

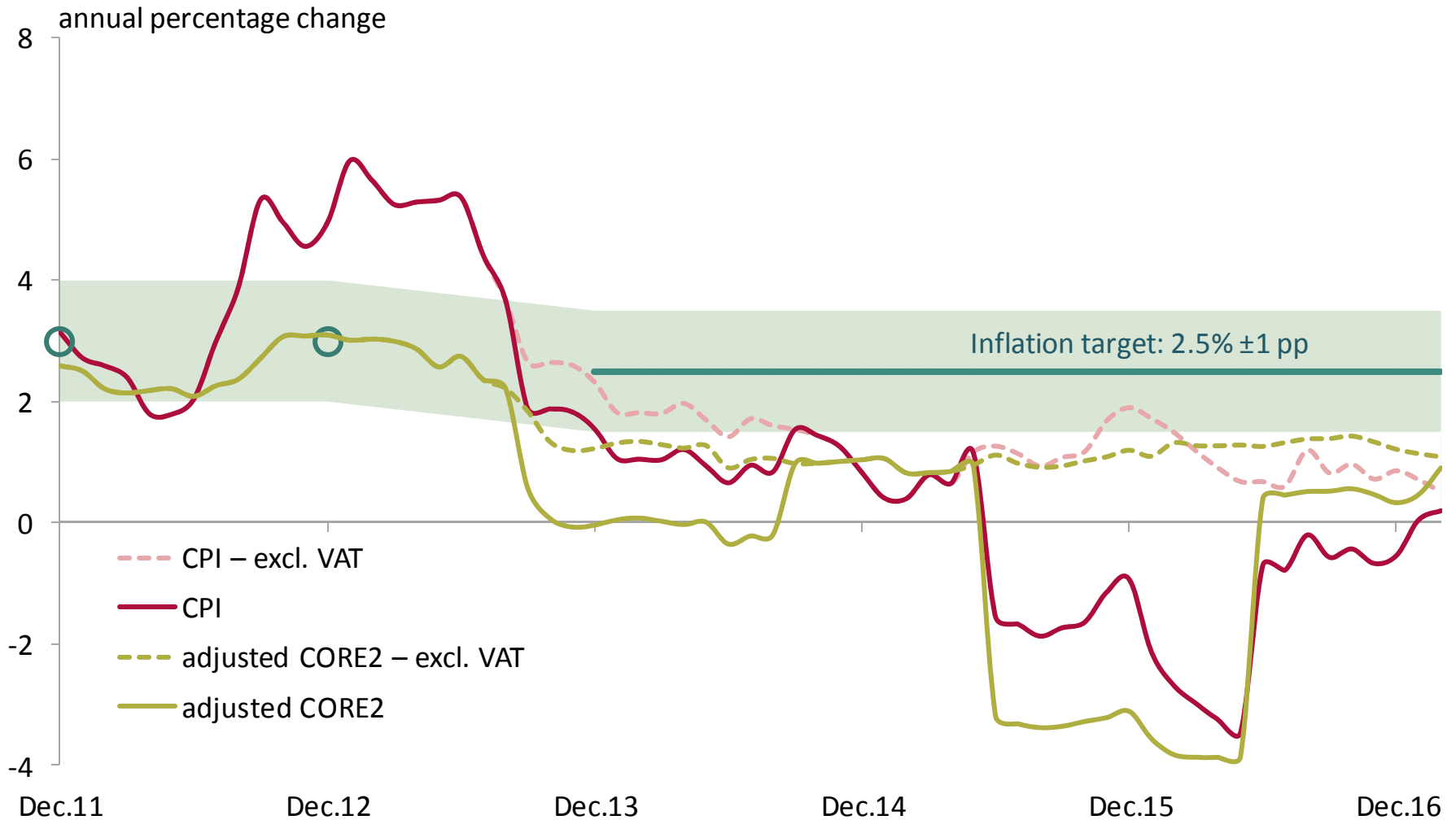
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# Romania: Recent Macroeconomic & Banking System Developments

April 2017

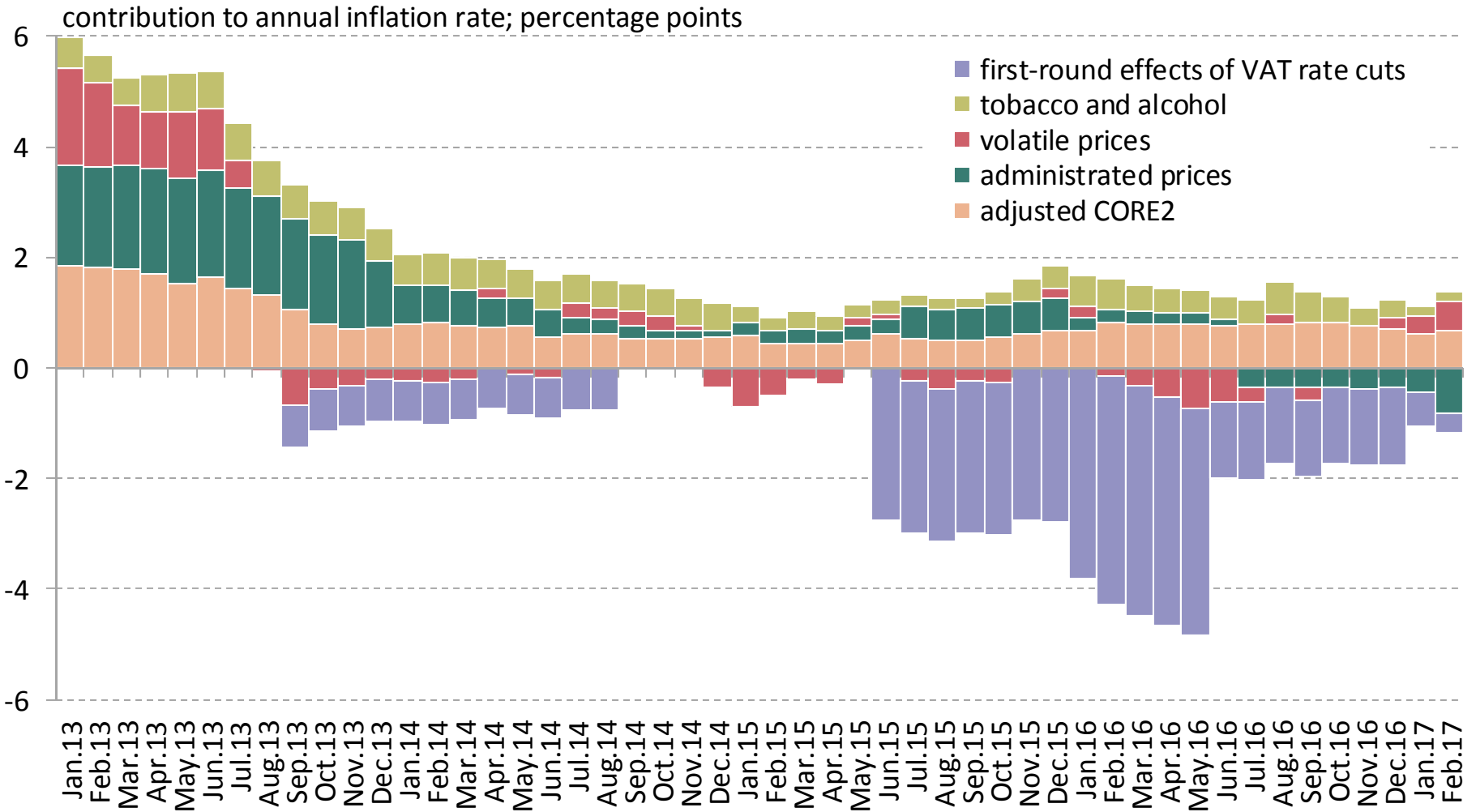
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# Inflation rate



Source: National Institute of Statistics, National Bank of Romania

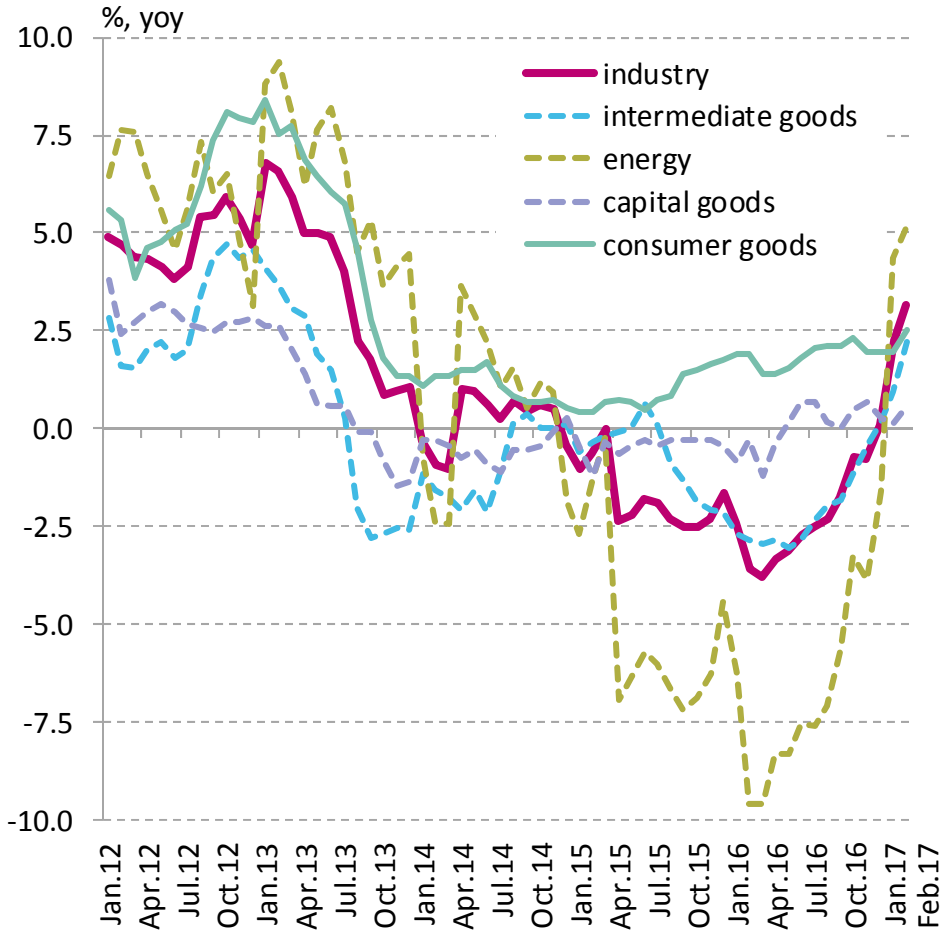
# Contributions to annual inflation rate



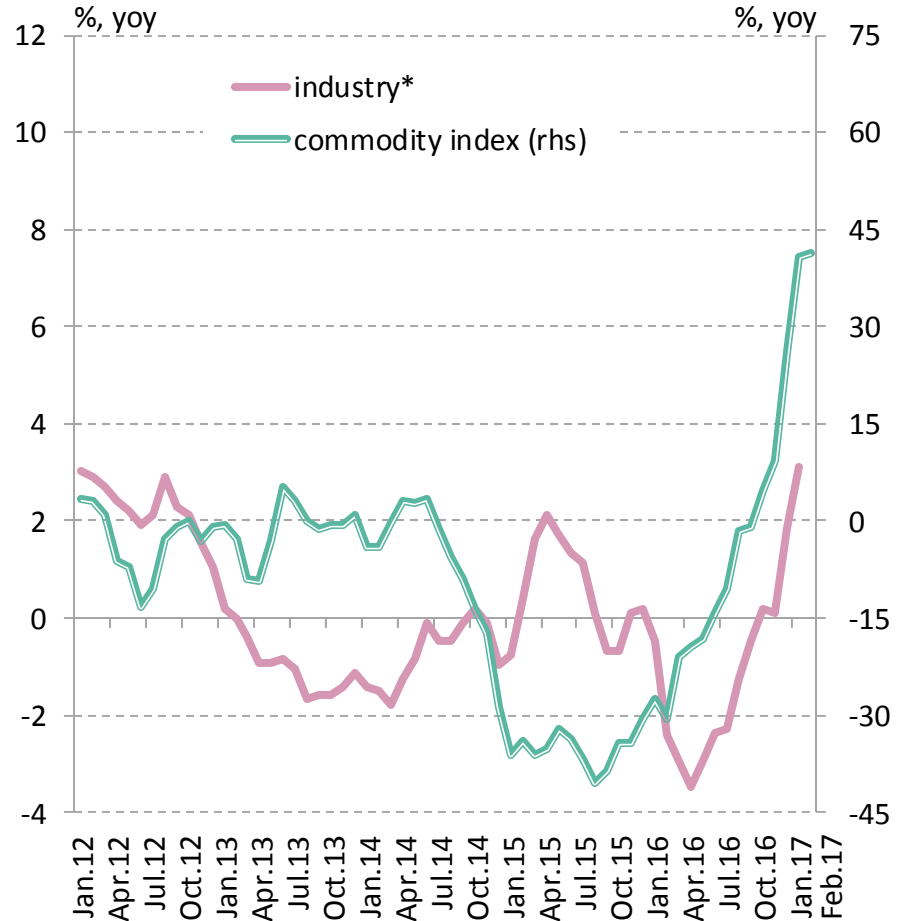
Source: National Institute of Statistics, National Bank of Romania calculations

