



CROATIAN NATIONAL BANK

---

# Standard presentation format

3rd quarter 2019

# Agenda

---

- **Central bank's objectives and structure**
- Real sector
- Monetary policy
- External sector
- Banking sector

# Central bank's objectives and tasks

---

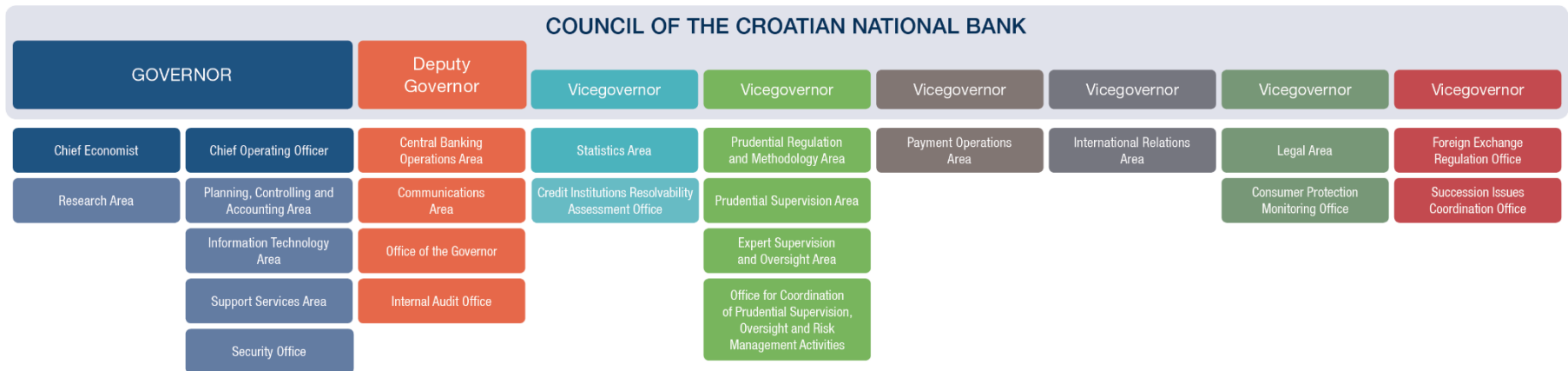
- ❑ STABILITY OF PRICES
- ❑ SUPPORTING THE GENERAL ECONOMIC POLICIES OF THE EUROPEAN UNION, WITHOUT PREJUDICE TO ITS PRIMARY OBJECTIVE
- ❑ Management of the international reserves
- ❑ Issuing banknotes and coins
- ❑ Issuing and revoking licenses for banks and bank supervision
- ❑ Regulating, improving 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



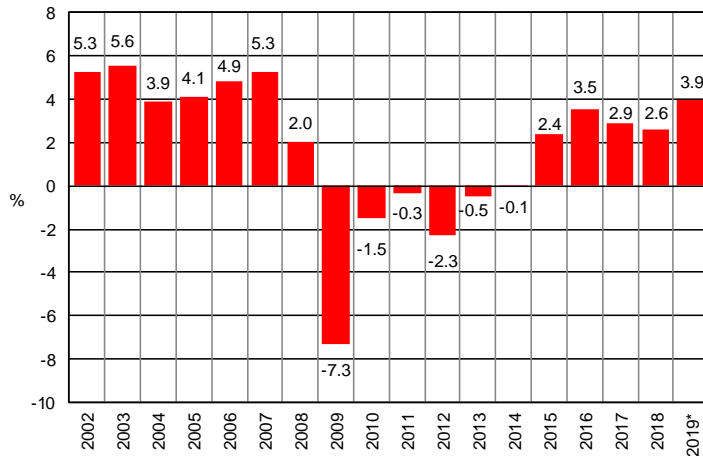
# Agenda

---

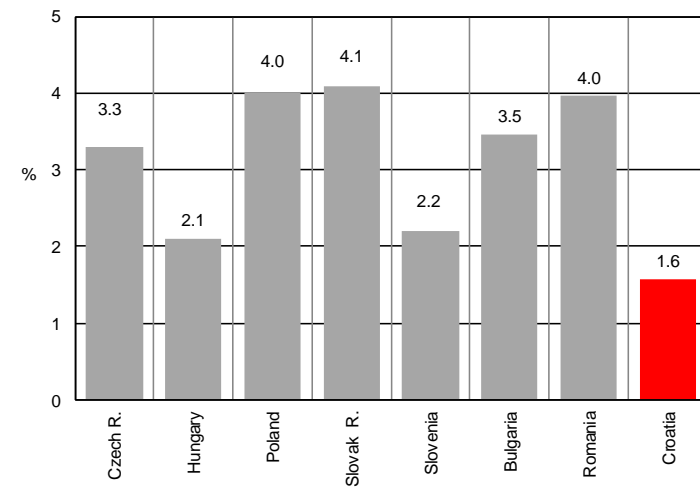
- Central bank's objectives and structure
- **Real sector**
  - **Aggregate demand and supply**
  - **Labour market**
  - **Prices**
  - **Fiscal policy**
- Monetary policy
- External sector
- Banking sector

# Real GDP rates of change

## Croatia



## Peer countries



\* The data refer to the first quarter of 2019.

Note: The data are according to ESA 2010 methodology, from 2017 are provisional. More information can be found on [www.dzs.hr](http://www.dzs.hr).

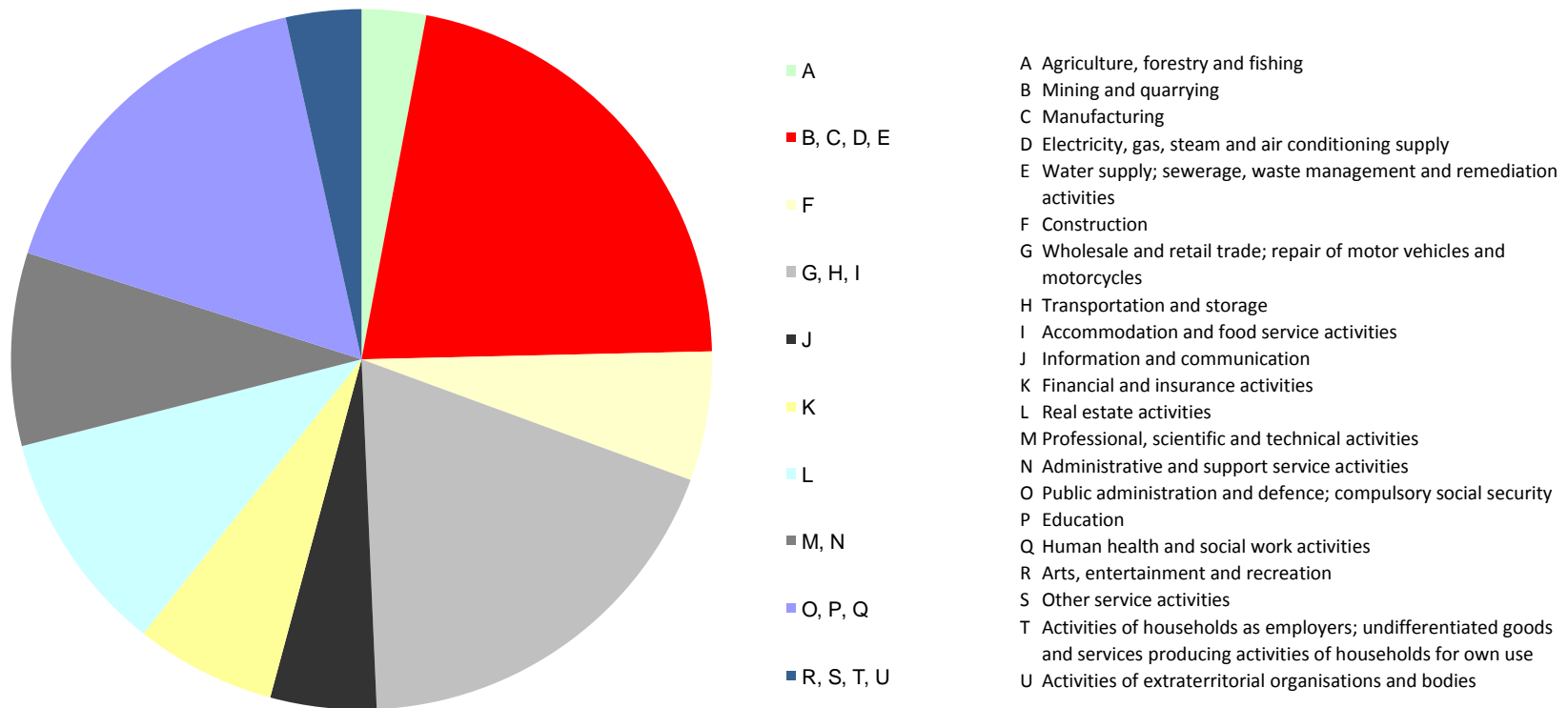
Source: CBS.

Average annual growth rate, 2003 – 2018

Note: The data are according to ESA 2010 methodology.

Sources: Eurostat and CBS.

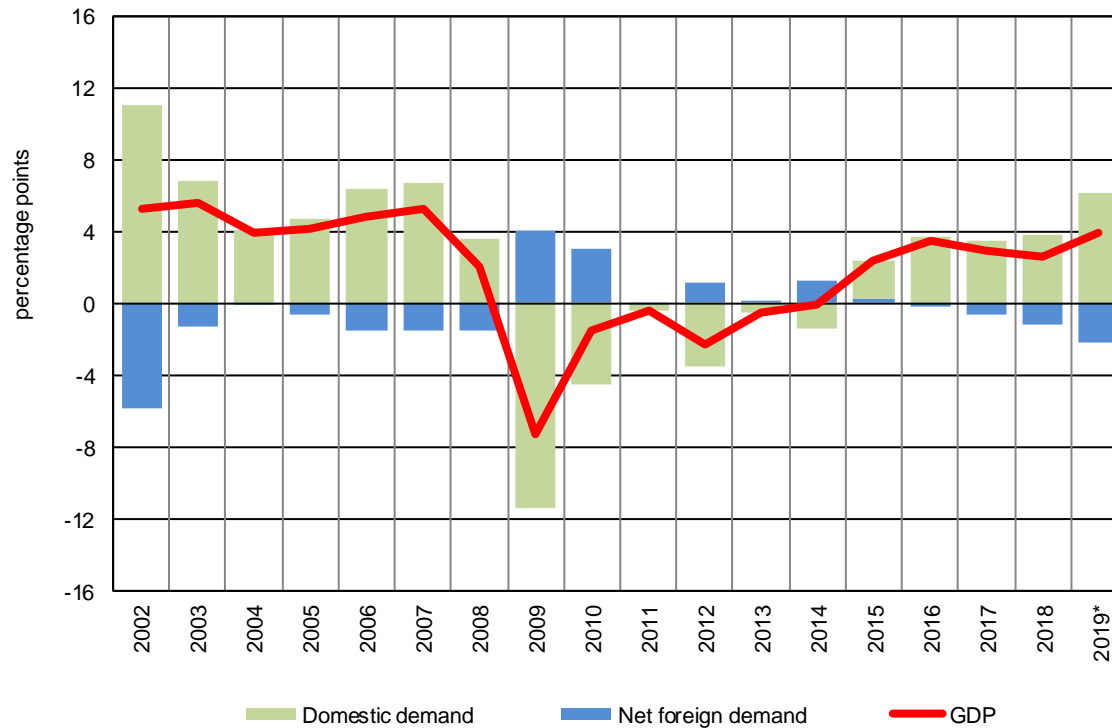
# Gross value added structure, in current prices, 2019



\* The data refer to the first quarter of 2019.  
 Note: The data are according to ESA 2010 methodology.  
 Source: CBS.



# Contributions of domestic and net foreign demand to GDP growth



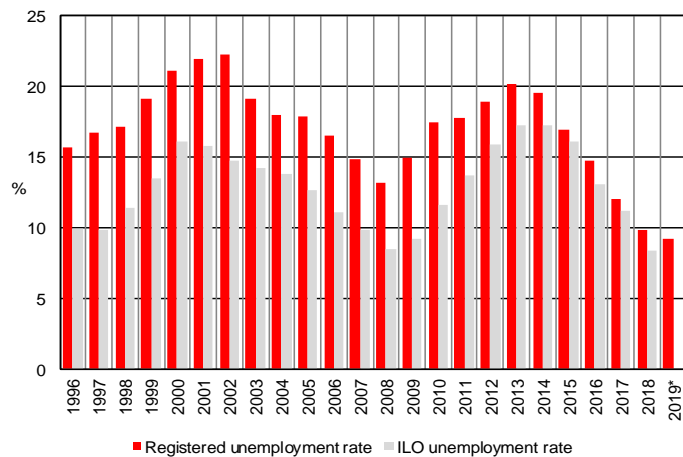
\* The data refer to the first quarter of 2019.

Note: The data are according to ESA 2010 methodology.

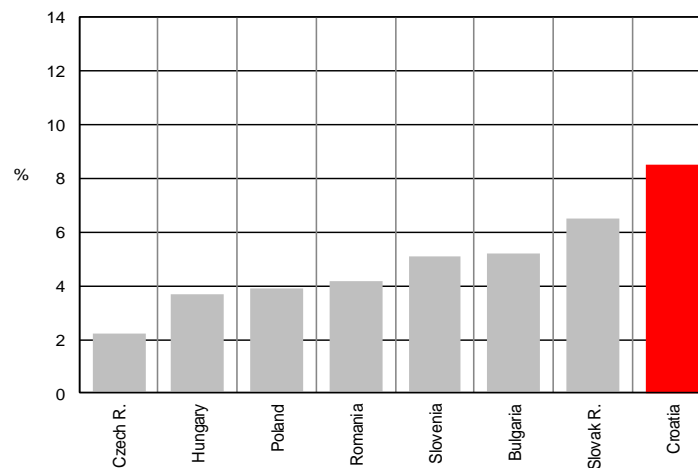
Source: CBS.

# Unemployment rate

## Croatia



## ILO unemployment rate, peer countries, 2018



\* Registered unemployment rate - the first five months of 2019.

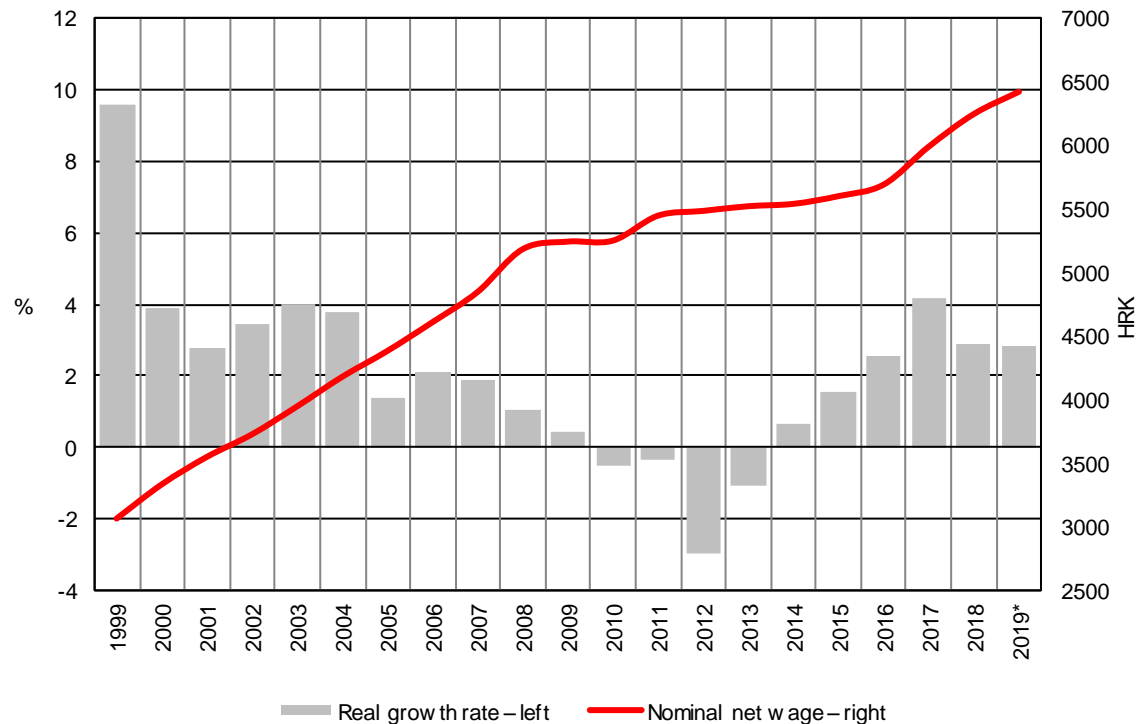
Note: Since the beginning of 2007 results from the Labour Force Survey have been published in quarterly dynamics. ILO unemployment rate refers to persons aged 15 years and over. Data on ILO unemployment rate for period 2007 – 2014 have been harmonised with the results of the Census of Population, Households 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.

Source: CBS.

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

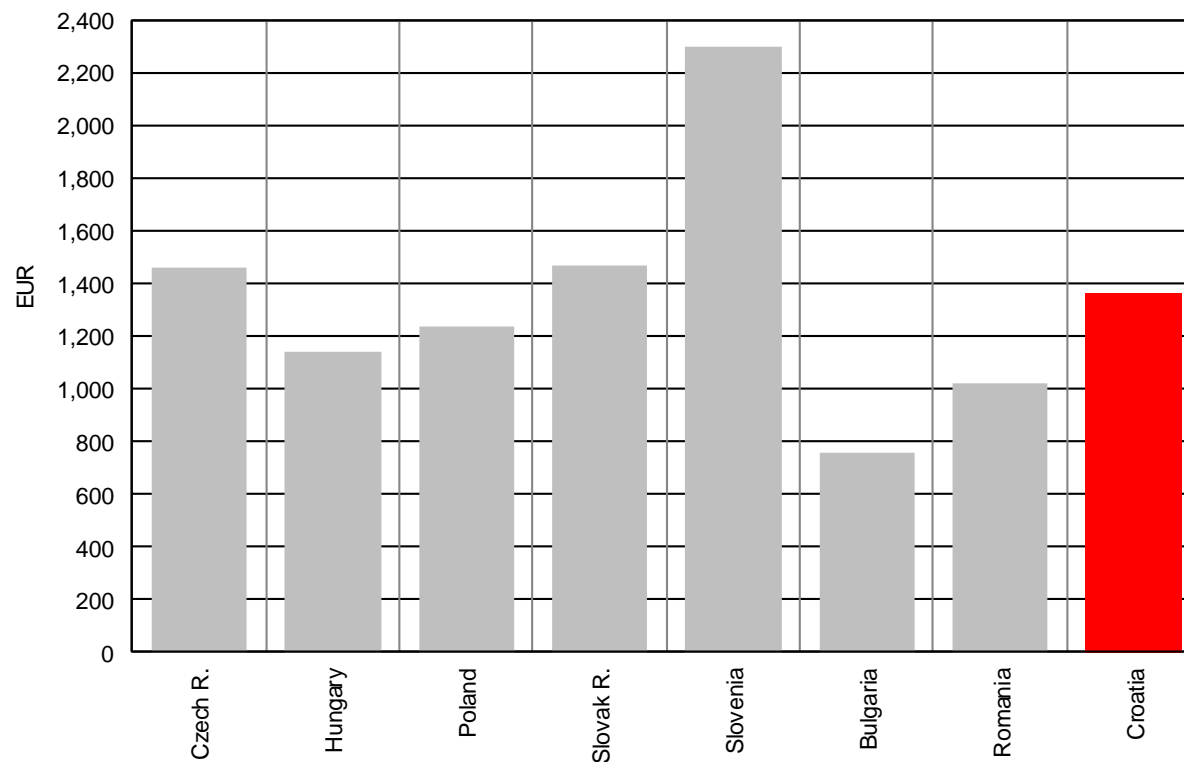
Sources: Eurostat and CBS.

# Nominal and real net wages



\* Last available data is for wages paid for April.  
Source: CBS, CNB.

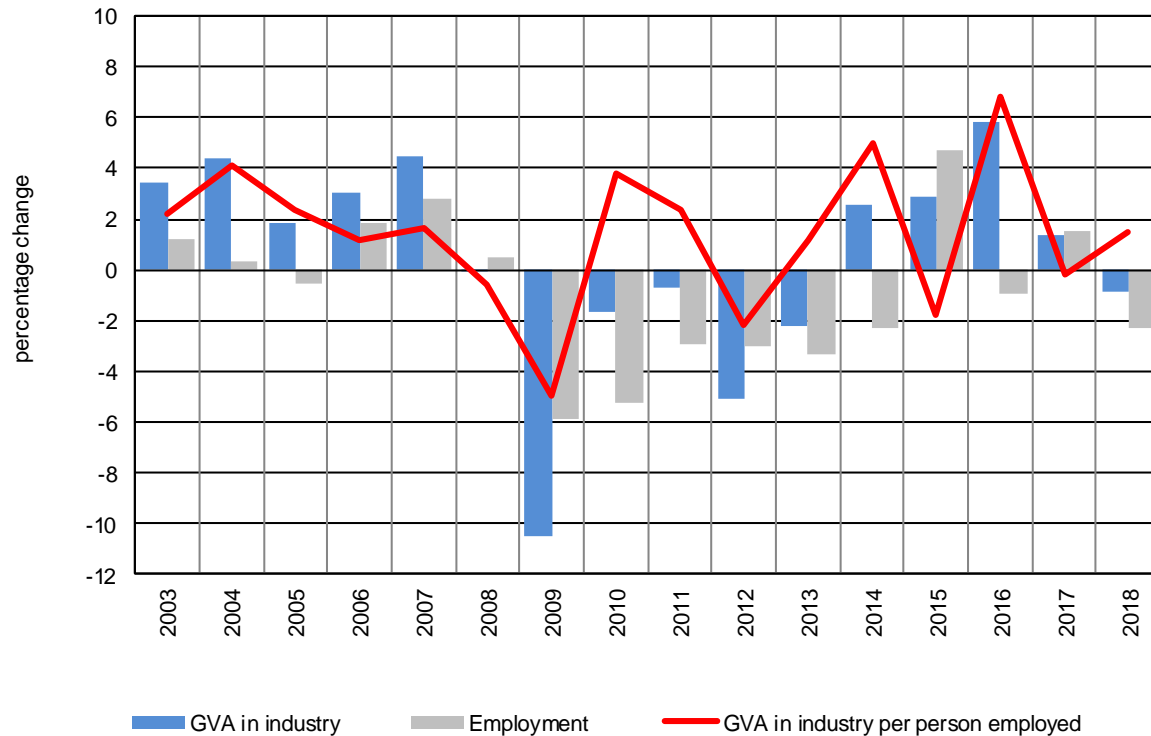
# Average monthly compensation per employee in economy, 2018



Note: Average monthly compensation per employee in economy is calculated as a ratio of total monthly compensation paid to employees and number of employees. Data for Croatia refers to the first three quarters.

