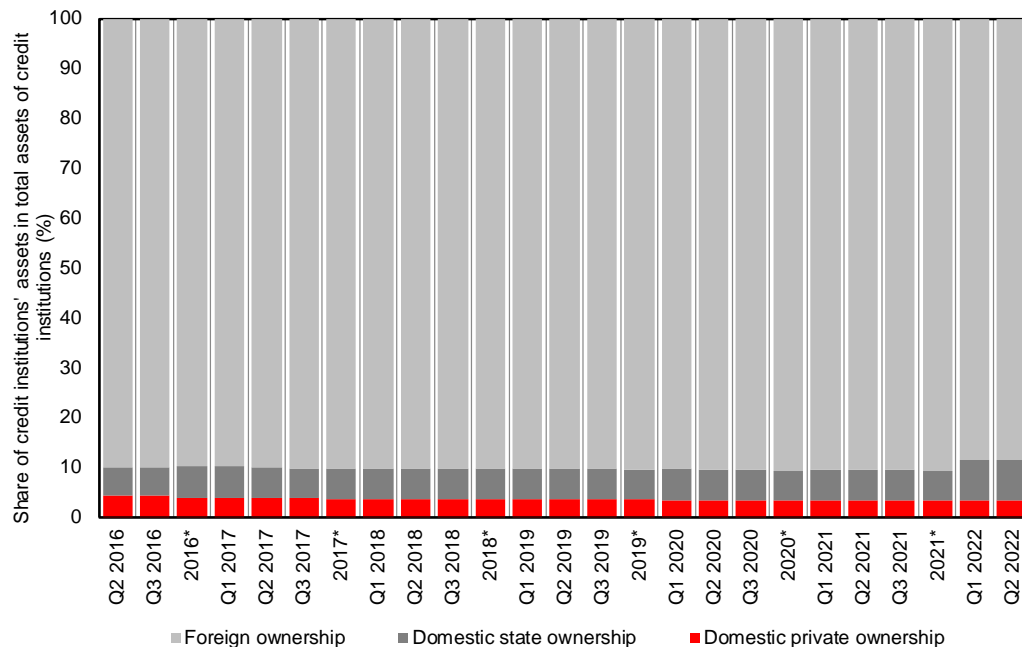
Number of credit institutions



*Audited data.
Source: CNB.

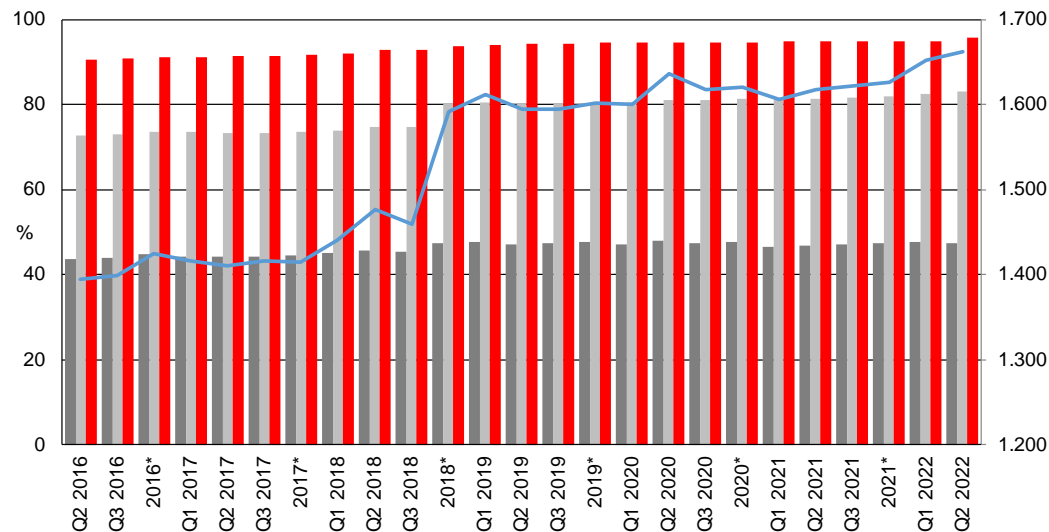
Ownership structure of credit institutions

Share of credit institutions' assets in total assets of credit institutions



*Audited data.
Source: CNB.