# Producer prices

## Domestic PPI – Romania



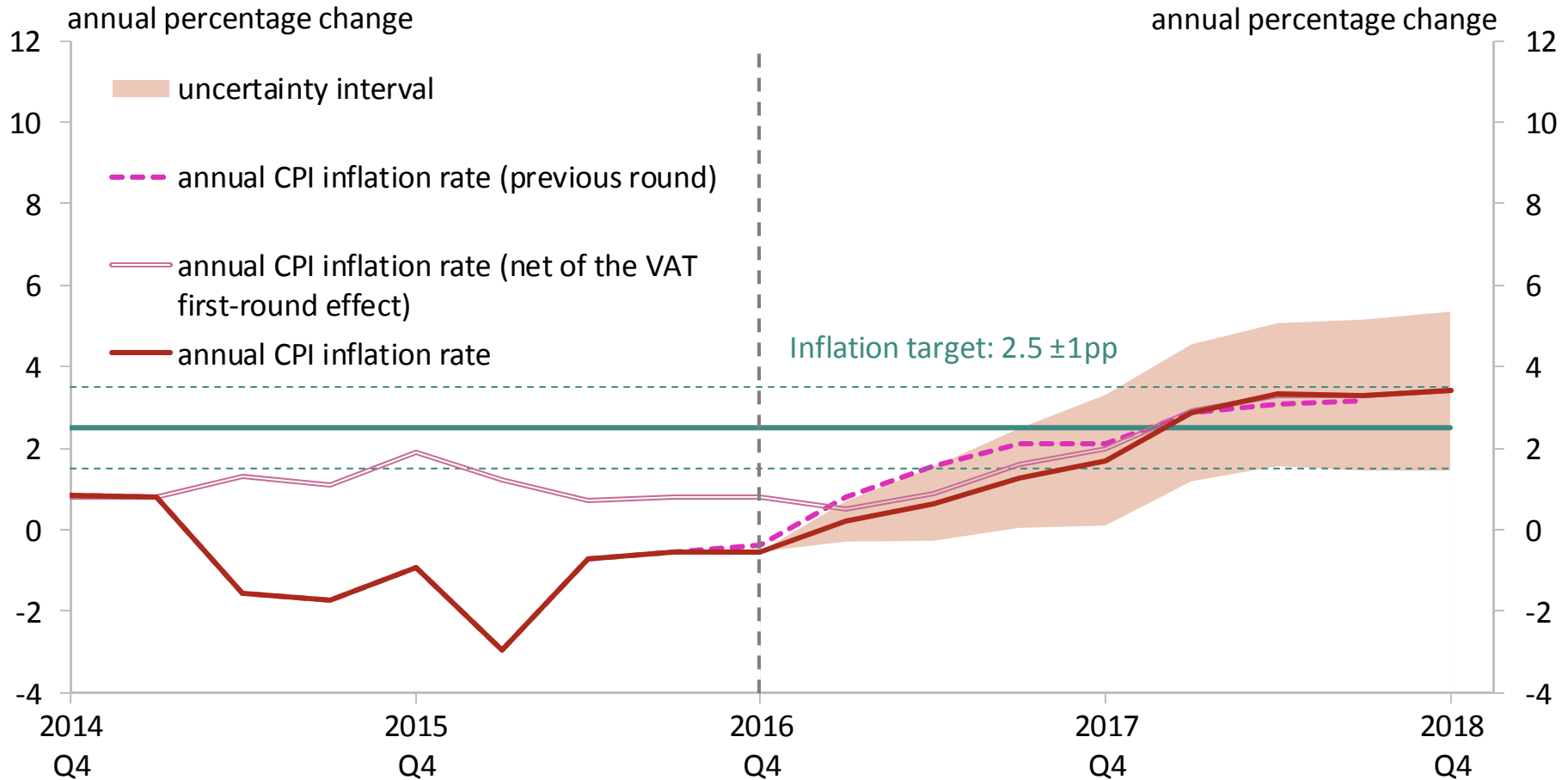
## Non-domestic PPI – EA19 and commodity prices



\* ) data not available for February 2017

Source: Eurostat, International Monetary Fund

# Inflation forecast



Note: According to the February 2017 Inflation Report. The uncertainty interval was calculated based on the forecast errors in the NBR projections during 2005-2016. The magnitude of forecast errors is positively correlated with the time horizon they refer to.

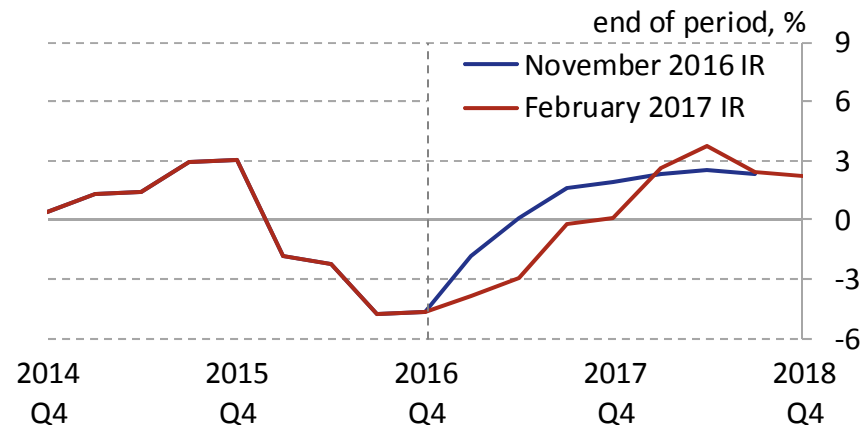
Source: National Institute of Statistics, National Bank of Romania projections and calculations

## Exogenous pressures on inflation

### □ Dynamics of **administered prices**:

- ✓ The forecast for 2017 was revised downwards by 1.9 percentage points, mainly amid scrapping a number of non-tax fees and charges starting February (primarily the subscription for national radio-TV services)

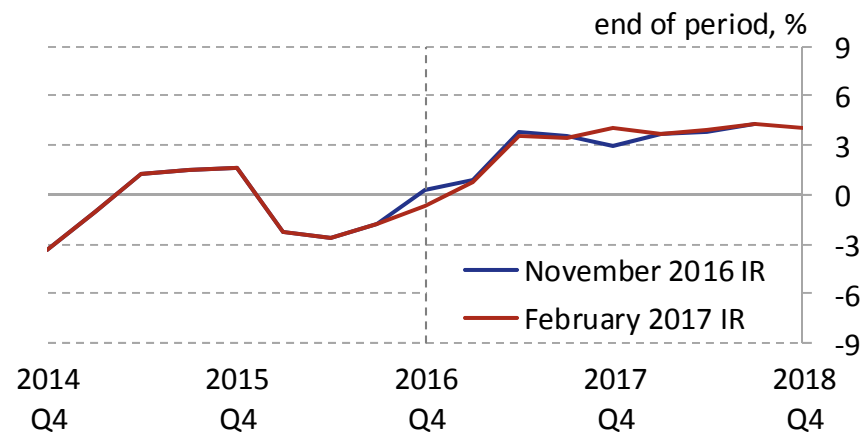
### Administered prices annual inflation



### □ The trajectory of **volatile food prices**:

- ✓ Is based on the assumption of normal agricultural years domestically

### Volatile food prices annual inflation



Source: NIS, NBR projections

# Annual adjusted CORE2 inflation projection

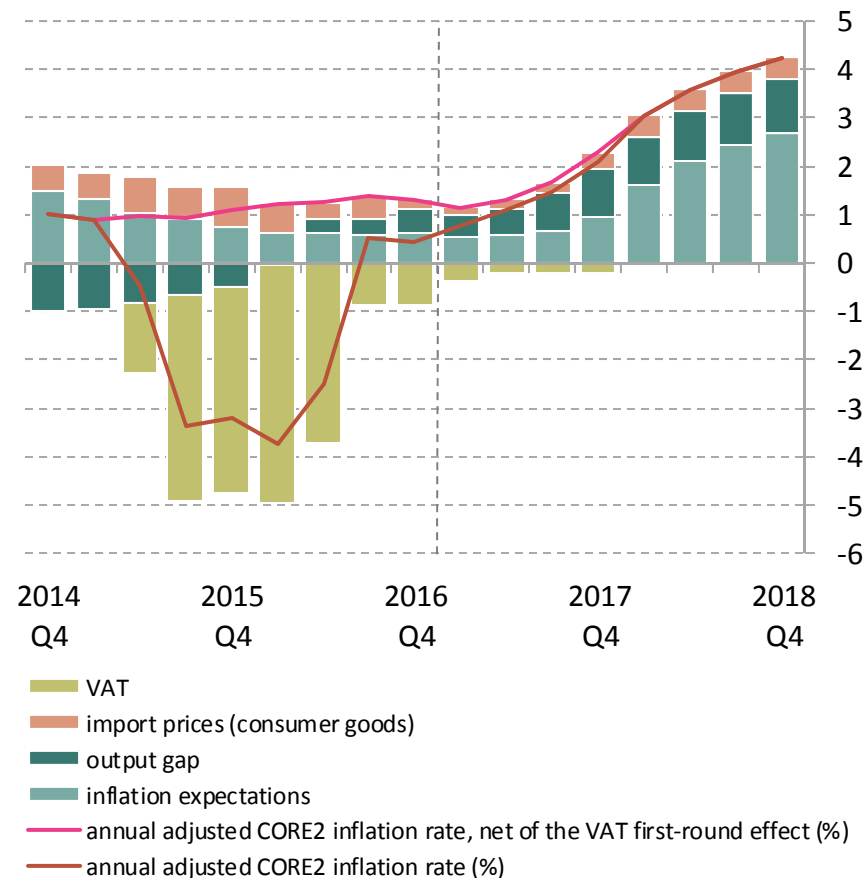
## – determinants –

### □ Upward path, as a result of:

- ✓ The successive fading-out of first-round statistical effects of the standard VAT rate cuts
- ✓ The gradual build-up of inflationary pressures stemming from fundamental factors:
  - increase in excess demand, prompted by the expansionary fiscal policy stance and the higher disposable income
  - the evolution of import prices for consumer goods, amid the advance in dynamics of external prices
  - upward trajectory of inflation expectations\* driven by these factors

\*) backward- and forward-looking

Contributions to annual adjusted CORE2 inflation (pp)



Note: The annual adjusted CORE2 inflation is calculated as a quarterly average, in line with its econometrically-modelled determinants.

Source: NBR calculations

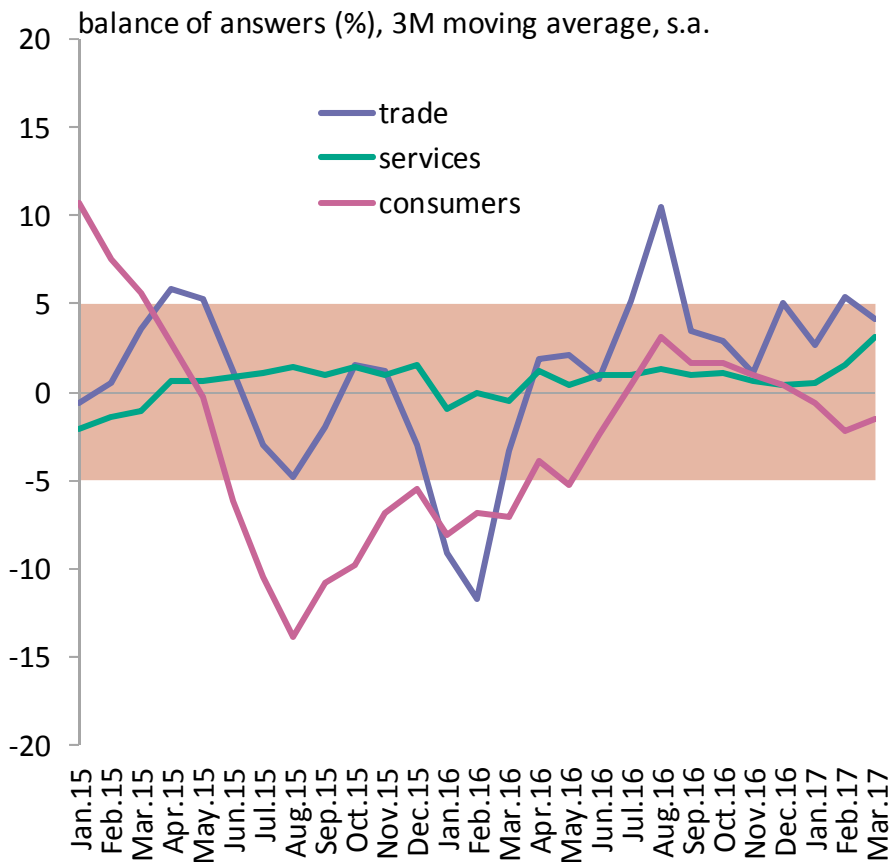
# Potential causes for inflation to deviate from the projected path

Causes	Balance of risks to the inflation path is assessed to be in equilibrium
<p><b>External coordinates:</b></p> <ul style="list-style-type: none"><li>– volatility of capital flows to emerging economies, given the adjustment of the monetary policy stances of the world’s major central banks, the implications of the new US Administration’s economic policies on the world economic outlook, the Brexit, and the issues facing the European banking system</li><li>– the prospects for economic growth and inflation in the euro area/EU and across major emerging economies</li></ul>	Tilted to the upside
<p><b>Uncertainty about fiscal and income policies:</b></p> <ul style="list-style-type: none"><li>– potential deviations from the set of fiscal measures included in the 2017 draft budget on either revenue or expenditure side</li><li>– favouring fiscal or wage-related measures aimed at boosting less sustainable domestic demand components to the detriment of those meant to increase capital expenditures</li></ul>	Tilted to the upside
<p><b>Global commodity prices (food, energy)</b></p>	In equilibrium
<p><b>Administered price dynamics, conditional upon available information:</b></p> <ul style="list-style-type: none"><li>– uncertainties surrounding the future adjustments in natural gas and electricity prices</li></ul>	Tilted to the downside