Source: Eurostat.

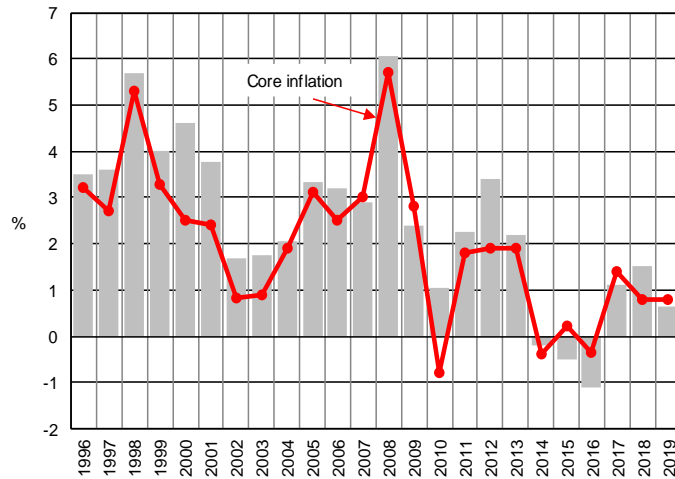
# Gross value added in industry per person employed



Source: CBS.

# Inflation

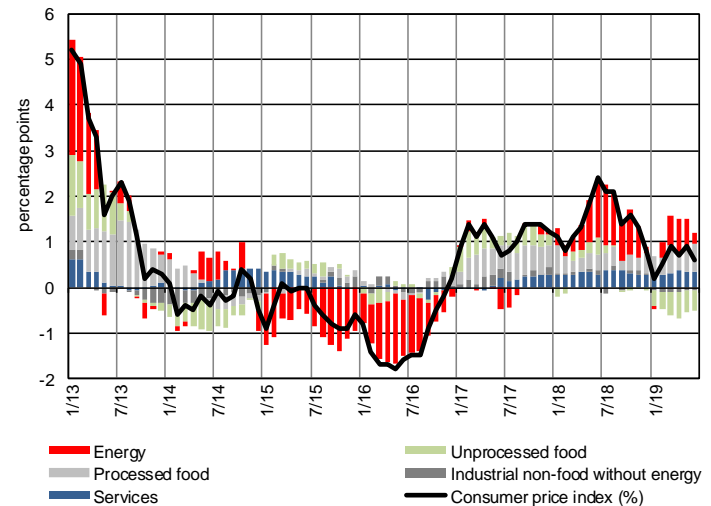
## Croatia



Note: CPI inflation (1996-1998 RPI inflation) and core inflation, average year-on-year rate of change.  
Data for 2019 refer to January – June 2019.

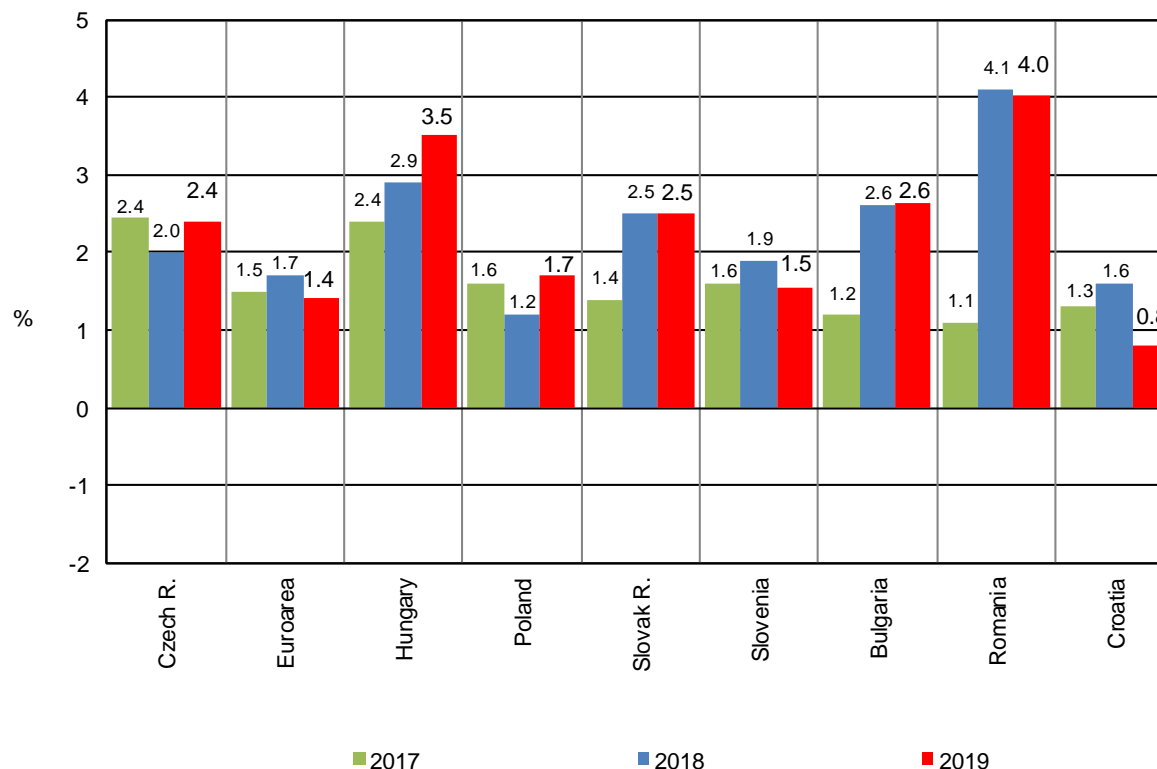
Source: CBS.

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



Sources: CBS and CNB's calculation.

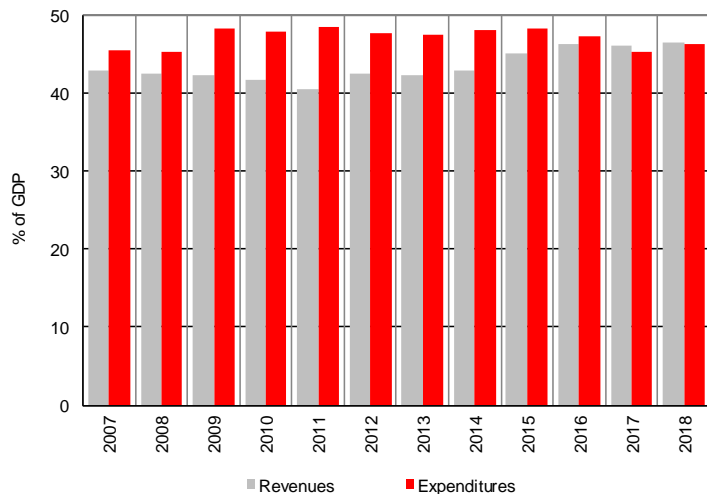
# Inflation in Croatia, euroarea and peer countries



Note: Average year-on-year rate of change. Inflation is measured by harmonized consumer price index. Data for 2019 refer to January – June 2019.  
Source: Eurostat.

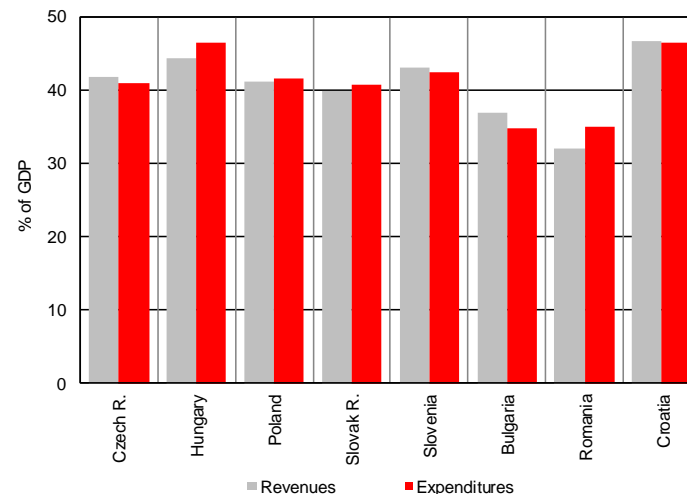
# Consolidated general government revenues and expenditures

## Croatia



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

## Peer countries, 2018

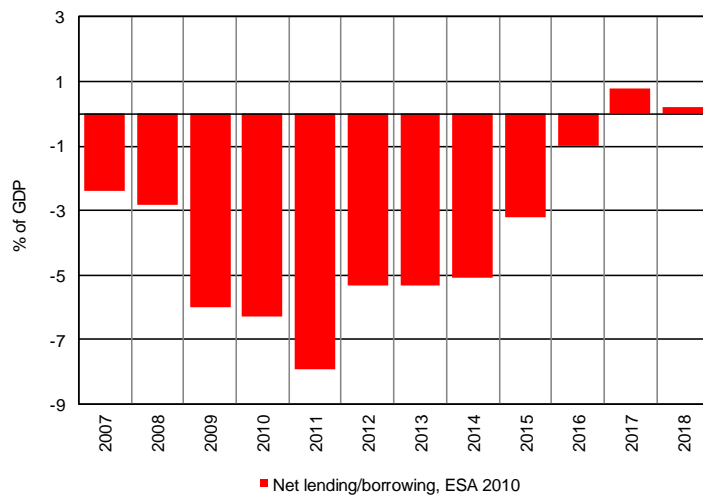


Note: According to ESA 2010 methodology.  
Sources: Eurostat and CBS.



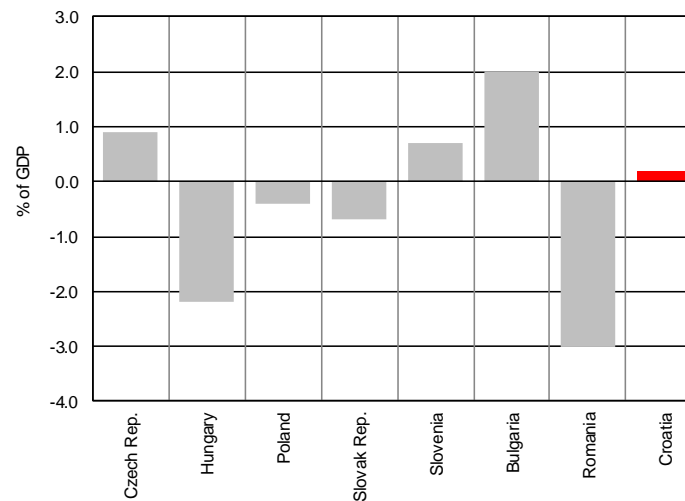
# Consolidated general government balance

## Croatia



Sources: Eurostat and CBS.

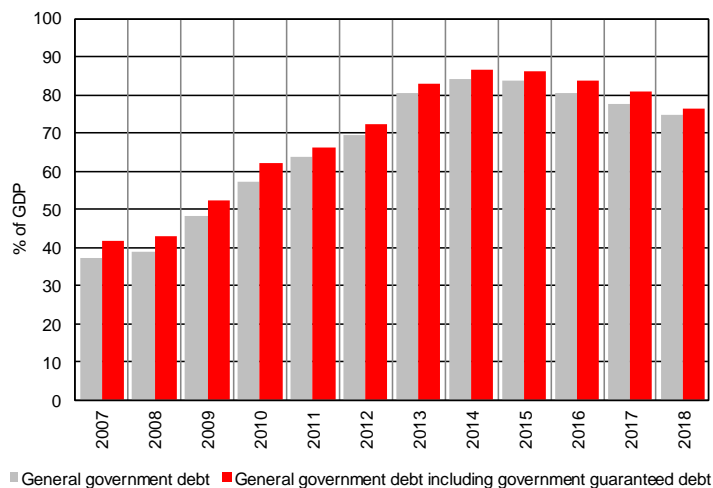
## Peer countries, 2018



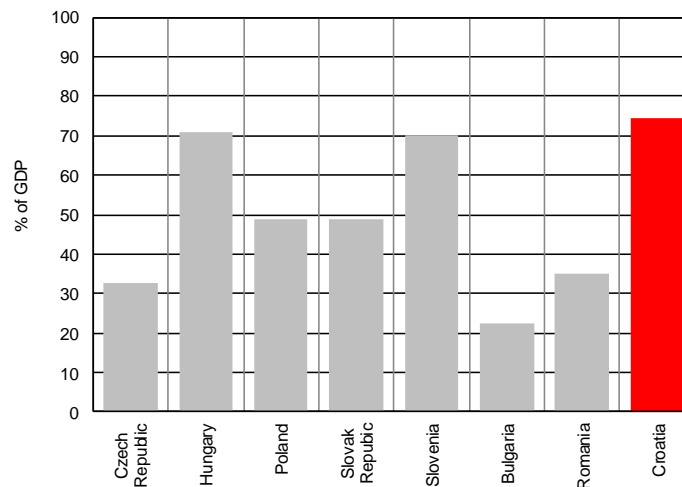
Note: According to ESA 2010 methodology.  
Sources: Eurostat and CBS.

# General government debt

## Croatia



## Peer countries, 2018



Note: Data are revised since December 2001 due to the further alignment of classification of institutional units to ESA2010 standard. Government guaranteed debt includes other sectors' domestic and external debt guaranteed by central government.  
Sources: Eurostat and CNB.

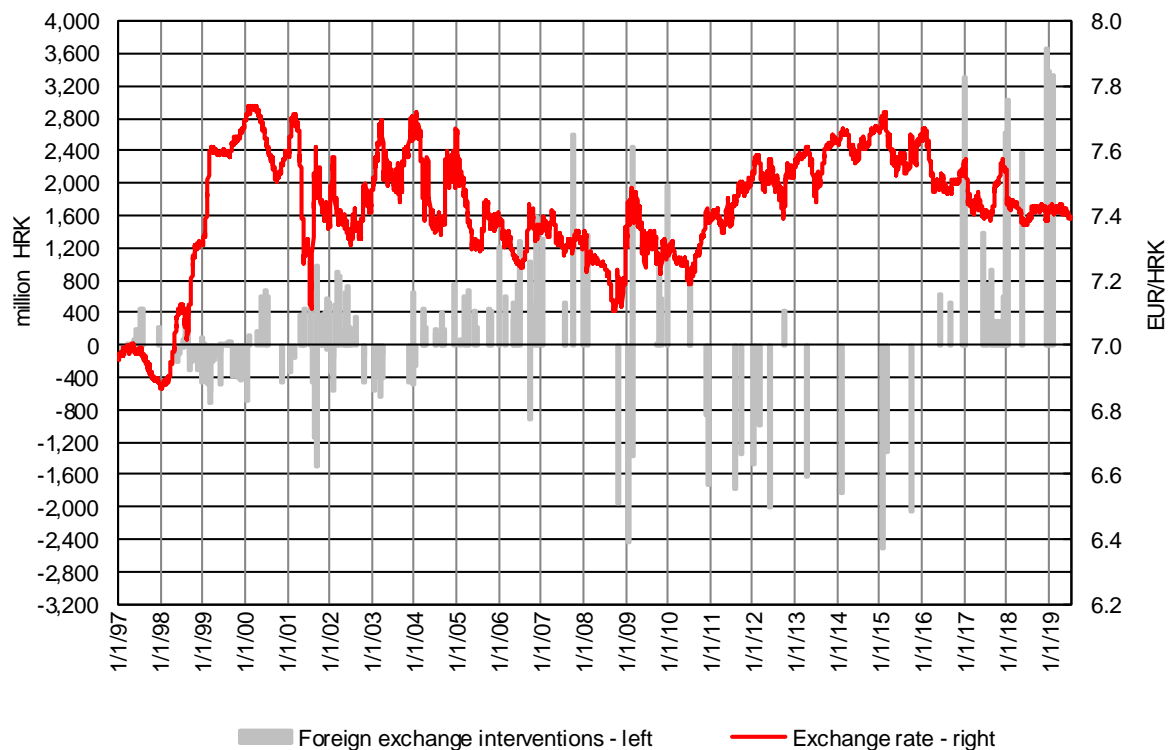
Sources: Eurostat and CNB.

# Agenda

---

- Central bank's objectives and structure
- Real sector
- **Monetary policy**
  - **Central bank's policy**
  - **Monetary developments**
  - **Interest rates**
- External sector
- Banking sector

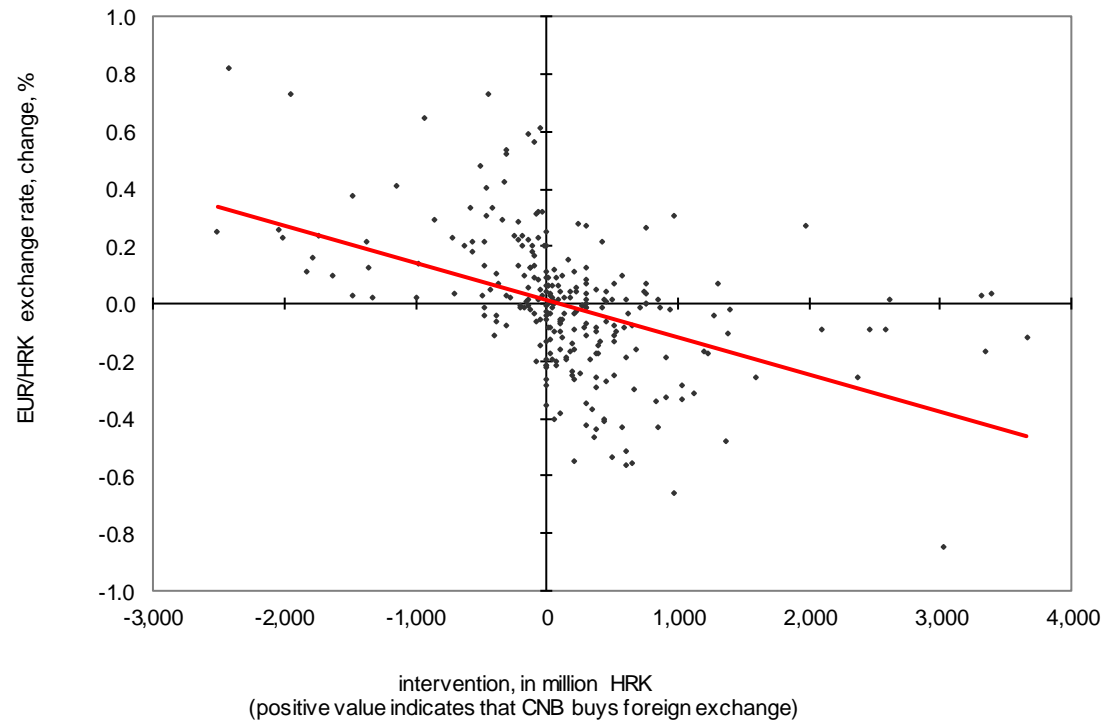
# Foreign exchange interventions and exchange rate



Note: EUR/HRK exchange rate before 1999 is calculated as product of DEM/HRK exchange rate and conversion factor (1.95583).

Source: CNB.

# Exchange rate movements before CNB intervention and amount of intervention, 1996 – 2019

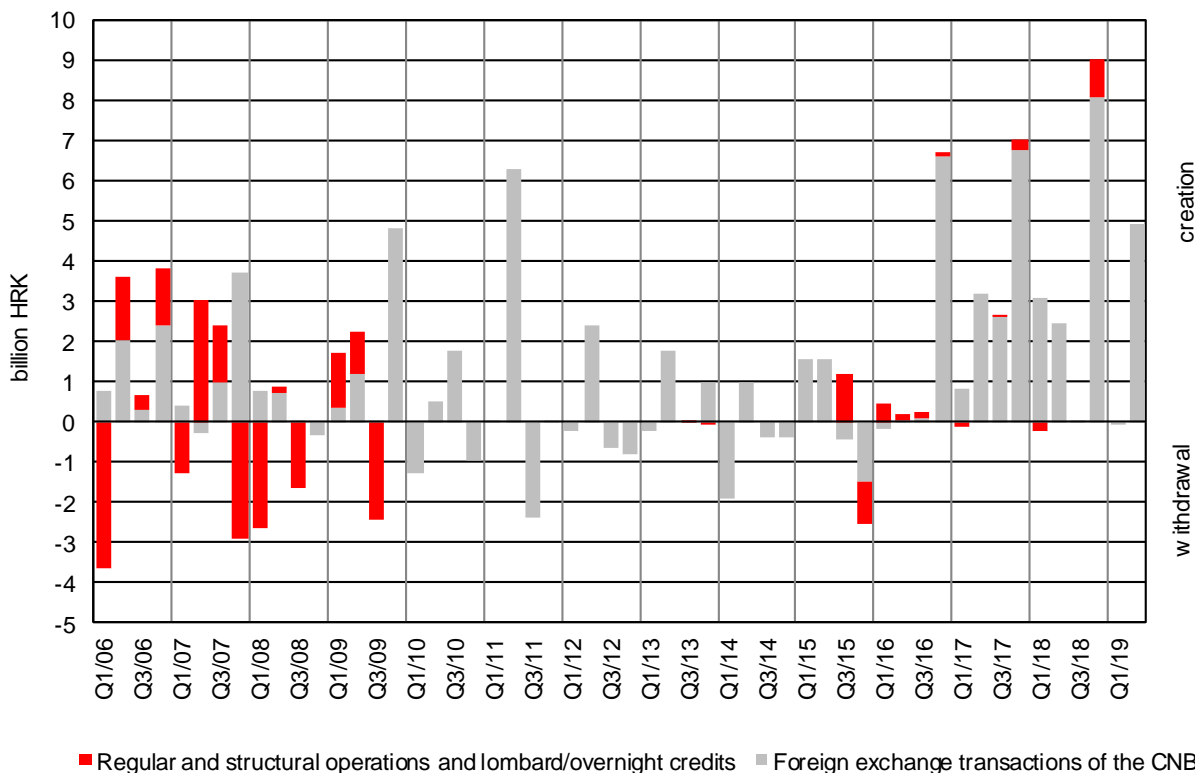


Exchange rate of the intervention day relative to exchange rate 4 days prior to intervention (y-axis) and the intervention amount (x-axis).

Note: EUR/HRK exchange rate before 1999 is calculated as product of DEM/HRK exchange rate and conversion factor (1.95583).