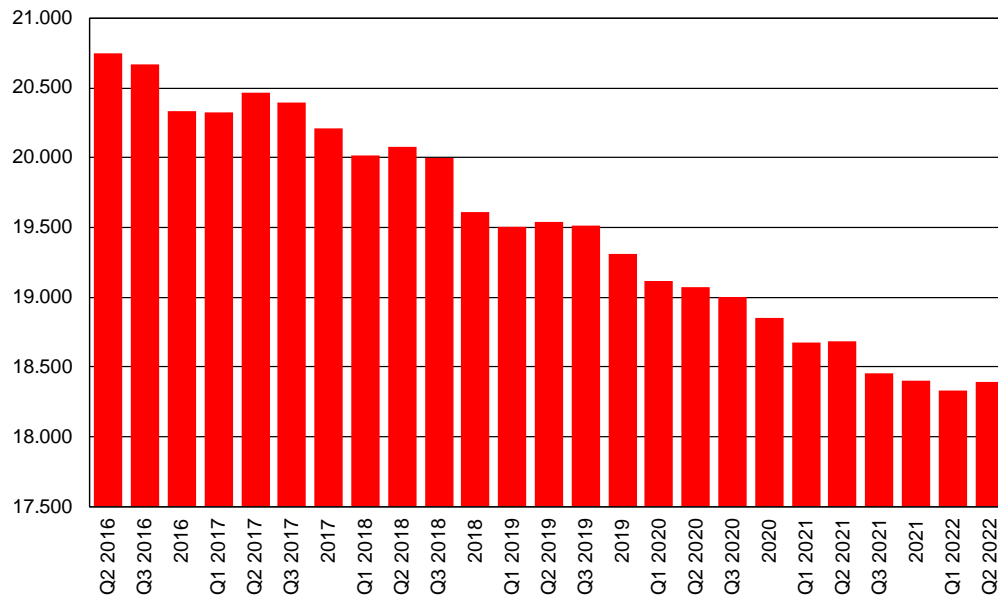
Indicators of asset concentration of credit institutions



*Audited data.
Source: CNB.

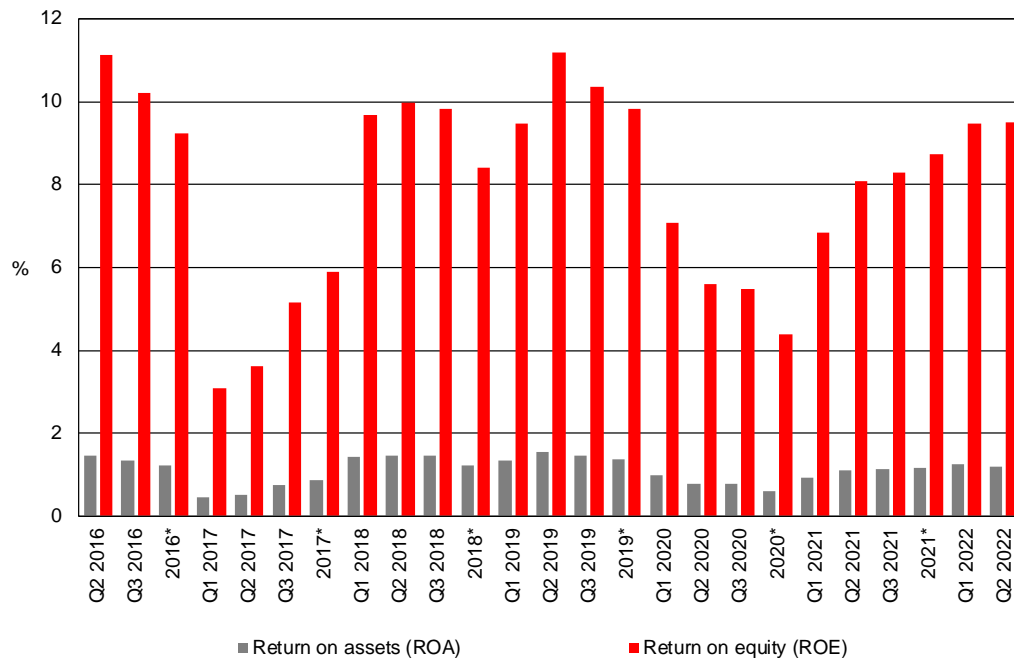
- Share of assets of the two largest credit institutions in total assets of credit institutions
- Share of assets of the five largest credit institutions in total assets of credit institutions
- Share of assets of the ten largest credit institutions in total assets of credit institutions
- Herfindahl-Hirschman Index for assets (HHI) – right scale