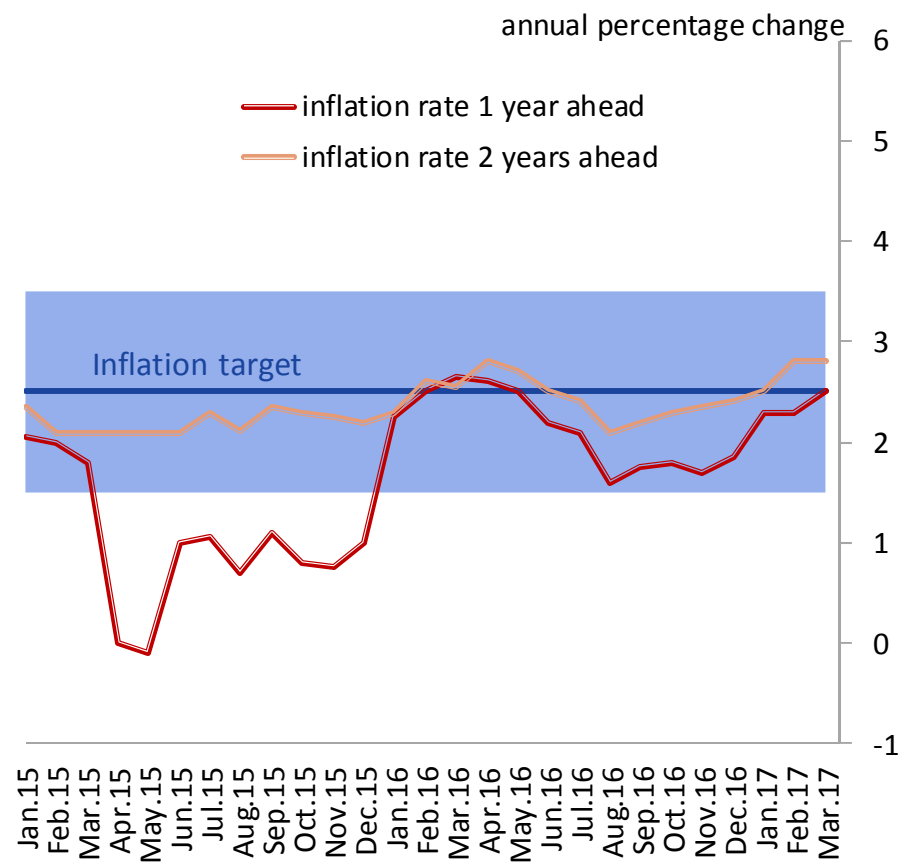


# Inflation expectations

## Economic agents\*



## Financial analysts



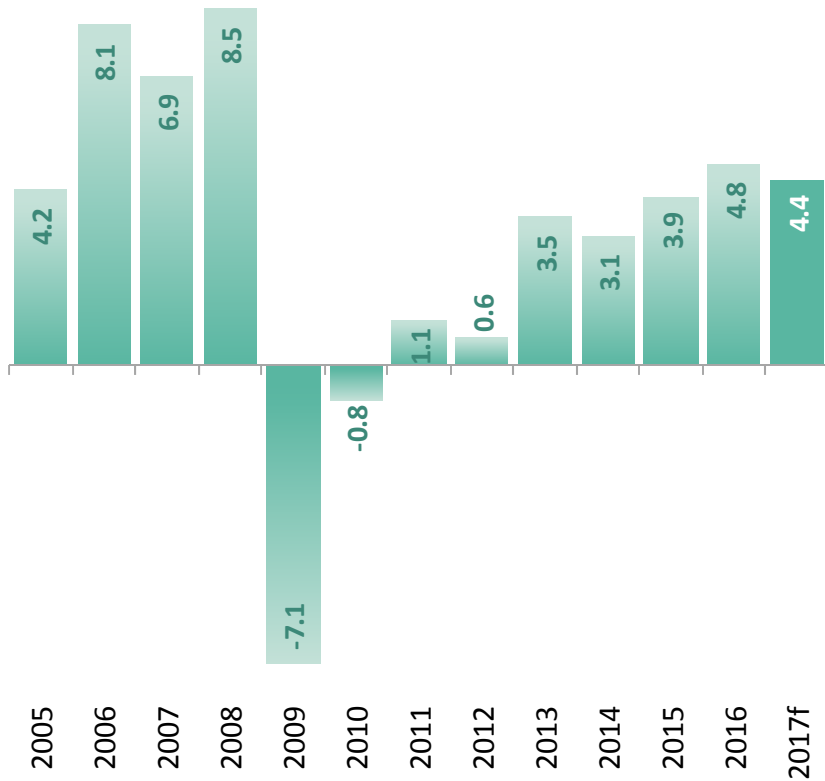
\*) 3-month horizon for trade and services companies and 12-month horizon for consumers; the annual inflation staying inside the  $\pm 5$  percent variation band indicates price stability

Source: EC-DG ECFIN survey, National Bank of Romania survey among financial analysts

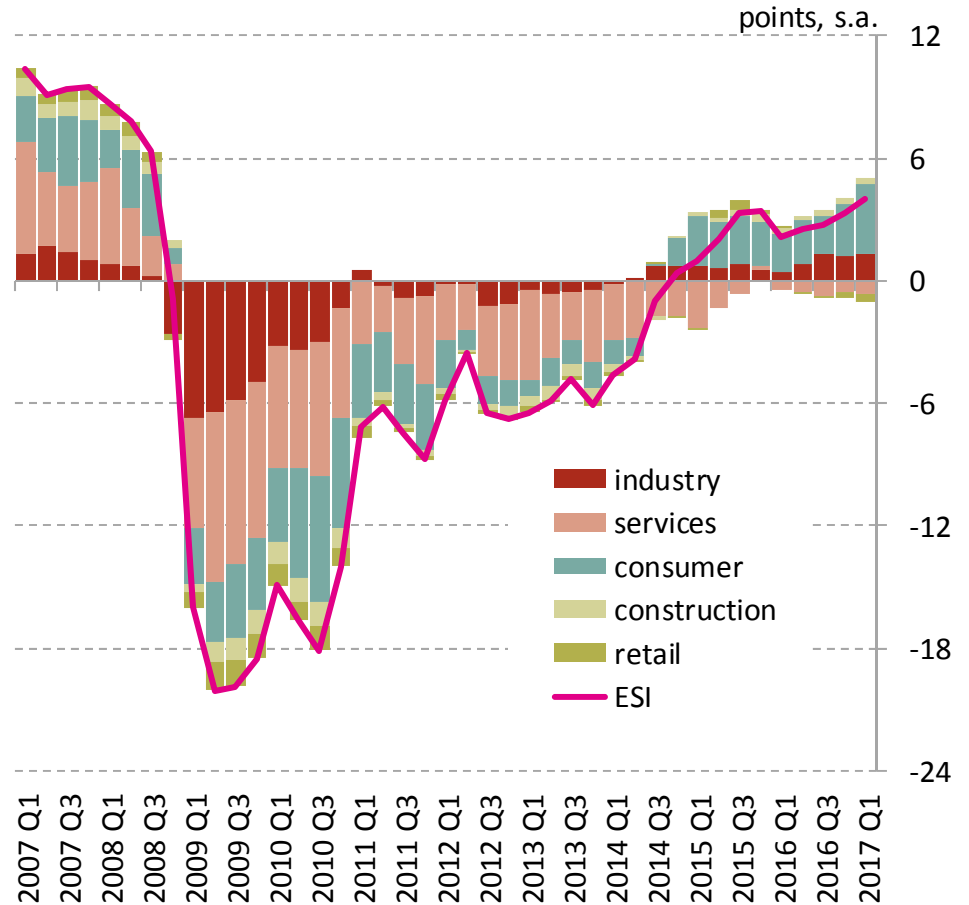
# Economic activity

## Real GDP

annual percentage change, gross data



## Economic confidence\*



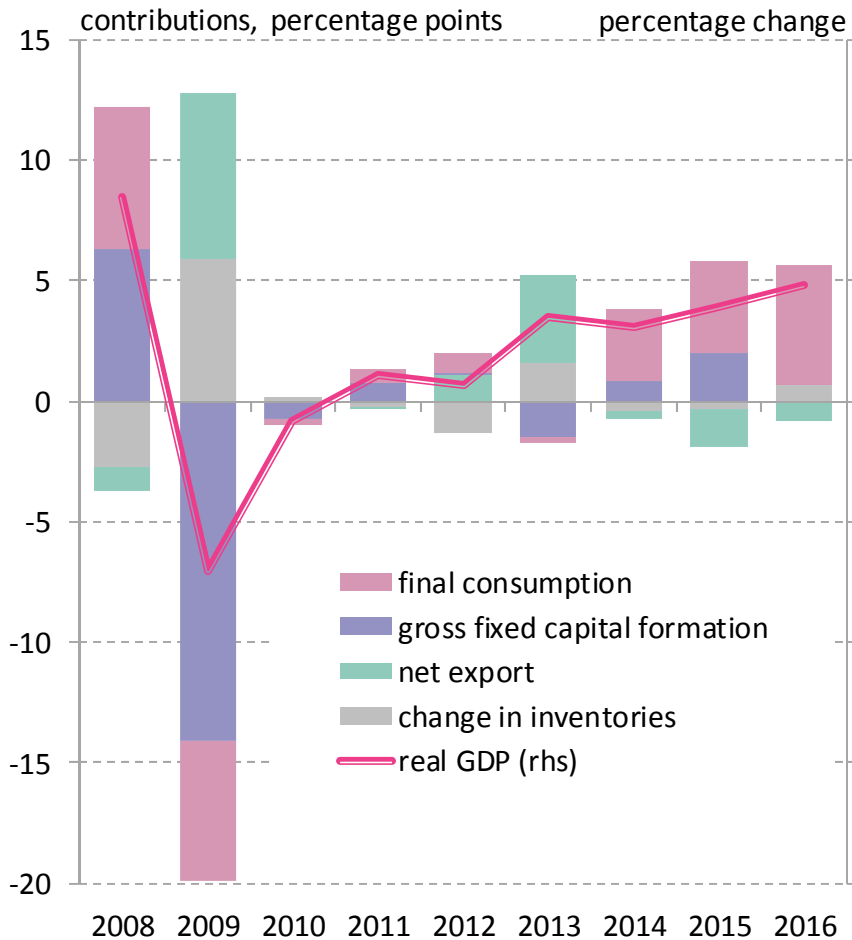
f) European Commission - Economic Forecast, Winter 2017

\*) deviation from the historical average (Apr. 2002 – Mar. 2017)

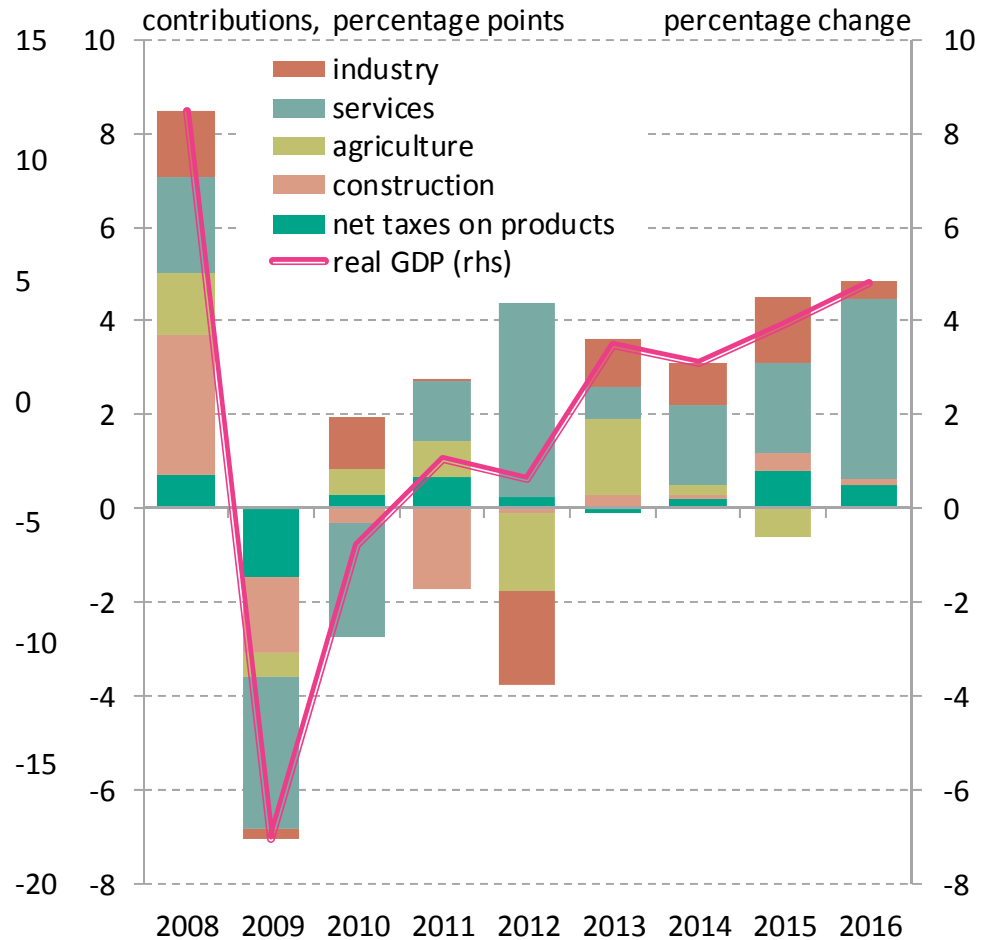
Source: National Institute of Statistics

