Romania:
Recent Macroeconomic & Banking System Developments

Lucian Croitoru

April 2019

Content

Economic growth

Drivers of agregate demand

Fiscal deficit

Current account deficit
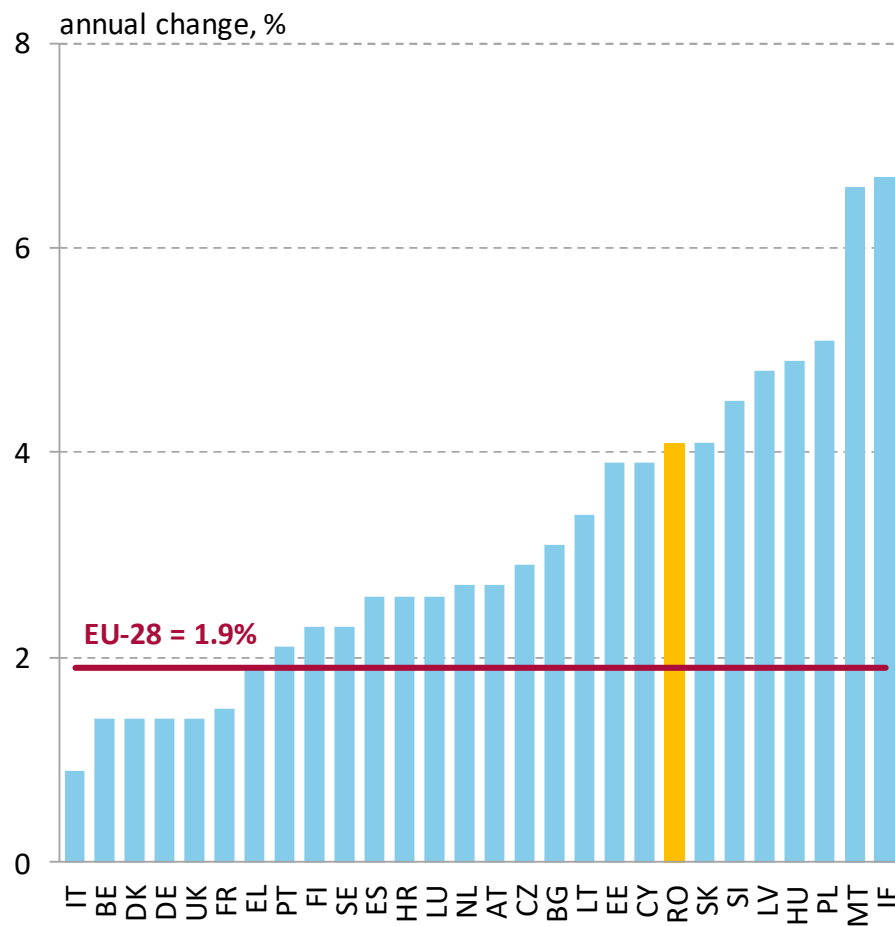
International reserves

Inflation and monetary policy
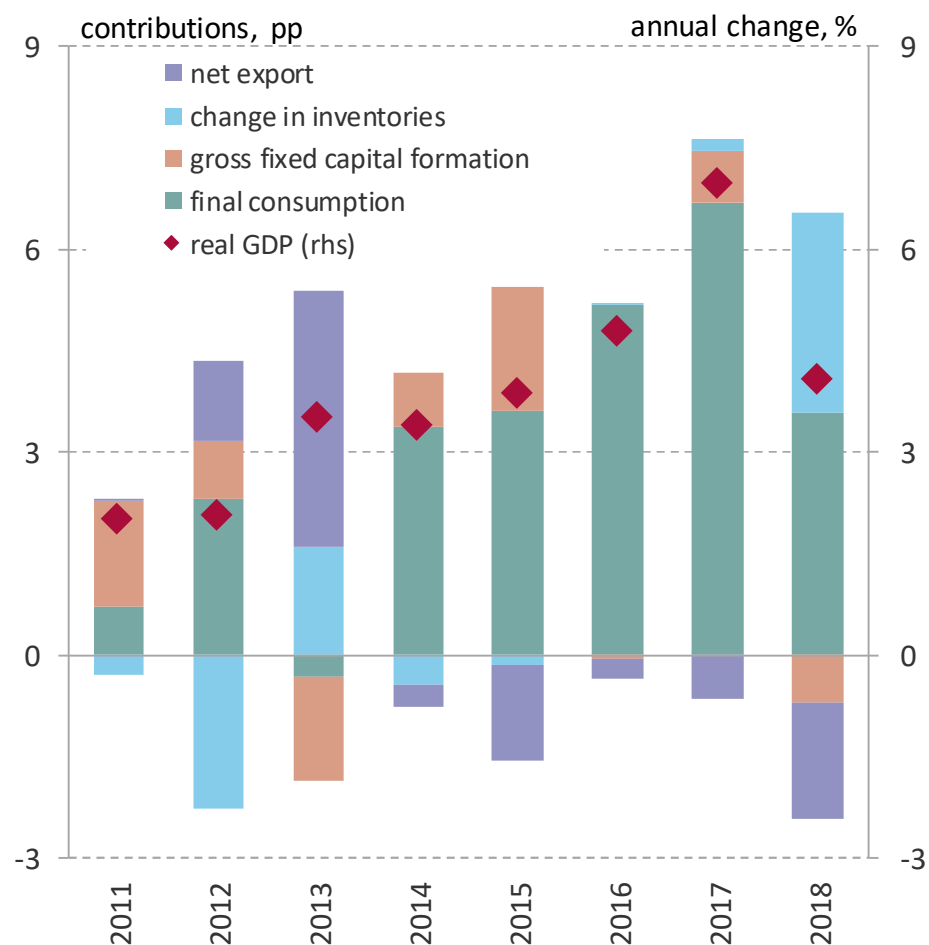
Financial intermediation and the banking sector

Economic growth

Romania's economic growth was significantly above the EU average, chiefly due to consumer demand

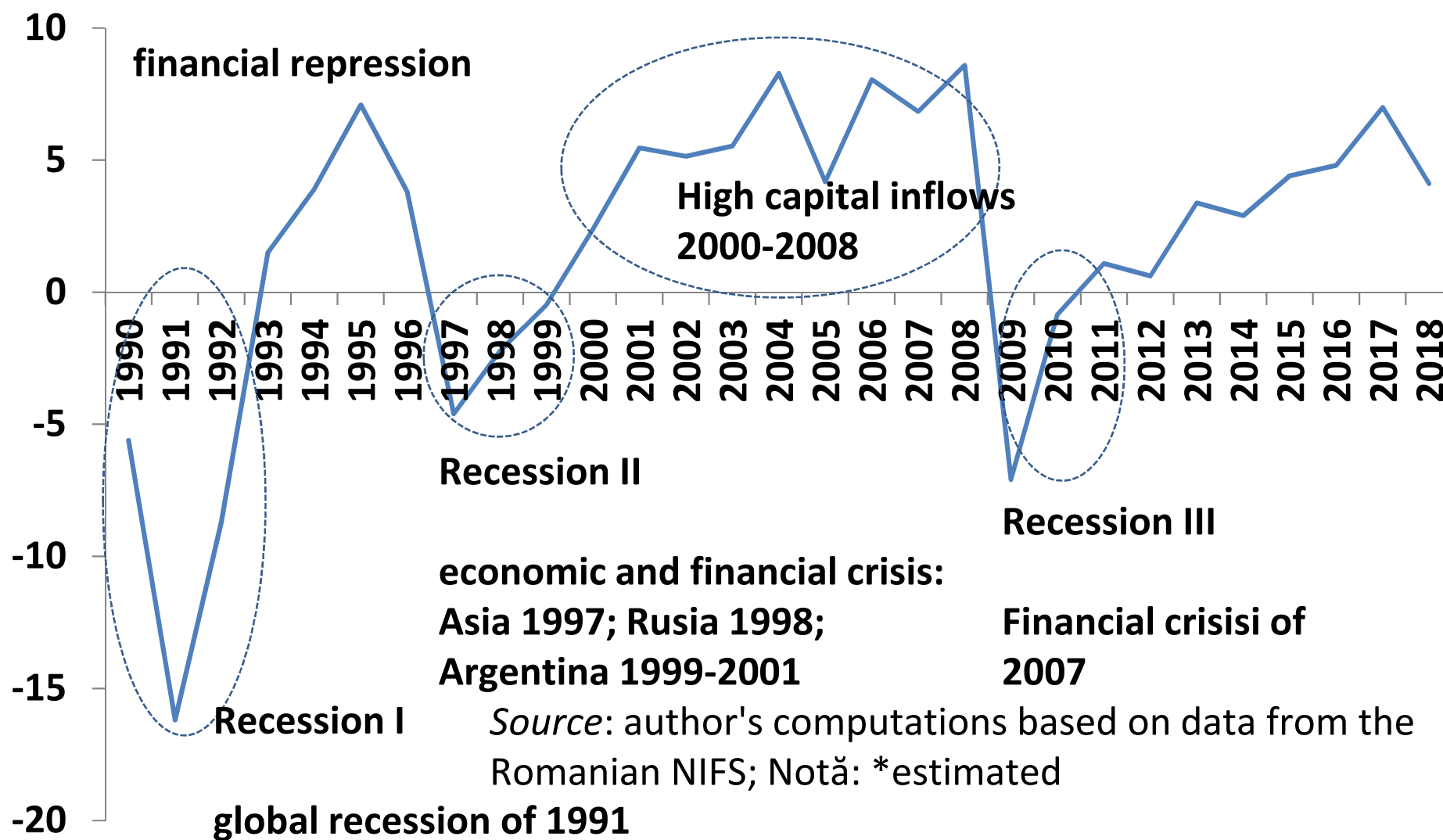## Economic growth in EU Member States in 2018

annual change, %

EU-28 = 1.9%

(Countries on x-axis: IT, BE, DK, DE, UK, FR, EL, PT, FI, SE, ES, HR, LU, NL, AT, CZ, BG, LT, EE, CY, RO, SK, SI, LV, HU, PL, MT, IE)

Contributions to economic growth in Romania

contributions, pp
annual change, %

- net export
- change in inventories
- gross fixed capital formation
- final consumption
- ◆ real GDP (rhs)

(Years on x-axis: 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018)

Source: Eurostat, NIS, NBR calculations

ROMANIA: annual GDP growth rates (%)

financial repression

High capital inflows
2000-2008

Recession II

Recession III

economic and financial crisis:
Asia 1997; Rusia 1998;
Argentina 1999-2001

Financial crisisi of
2007

Recession I

Source: author's computations based on data from the
Romanian NIFS; Notă: *estimated
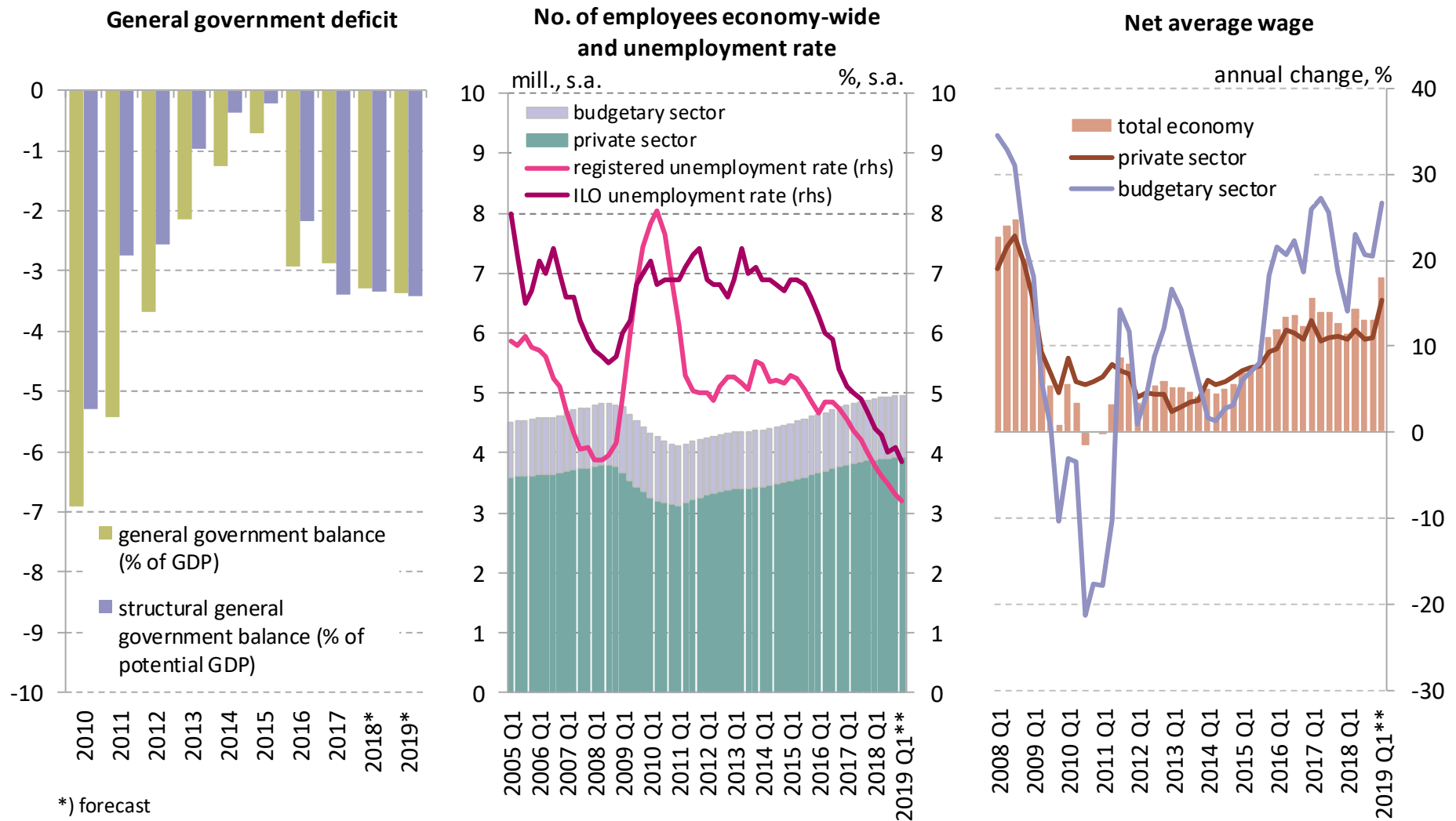
global recession of 1991