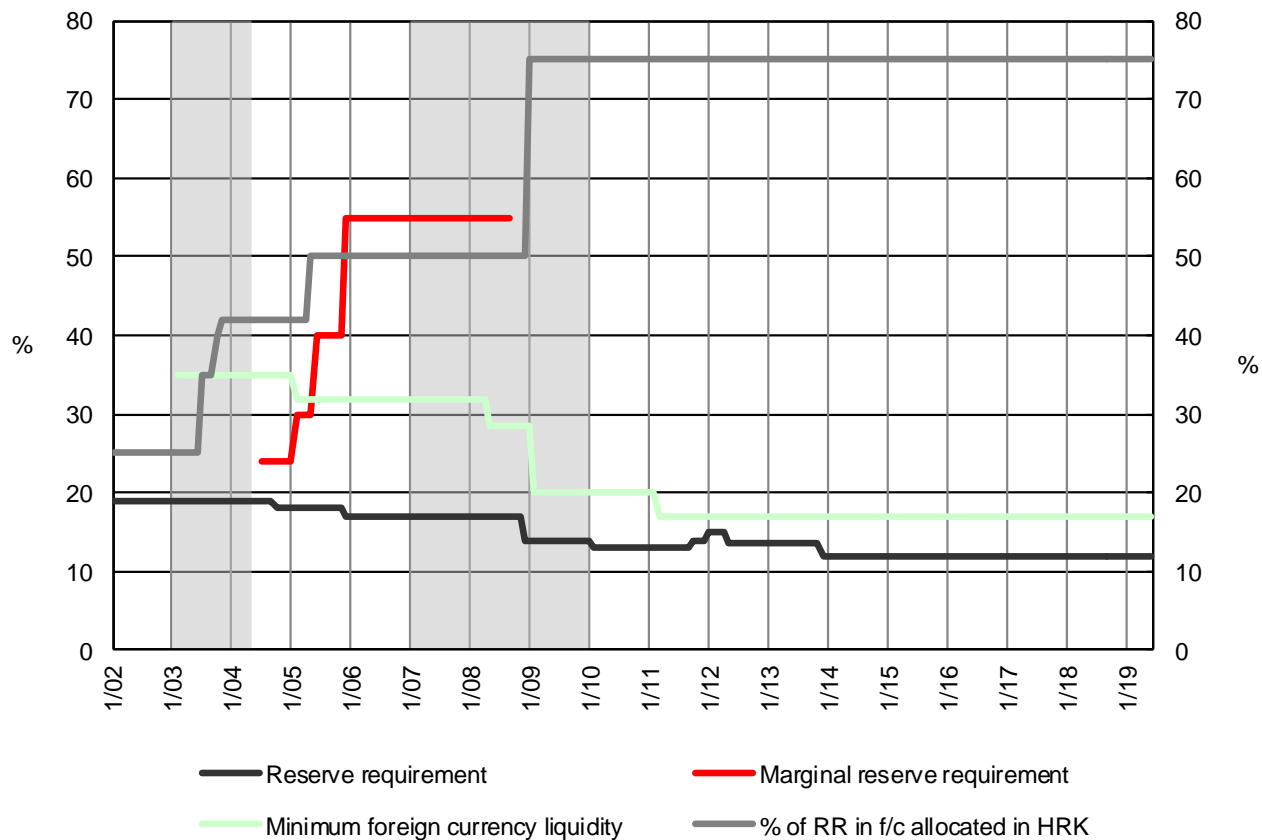
Source: CNB.

# Creation and withdrawal of reserve money



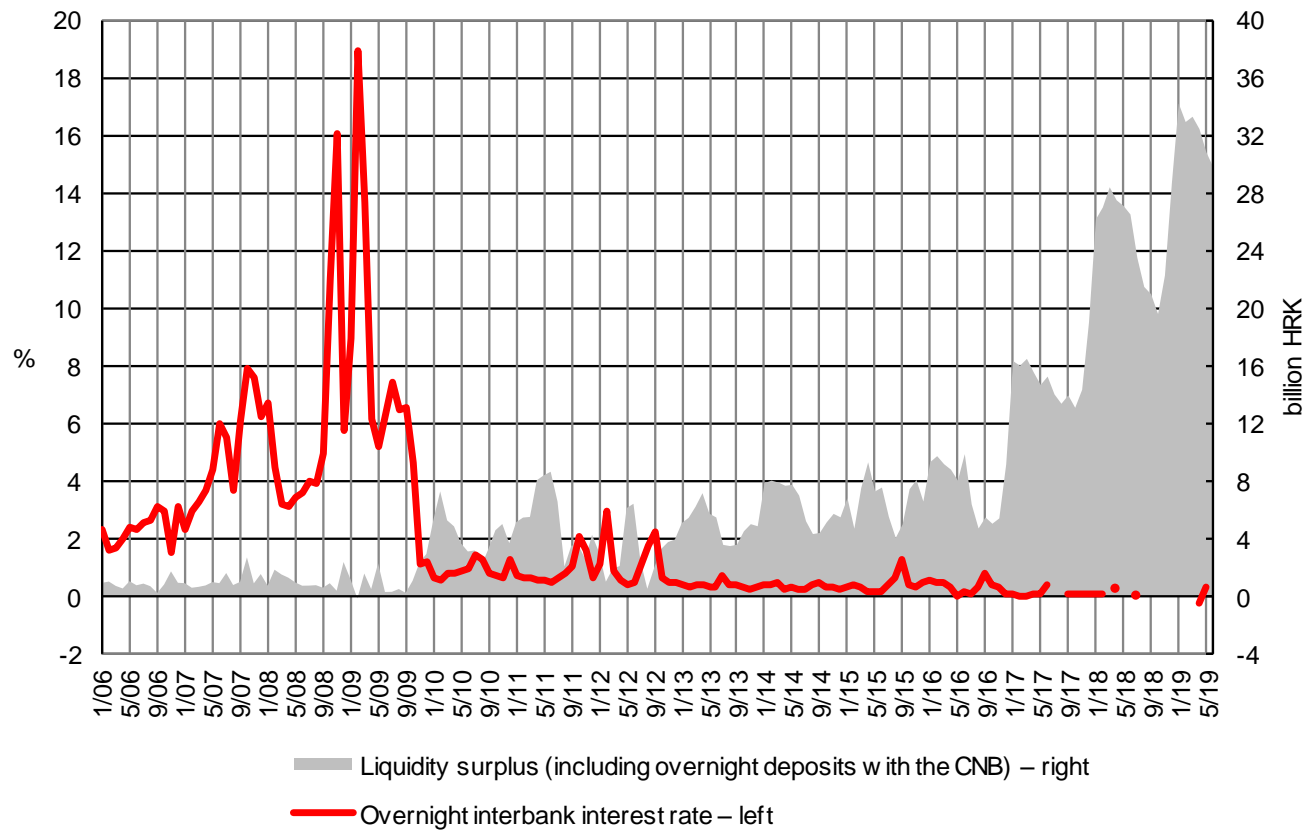
Note: The possibility of using Lombard credits was abolished, while the possibility of using overnight credits was introduced on 28 September 2017. Values for the regular and structural operations, as well as lombard/overnight credits are shown as change in one quarter. Foreign exchange transactions 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



Note: Shaded areas represent periods when banks' credit growth was regulated by compulsory CNB bills.  
Source: CNB.

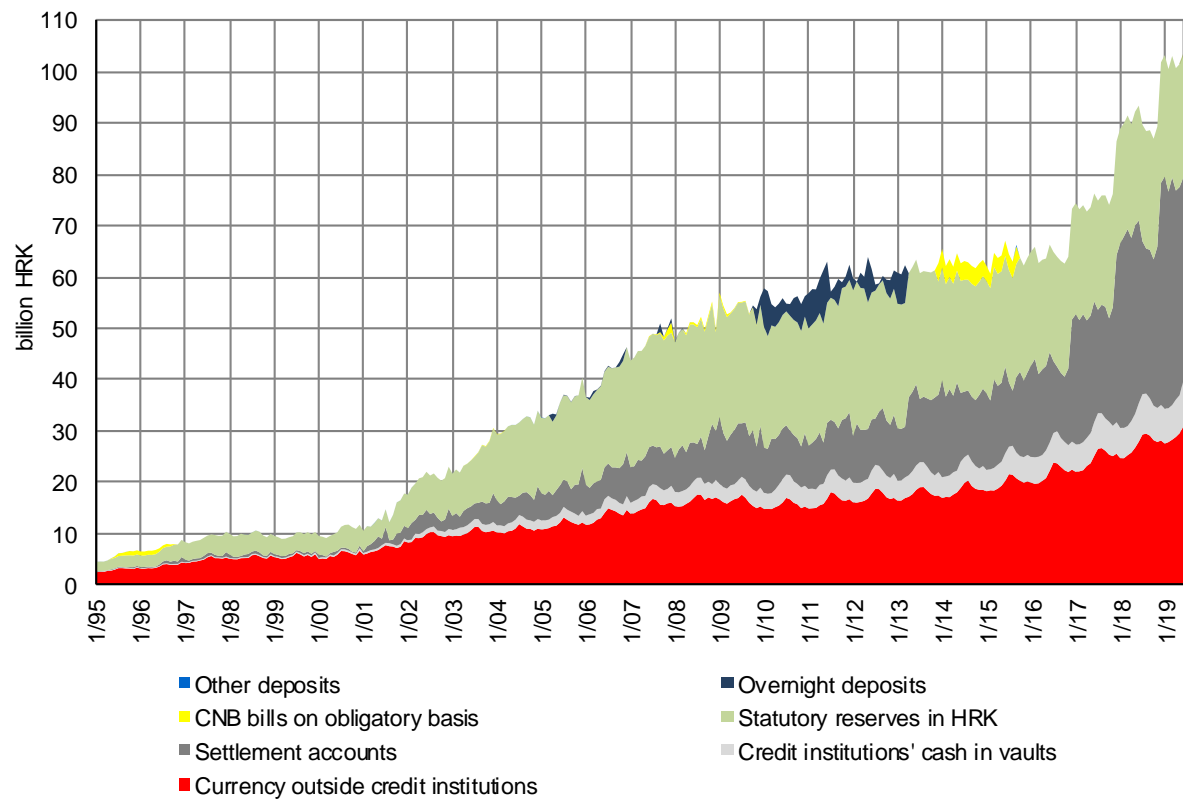
# Liquidity surplus and overnight interest rate



Source: CNB.

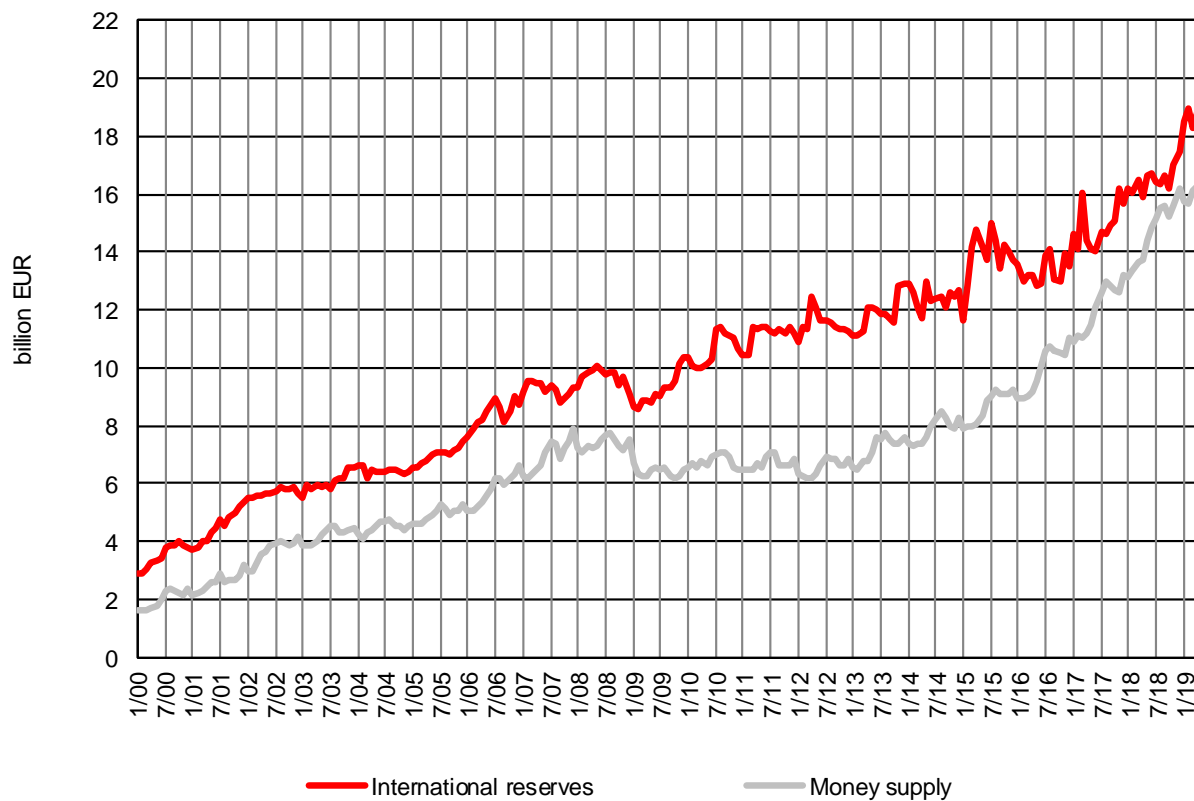


# Base money M0



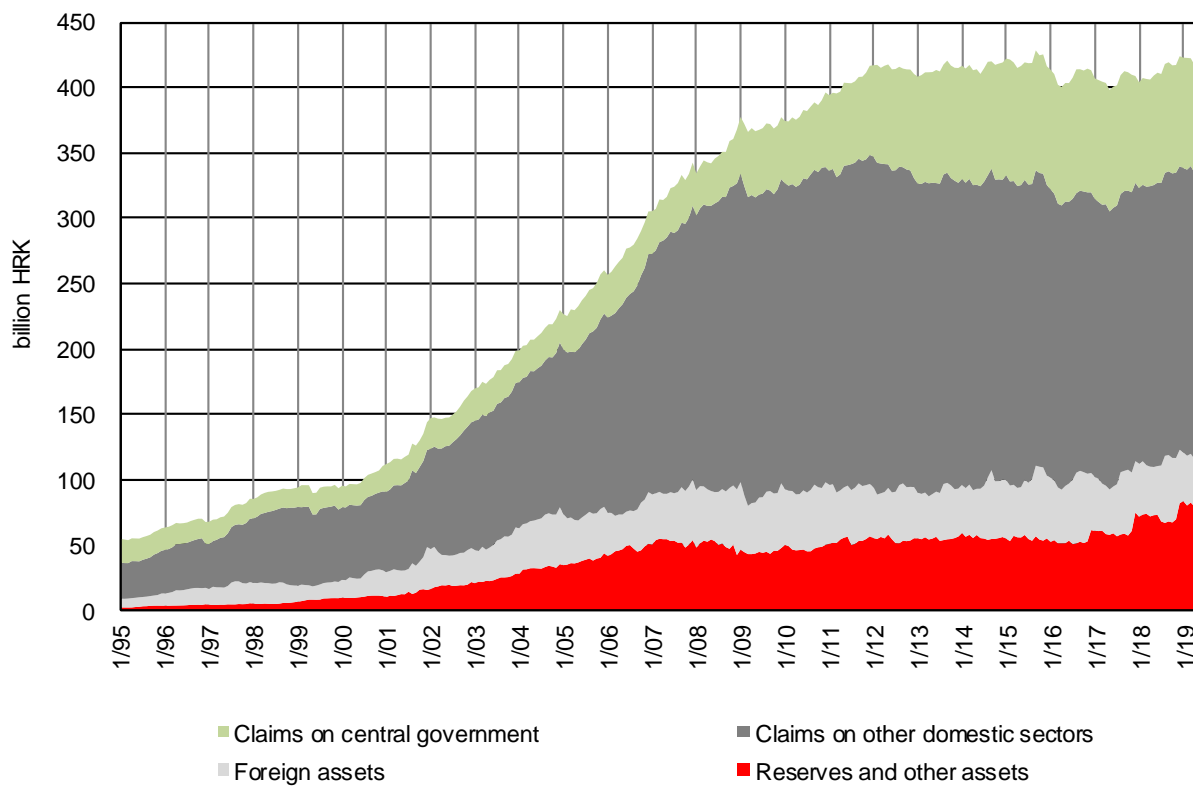
Source: CNB.

# CNB's international reserves and money supply



Source: CNB.

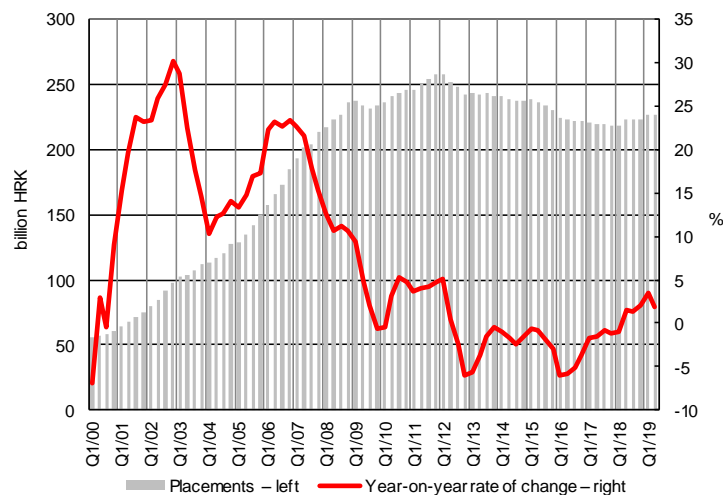
# Other monetary financial institutions' assets



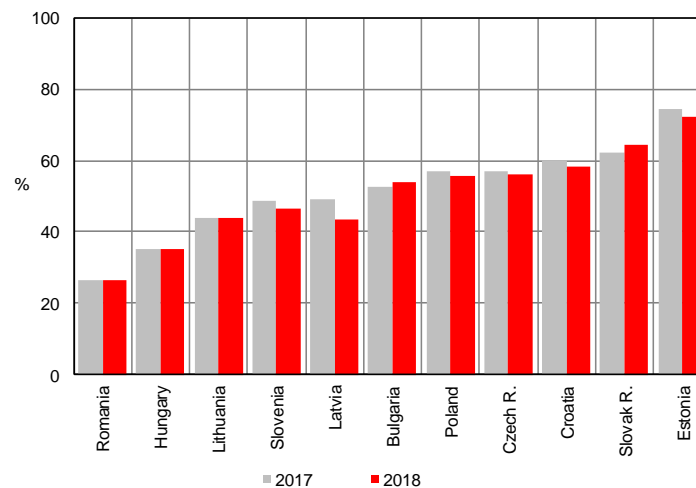
Source: CNB.

# Placements to other domestic sectors (excluding government)

## Placements to other domestic sectors (excluding government)



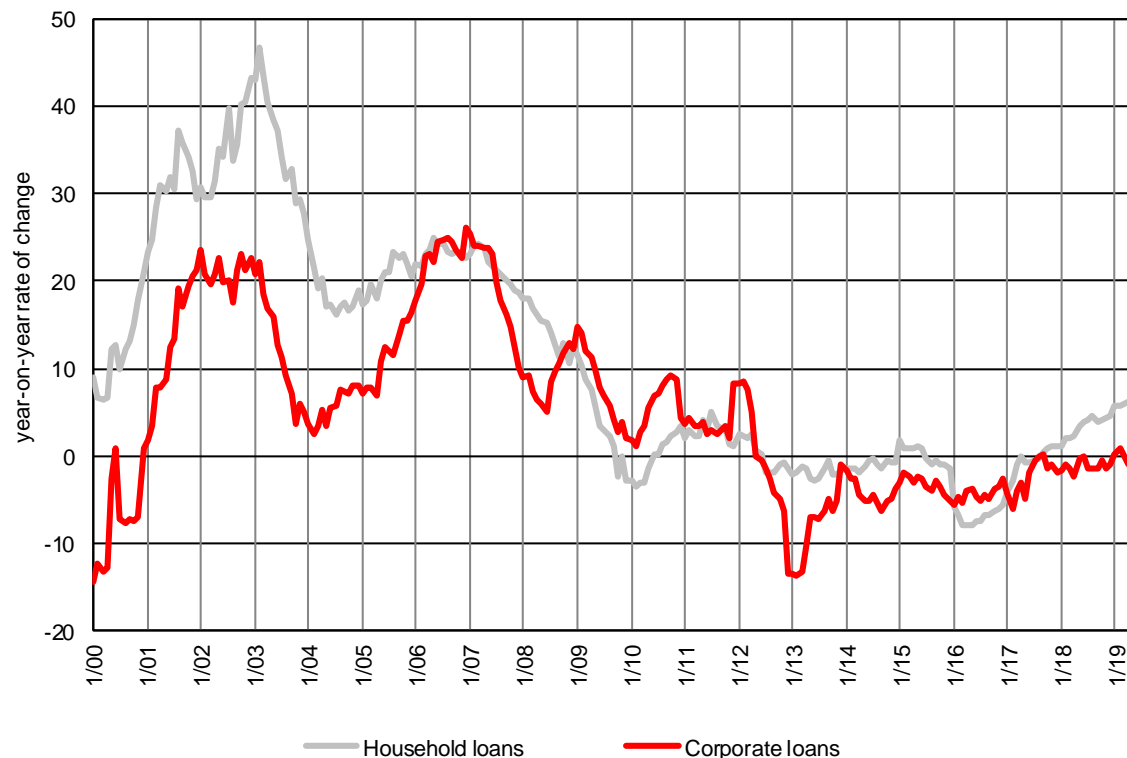
## Placements-to-GDP ratio



Note: One-off effects substantially decreased the stock of placements and in 2012 they relate to the assumption of shipyards loans by the Ministry of Finance and the transaction of one bank which, aiming to reduce its partly recoverable and irrecoverable placements transferred a portion of its claims to a company indirectly owned by the parent bank. One-off effects in 2013 relate to the bankruptcy of Centar banka, methodological changes in the recording of fees and another transfer of one bank's recoverable and irrecoverable placements to an affiliated enterprise, while 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.