# Contributions to growth

## Demand



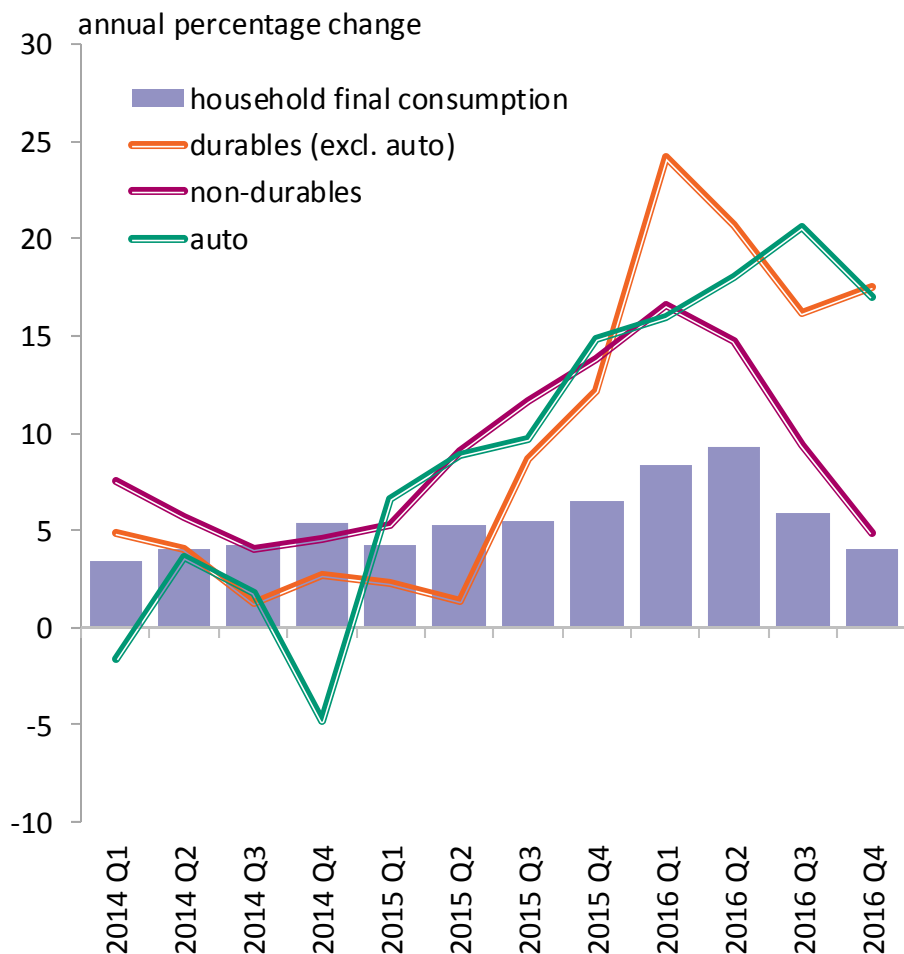
## Supply



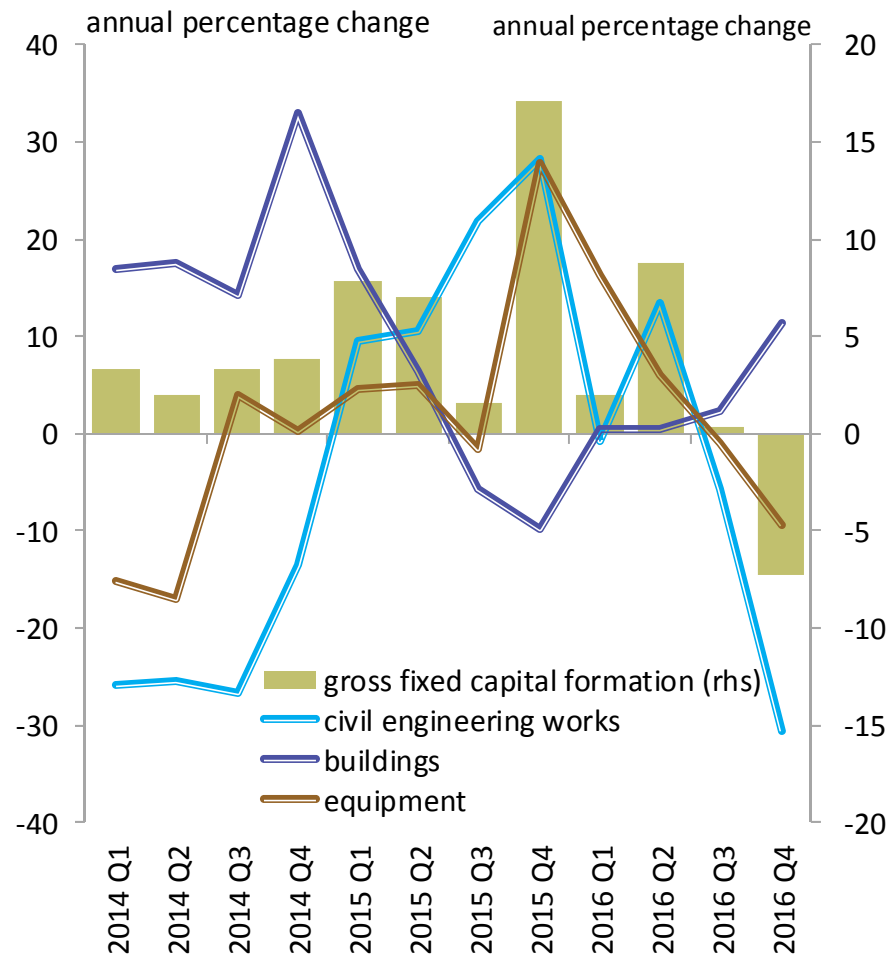
Source: National Institute of Statistics, National Bank of Romania calculations

# Domestic demand

## Private consumption

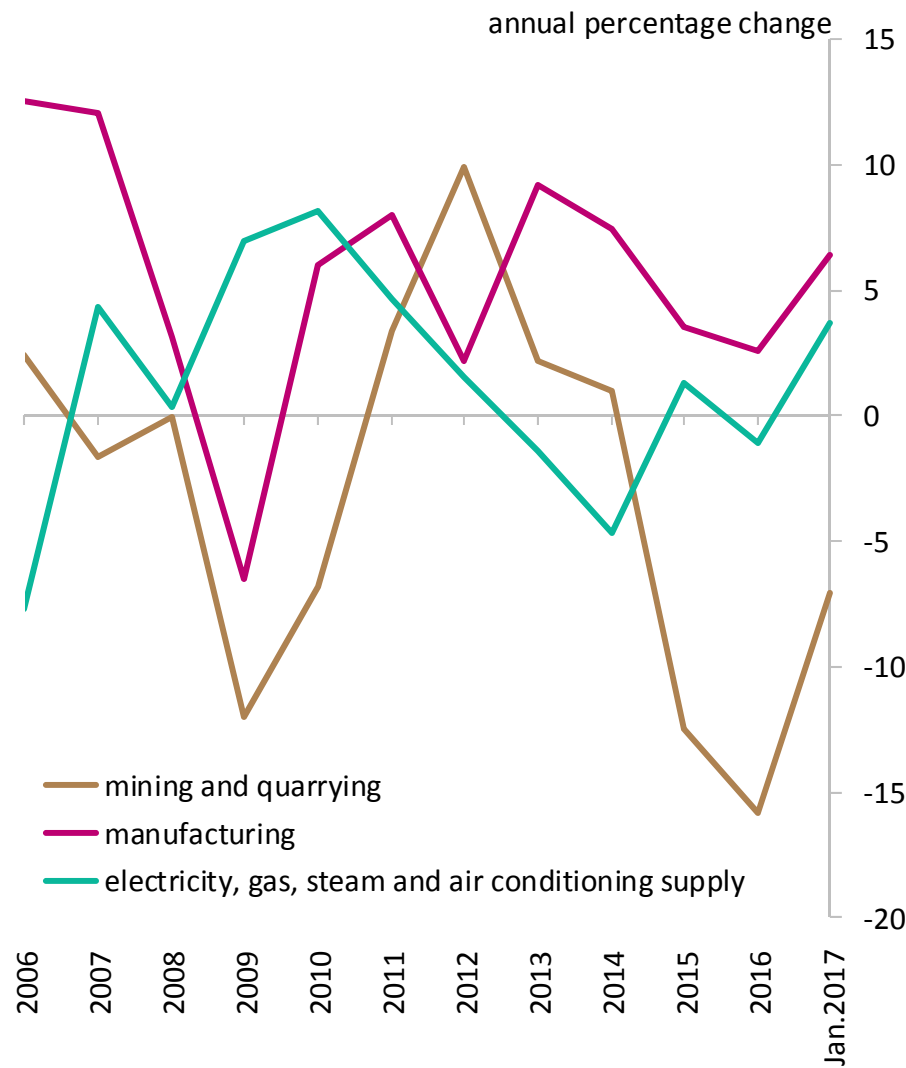
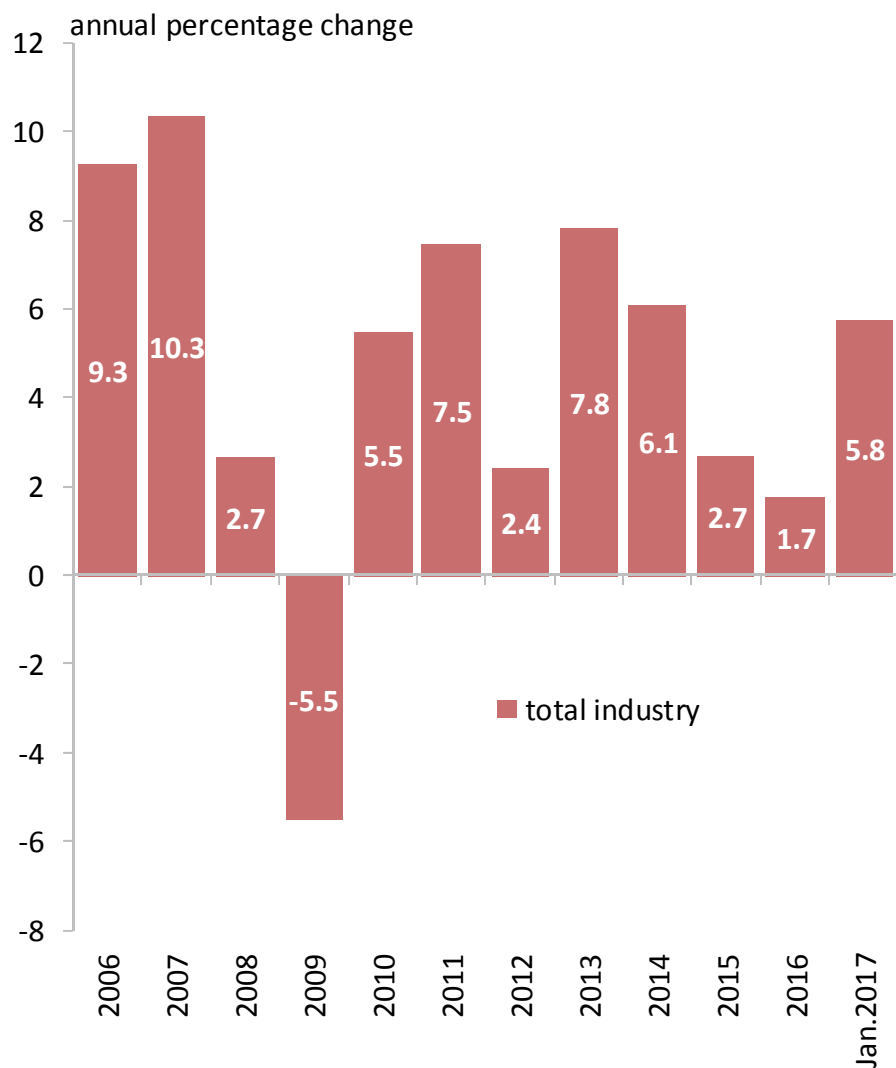