Drivers of agregate demand
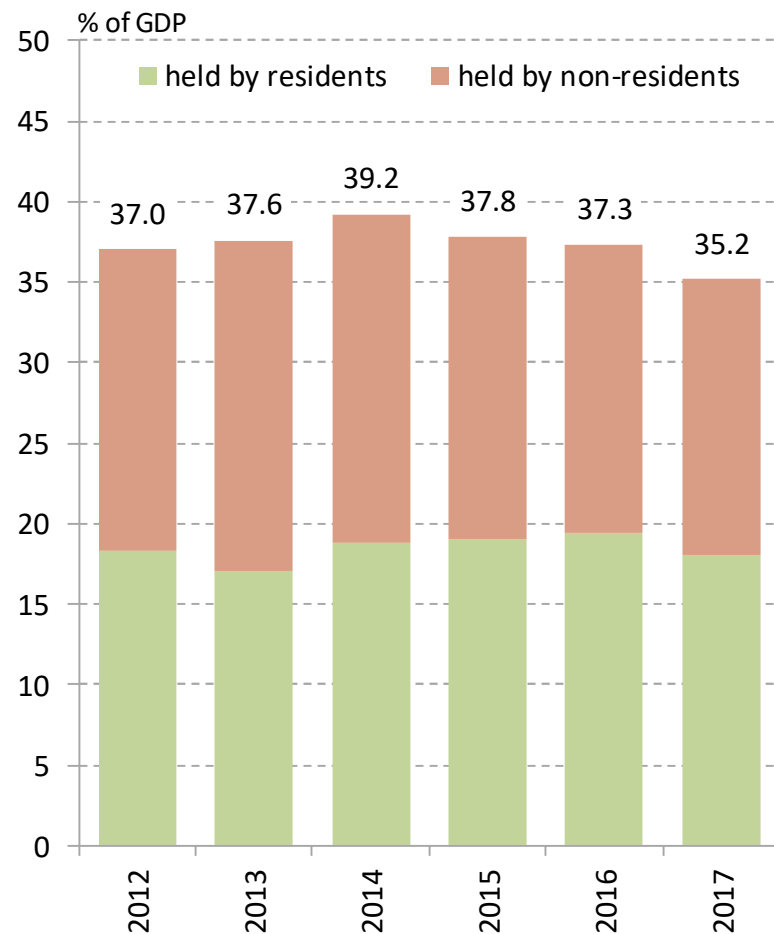
Fiscal deficits

Current account deficit

International reserves

Fiscal stimuli and favorable labor market conditions in terms of wages and employment were the major drivers of demand
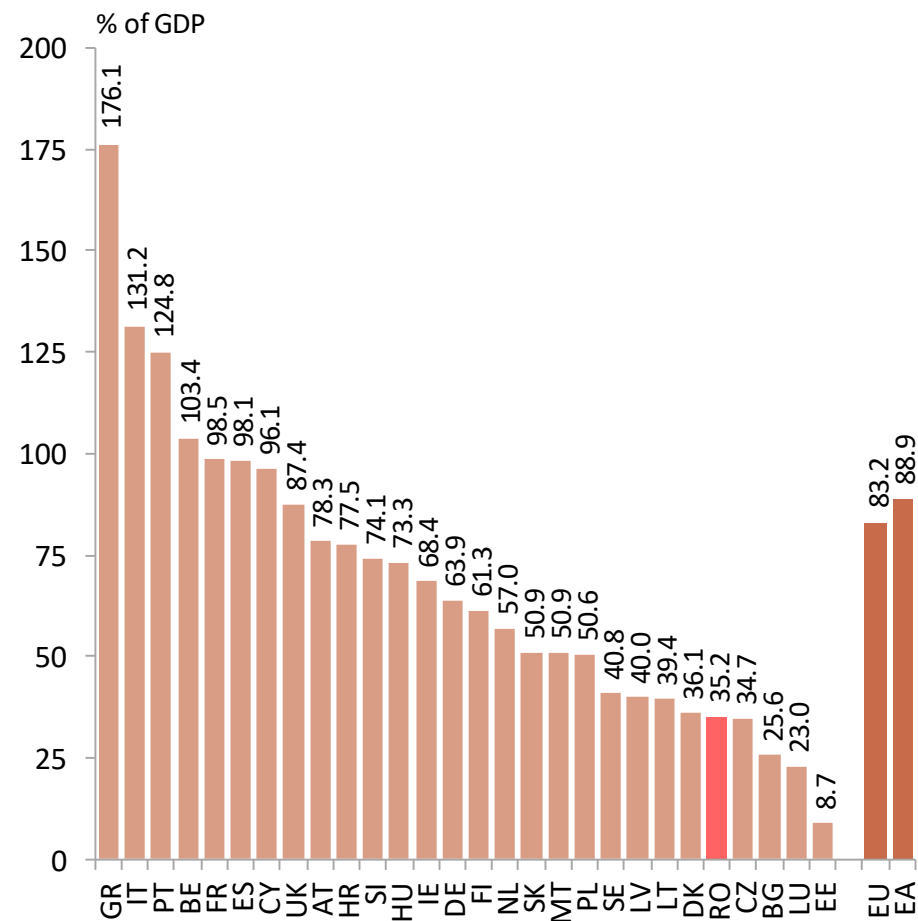
General government deficit

- general government balance (% of GDP)
- structural general government balance (% of potential GDP)

*) forecast

Source: AMECO, NIS, NBR calculations

No. of employees economy-wide and unemployment rate

mill., s.a.   %, s.a.

- budgetary sector
- private sector
- registered unemployment rate (rhs)
- ILO unemployment rate (rhs)

**) Jan. 2019 for employees and Jan.-Feb 2019 for unemployment rate and wage

Net average wage

annual change, %

- total economy
- private sector
- budgetary sector

Low public debt compared with most EU Member States; balanced composition by type of holders

Romania's public debt

% of GDP

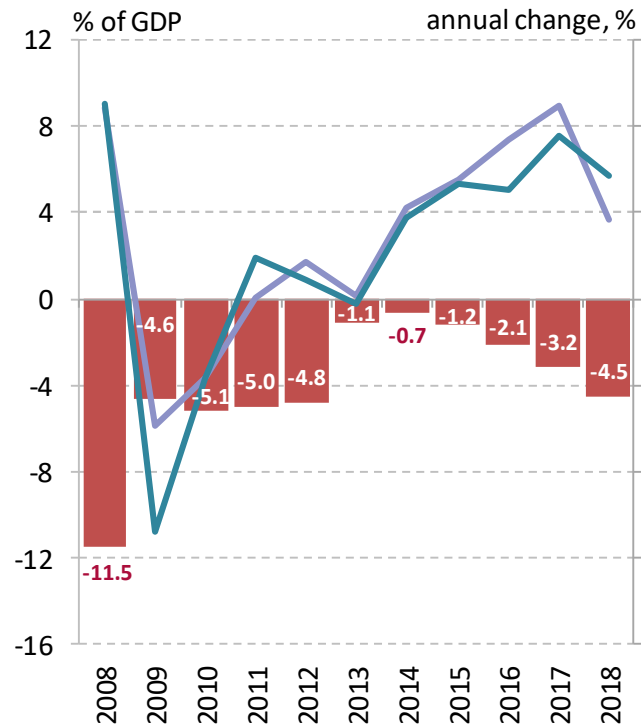Legend: ■ held by residents ■ held by non-residents

- 2012: 37.0
- 2013: 37.6
- 2014: 39.2
- 2015: 37.8
- 2016: 37.3
- 2017: 35.2

Source: NIS, MPF

Gross public debt of EU Member States at end-2017

% of GDP

- GR: 176.1
- IT: 131.2
- PT: 124.8
- BE: 103.4
- FR: 98.5
- ES: 98.1
- CY: 96.1
- UK: 87.4
- AT: 78.3
- HR: 77.5
- SI: 74.1
- HU: 73.3
- IE: 68.4
- DE: 63.9
- FI: 61.3
- NL: 57.0
- SK: 50.9
- MT: 50.9
- PL: 50.6
- SE: 40.8
- LV: 40.0
- LT: 39.4
- DK: 36.1
- RO: 35.2
- CZ: 34.7
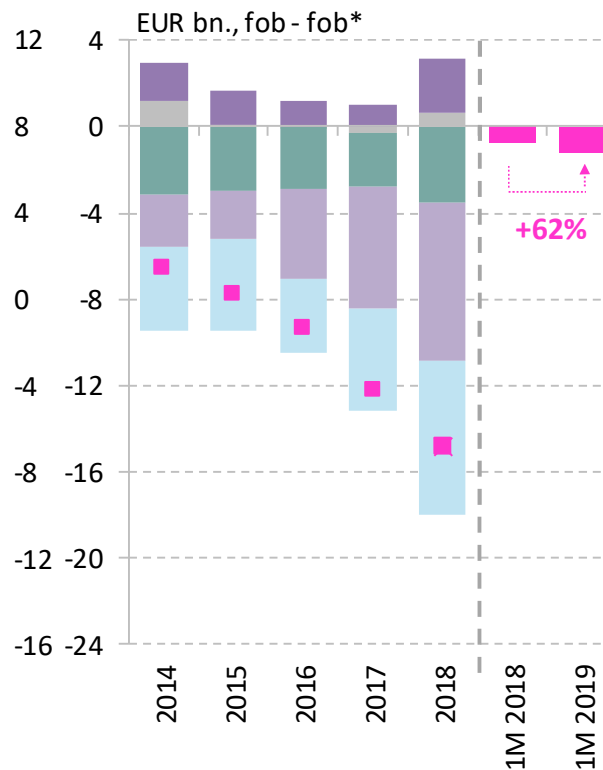- BG: 25.6
- LU: 23.0
- EE: 8.7
- EU: 83.2
- EA: 88.9

Source: AMECO

Worsening of external imbalance on the back of robust domestic absorption …

Domestic absorption and external balance

% of GDP   annual change, %

Values: -11.5, -4.6, -5.1, -5.0, -4.8, -1.1, -0.7, -1.2, -2.1, -3.2, -4.5

(years: 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018)

- 🟥 current account balance
- household final consumption (rhs)
- domestic absorption (rhs)