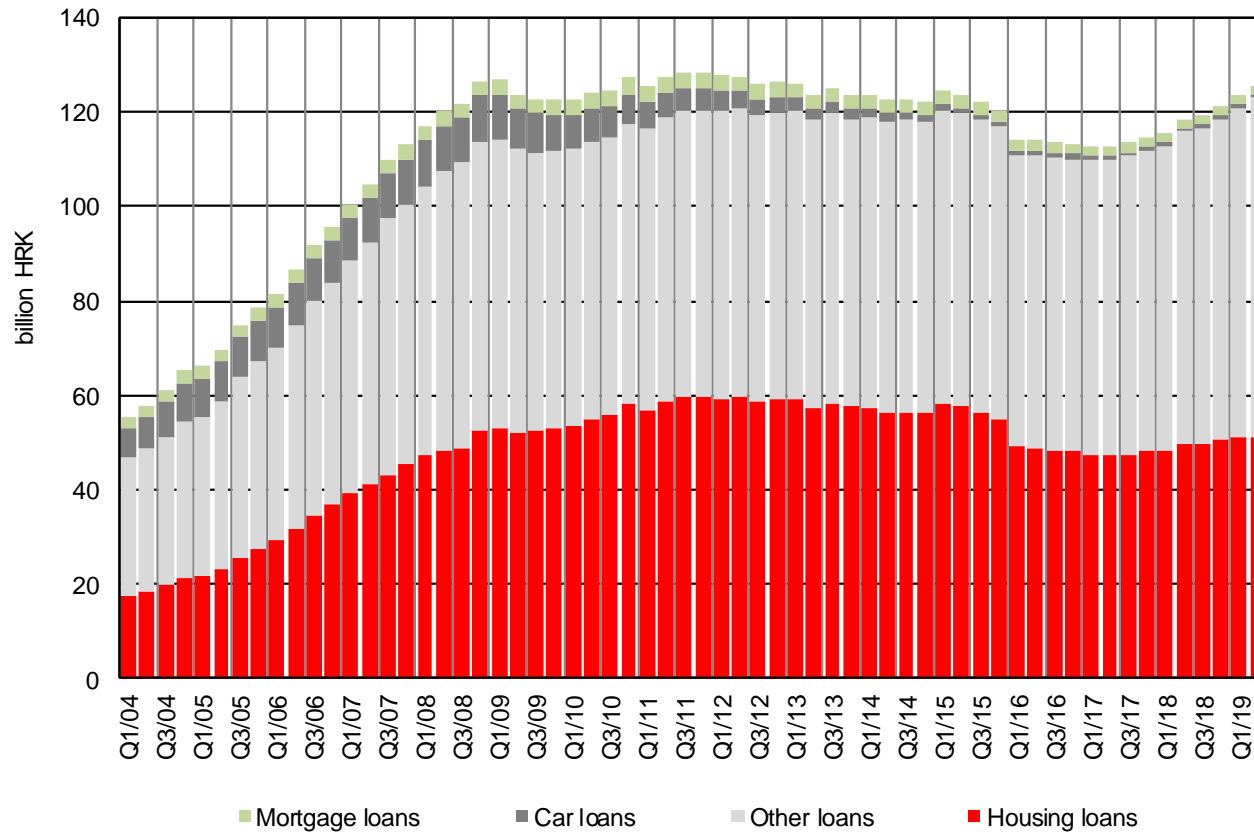
# Loans of other monetary financial institutions



Note: One-off effects substantially decreased the stock of loans and in 2012 they relate to the assumption of shipyards loans by the Ministry of Finance and the transaction of one bank which, aiming to reduce its partly recoverable and irrecoverable placements transferred a portion of its claims to a company indirectly owned by the parent bank. One-off effects in 2013 relate to the bankruptcy of Centar banka, methodological changes in the recording of fees and another transfer of one bank's recoverable and irrecoverable placements to an affiliated enterprise, while in 2015 and 2016 they relate to partial write-off of loans to households indexed to the Swiss Franc.

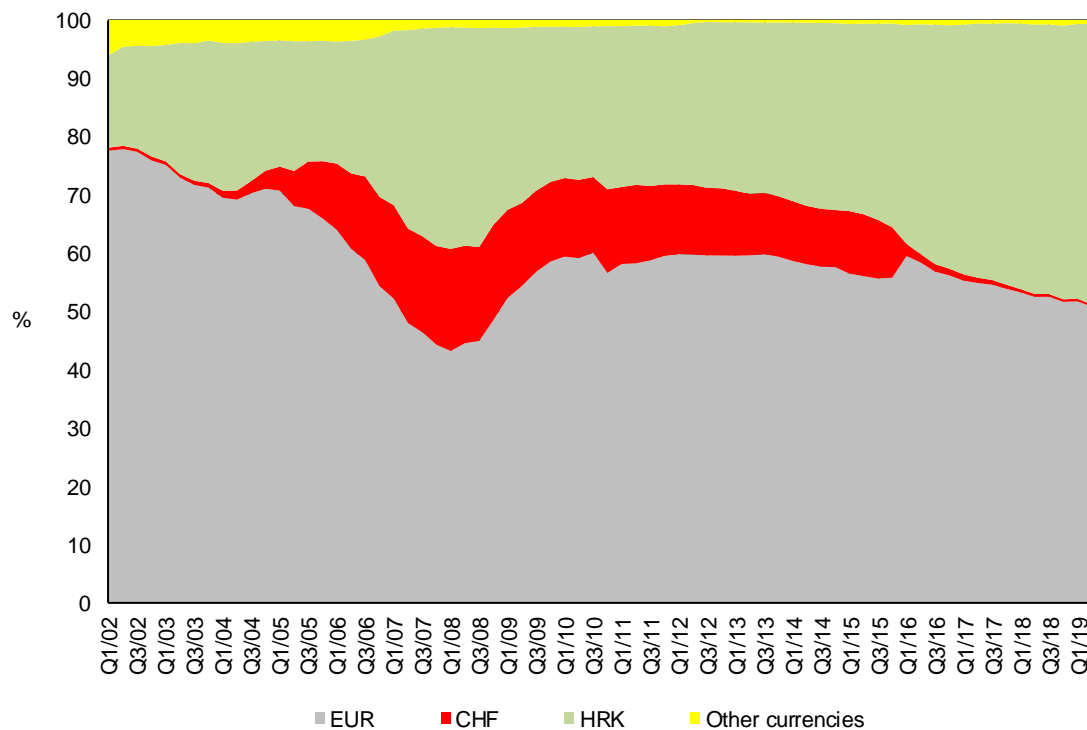
Source: CNB.

# Loans to households - structure



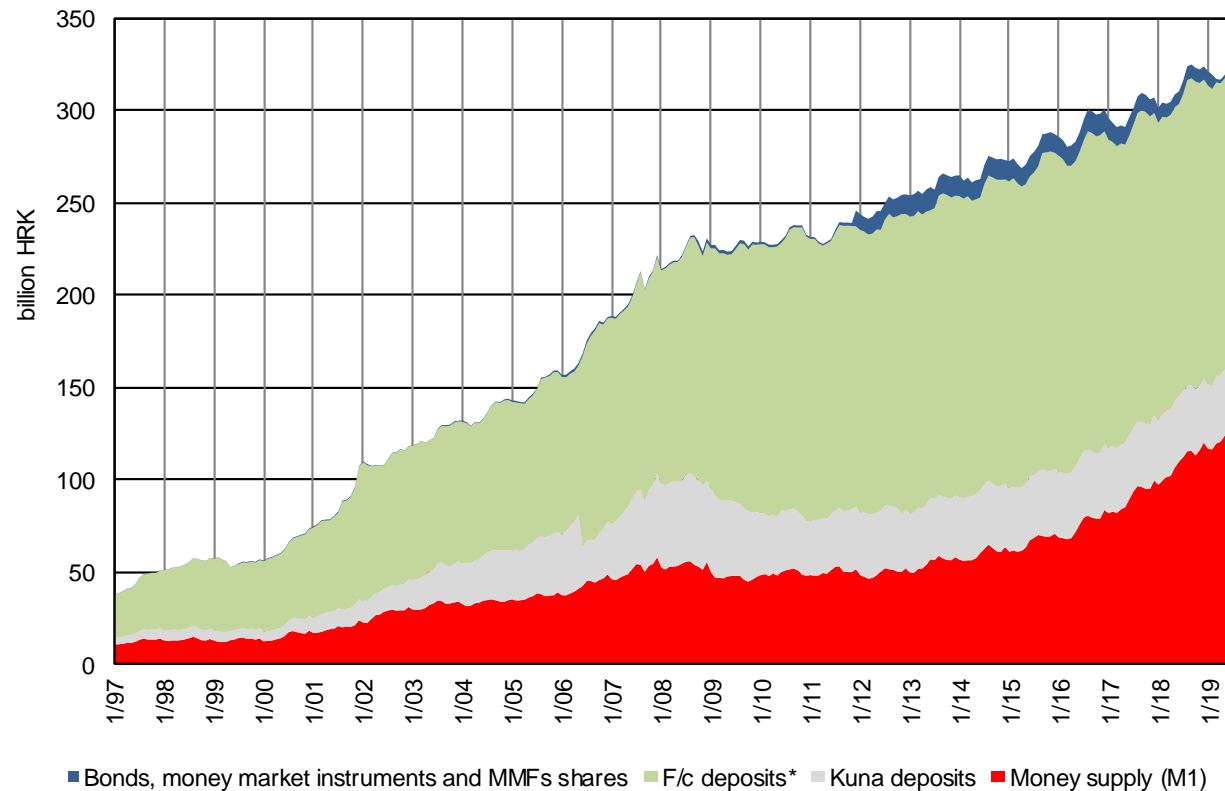
Source: CNB.

# 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)

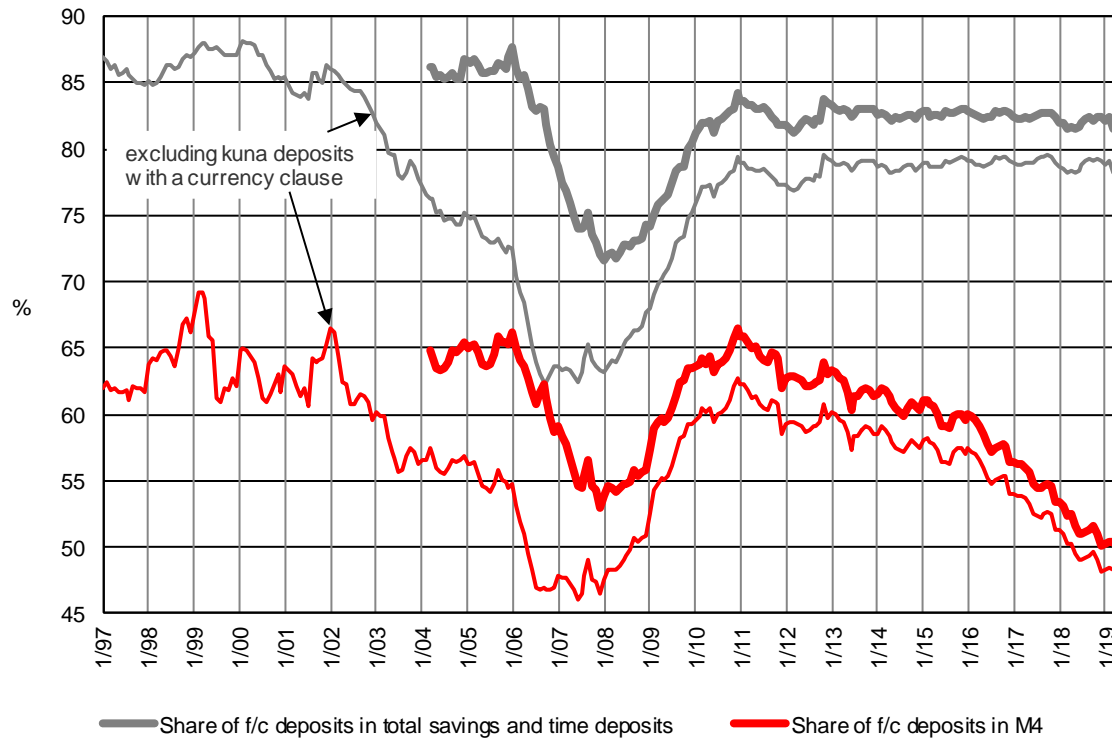


\* Up to May 2006, kuna deposits with a currency clause were included in kuna deposits, and from June 2006 on, they are included in F/c deposits.

Source: CNB.

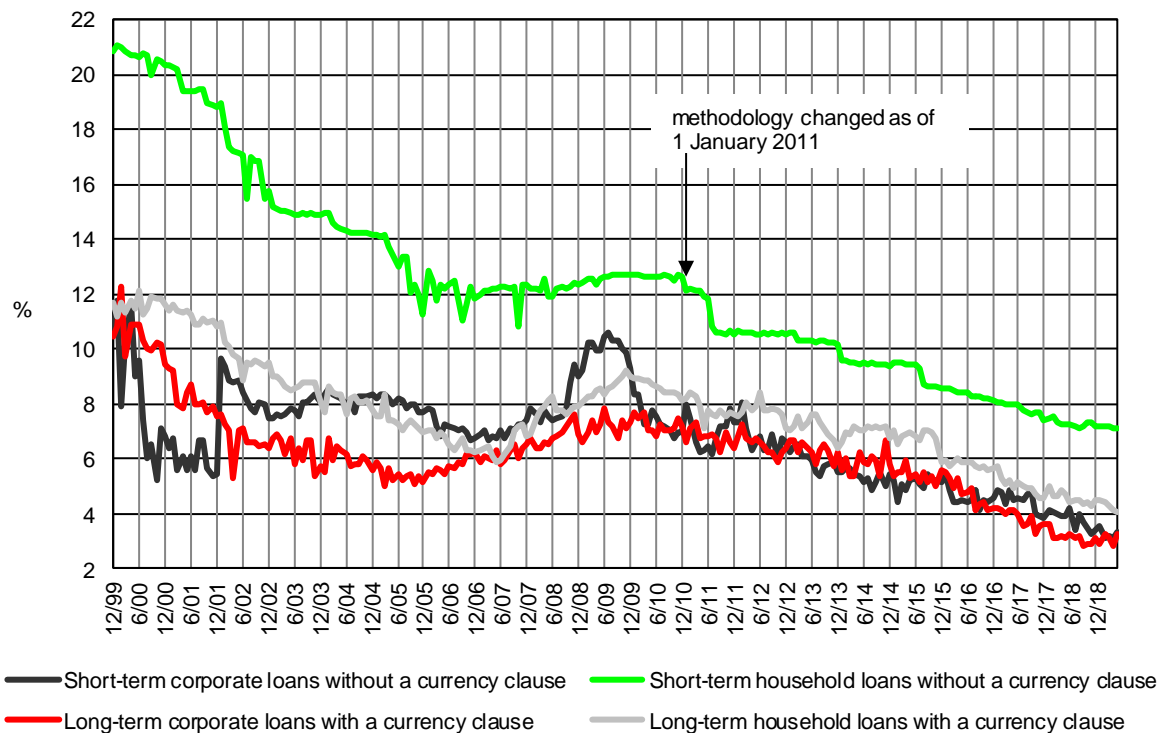


# Euroisation



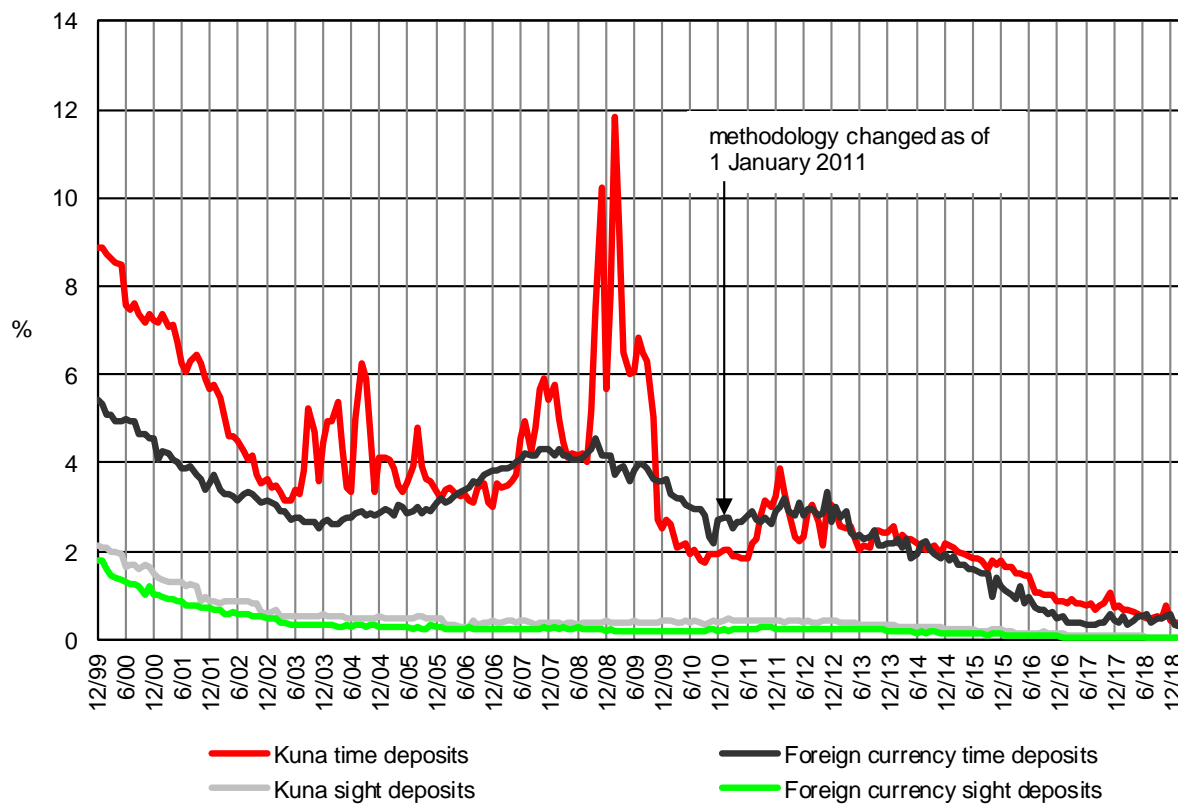
Source: CNB.

# Average lending interest rates



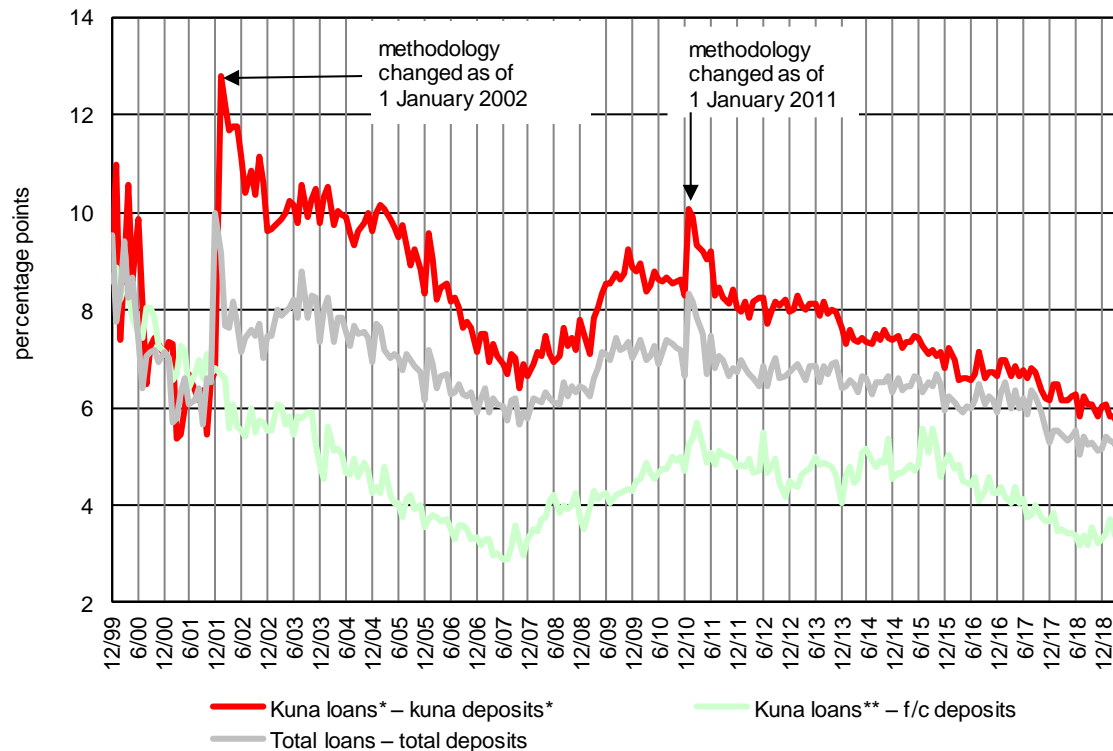
Note: Details about the new interest rate statistics: Bulletin 204, June 2014  
(<http://www.hnb.hr/publikac/bilten/arhiv/bilten-204/hbilt204.pdf>).  
Source: CNB.

# 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



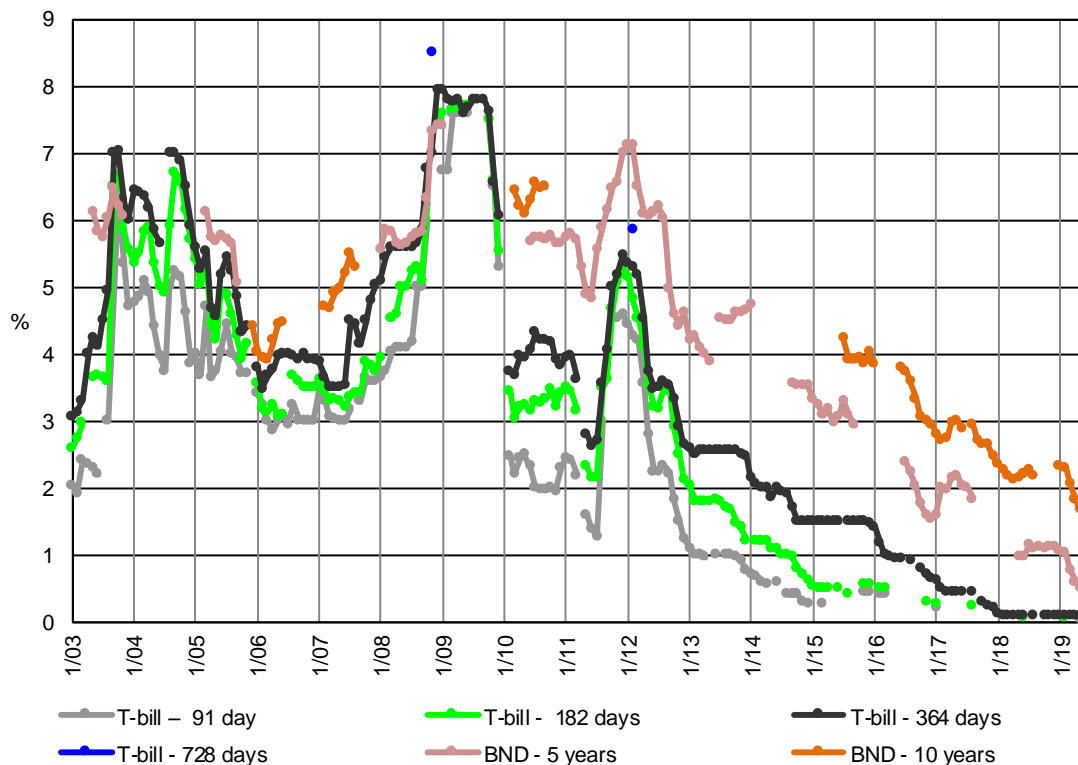
\* without a currency clause

\*\* with a currency clause

Note: Details about the new interest rate statistics: Bulletin 204, June 2014  
(<http://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.

Note: Details about calculation of yield to maturity: Bulletin 210, January 2015.

Sources: MoF and ZSE.