## Investment



Source: National Institute of Statistics, National Bank of Romania calculations

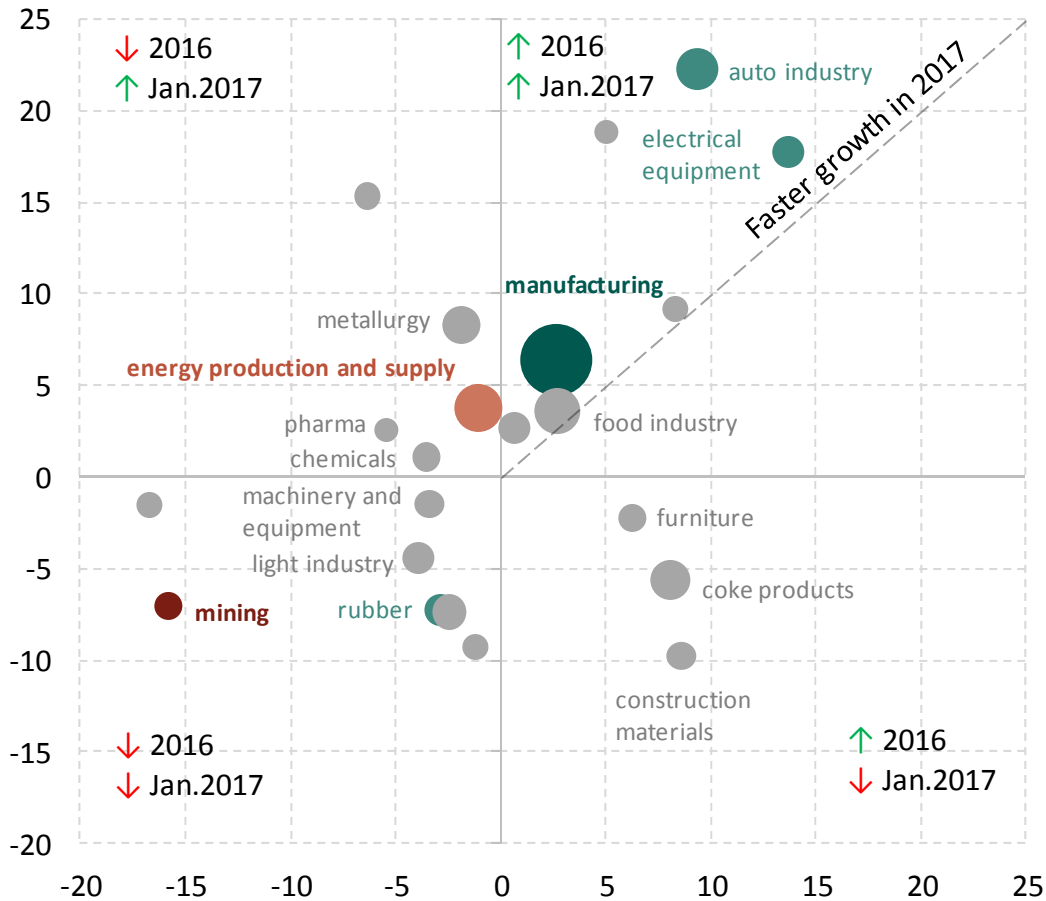
# Industrial output



Source: National Institute of Statistics

# Recent developments in industry

## Industrial production

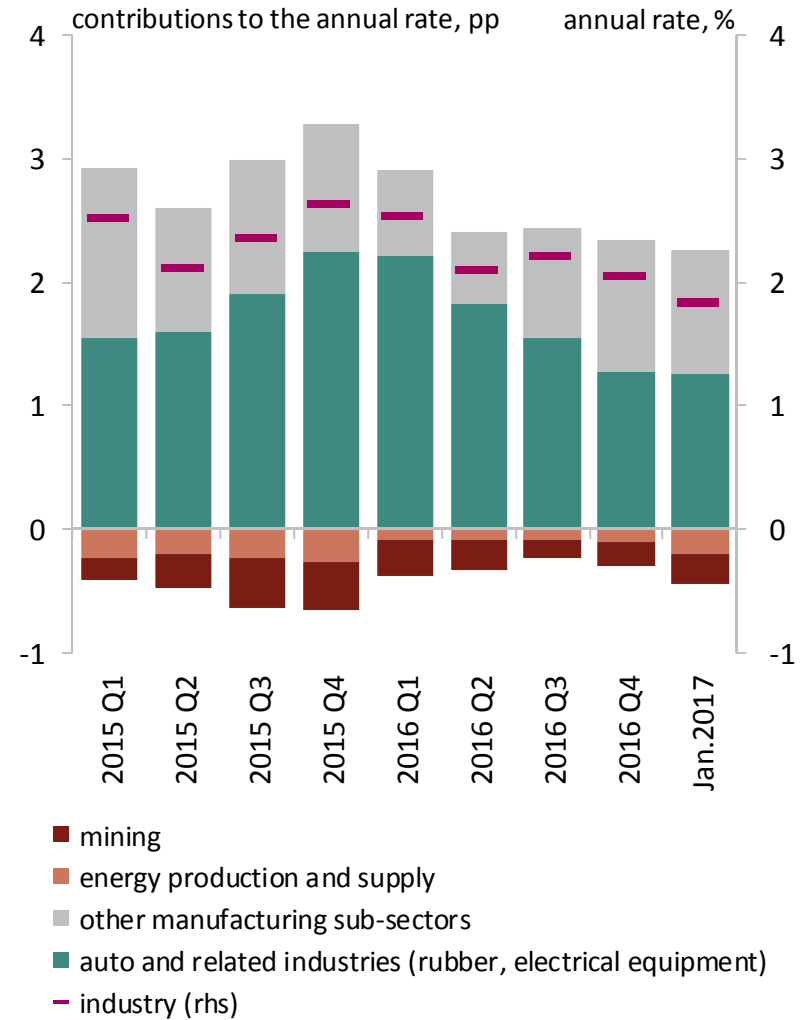


Ox: average annual growth rate in 2016, %

Oy: average annual growth rate in Jan. 2017, %

Source: National Institute of Statistics, National Bank of Romania calculations

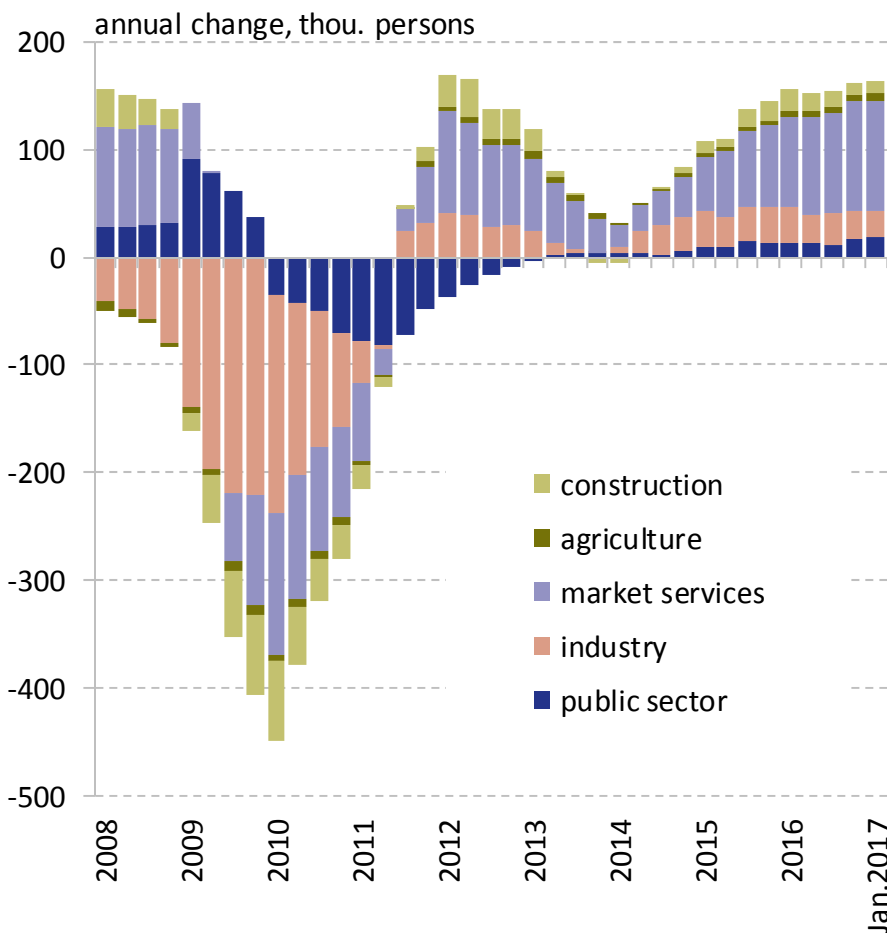
## Employees in industry



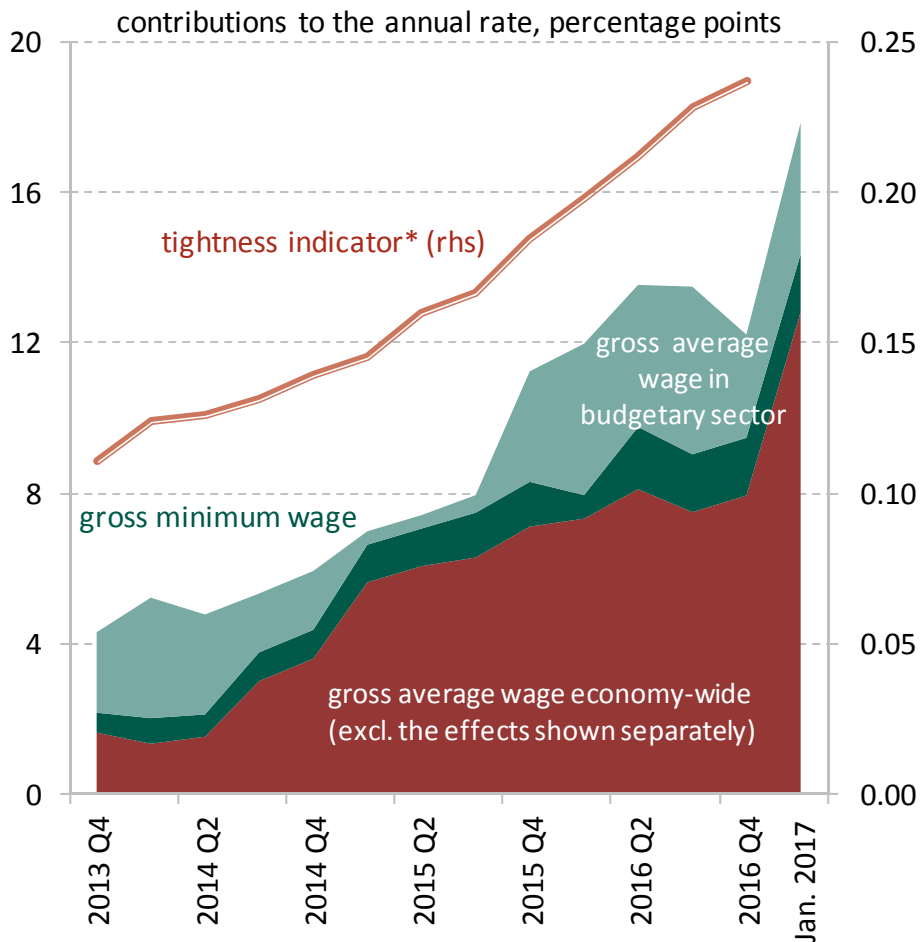
- mining
- energy production and supply
- other manufacturing sub-sectors
- auto and related industries (rubber, electrical equipment)
- industry (rhs)

# Labour market conditions

## Number of employees



## Labour market tightness



\*) calculated as a ratio of job vacancy rate to ILO unemployment rate; a higher level indicates tighter labour market conditions

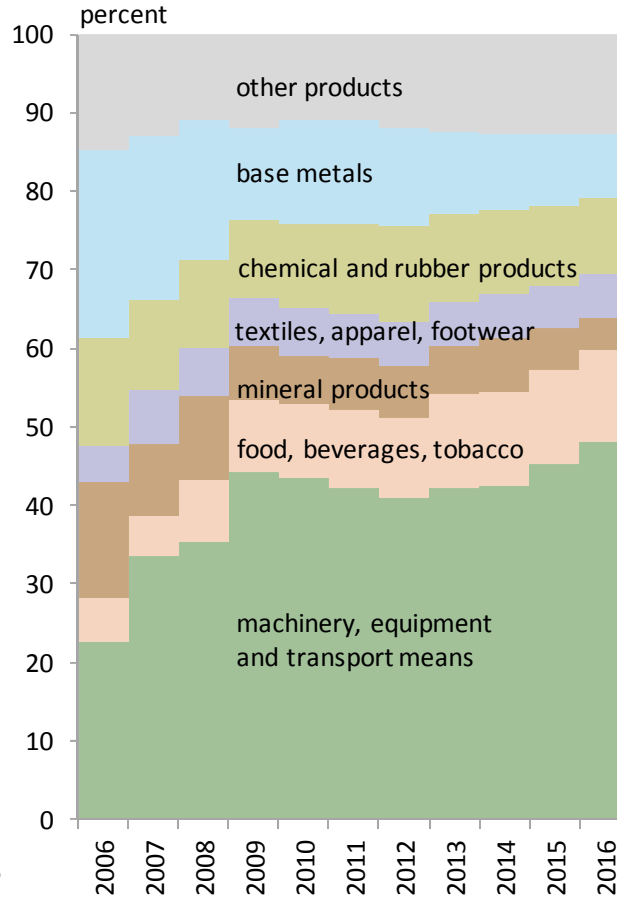
Source: Eurostat, National Institute of Statistics, National Bank of Romania calculations