Balance on trade in goods

EUR bn., fob - fob*

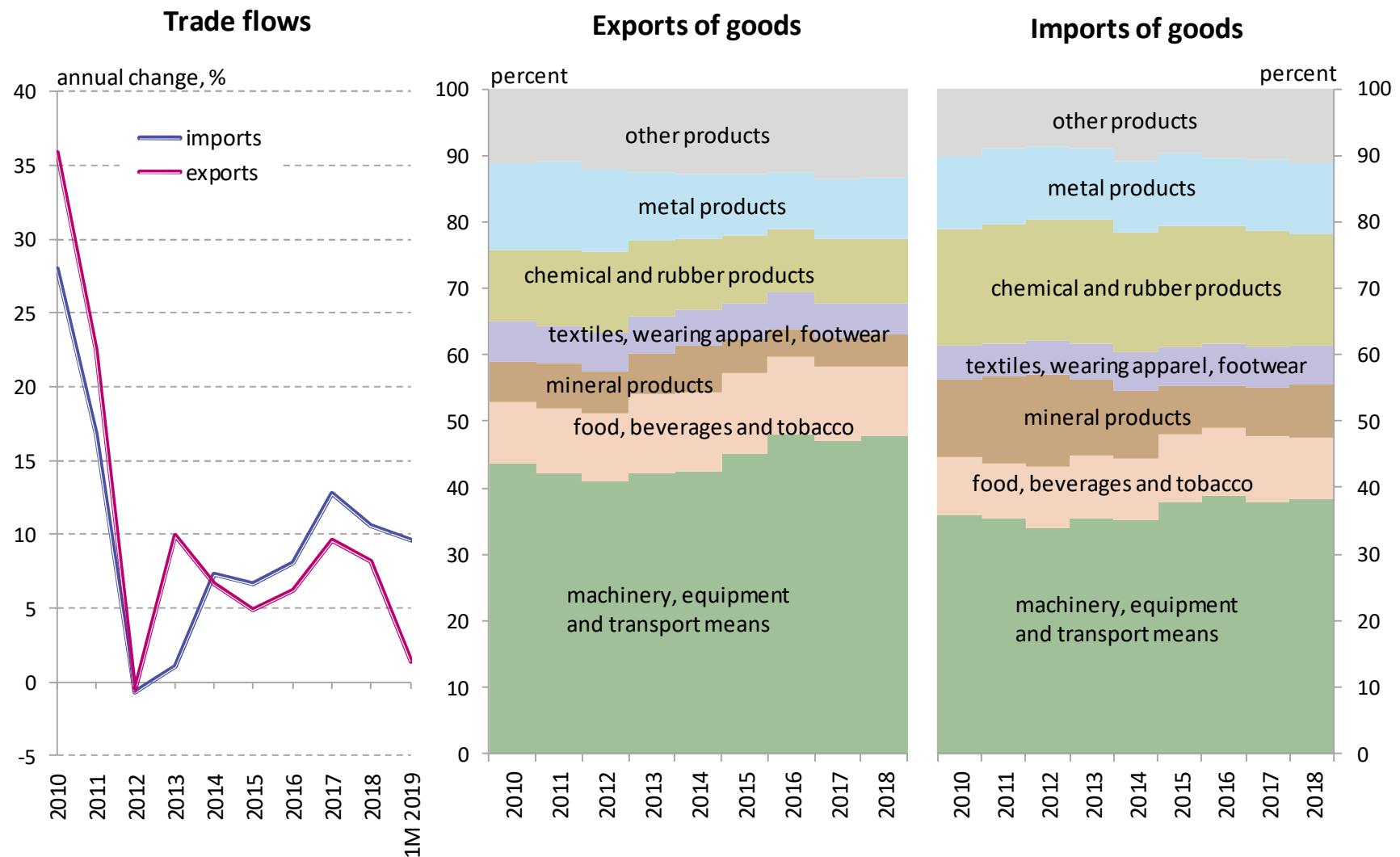(years: 2014, 2015, 2016, 2017, 2018, 1M 2018, 1M 2019)

+62%

- 🟦 intermediate goods
- 🟪 consumer goods excl. cars, motor spirit
- 🟩 capital goods
- 🟪 passenger cars, motor spirit
- ⬜ goods n.e.c.
- 🟥 goods deficit

Current account in EU Member States

RO

OX: current account balance (% of GDP), 2017
OY: current account balance (% of GDP), 2018

*) according to BPM6, goods under processing trade arrangements are excluded

Source: NIS, Eurostat, NBR, NBR calculations

... with the international economic slowdown affecting exports

Trade flows

annual change, %

Note: BPM6-compliant calculations.

Source: NBR

Exports of goods

percent

other products

metal products

chemical and rubber products

textiles, wearing apparel, footwear

mineral products

food, beverages and tobacco

machinery, equipment and transport means

Imports of goods

percent

other products

metal products

chemical and rubber products

textiles, wearing apparel, footwear

mineral products

food, beverages and tobacco

machinery, equipment and transport means

Current account deficit financed primarily from stable flows

EUR bn., balance

EUR bn., balance

■ current account　■ loans　■ stable flows*　■ volatile flows**　■ other flows

*) direct investment and capital account

**) portfolio investment and deposits

"+" inflows; "-" outflows
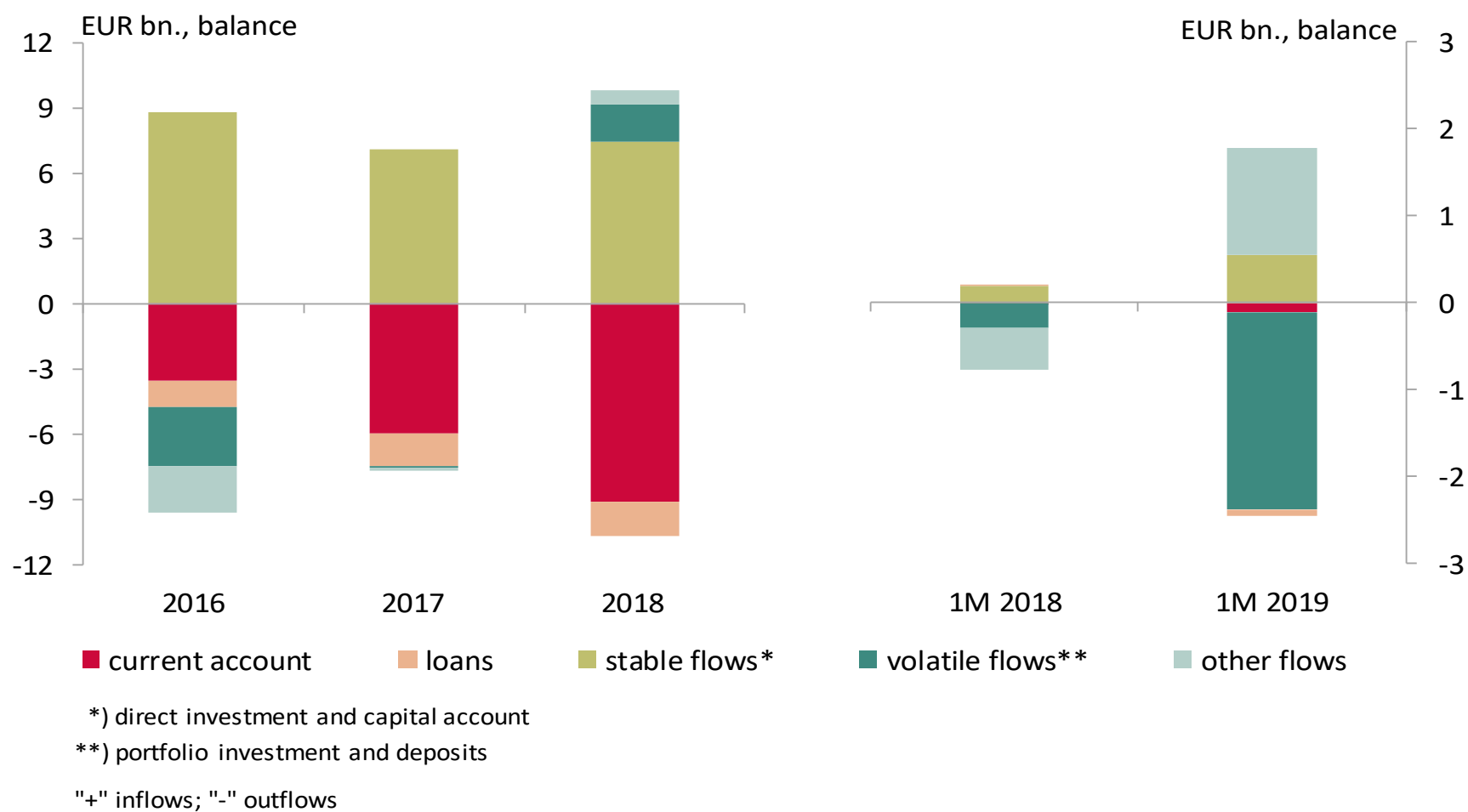
Source: NBR

Romania's international reserves remained at a high level; reserve adequacy indicators within recommendable limits

International reserves

EUR bn.

- NBR foreign exchange reserves
- gold

(2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, Mar.2019)

External debt

EUR bn.

- ST debt (majority private debt)
- LT debt

Year	LT debt	ST debt
2008	51.9	20.6
2009	66.7	15.6
2010	74.1	19.5
2011	77.1	22.8
2012	79.9	20.9
2013	78.9	19.2
2014	75.8	18.9
2015	71.4	20.6
2016	69.6	23.3
2017	68.5	28.8
2018	68.0	31.5
Jan.2019	67.5	30.9

Reserve adequacy indicators

EUR bn.

- international reserves
- IMF indicator (100-150%)
- 3 months of prospective imports
- 100% of ST external debt (residual maturity)
- 20% of M3

(2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, Jan.2019)