# Bonds listed on the ZSE

Issuer	Year of issue	Original maturity	Currency	Nominal value (millions)	Nominal interest rate
<b>State</b>					
Republic of Croatia	2004	15 years	EUR	1,000	5.375%
Republic of Croatia	2010	10 years	HRK	5,000	6.750%
Republic of Croatia	2010	10 years	EUR	1,000	6.500%
Republic of Croatia	2011	11 years	EUR	1,000	6.500%
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	2016	5 years	HRK	6,000	2.750%
Republic of Croatia	2017	5 years	HRK	3,000	2.250%
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	3 years	EUR	500	0.500%

Issuer	Year of issue	Original maturity	Currency	Nominal value (millions)	Nominal interest rate
<b>Corporate</b>					
Optima telekom d.d.	2007	15.3 years	HRK	250	5.250%
NETA Capital Croatia d.d.* in liquidation	2013	unspecified	HRK	2	8.000%
Dalekovod d.d.	2014	15.3 years	HRK	16	4.000%
Dalekovod d.d.	2014	15.3 years	EUR	1	4.000%
HP-Hrvatska pošta d.d.	2014	5 years	HRK	400	5.125%
Jadran Galenski laboratorij d.o.o.	2015	5 years	HRK	200	5.813%
Atlantic Grupa d.d.	2016	5 years	HRK	200	3.125%
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%

Stock as at 9 July 2019.  
Source: ZSE.

\* With call option.  
Stock as at 9 July 2019.  
Source: ZSE.

# Agenda

---

- Central bank's objectives and structure
- Real sector
- Monetary policy
- **External sector**
  - **Exchange rate**
  - **Foreign trade**
  - **Current account**
  - **External debt**
  - **FDI**
- Banking sector

# 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

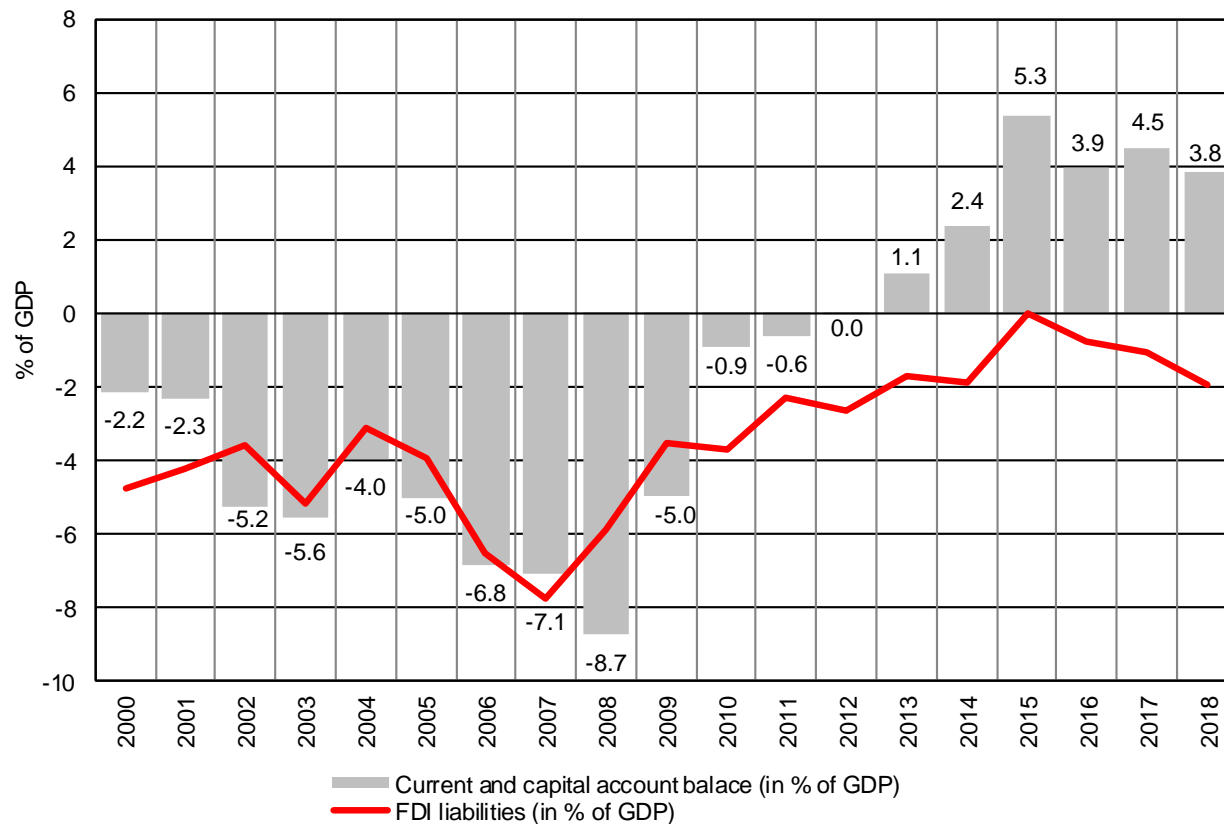


# Foreign exchange market

---

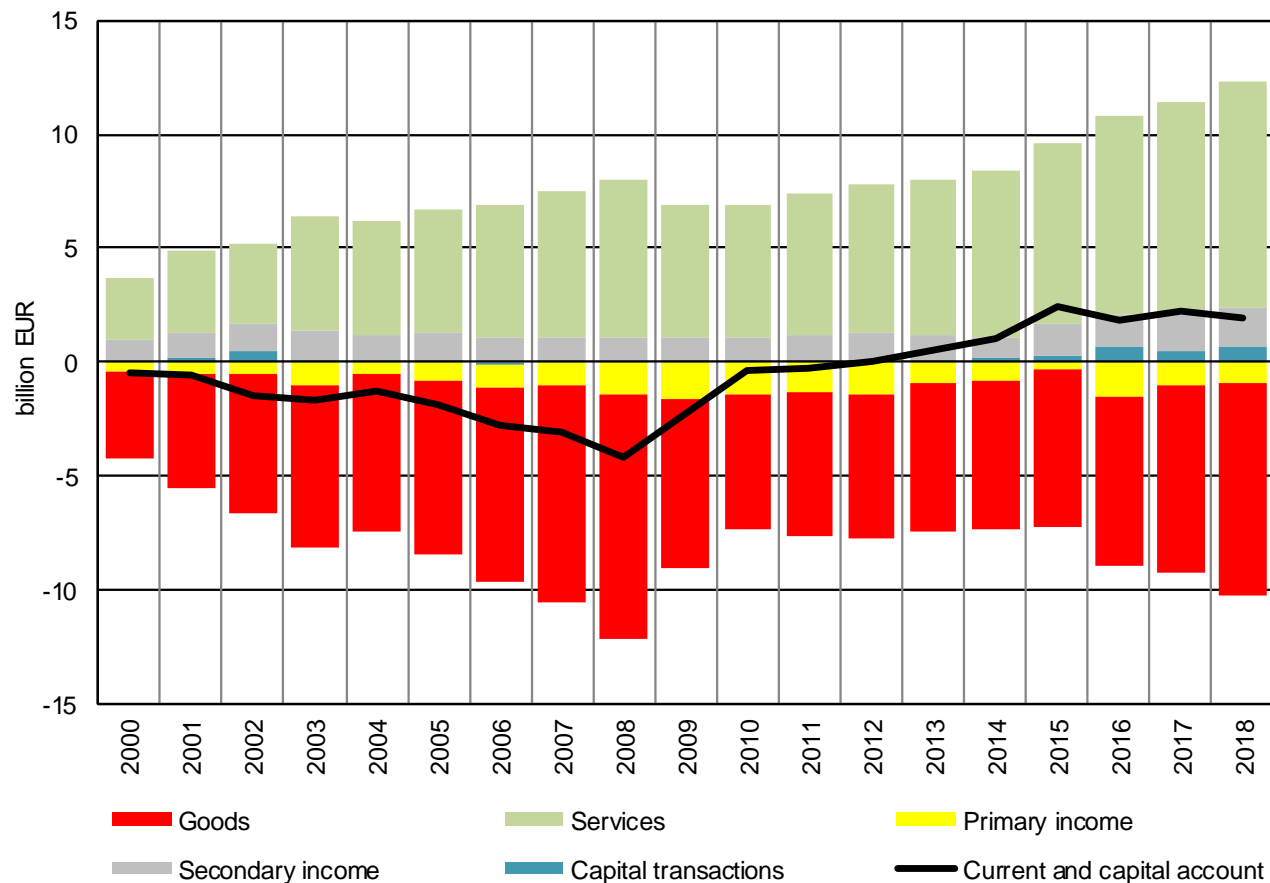
- Kuna is fully convertible
- No restrictions on repatriation of profits and liquidation of investments
- Banks freely determine the exchange rate, engage in the foreign exchange operations and conduct international payment transactions

# Current and capital account balance and FDI



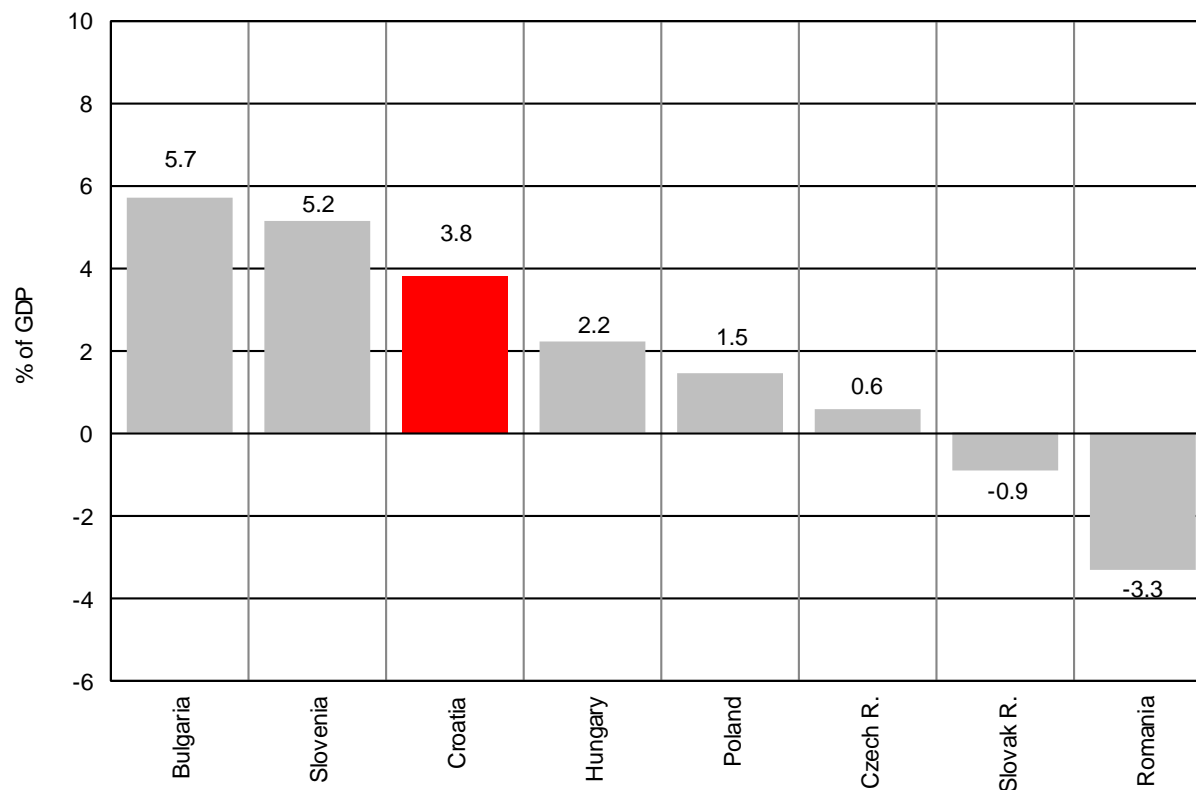
Note: According to BPM6 and ESA 2010 methodology. The FDI liabilities data doesn't include round tripping. Negative values of FDI liabilities indicate inflow of FDI.  
Source: CNB.

# Structure of the current and capital account balance



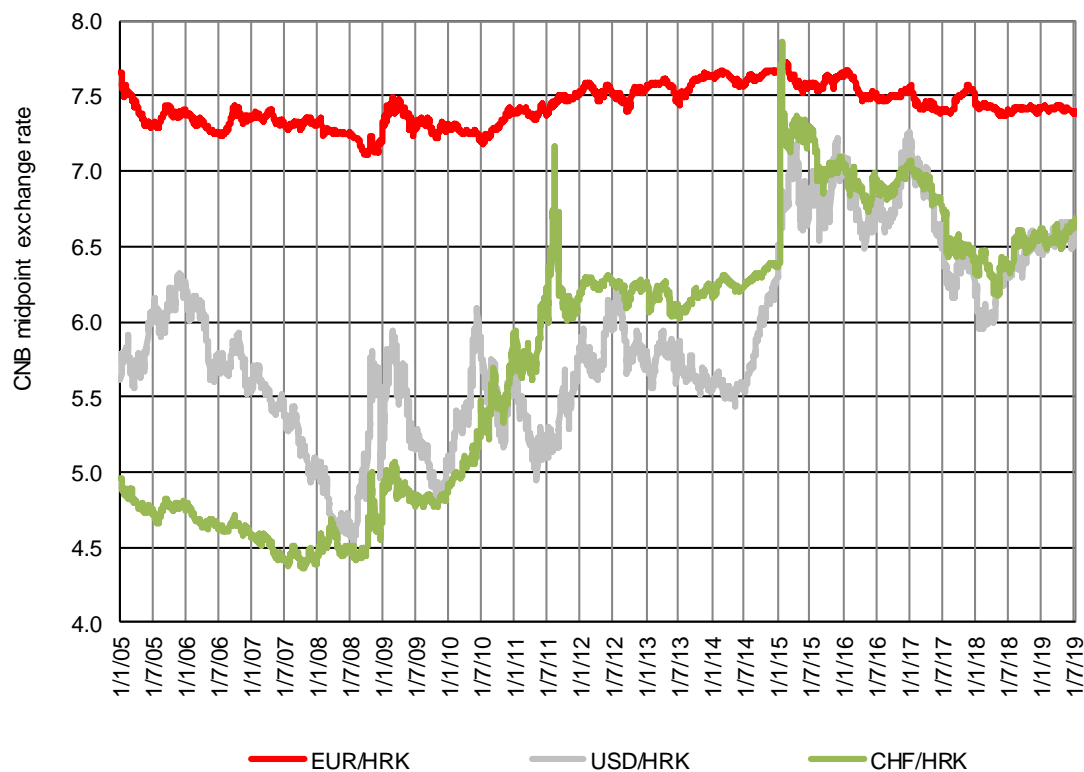
Source: CNB.

# Current and capital account balance by countries, 2018



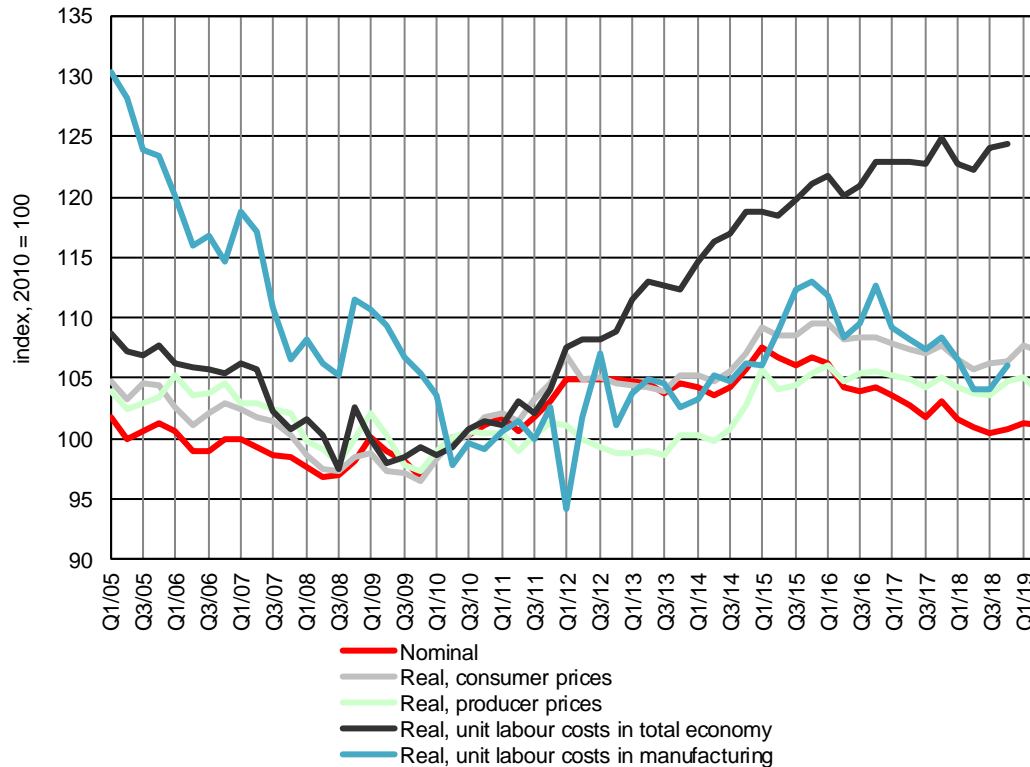
Sources: Eurostat and CNB.

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



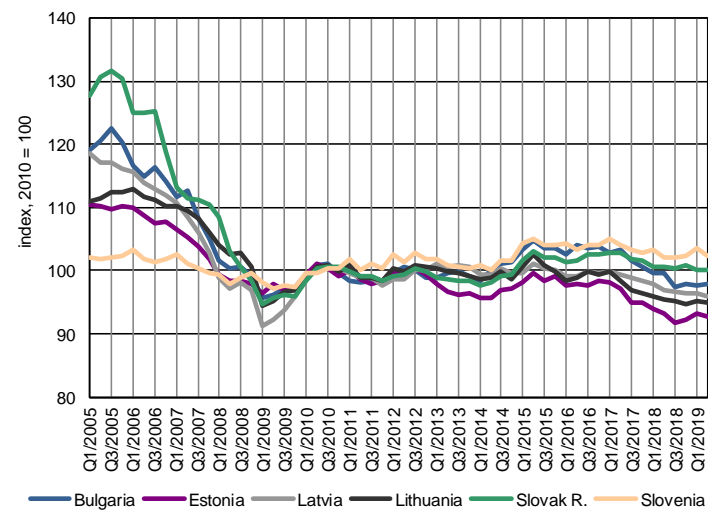
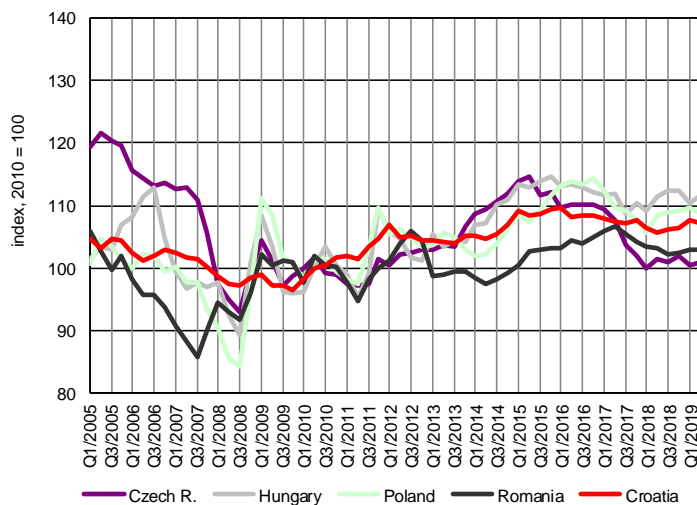
Source: CNB.

# 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). The fall of index denotes appreciation of the kuna. Data for second quarter of 2019 of the kuna deflated by producer prices refer to April and May.  
Source: CNB.

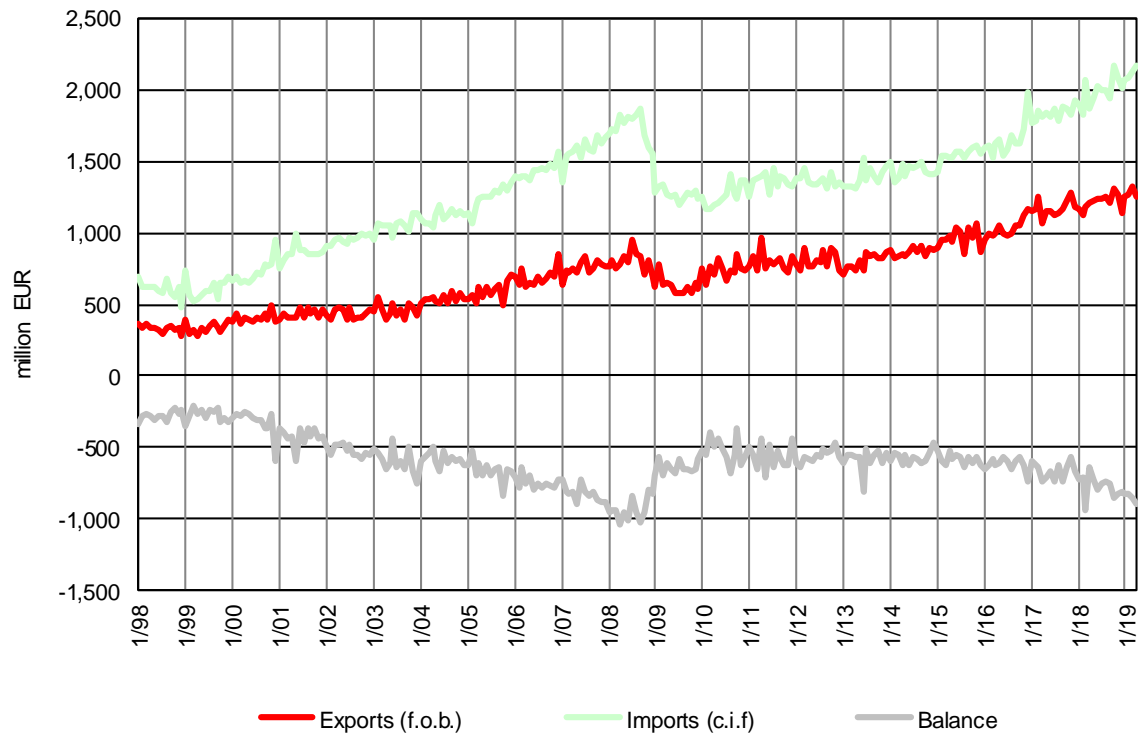
# Index of real effective exchange rate deflated by CPI



Note: The fall of index denotes real effective appreciation.

Sources: BIS and CNB.