# External trade in goods

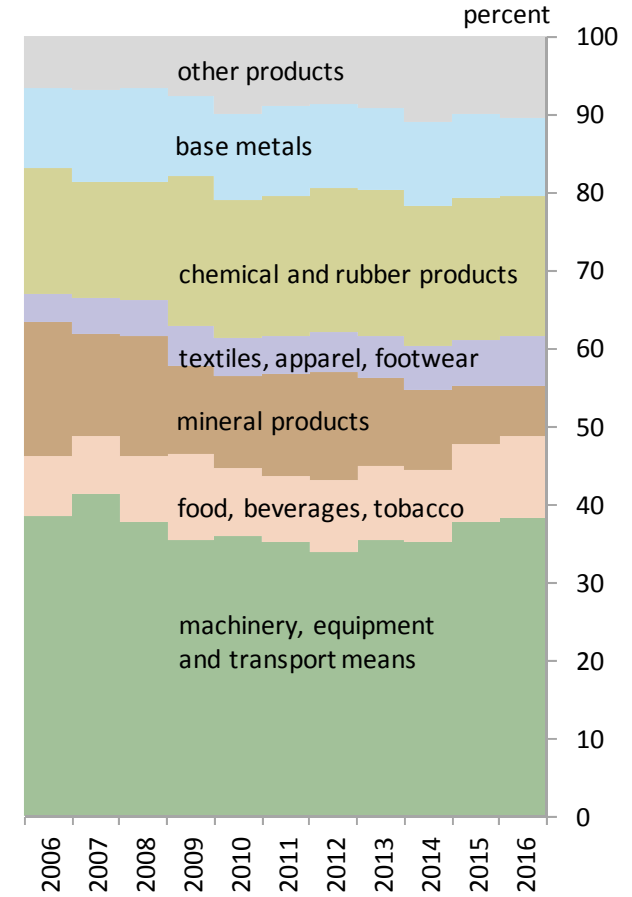
## Trade flows



## Exports of goods



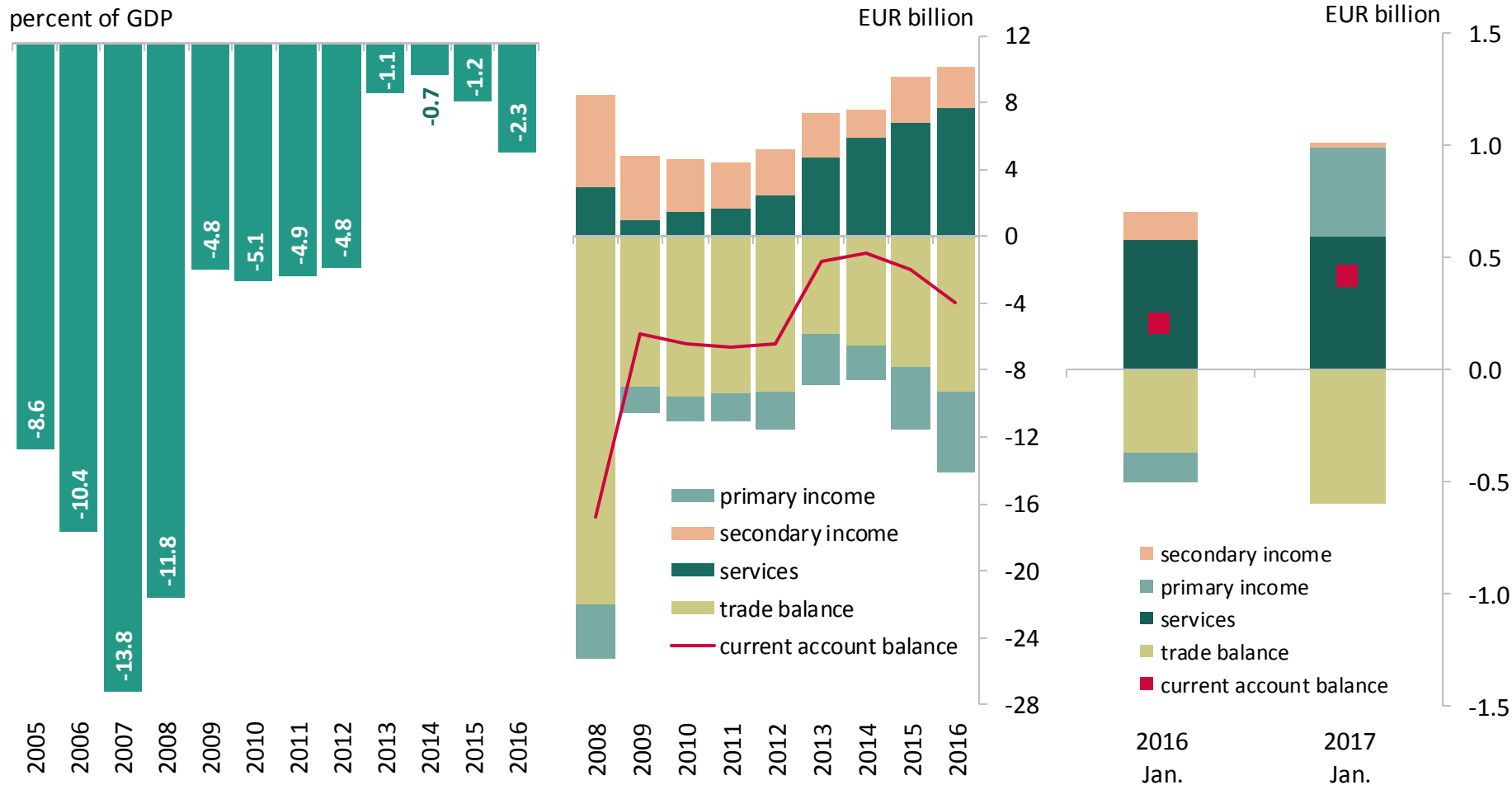
## Imports of goods



Source: National Bank of Romania



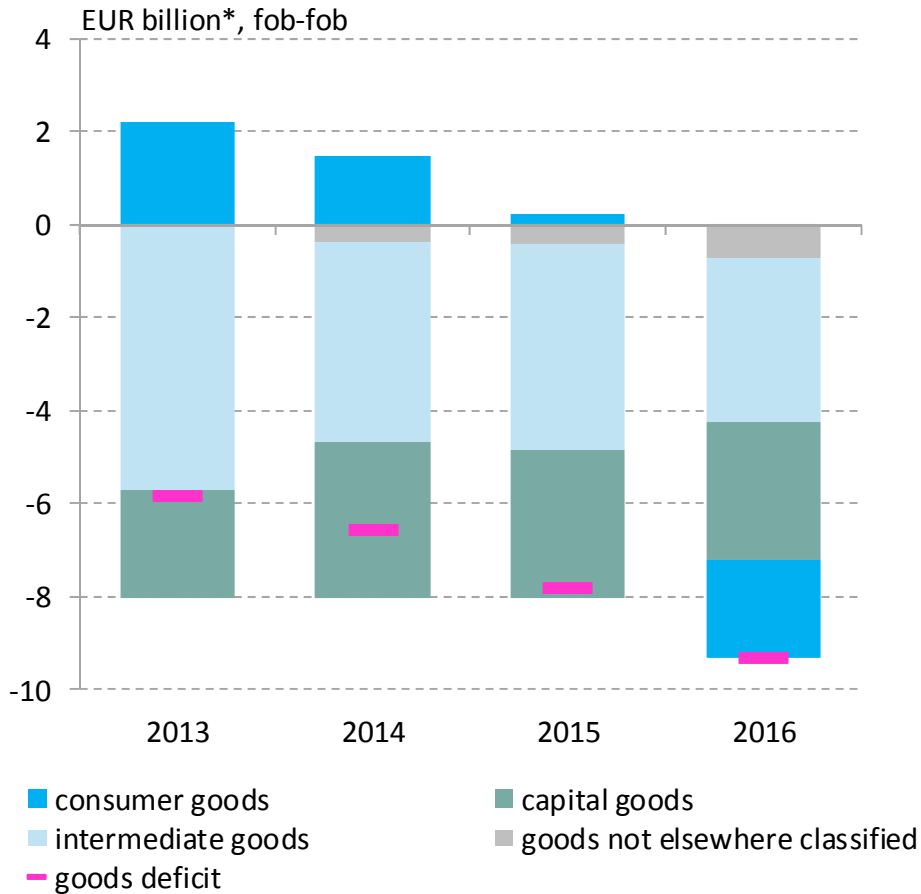
# Current account balance



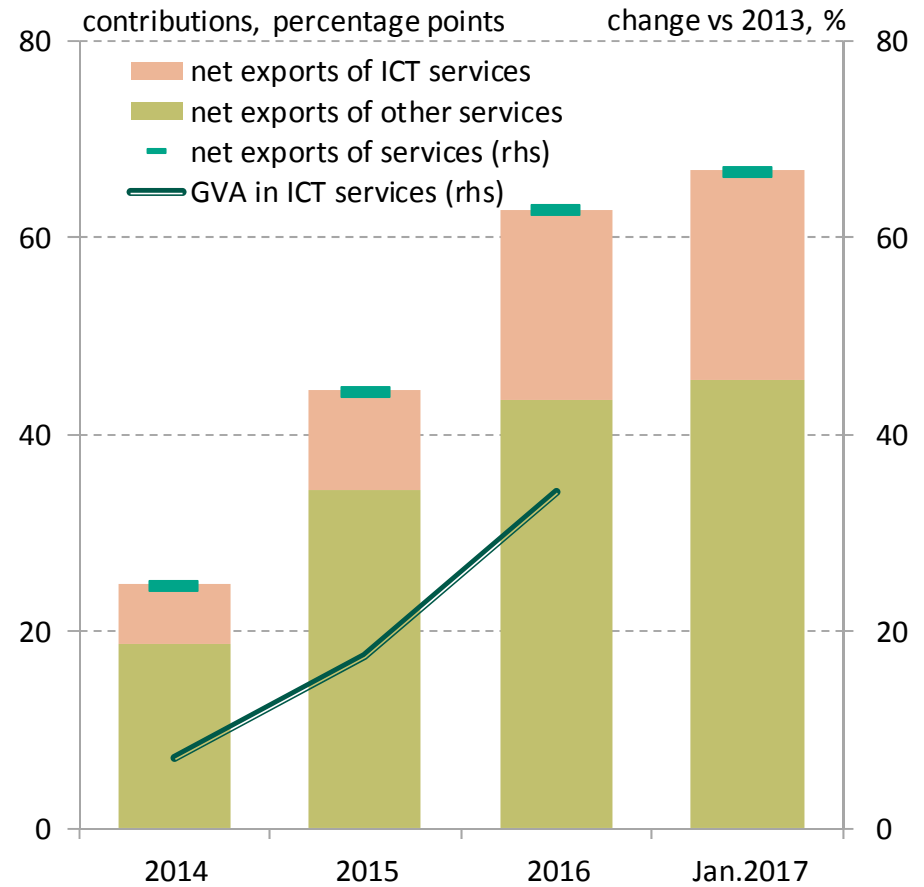
Source: National Institute of Statistics, National Bank of Romania

# Trade balance

## Trade in goods balance



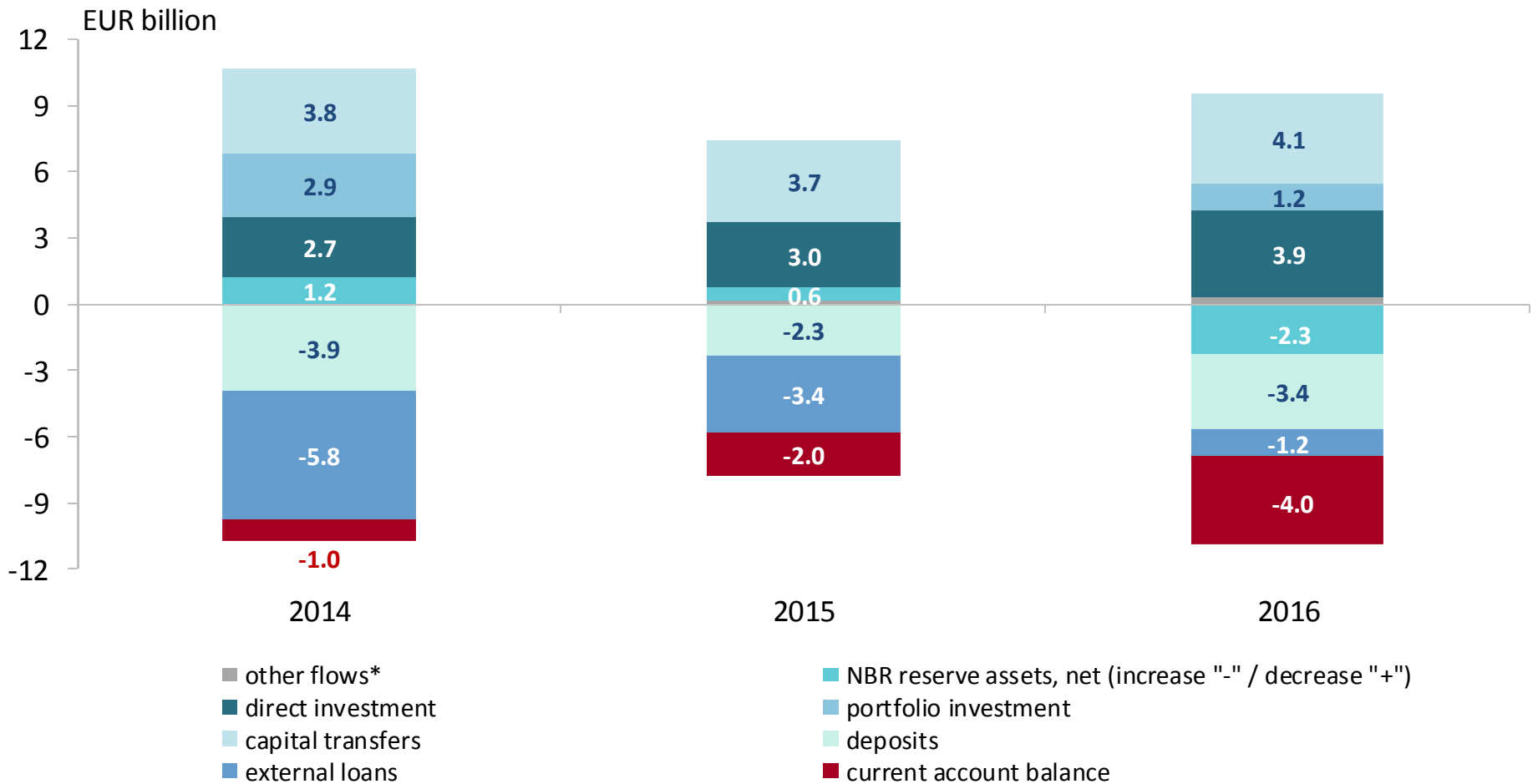
## Trade in services balance



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

Source: National Institute of Statistics, Eurostat, National Bank of Romania calculations

## Current account deficit financing



\*) mainly consist of trade credits and advances and other accounts

Source: National Bank of Romania

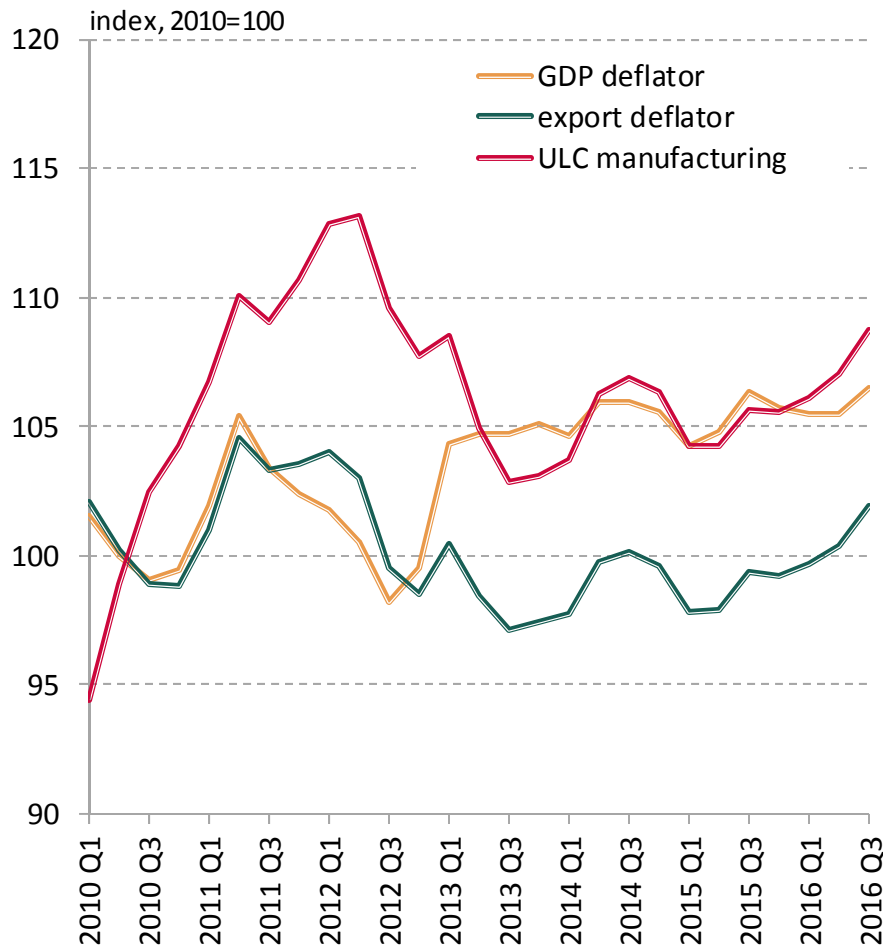
# Nominal exchange rate

(daily data)