Source: NBR, NCSP, IMF, NBR calculations

Inflation and monetary policy

The annual CPI inflation rate overpassed the variation band of the flat target starting from February 2019 ...
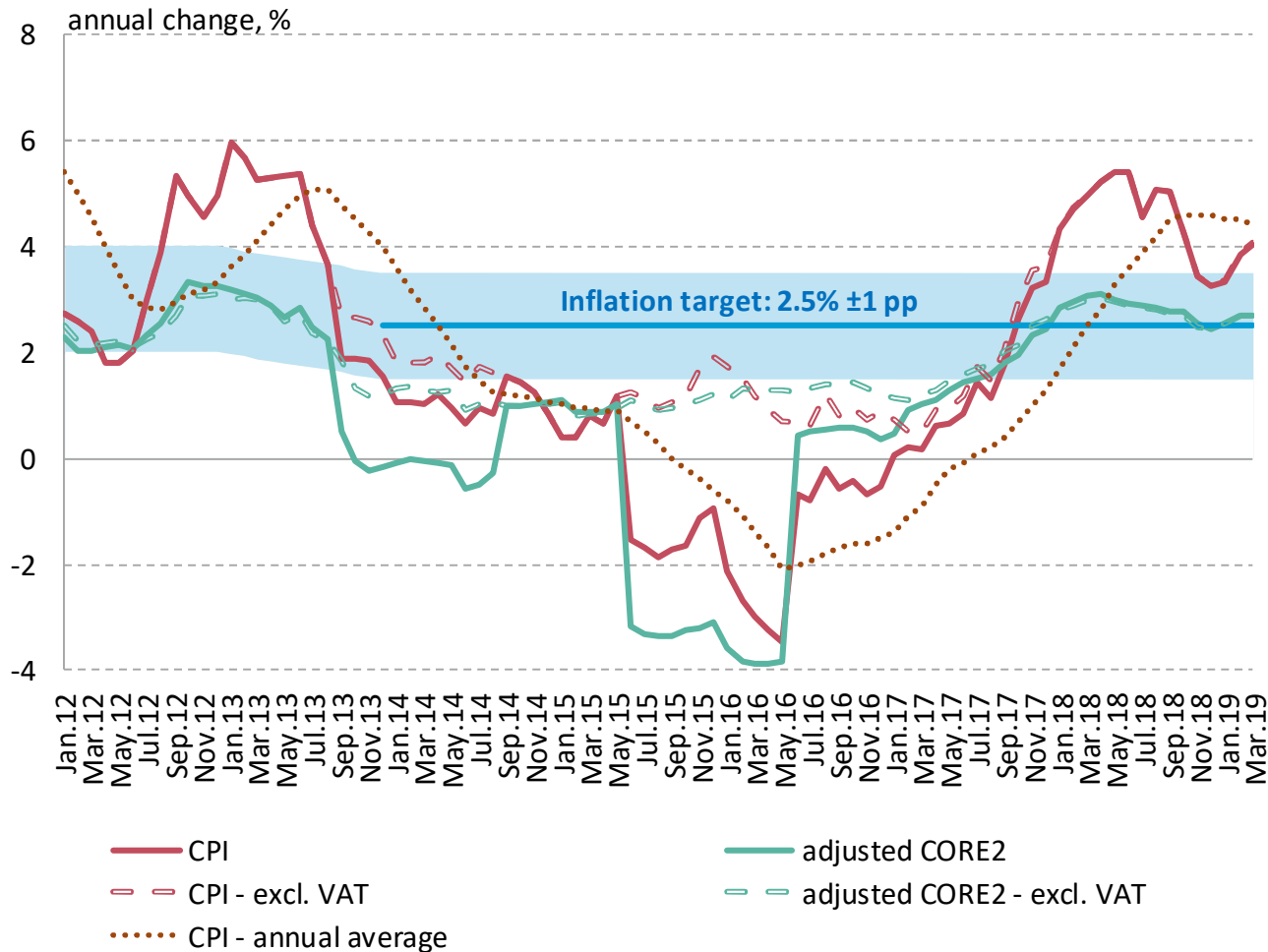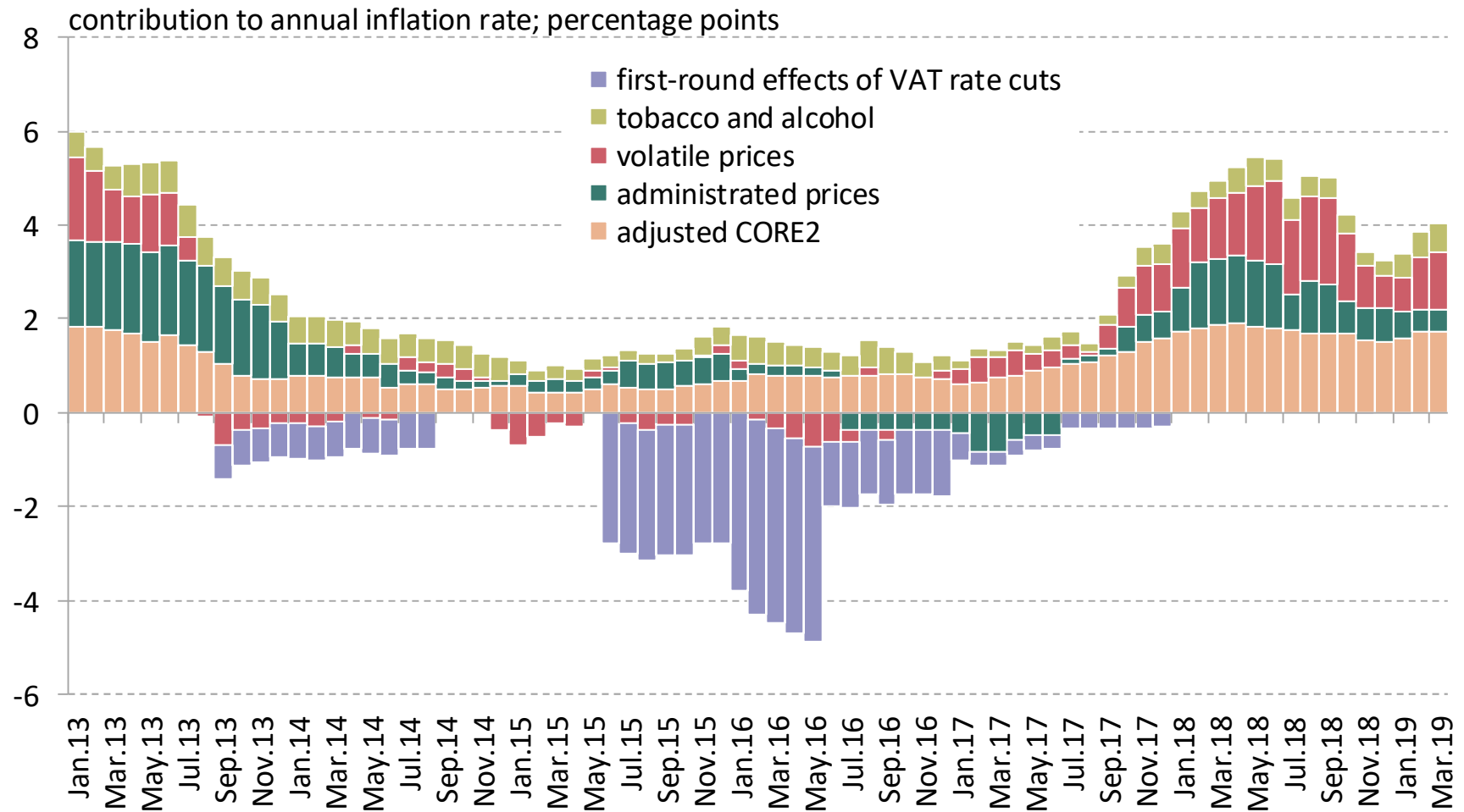

Determinants

⬆ Supply-side shocks in the case of fuels and vegetables

⬆ Significant excess aggregate demand

⬆ High production costs (labour costs, utilities expenses)

⬆ Upward adjustment of inflation expectations
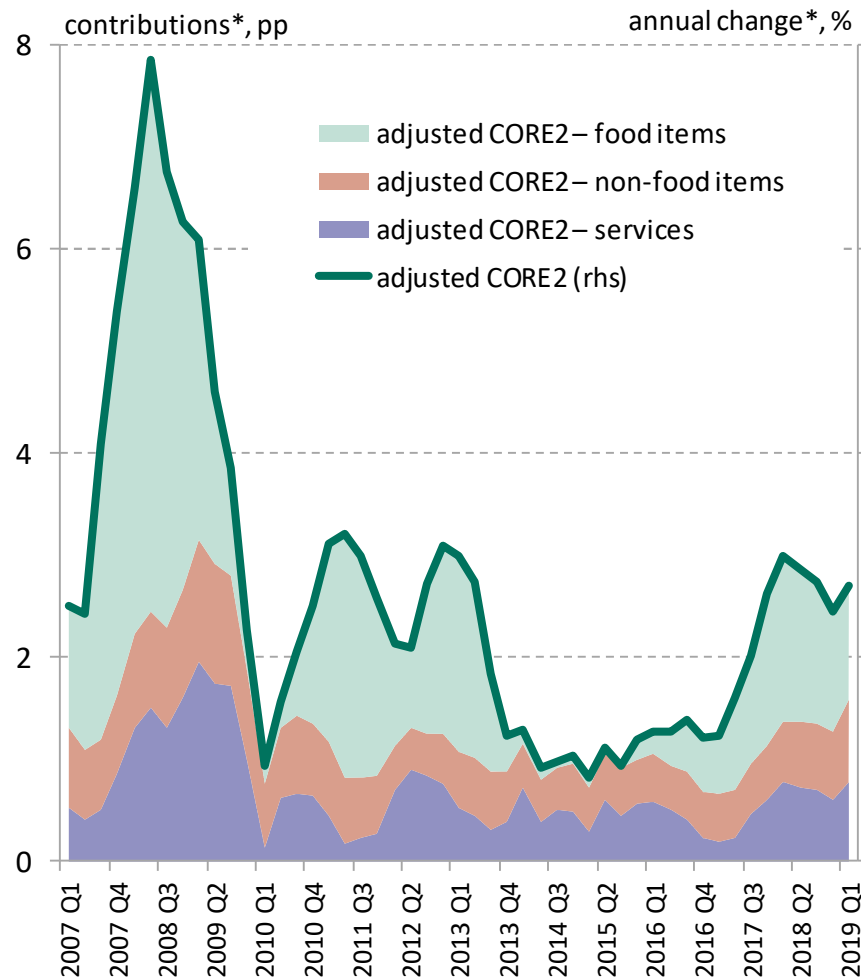
⬆ Depreciation of the domestic currency versus the euro

annual change, %

Inflation target: 2.5% ±1 pp

CPI
CPI - excl. VAT
CPI - annual average
adjusted CORE2
adjusted CORE2 - excl. VAT

Source: NIS, NBR calculations and estimates

… mainly on the back of exogenous components

contribution to annual inflation rate; percentage points

Legend:
- first-round effects of VAT rate cuts
- tobacco and alcohol
- volatile prices
- administrated prices
- adjusted CORE2

Source: NIS, NBR calculations

Excess aggregate demand and high production costs entailed robust core inflation as well
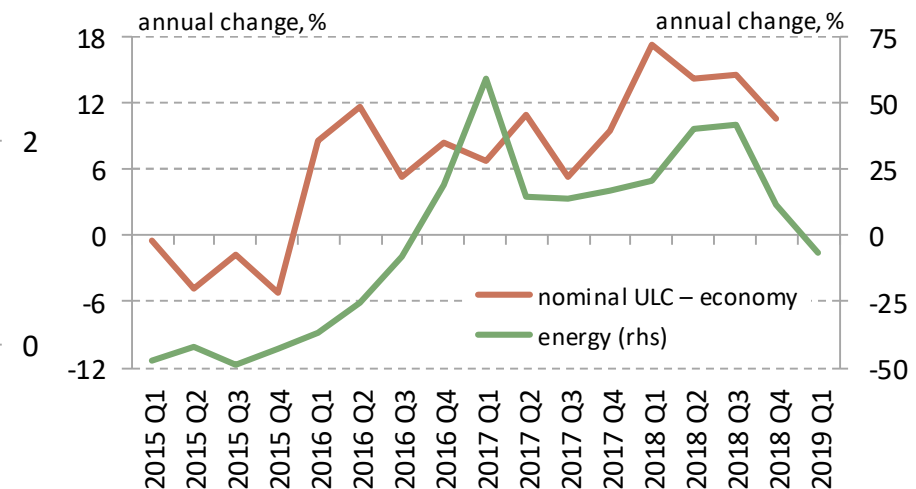
Core inflation components

contributions*, pp

annual change*, %

- adjusted CORE2 – food items
- adjusted CORE2 – non-food items
- adjusted CORE2 – services
- adjusted CORE2 (rhs)

*) excluding VAT direct effect

Cyclical position of the economy

output gap, % of potential GDP

Production costs

annual change, %

annual change, %
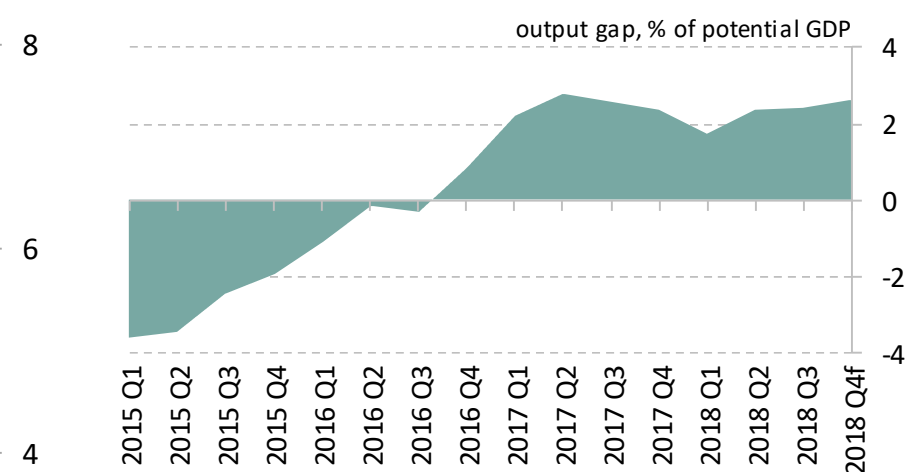
- nominal ULC – economy
- energy (rhs)

Source: NIS, World Bank, NBR calculations and estimates

The negative spread between interest rates and the annual inflation rate is not characteristic only of Romania