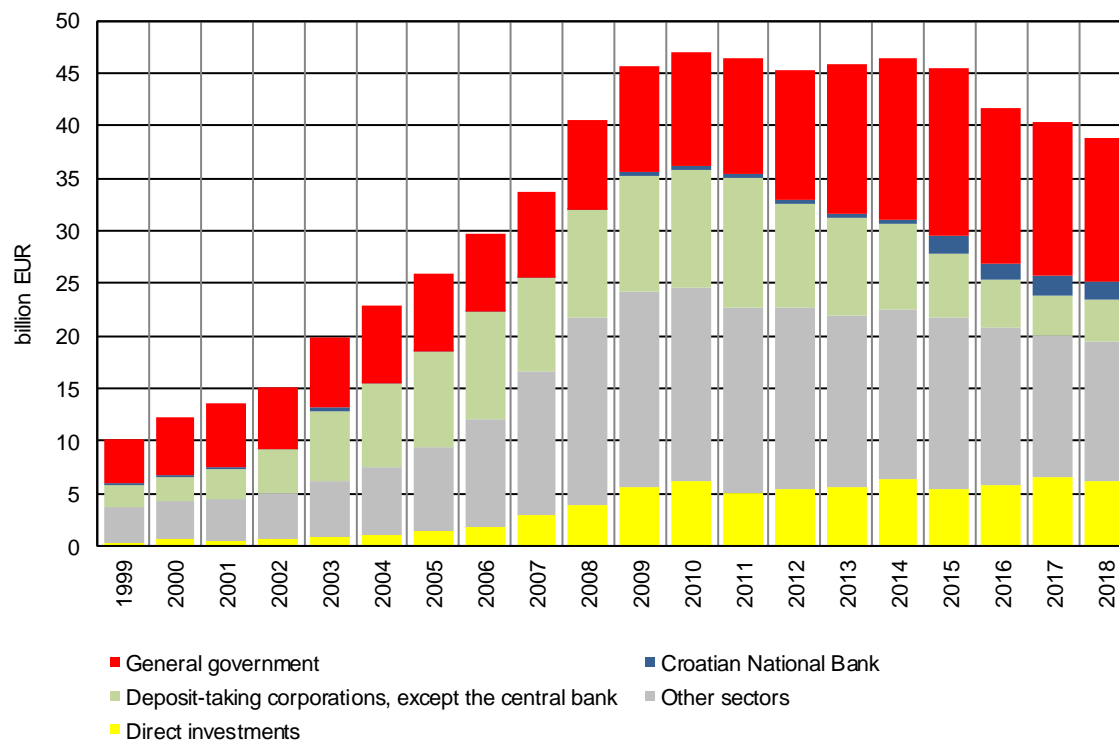
# Merchandise trade



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



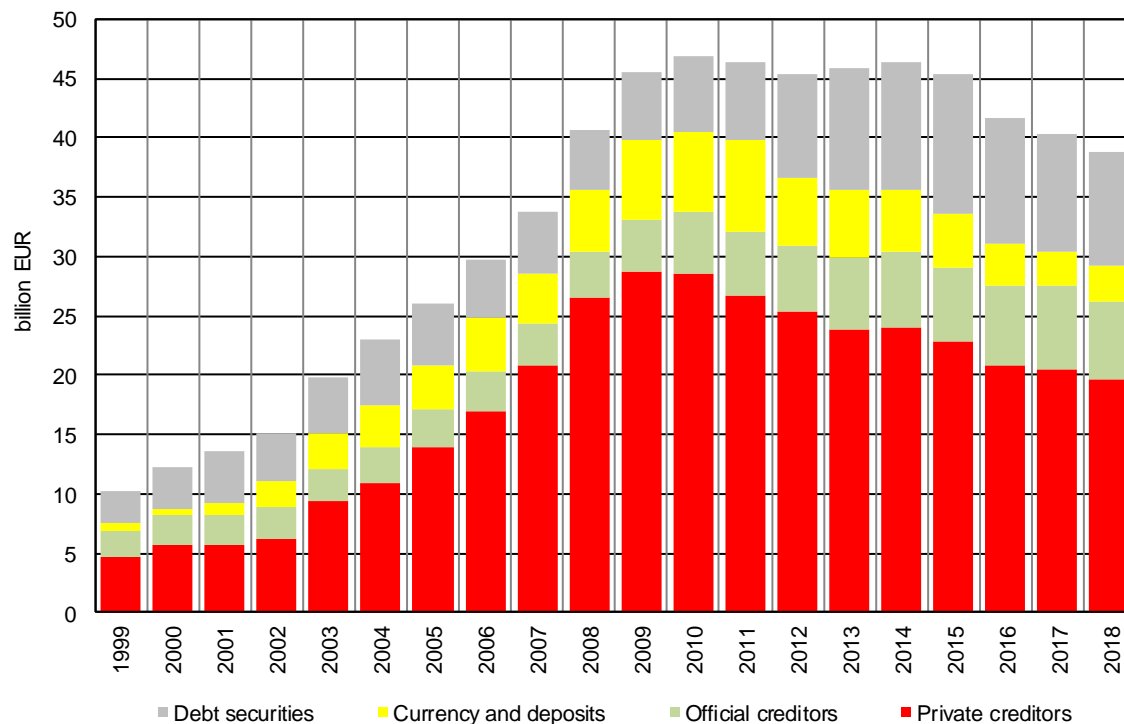
# Gross external debt by debtors



Note: According to BPM6 and ESA2010 methodology. In the entire series of data, the CBRD is reclassified from other sectors to the sector general government.

Source: CNB.

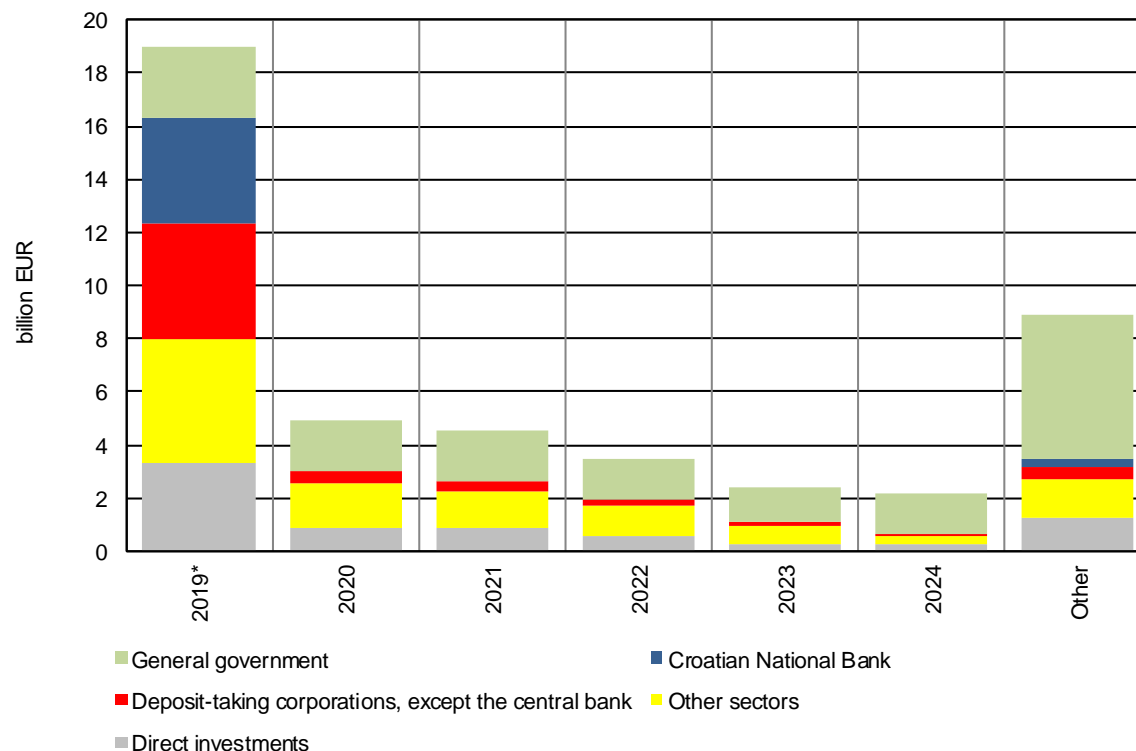
# Gross external debt by creditors



Source: CNB.

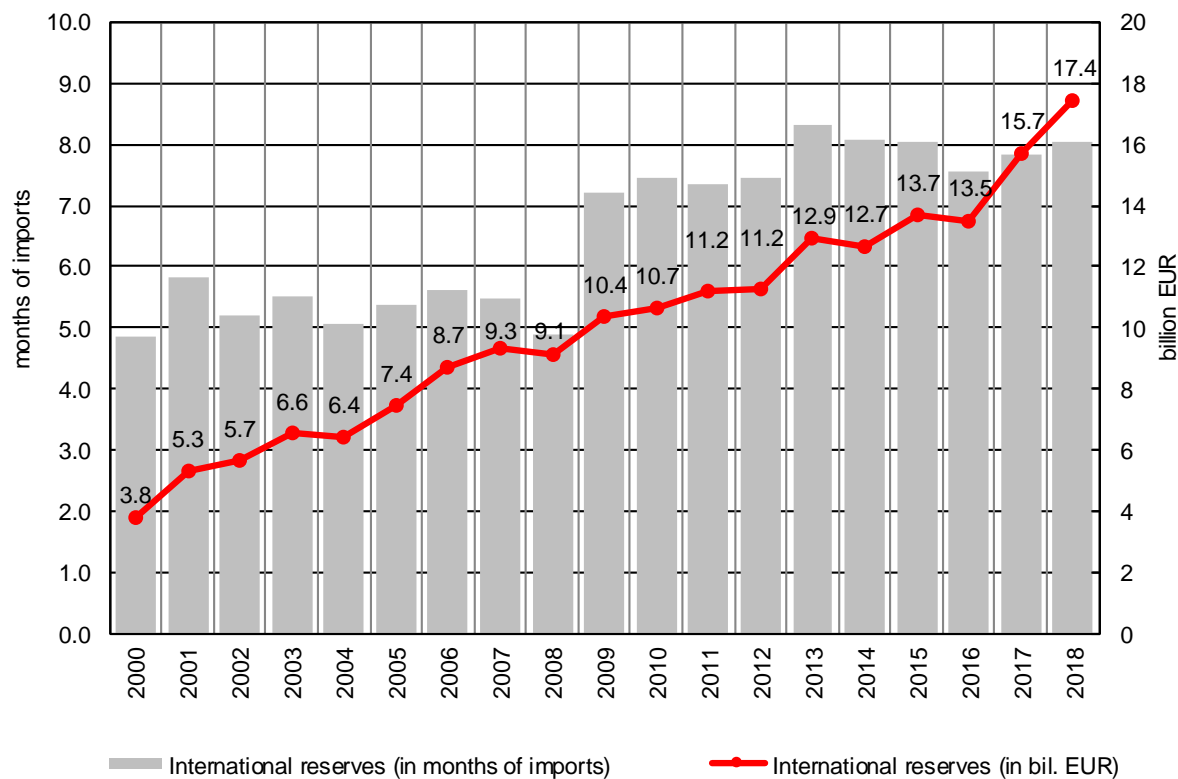
# Estimated future principal and interest payments

by debtors



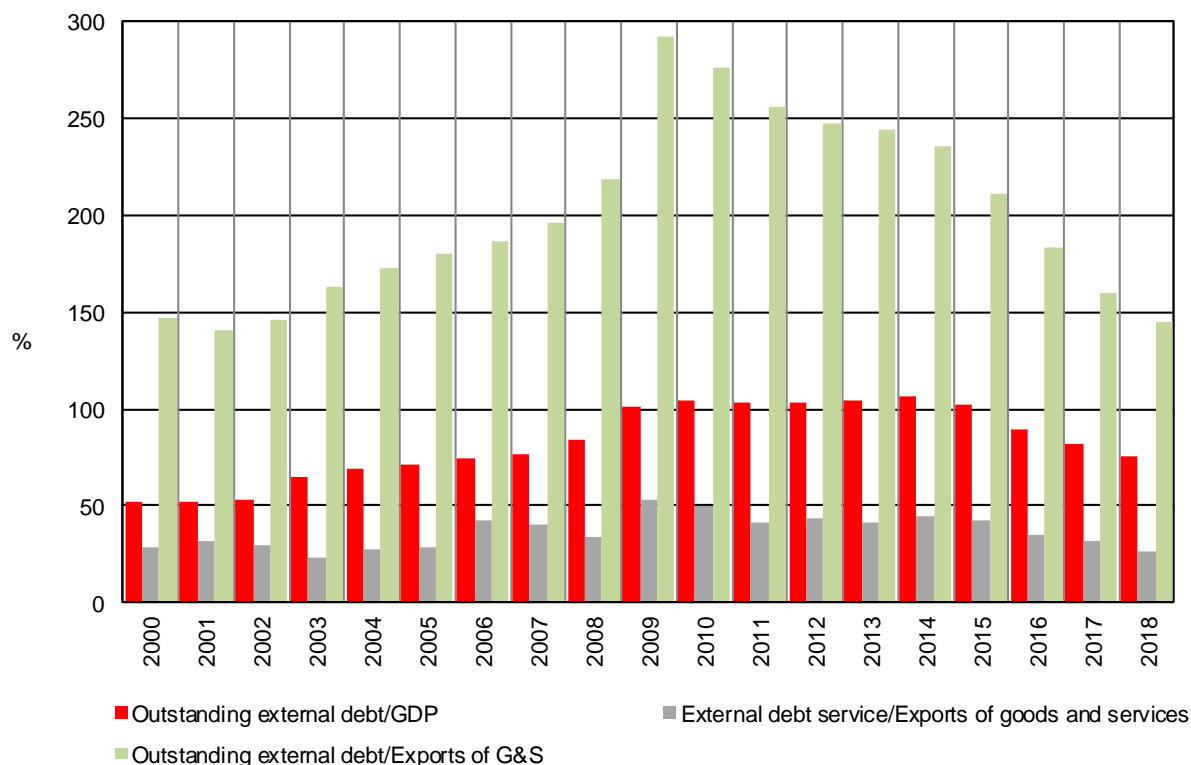
\* Data for 2019 refer to repayments made until end-April 2019 and projected repayments for the rest of 2019. Data doesn't include arrears.  
Source: CNB.

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



Source: CNB.

# External debt ratios

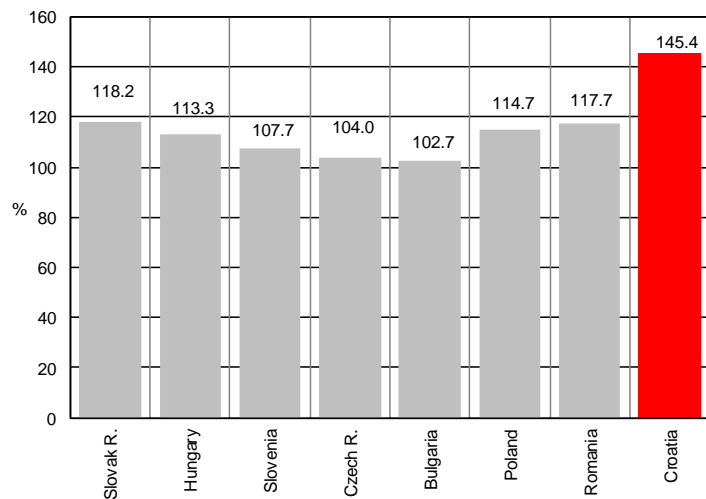


Note: External debt service includes principal payments on bonds, long-term trade credits and long-term loans (excluding liabilities to affiliated enterprises), as well as total interest payments (including FISIM), without interest payments on direct investment.

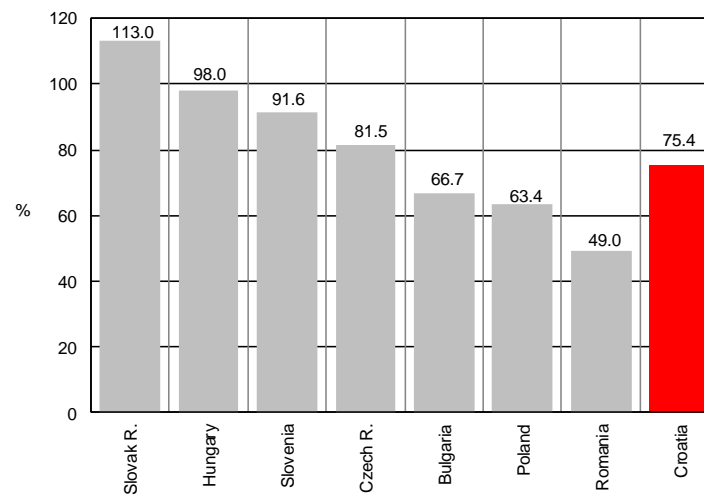
Source: CNB.

# External debt ratios by countries, 2018

## Outstanding external debt/Exports of G&S

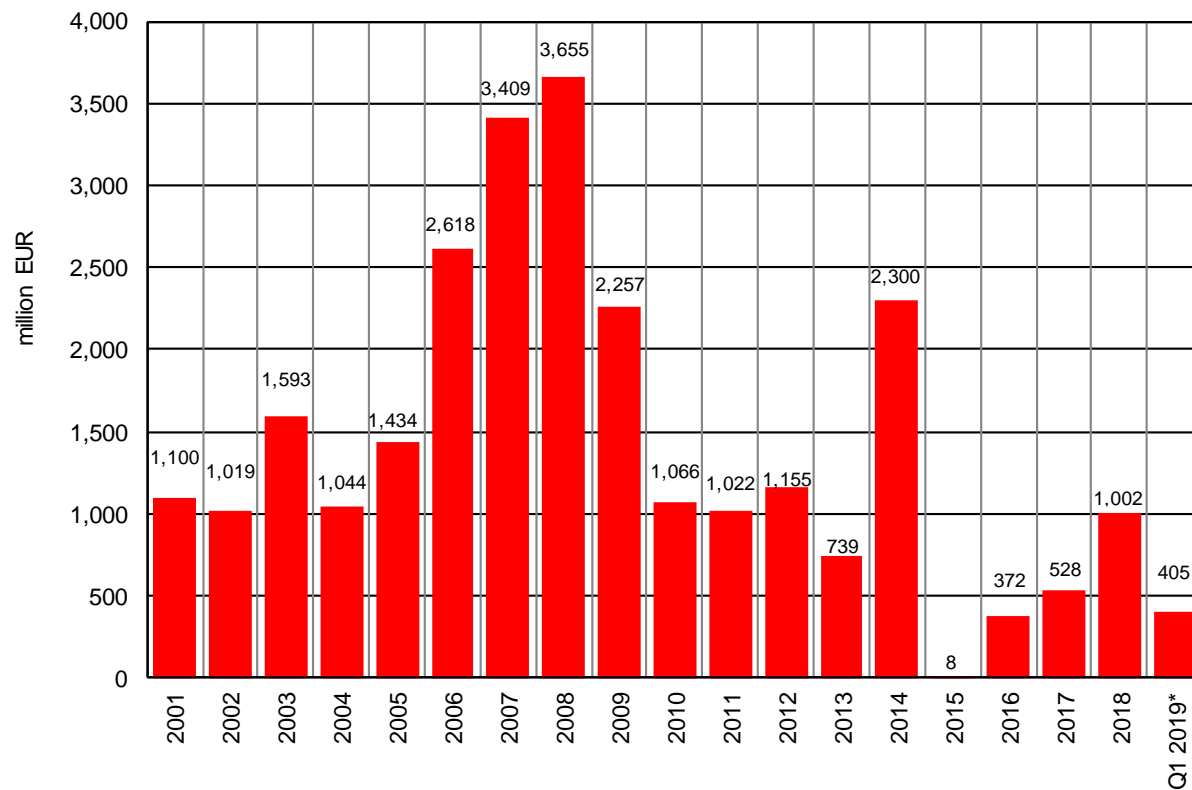


## Outstanding external debt/GDP



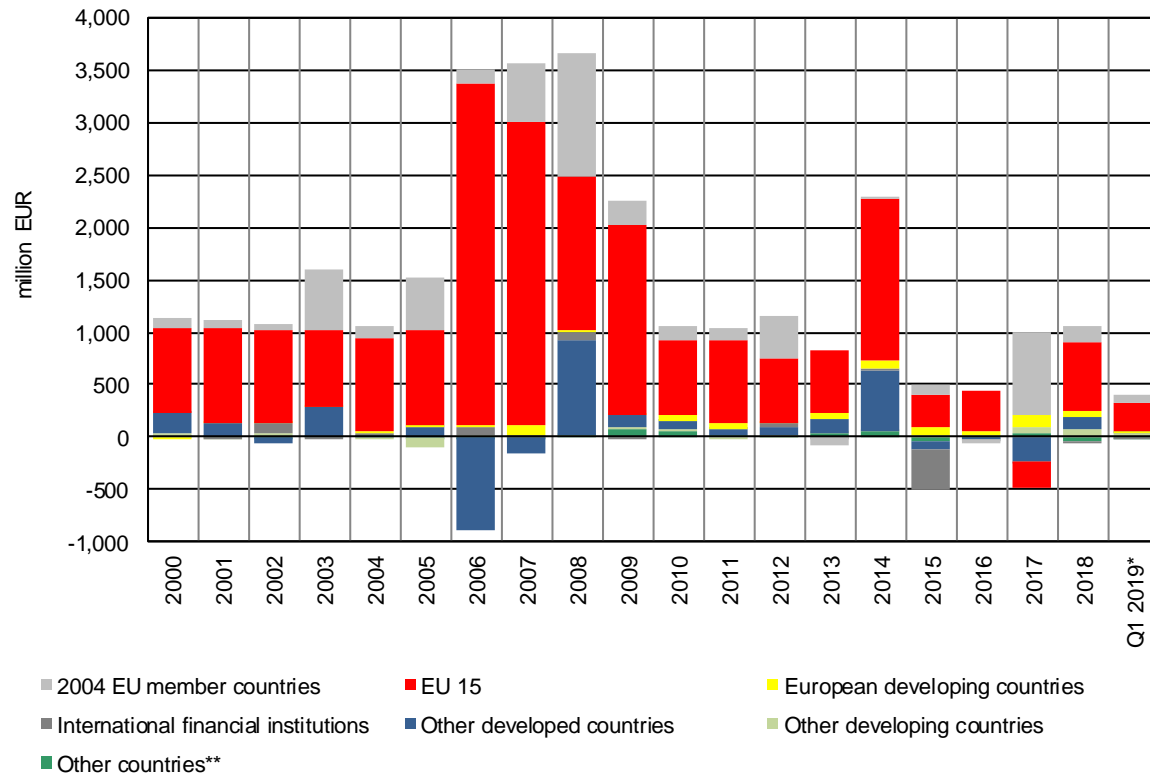
Sources: Eurostat and CNB.

# FDI, net incurrence of liabilities



\* Preliminary data.  
Source: CNB.

# FDI, net incurrence of liabilities by country of origin



\* Preliminary data.