Number of employees in credit institutions



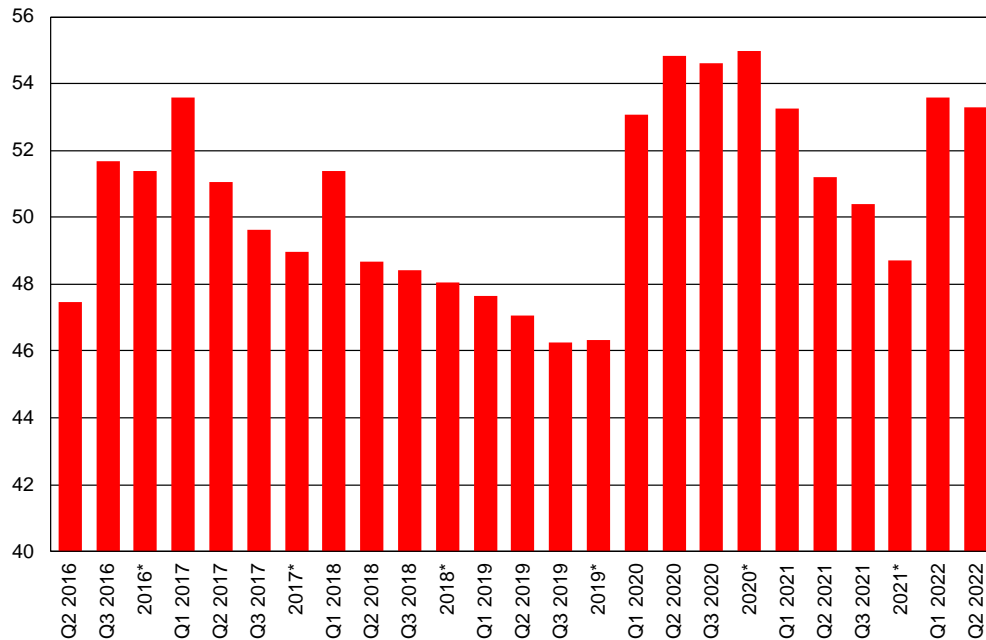
Source: CNB.

Return on assets (ROA) and return on equity (ROE)