Romania

Poland

3M WIBOR

3M ROBOR

Hungary

Czech Republic

3M BUBOR

3M PRIBOR

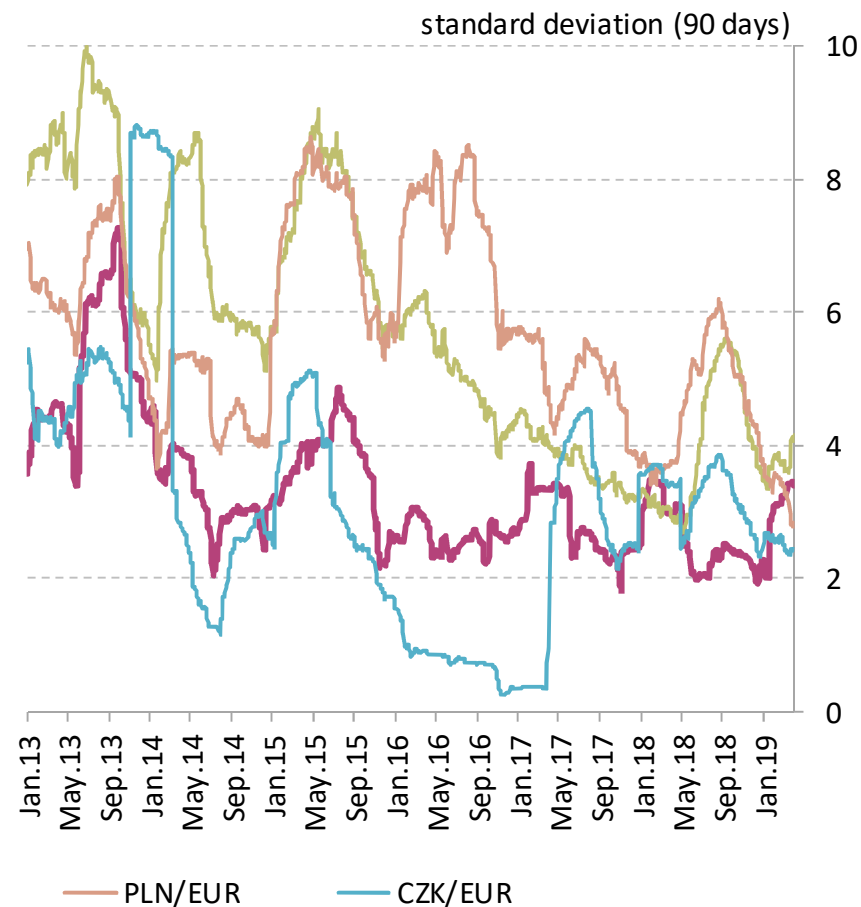—— monetary policy rate   —— annual inflation rate
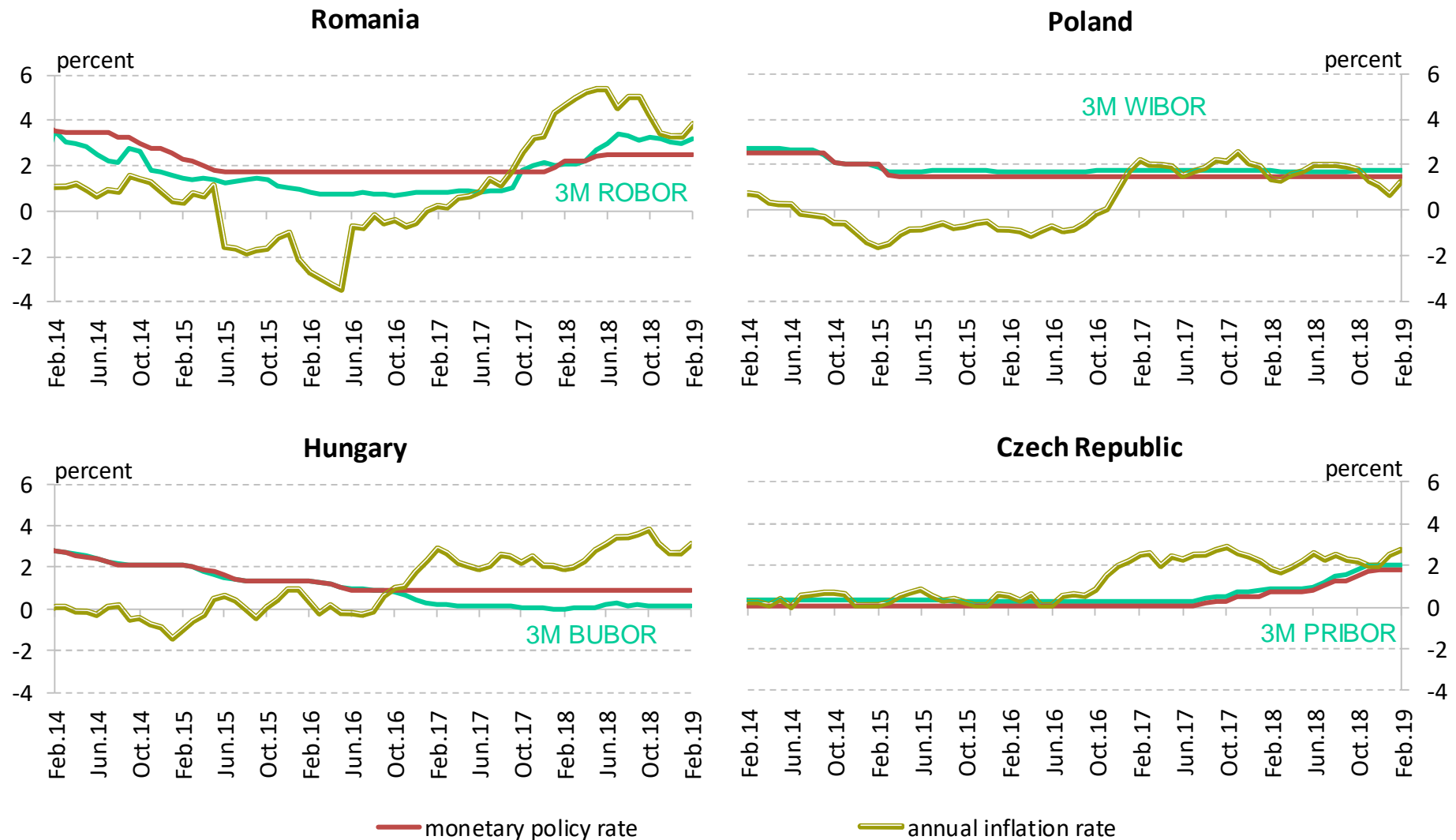
Source: Bloomberg, NBR, national central banks, national statistical offices

Moderate depreciation trend of the leu versus the euro, amid the widening of external imbalance; volatility similar to peers
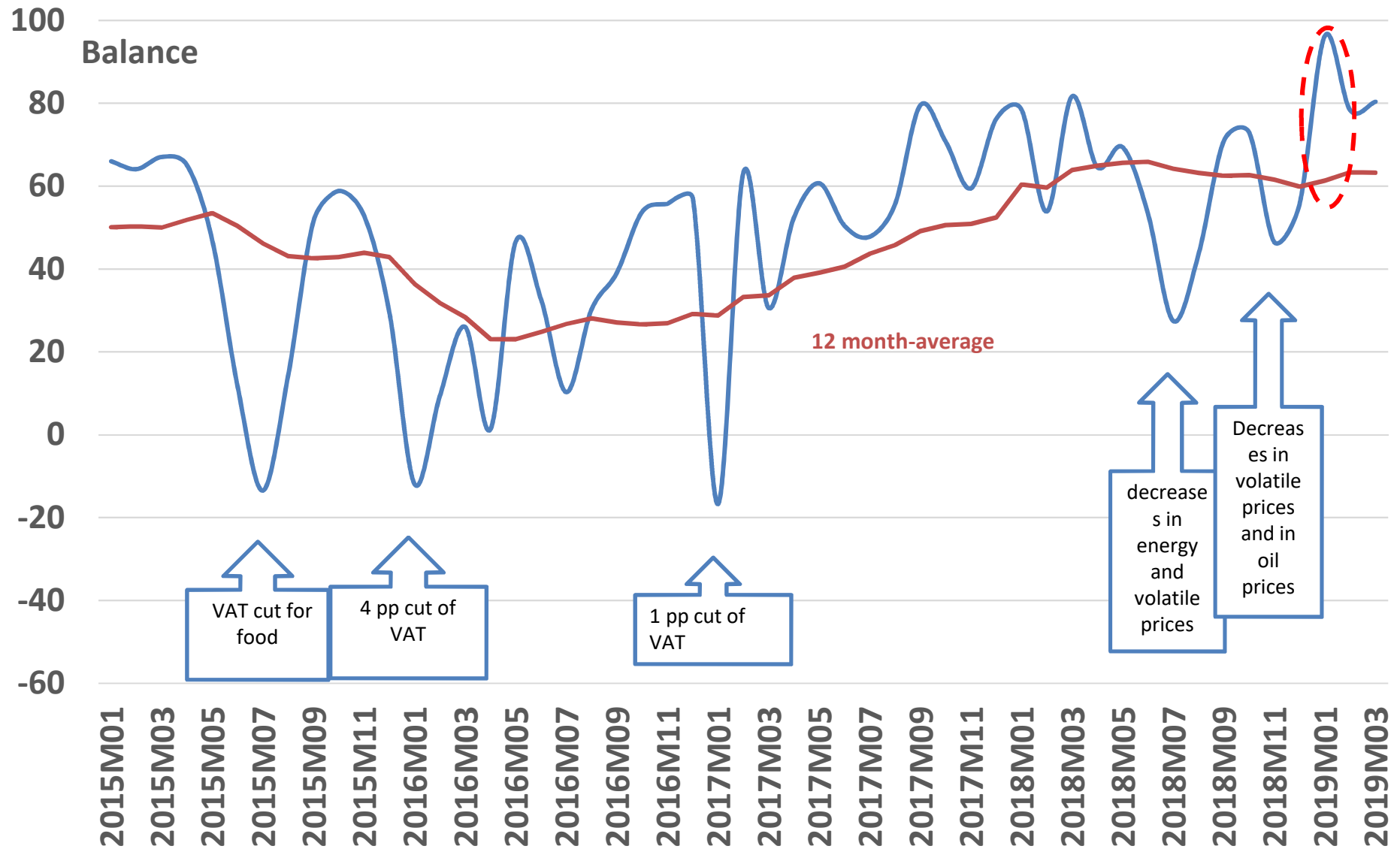
Exchange rates

index (%), 31 December 2012=100
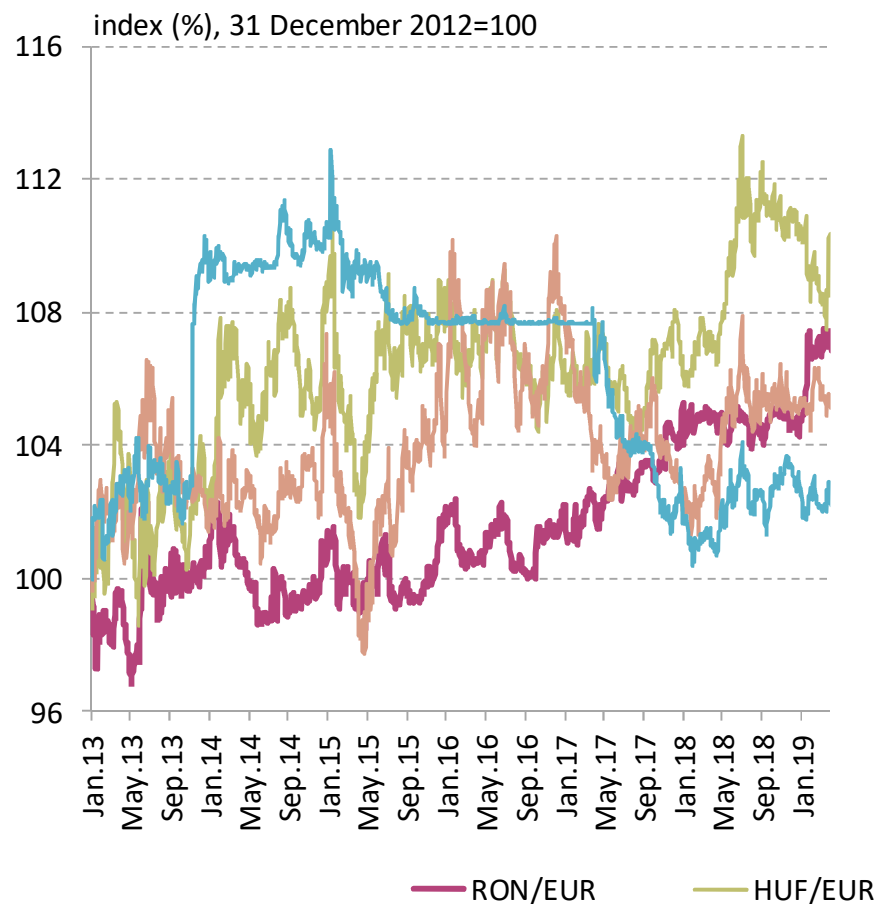
Historical volatility

standard deviation (90 days)