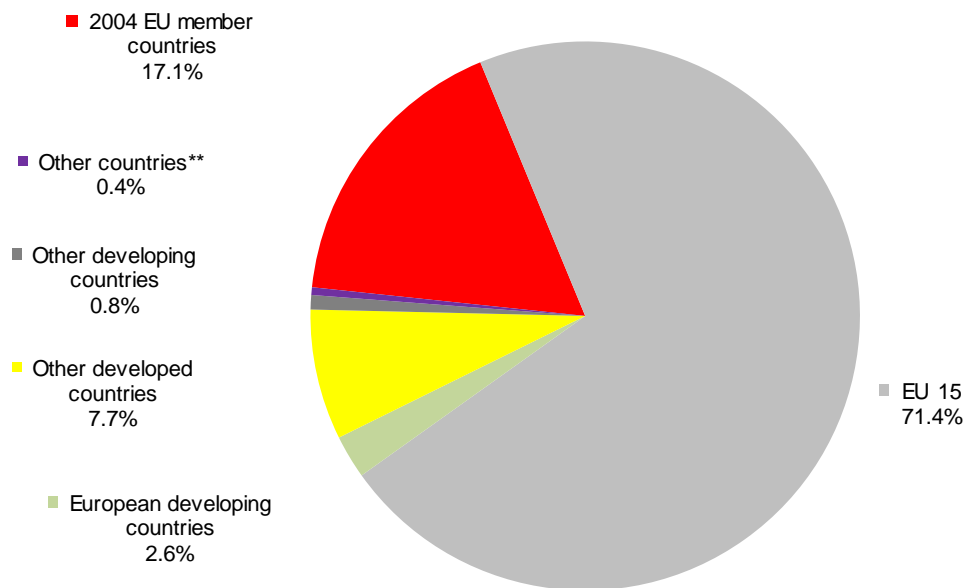
\*\* Refers to unknown countries and total population adjustment

Source: CNB.



# FDI, net incurrence of liabilities

1993 – Q1 2019\* (31,197.2 million EUR)



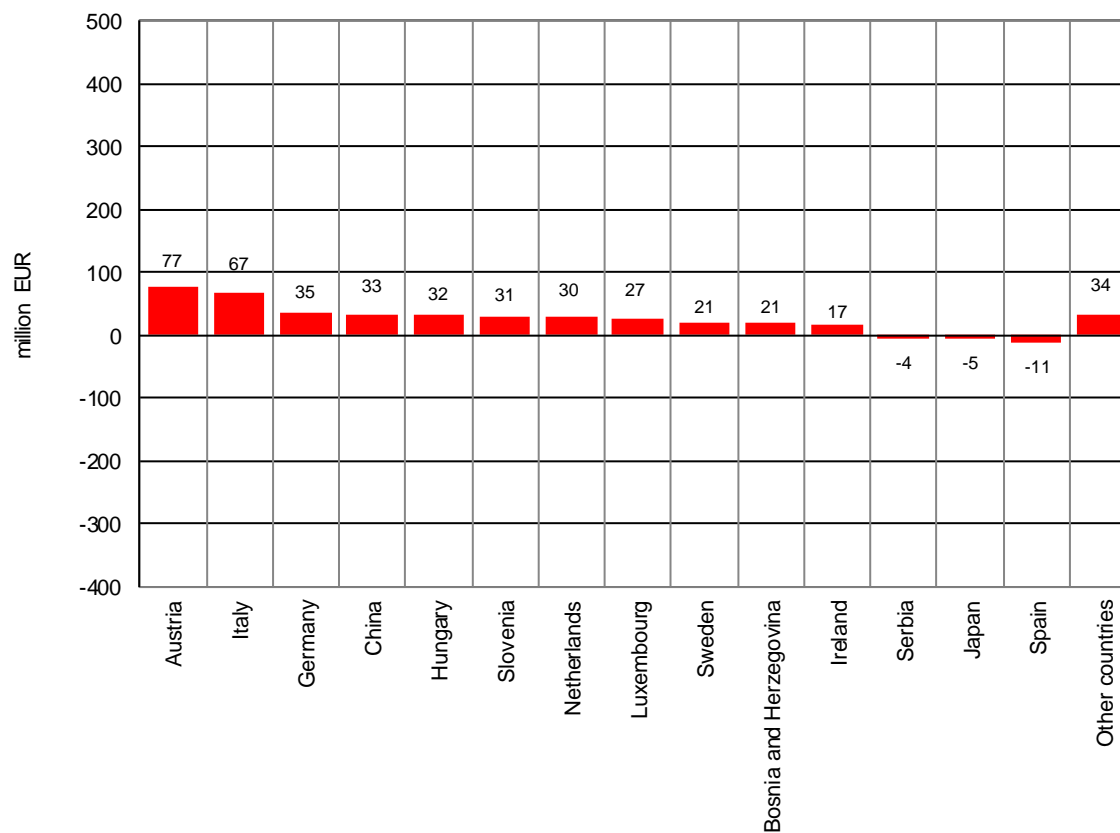
\* Preliminary data.

\*\* Refers to unknown countries and total population adjustment

Source: CNB.

# FDI, net incurrence of liabilities

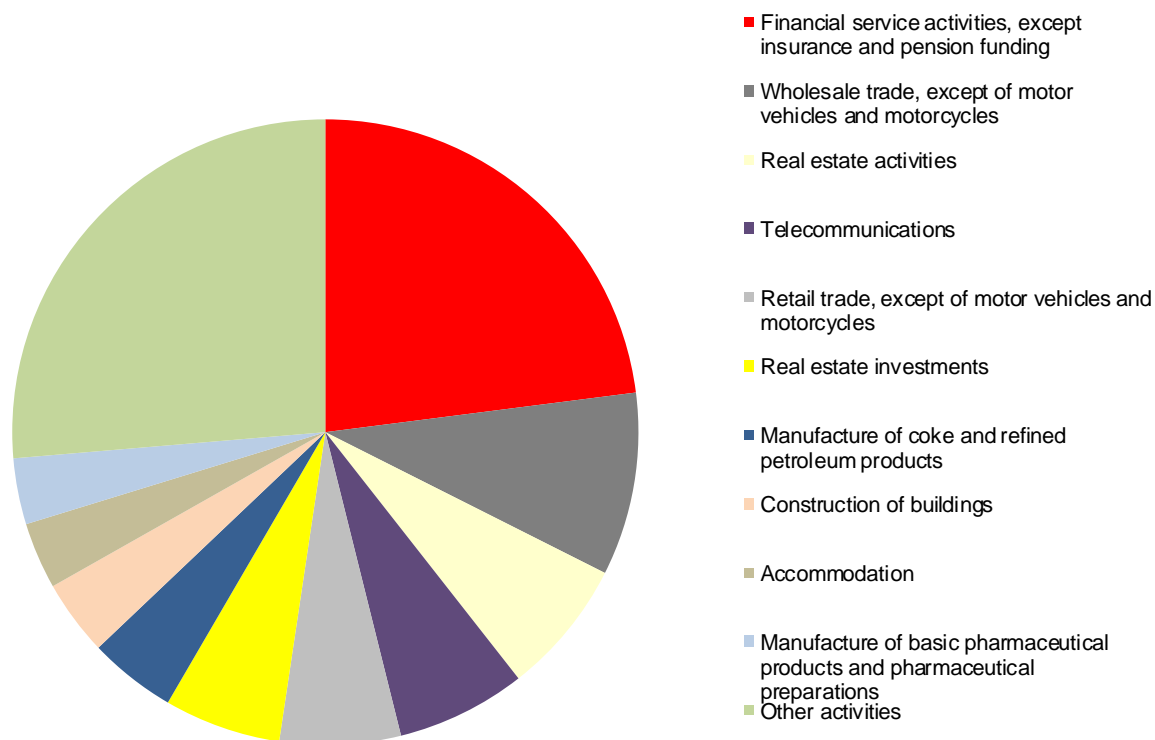
Q1 2019\* (405.00 million EUR)



\* Preliminary data.  
Source: CNB.

# FDI, net incurrence of liabilities

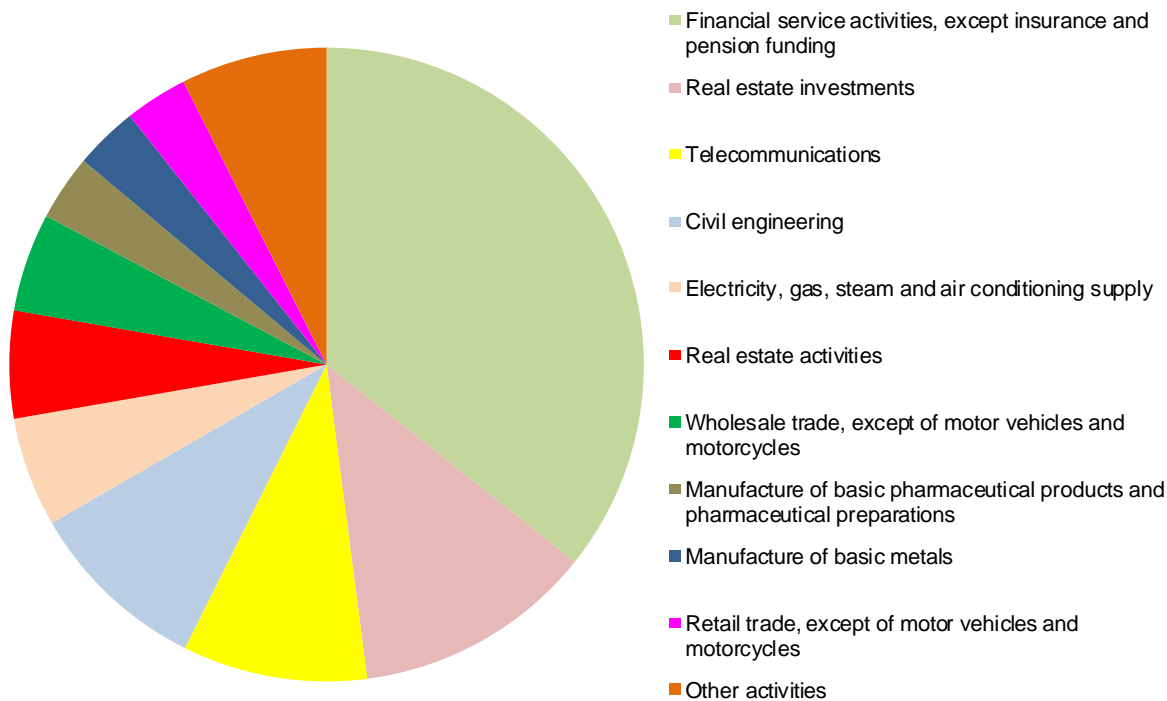
1993 – Q1 2019\* (31,197.2 million EUR)



\* Preliminary data.  
Source: CNB.

# FDI, net incurrence of liabilities

Q1 2019\* (405.00 million EUR)



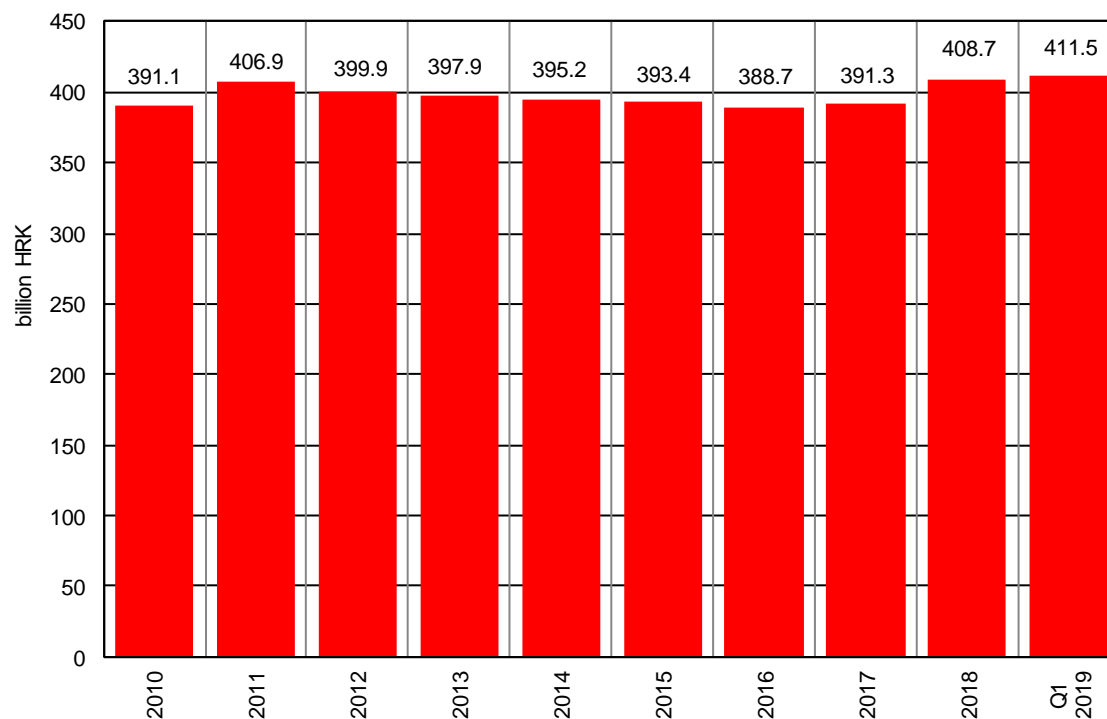
\* Preliminary data.  
Source: CNB.

# Agenda

---

- Central bank's objectives and structure
- Real sector
- Monetary policy
- External sector
- **Banking sector**
  - **Size, structure and concentration**
  - **Leverage ratio and capital adequacy**
  - **Profitability**
  - **Coverages**
  - **Structure of loans and deposits by institutional sectors**

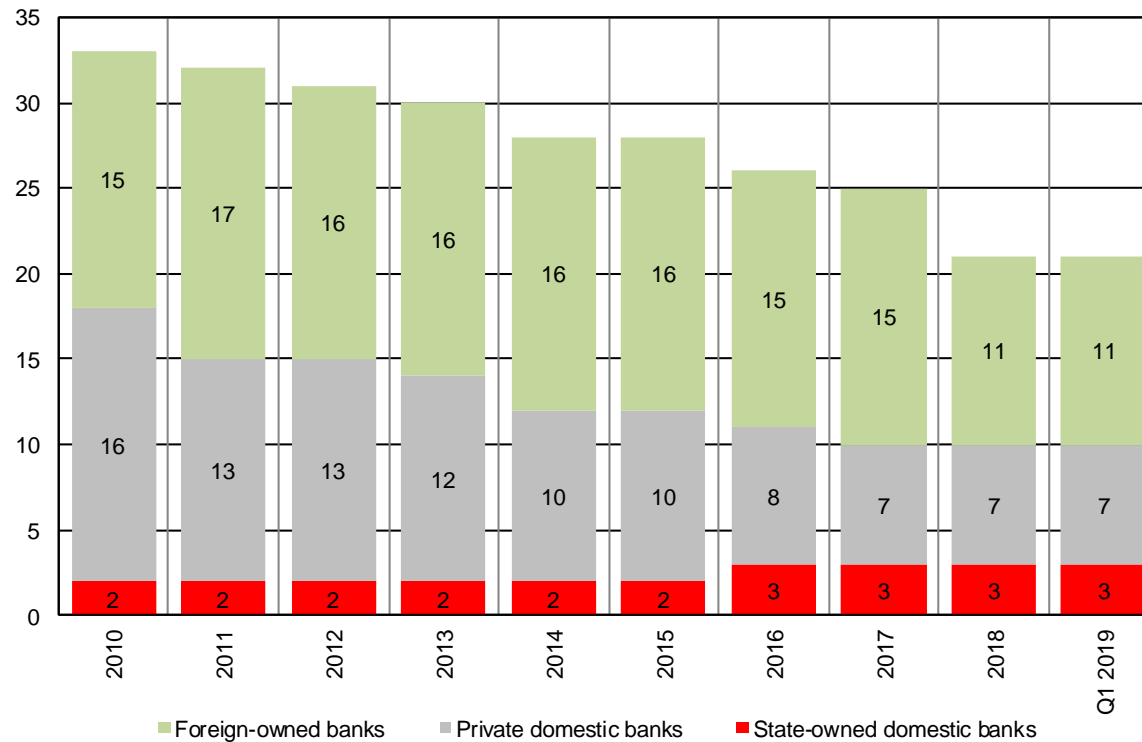
# Total assets of the banking system



\* Bankruptcy proceedings were opened against Tesla štedna banka on 30 March 2018. As the bank did not submit the audited data as at the end of 2017, it is not included in the aggregate data for the respective date (with the exception of data on the number of banks). According to the latest data available, assets of the bank stood at only HRK 1.5 m.

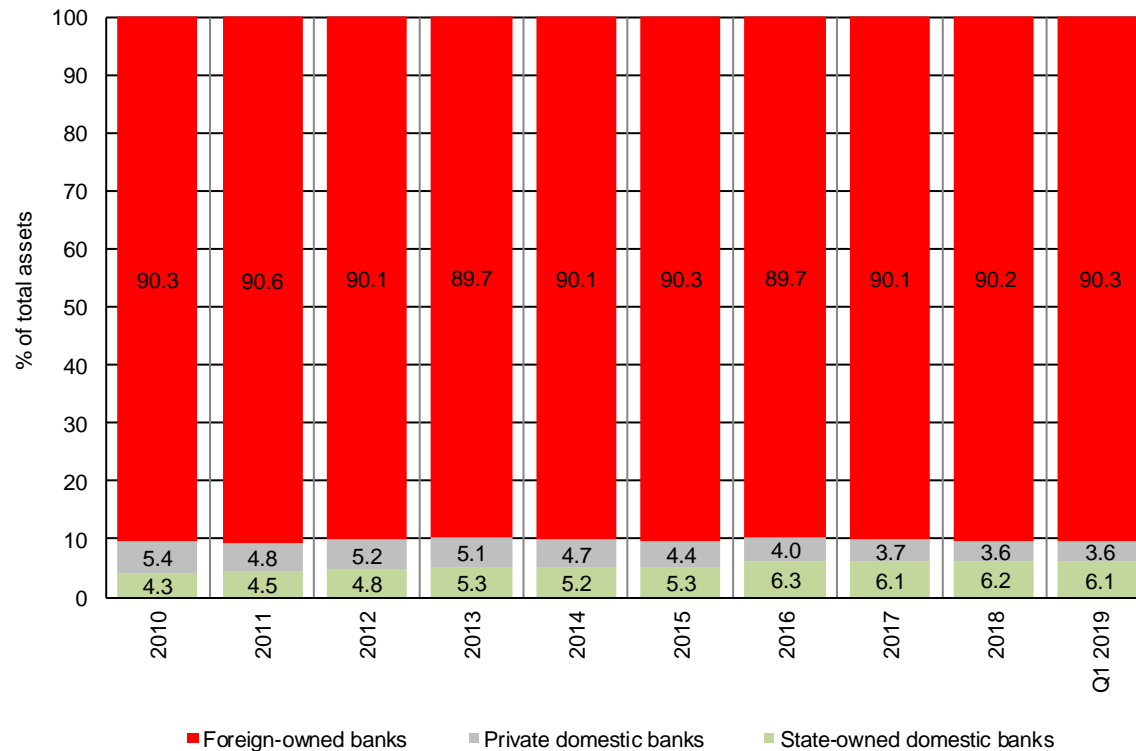
Source: CNB.

# Number of banks



Source: CNB.

# Banking system by ownership

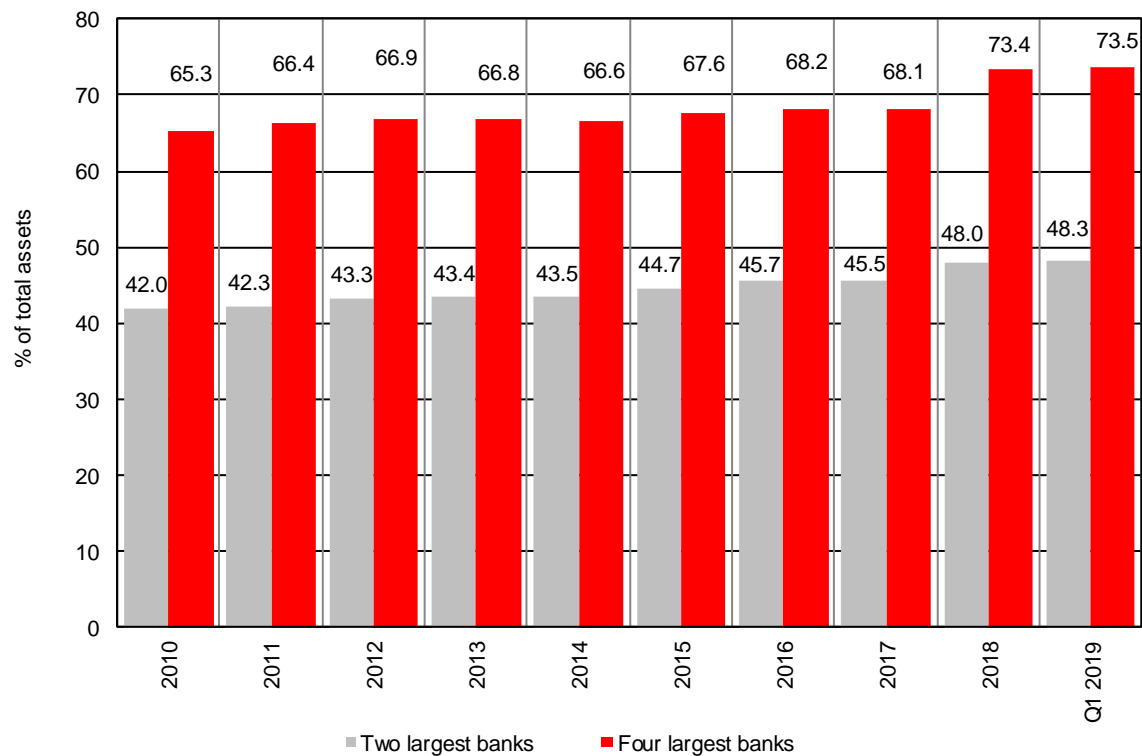


Source: CNB.