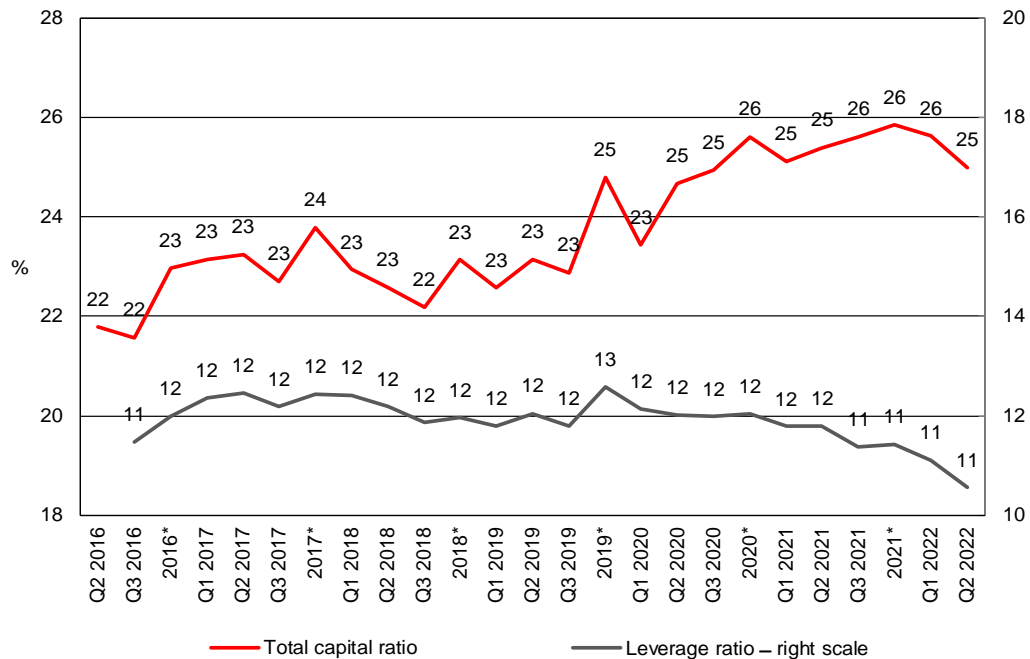
*Audited data.
Source: CNB.

Cost-to-income ratio (CIR)



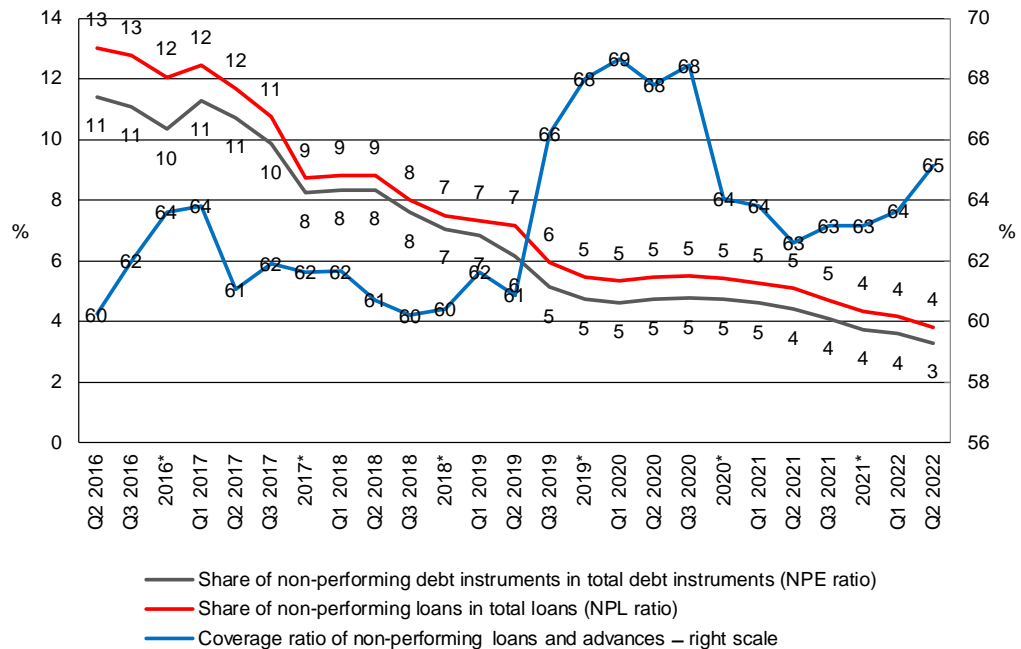
*Audited data.
Source: CNB.

Total capital ratio and leverage ratio



*Audited data.
Source: CNB.