— RON/EUR   — HUF/EUR   — PLN/EUR   — CZK/EUR

Source: Bloomberg

Inflation diffusion index in Romania

Balance

12 month-average

VAT cut for food

4 pp cut of VAT

1 pp cut of VAT

decreases in energy and volatile prices

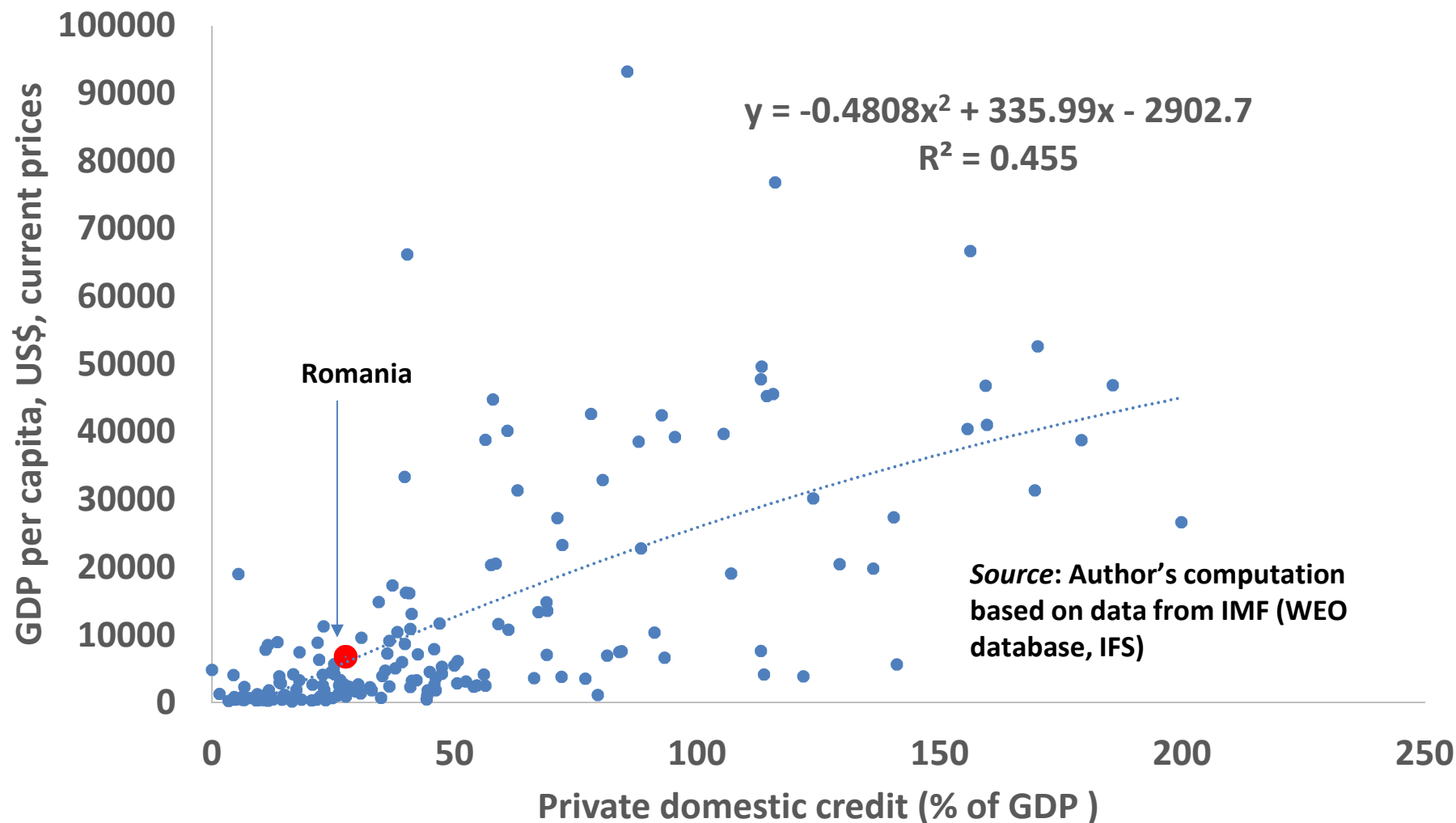Decreases in volatile prices and in oil prices

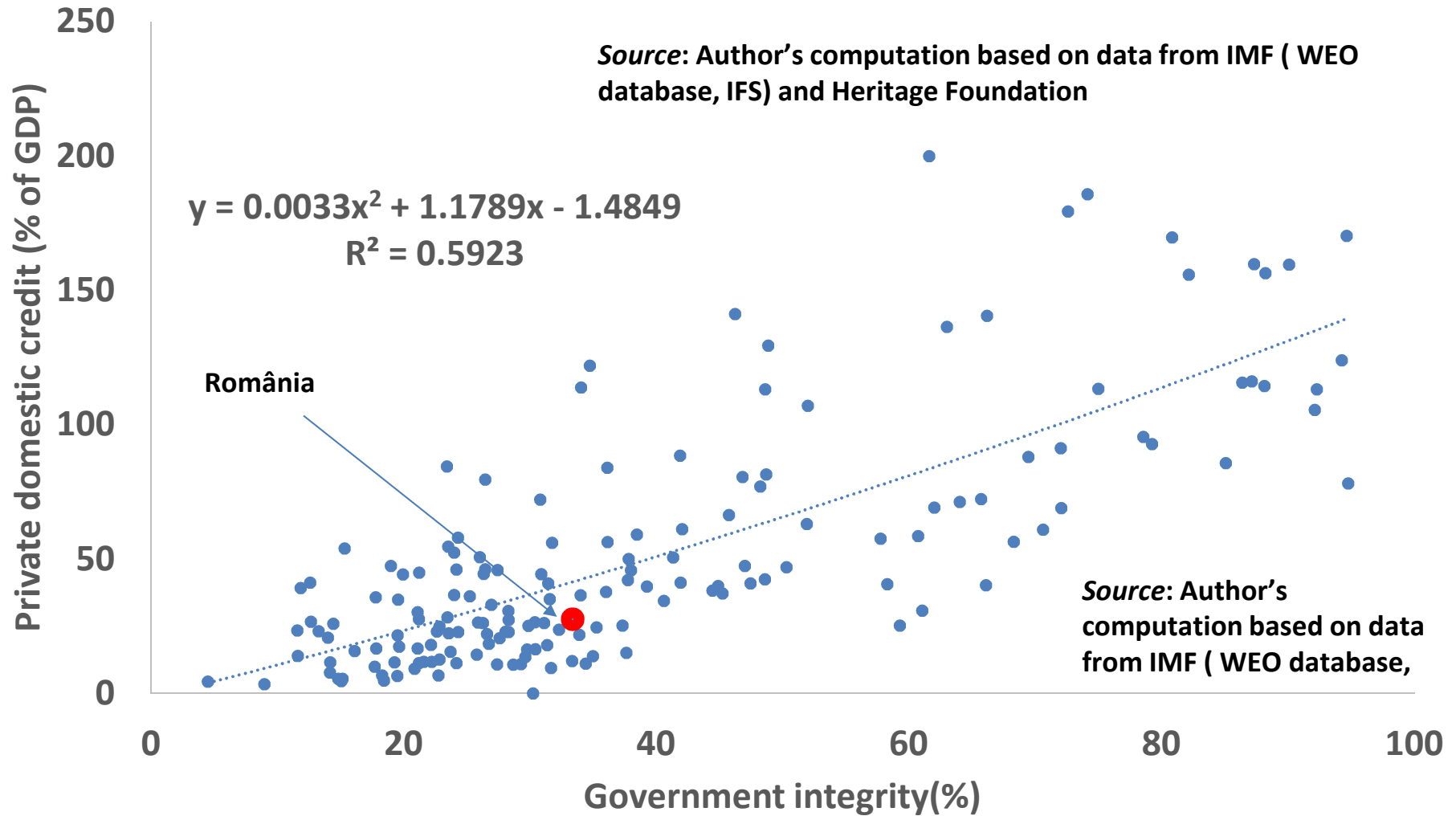# Financial intermediation and the banking sector

The next three slides:

Weak property rights and low government integrity have

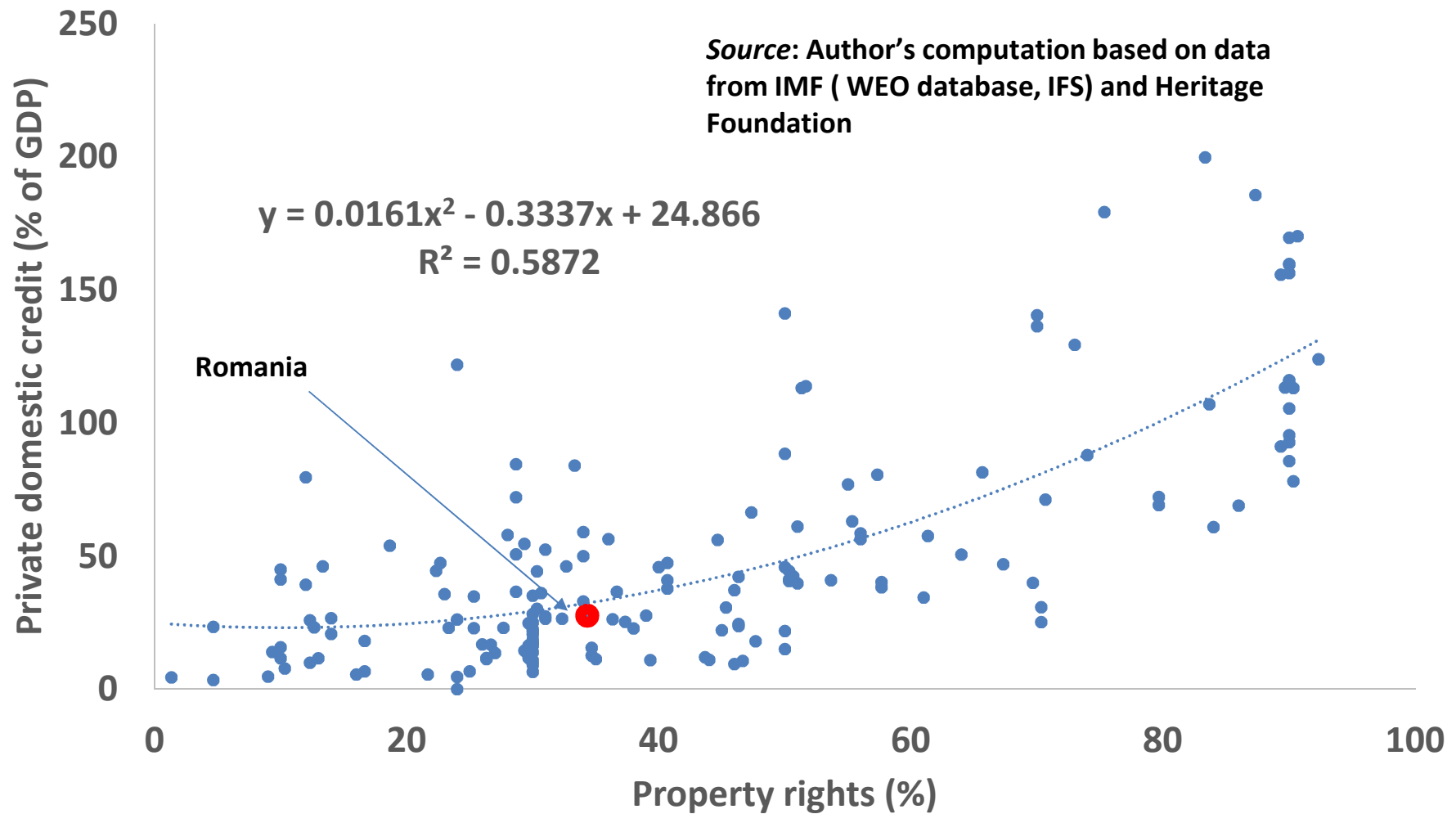a drag on financial intermediation

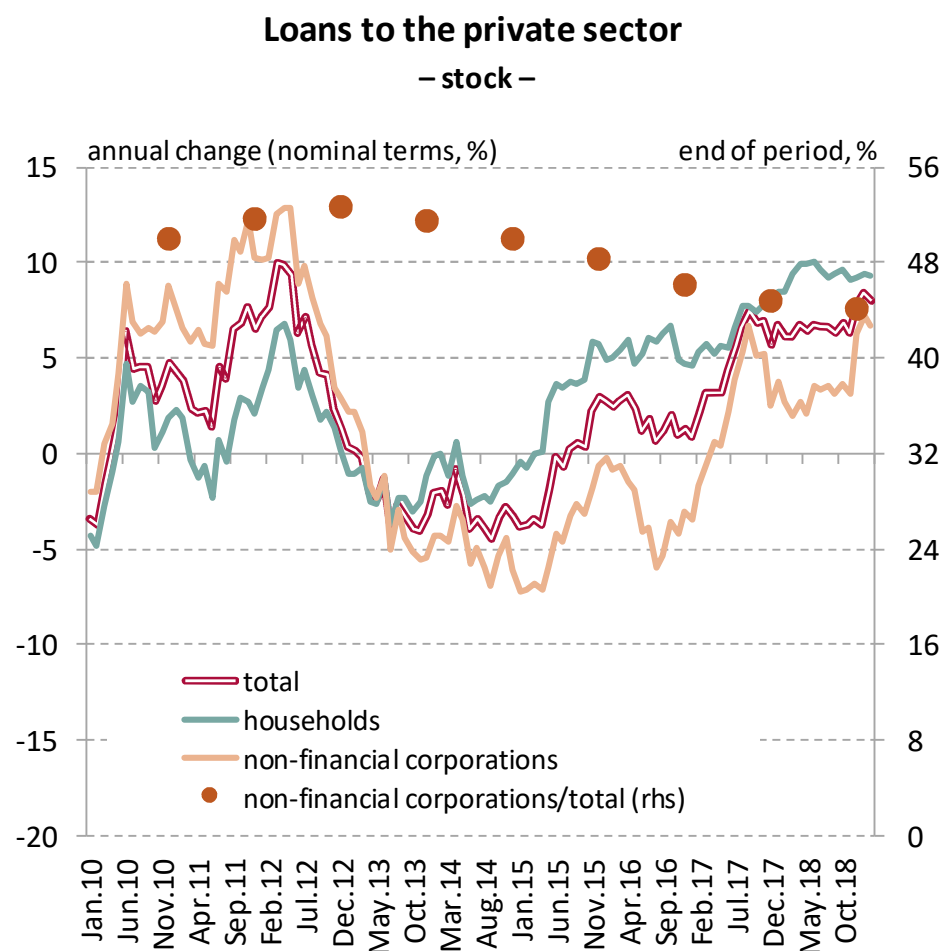# The correlation between financial intermediation and GDP/capita in the 2001-2015 period for 177 countries

$$y = -0.4808x^2 + 335.99x - 2902.7$$
$$R^2 = 0.455$$

Romania

Source: Author's computation based on data from IMF (WEO database, IFS)