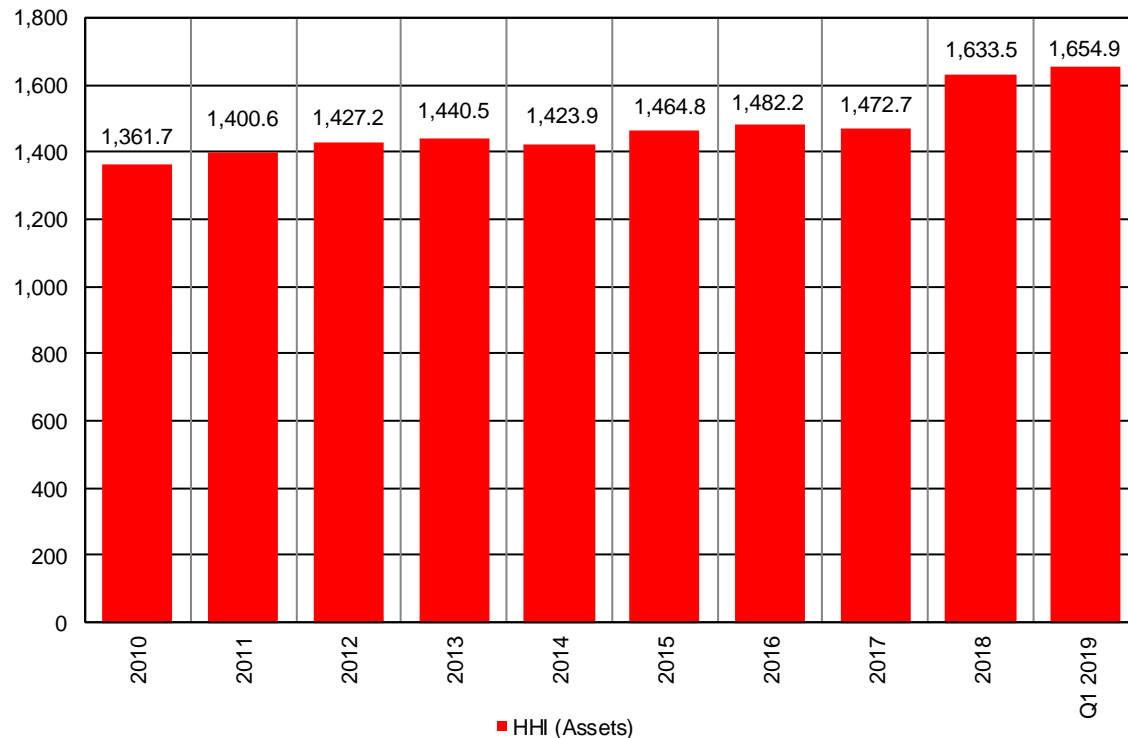
# Concentration index

share of assets of the 2(4) largest banks in total assets



Source: CNB.

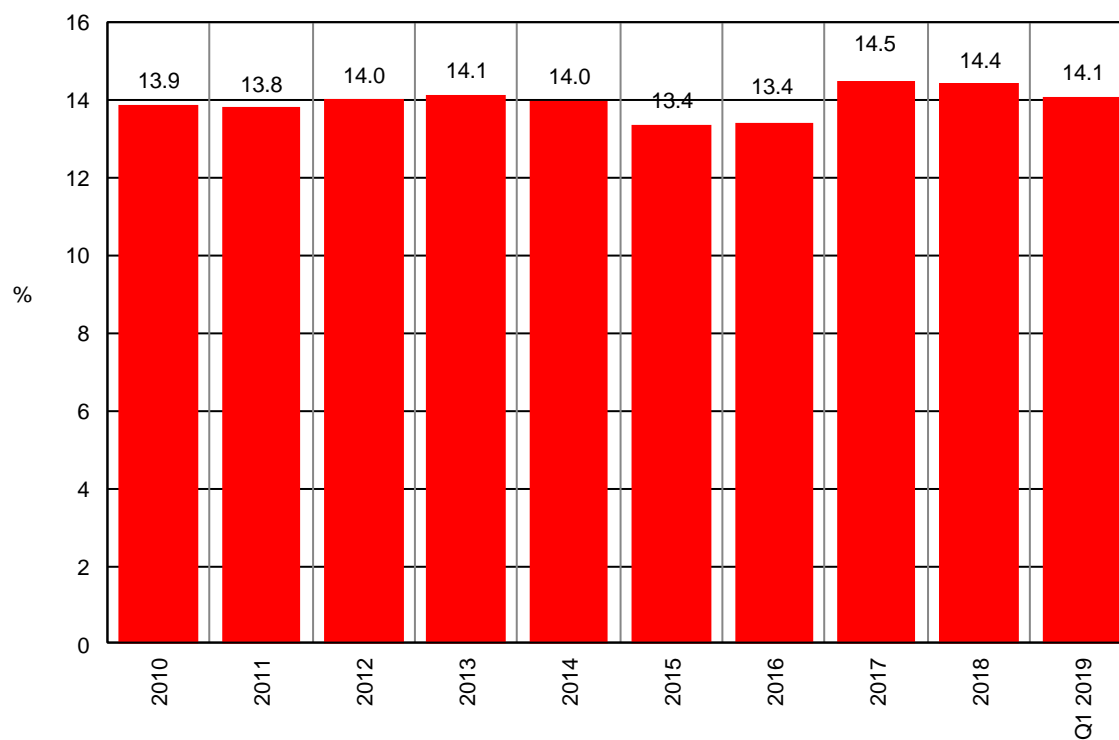
# Herfindahl – Hirschman index (HHI)



Source: CNB.

# Leverage ratio

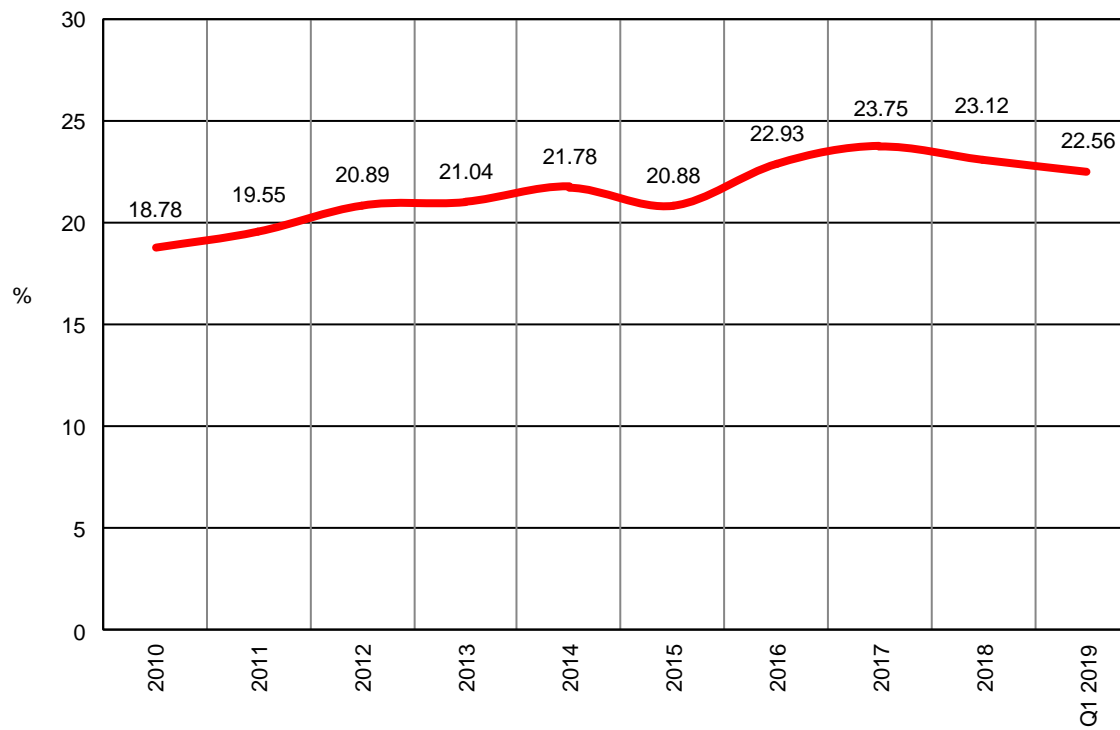
equity capital/total assets



Source: CNB.

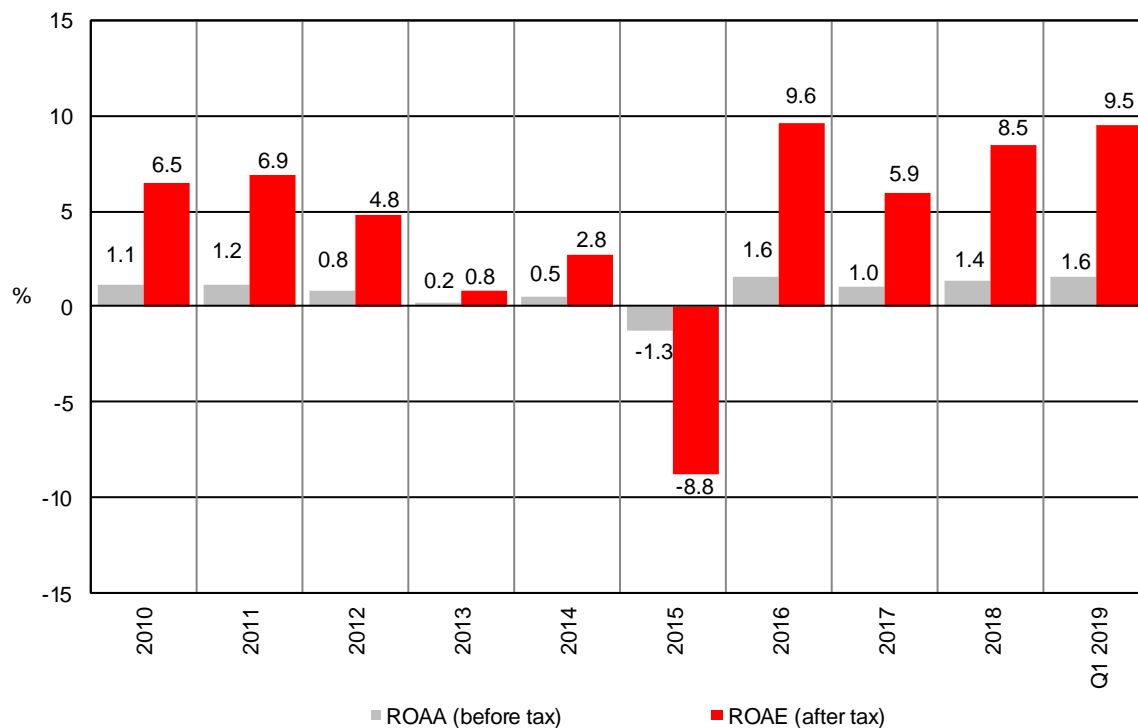
# Total capital ratio

own funds/total exposure to risks



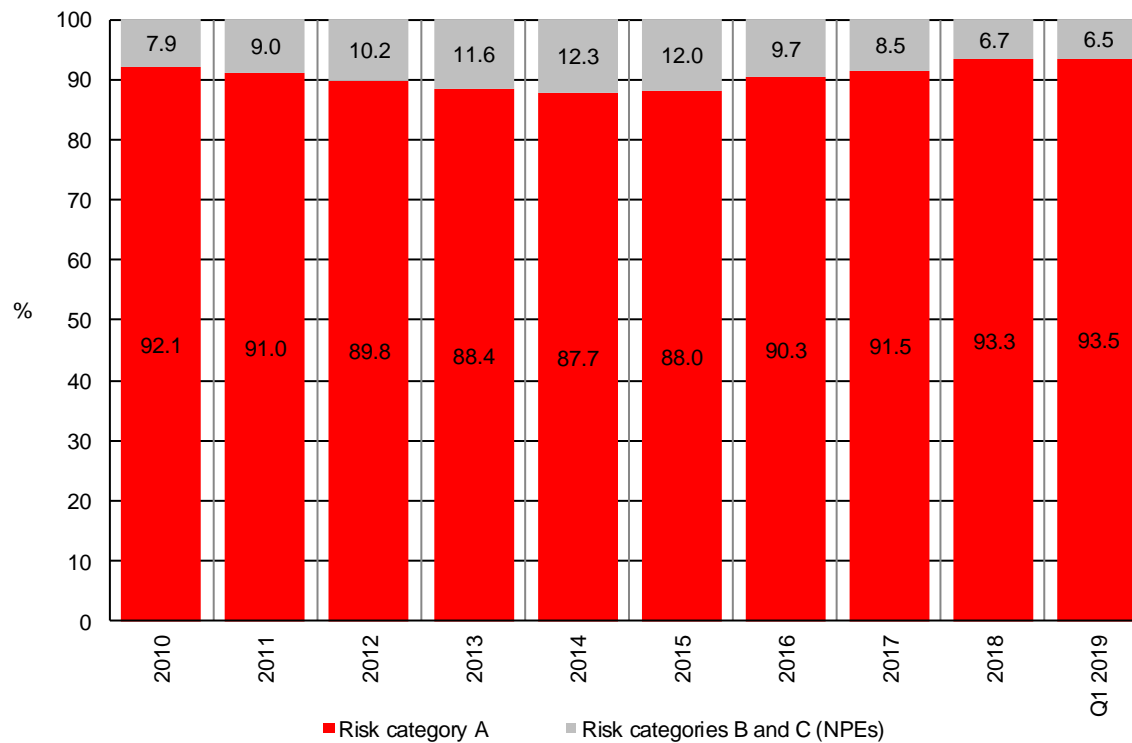
Source: CNB.

# ROAA and ROAE



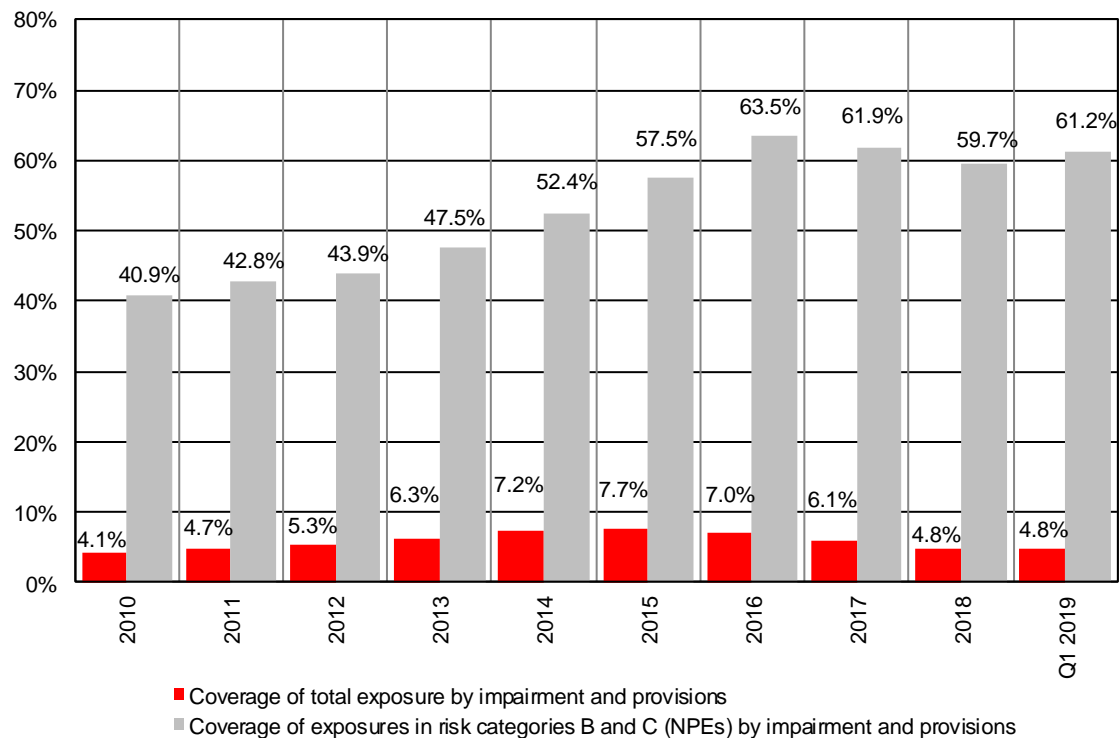
Source: CNB.

# Classification of total exposures



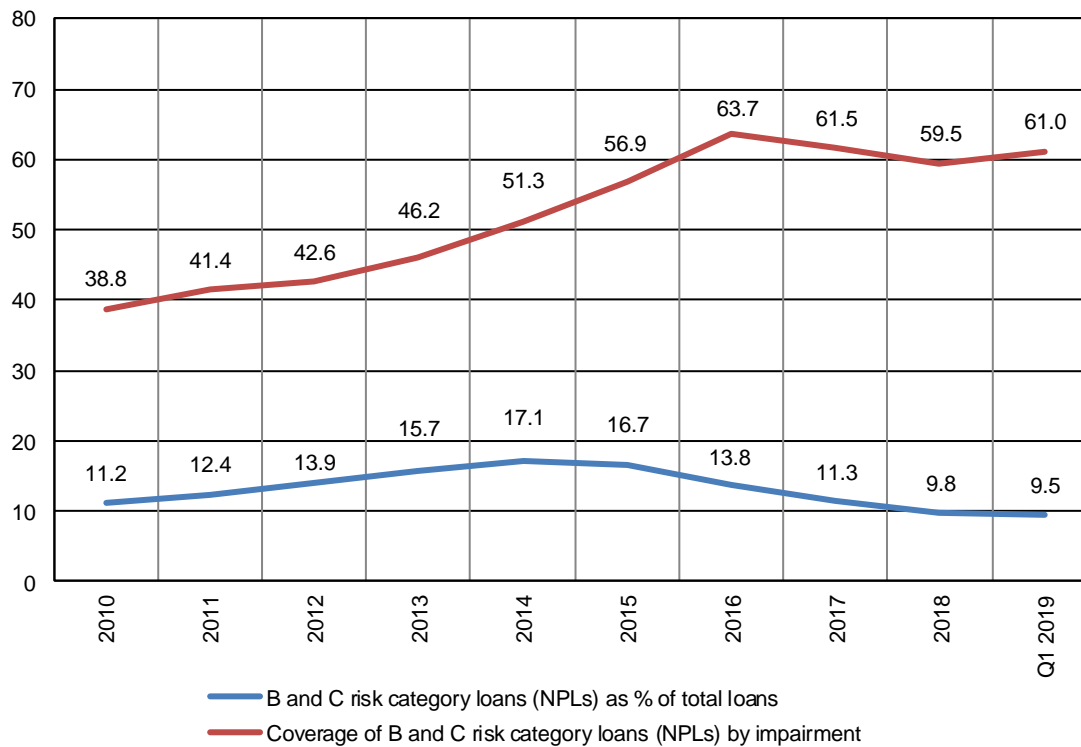
Source: CNB.

# Coverage of total exposures



Source: CNB.

# Loan quality

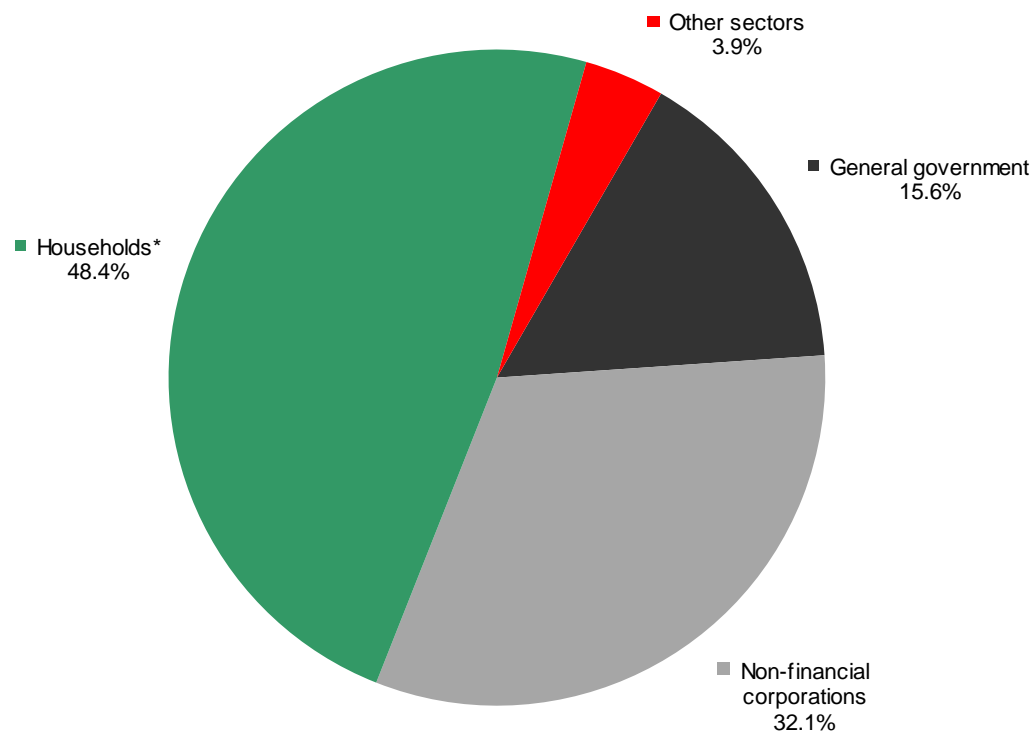


Source: CNB.



# Structure of extended loans (gross) by institutional sectors, ESA 2010

31 March 2019

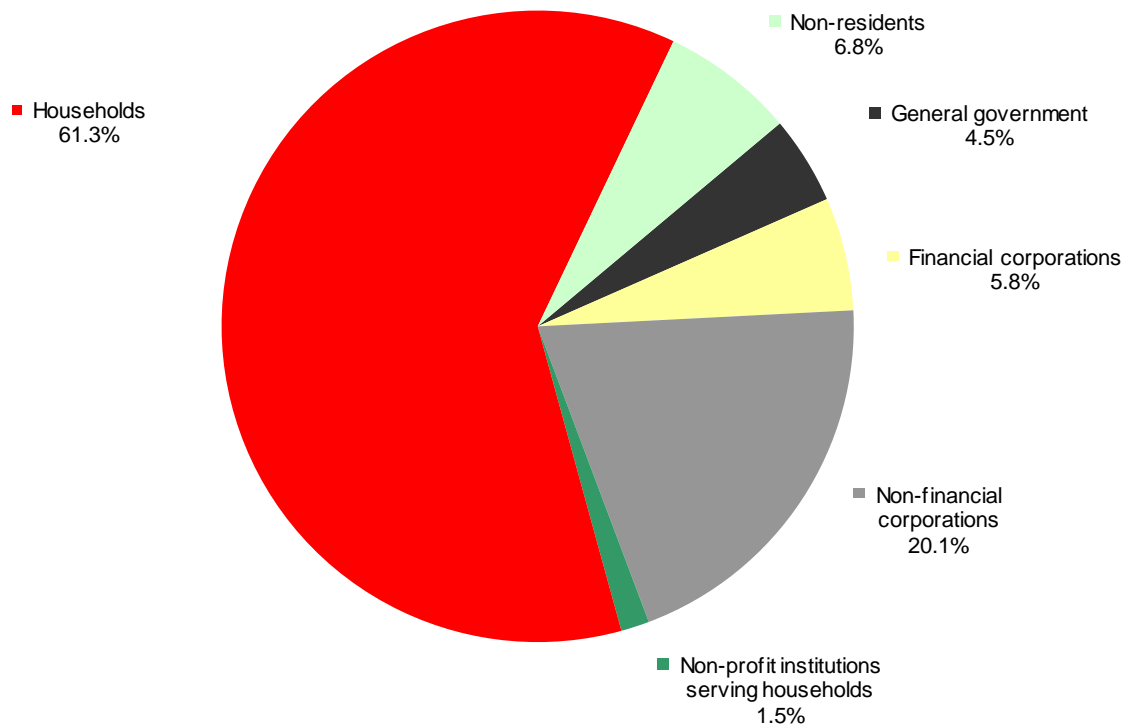


\* Includes non-profit institutions serving households.

Source: CNB.

# Structure of received deposits by institutional sectors, ESA 2010

31 March 2019



Source: CNB.