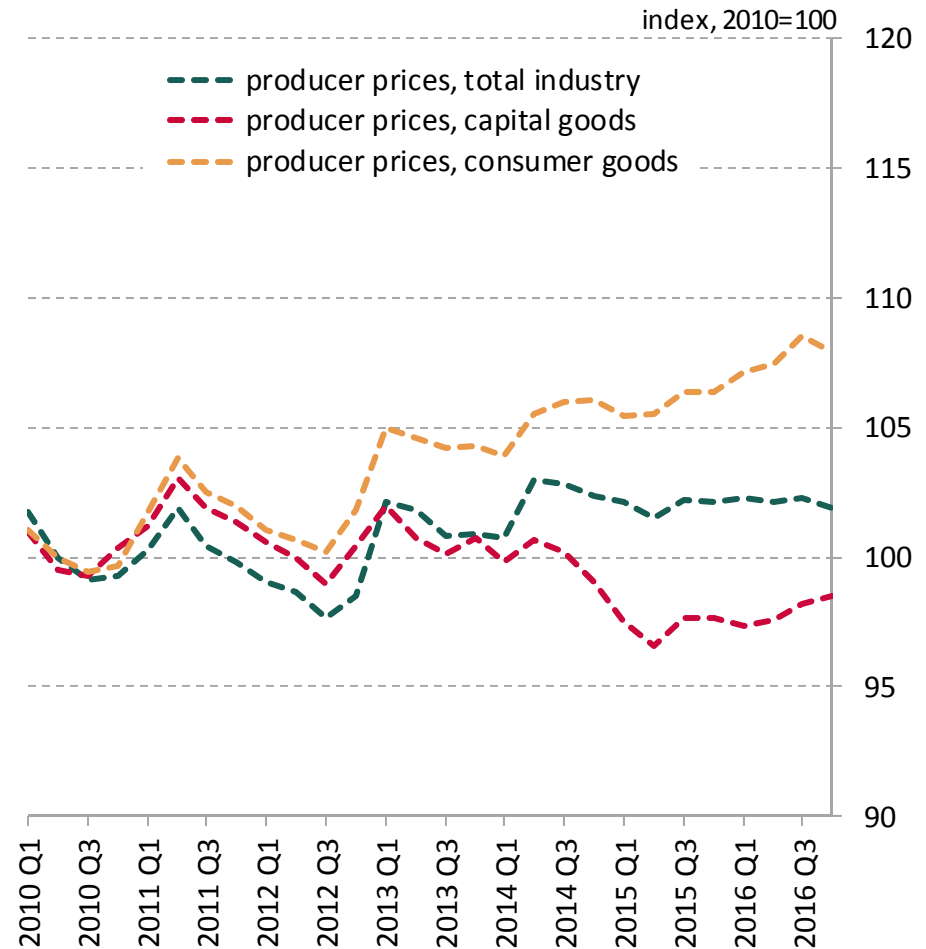


Source: National Bank of Romania

# Real effective exchange rate

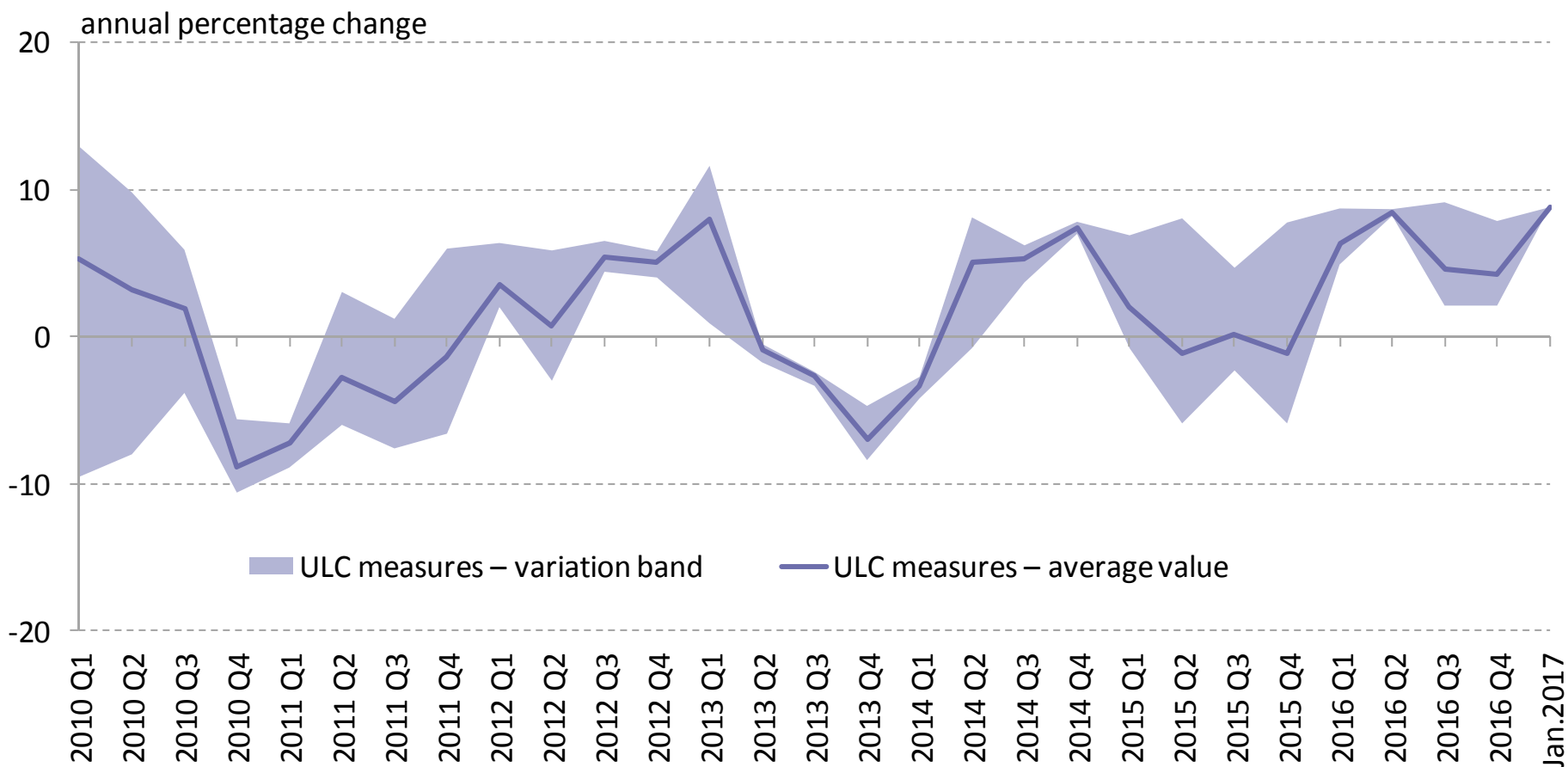


Source: European Commission



Source: European Commission, Eurostat, NBR calculations

# Unit labour cost developments

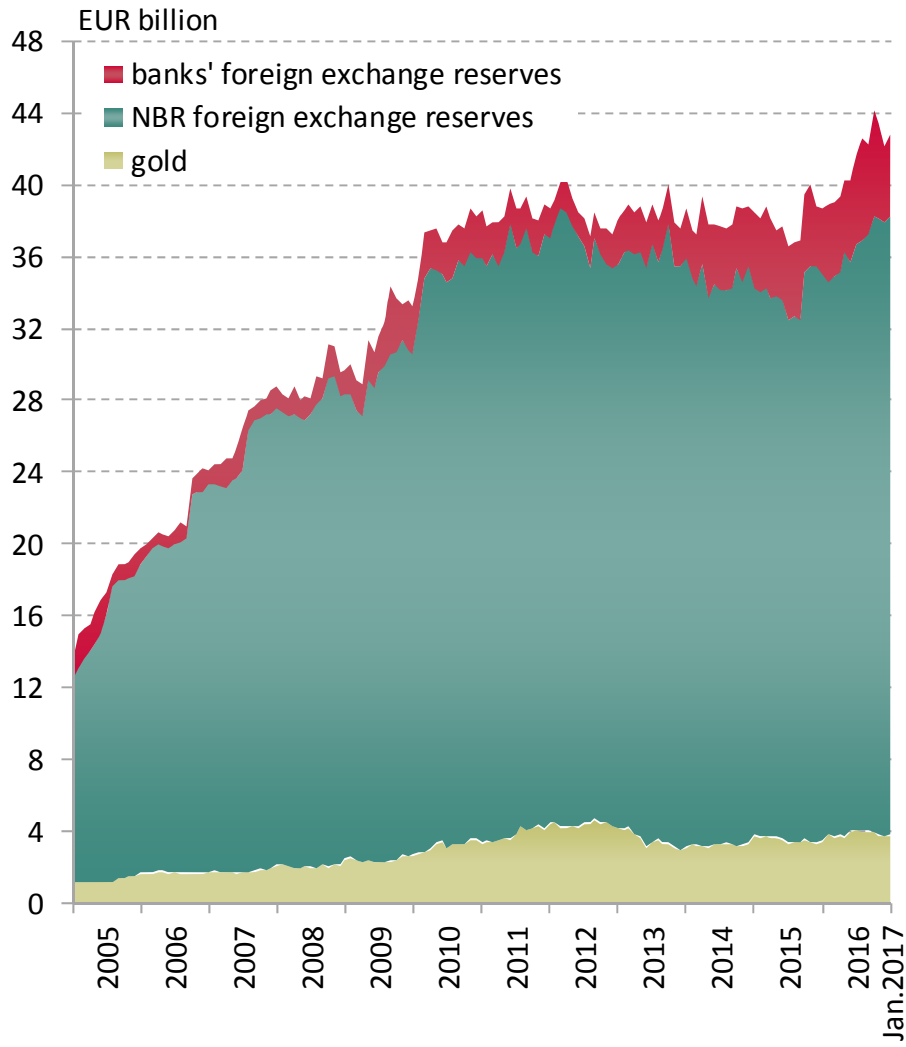


\*) Q1 data available only for unit wage costs in industry

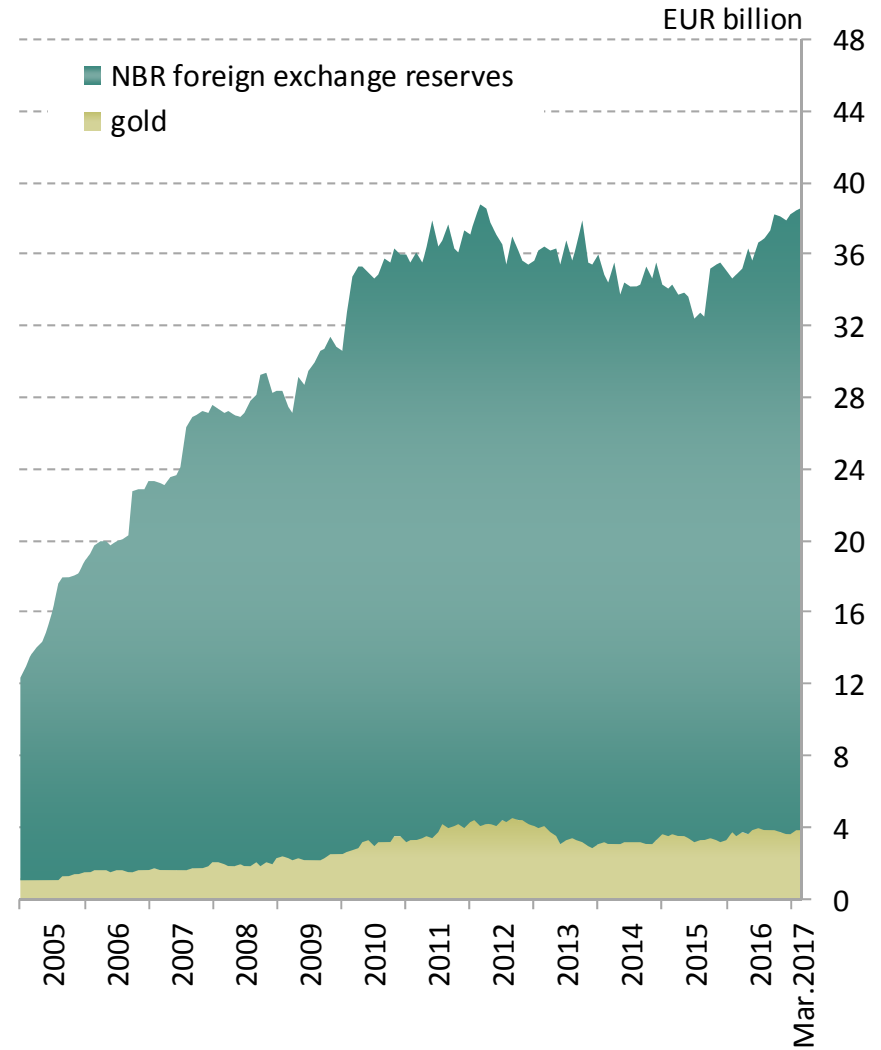
Note: ULC measures include the annual dynamics of unit labour costs economy-wide (based on both the number of persons employed and the hours worked) and unit wage costs in industry.