GDP per capita, US$, current prices

Private domestic credit (% of GDP)

The correlatin between government integrity and financial intermediation in the 2001-2015 perioad for 165 contries

$y = 0.0033x^2 + 1.1789x - 1.4849$

$R^2 = 0.5923$

România

Source: Author's computation based on data from IMF (WEO database, IFS) and Heritage Foundation

Source: Author's computation based on data from IMF (WEO database,

Private domestic credit (% of GDP)

Government integrity(%)

Property rights-financial intermediation correlation between 2001-2015 for 165 contries

Source: Author's computation based on data from IMF (WEO database, IFS) and Heritage Foundation

$y = 0.0161x^2 - 0.3337x + 24.866$

$R^2 = 0.5872$

Romania

Private domestic credit (% of GDP)

Property rights (%)

Significantly slower increase in loans to non-financial corporations than in household credit

Loans to the private sector
– stock –

annual change (nominal terms, %)   end of period, %

Legend:
- total
- households
- non-financial corporations
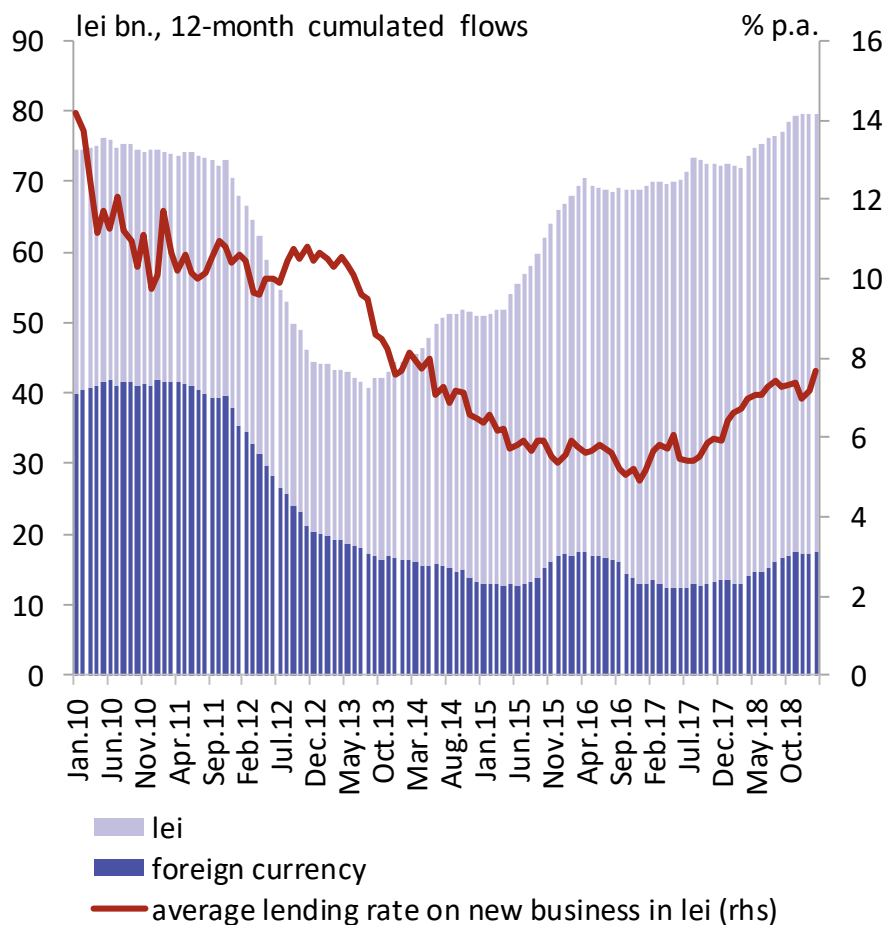- non-financial corporations/total (rhs)

Source: NBR

Persistence of structural vulnerabilities – inadequate capitalisation, poor profitability, payment indiscipline, easy recourse to insolvency – dampens lending to non-financial corporations

Over the past decade, irrespective of the business cycle stage, 40-50 percent of active firms reported losses, while the share of companies with equity below the regulatory threshold exceeded 40 percent
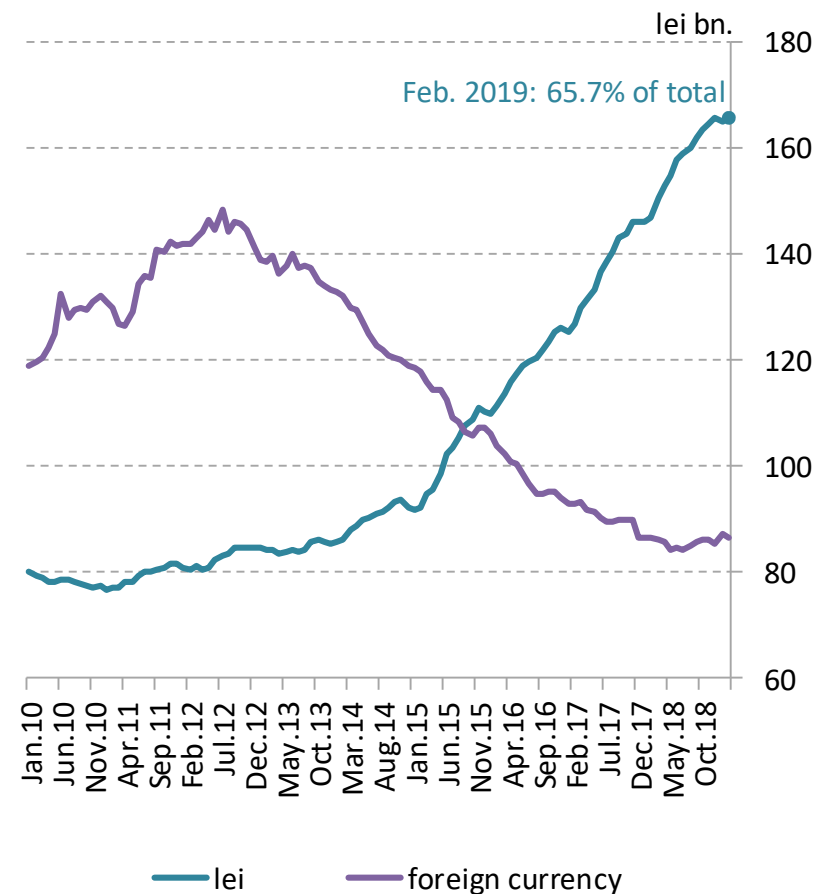
Robust increase in leu-denominated loans, with a favourable impact on the currency composition of credit to the private sector

New loans to the private sector and average rate on leu-denominated new loans

lei bn., 12-month cumulated flows   % p.a.

- lei
- foreign currency
- average lending rate on new business in lei (rhs)

Loans to the private sector (stock)

lei bn.

Feb. 2019: 65.7% of total

- lei
- foreign currency

Source: NBR

Housing loans acted as the main driver
behind the swift dynamics of credit to households

Consumer loans

Housing loans

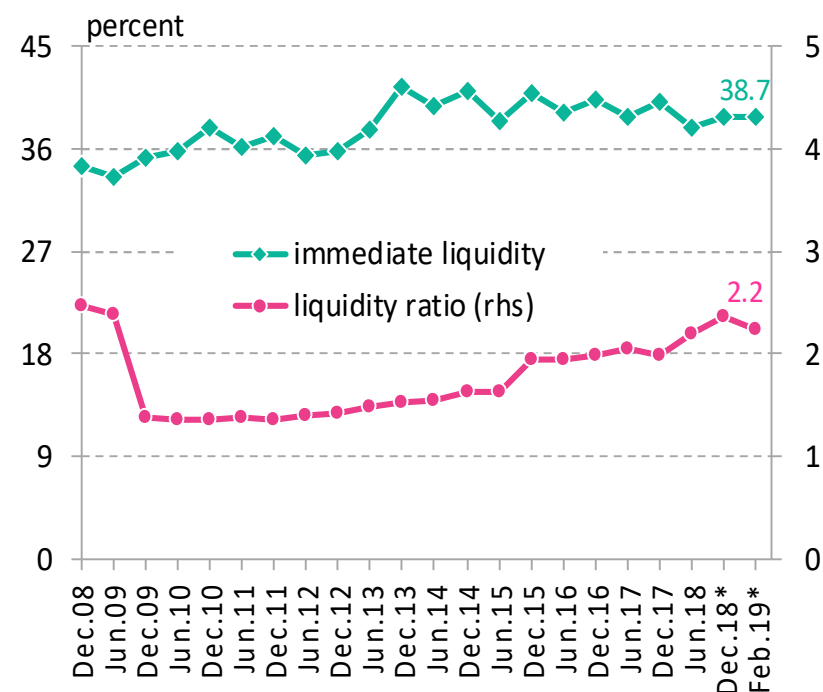**Interest rate on leu-denominated loans to households**

*) excl. renegotiated loans
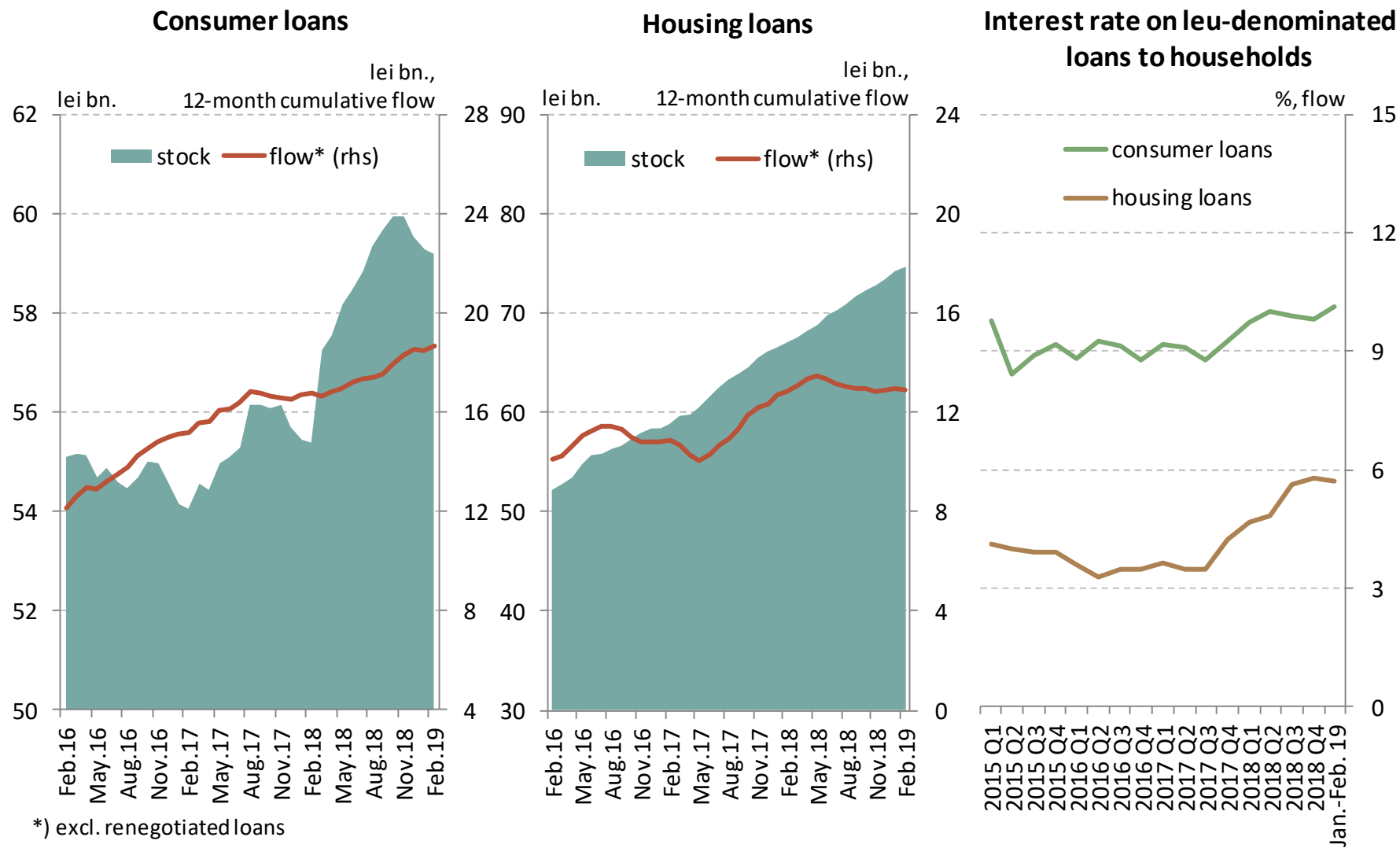
Source: NBR

Comfortable levels of capital adequacy and liquidity in the banking sector

Capital adequacy indicators

percent

Legend:
- solvency ratio
- Tier 1 capital ratio for credit risk
- Tier 1 capital ratio
- **total capital ratio (CRD IV/CRR)**
- **Tier 1 capital ratio (CRD IV/CRR)**