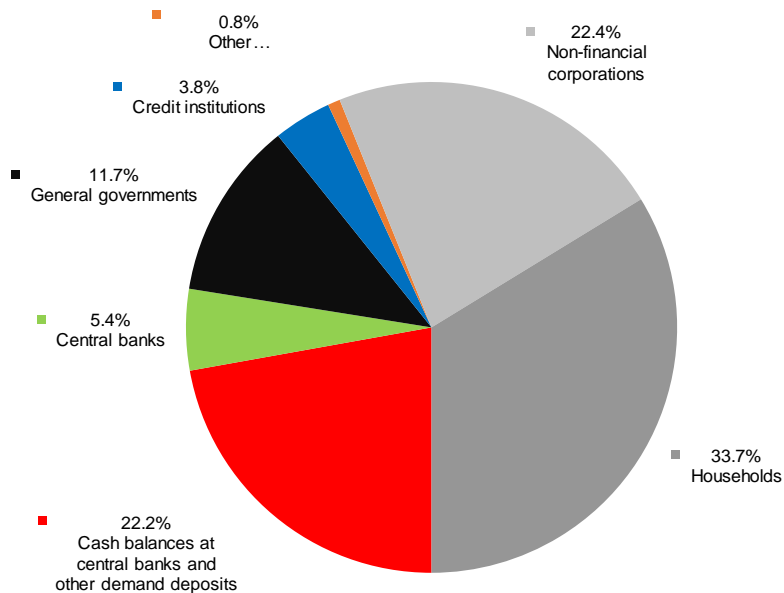
Quality of exposures



*Audited data.
Source: CNB.

Structure of extended loans by institutional sectors

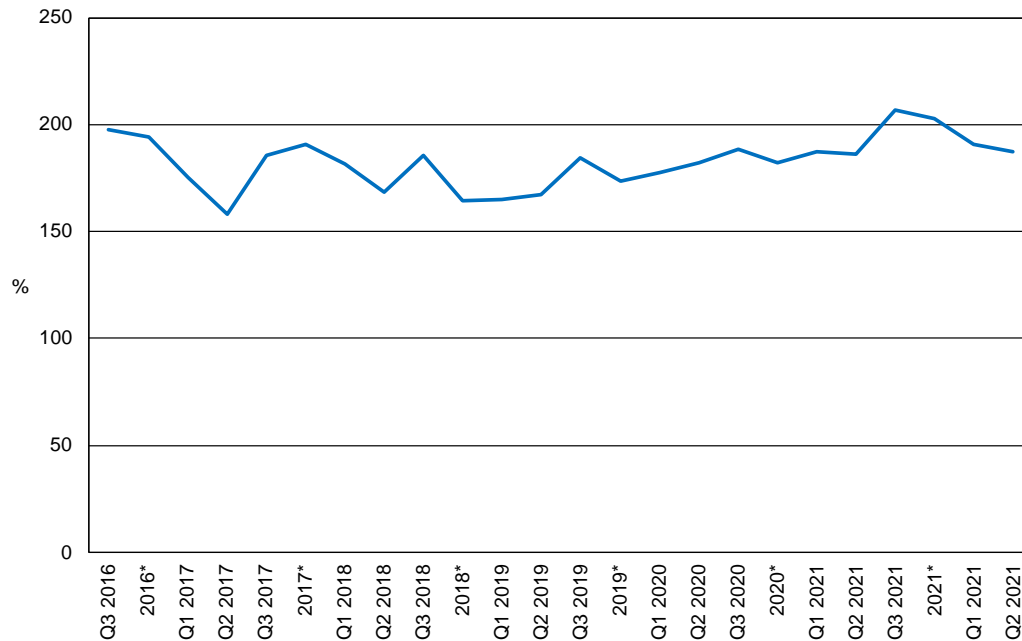
30 June 2022



Loans and advances

Source: CNB.

Liquidity coverage ratio (LCR)



*Audited data.
Source: CNB.