Liquidity indicators

percent

- immediate liquidity
- liquidity ratio (rhs)

38.7

2.2
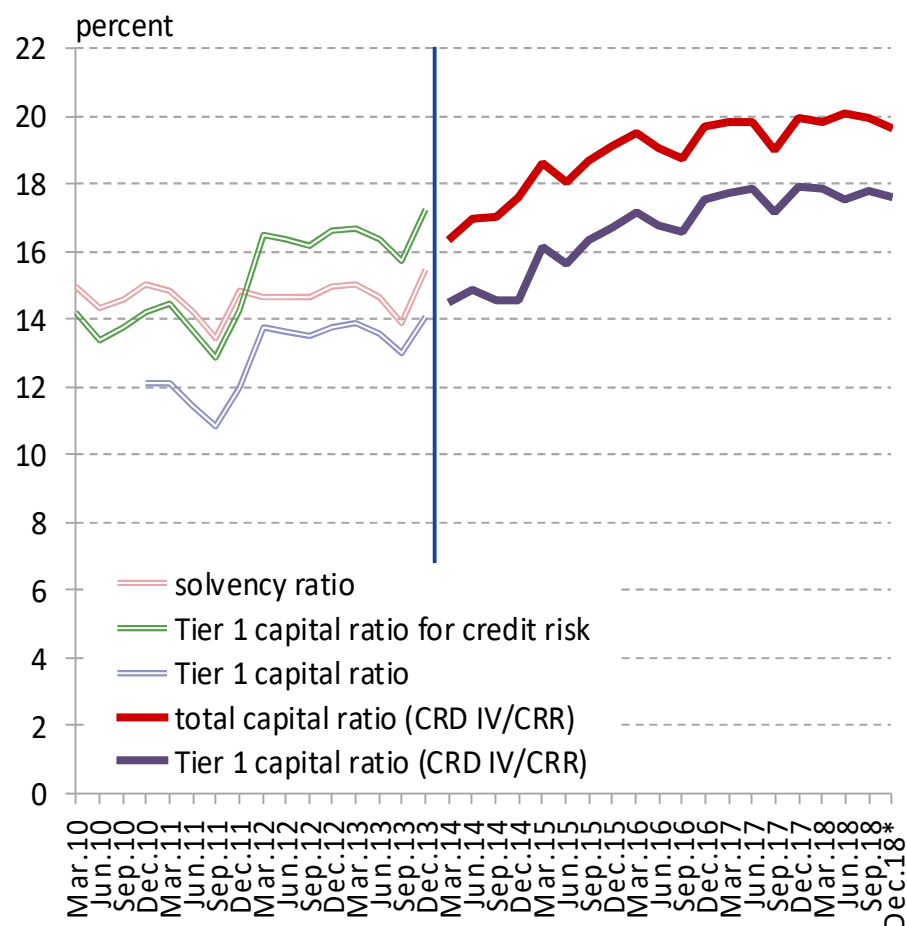
Immediate liquidity = (cash, demand and time deposits with banks + unpledged government securities + unencumbered bonds)/Total liabilities (prudent level > 30%)

Liquidity ratio = effective liquidity/required liquidity (regulated threshold = 1)

*) indicators are calculated based on data in prudential reports, prior to submission of audited annual accounts

Source: NBR

Financial cycle: whre does Romania stand? (domestic credit plus exterenal credit, housing prices)
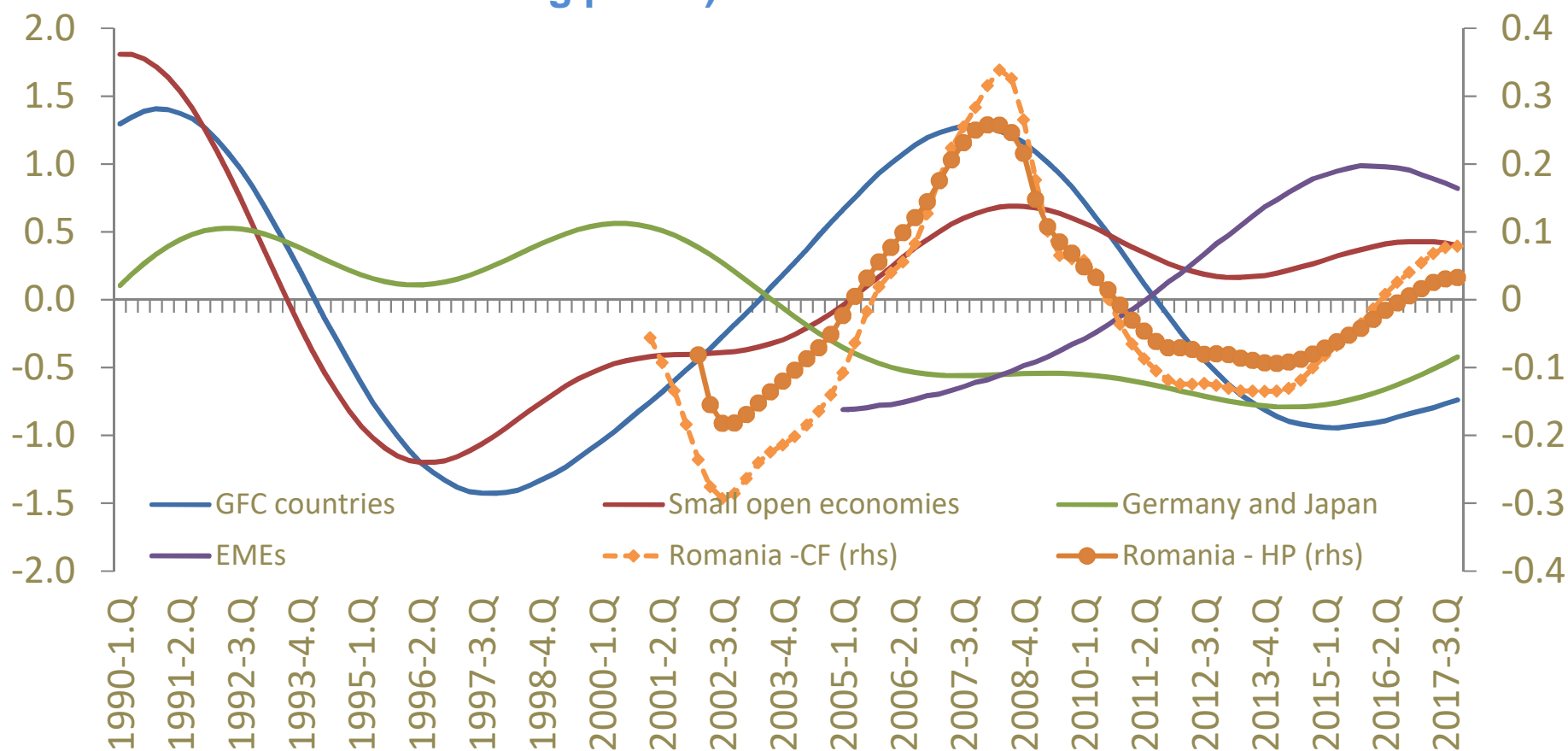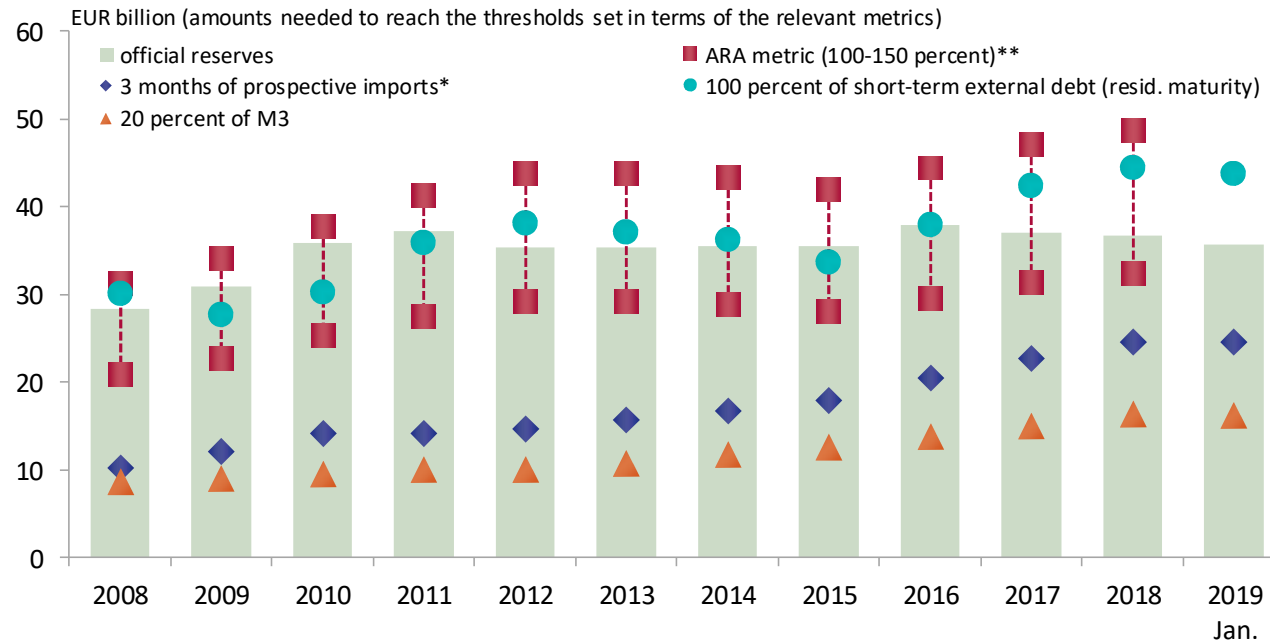

Note: Global Financial Crisis (GFC) countries are FR, ES, IT, UK and US; Small open economies are Austaralia, Canada, Switzerland, Finland, Norway and Suden; EMEs are Brasil, Chile, Columbia, Hong-Kong, Inonesia, Korea, Mexic, Malaysia, Peru, Singapore and Thailand. For Romania, the method used was Christiano-Fitzgerald (medium term: 8 - 14 years) and Hodrick Prescott with parameter lambda = 25 000 (equivalent for a 14 years cycle length).

Sources: BIS (Annual Economic Report 2018) and own calculations

Thank you!

Official reserves adequacy

EUR billion (amounts needed to reach the thresholds set in terms of the relevant metrics)

Legend:
- ■ official reserves (light green)
- ◆ 3 months of prospective imports*
- ▲ 20 percent of M3
- ■ ARA metric (100-150 percent)**
- ● 100 percent of short-term external debt (resid. maturity)

Years: 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 Jan.

*) 12m prospective imports of goods and services

**) This indicator is calculated based on the IMF's measure developed for emerging market economies. A broader-based metric is considered in order to capture risk sources such as external liabilities, external demand contraction and capital flight.

For a flexible exchange rate regime, ARA metric = 30% of ST debt (resid. maturity) + 15% of Other liabilities + 5% of Exports of goods and services + 5% of Broad Money.

Source: International Monetary Fund, National Bank of Romania