Source: Eurostat, National Institute of Statistics, National Bank of Romania estimates

## Romania: foreign reserve assets

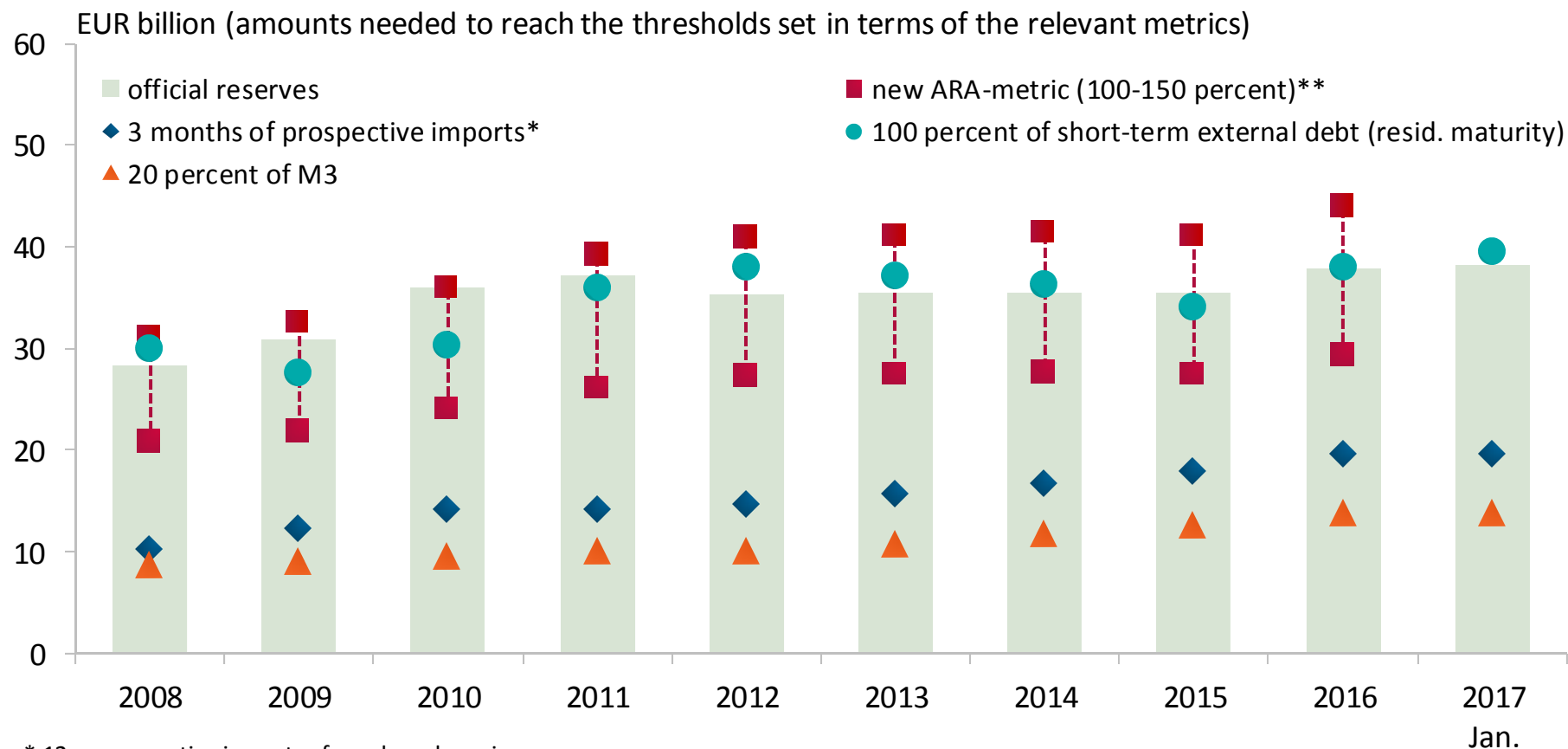


## Romania: international reserves



Source: National Bank of Romania

## Official reserves adequacy



\* 12m prospective imports of goods and services

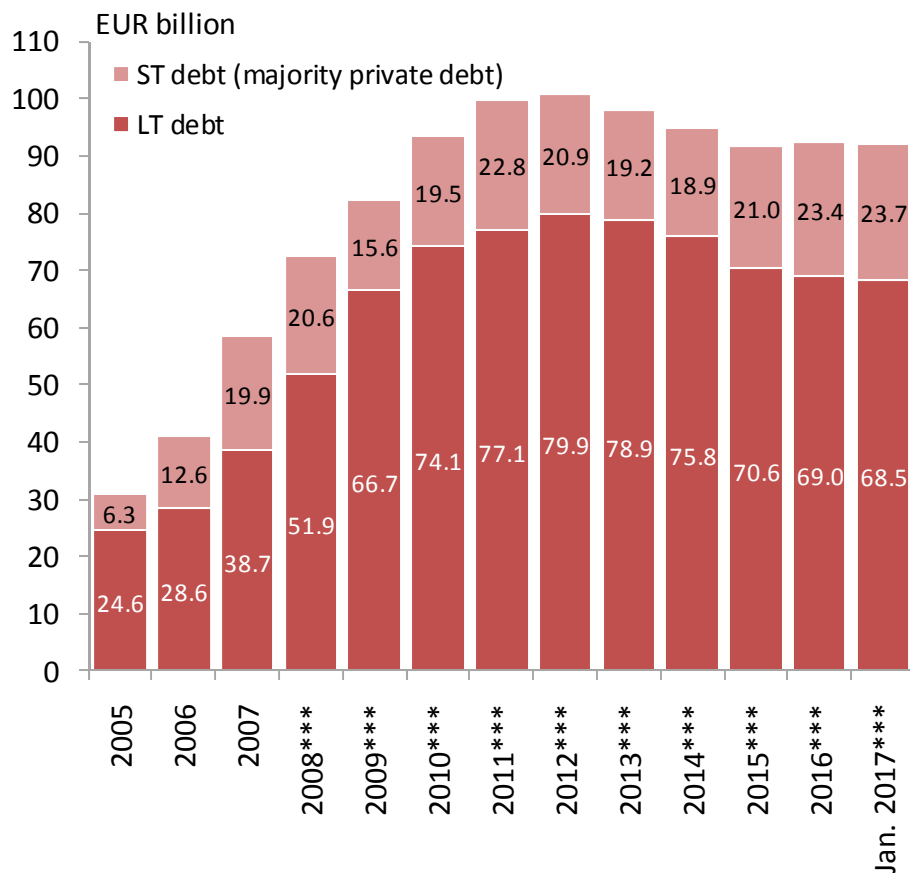
\*\* This indicator is calculated based on the IMF's measure developed for emerging market economies. A broader-based metric is considered in order to capture risk sources such as external liabilities, external demand contraction and capital flight.

For a flexible exchange rate regime, New ARA-metric = 30% of ST debt (resid. maturity) + 10% of Other liabilities + 5% of Prospective exports of goods and services + 5% of Broad Money.

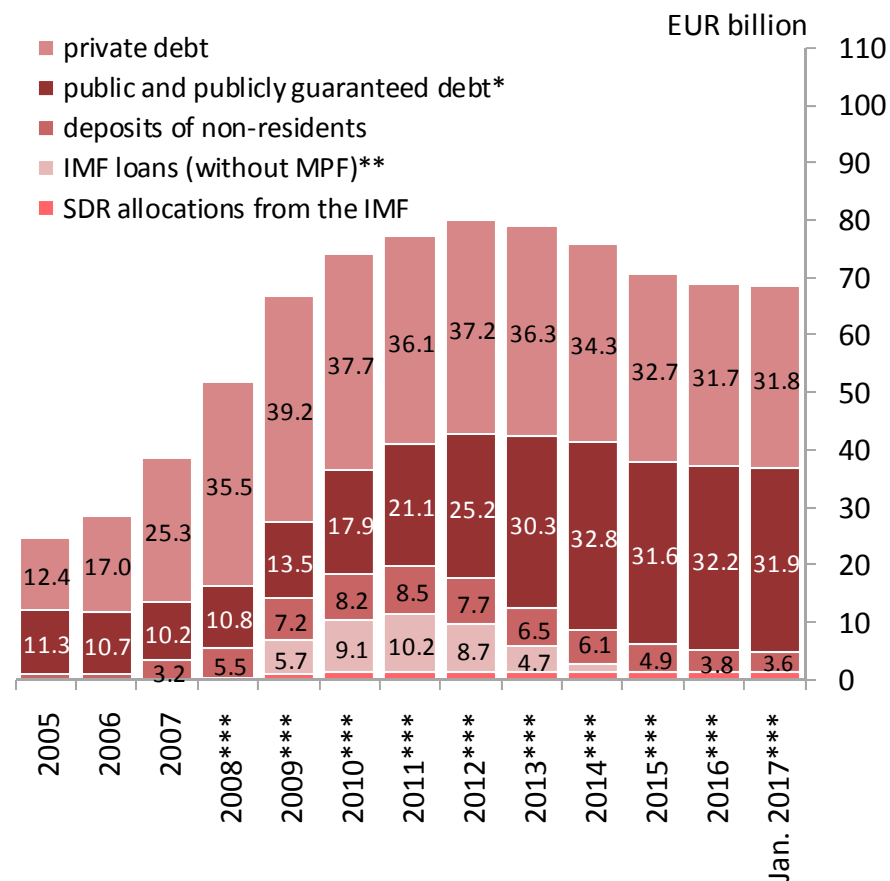
Source: International Monetary Fund, National Bank of Romania



## Total external debt



## Long-term external debt



\*) external loans taken directly/guaranteed by the MPF and local general government in compliance with the legislation on public debt, including Government Emergency Ordinance No. 99/2009 ratifying the Stand-By Arrangement between Romania and the IMF

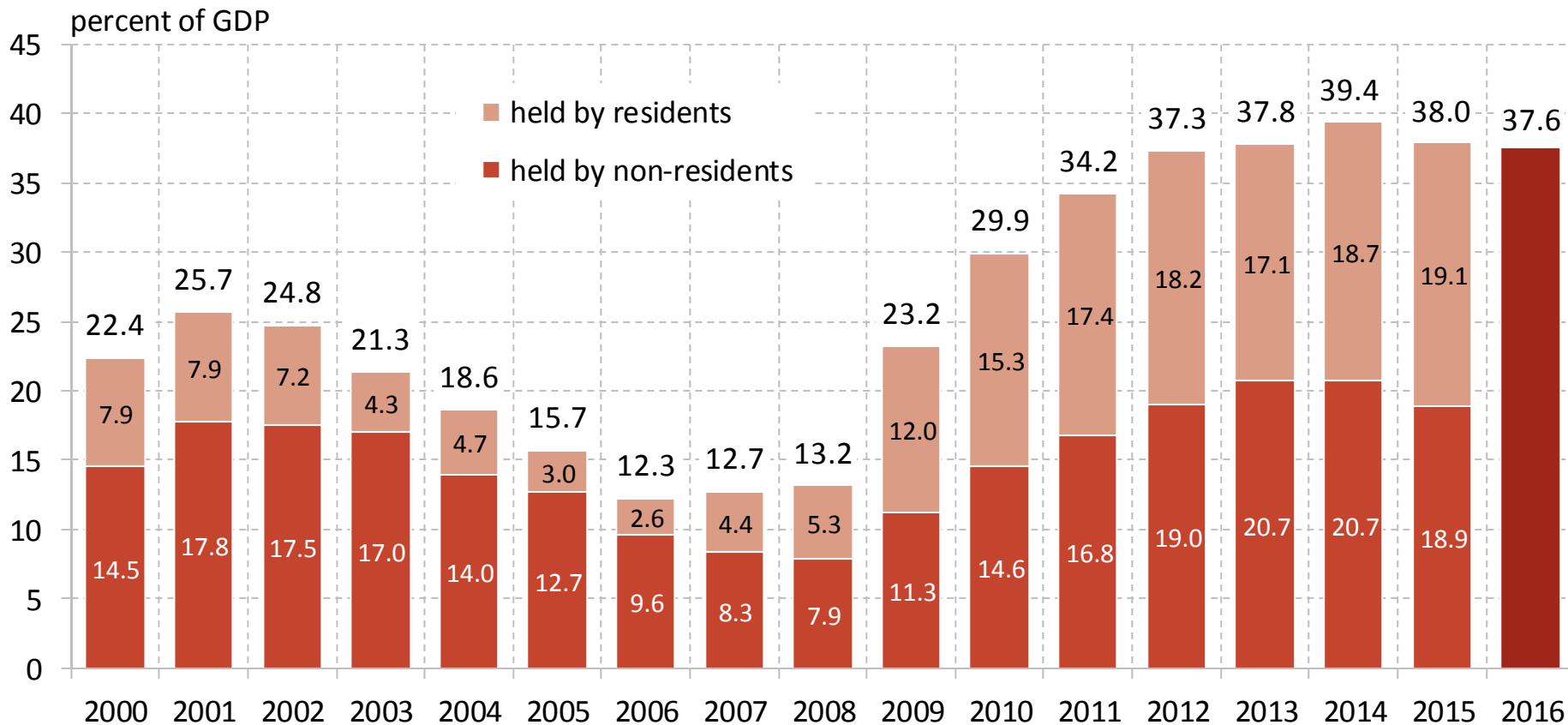
\*\*) IMF borrowings under the Stand-By Arrangement concluded with the IMF, excluding the amount received by the MPF from the IMF according to Government Emergency Ordinance No. 99/2009

\*\*\*) according to the IMF's BPM6

Source: National Bank of Romania

# Public debt

(according to ESA2010)



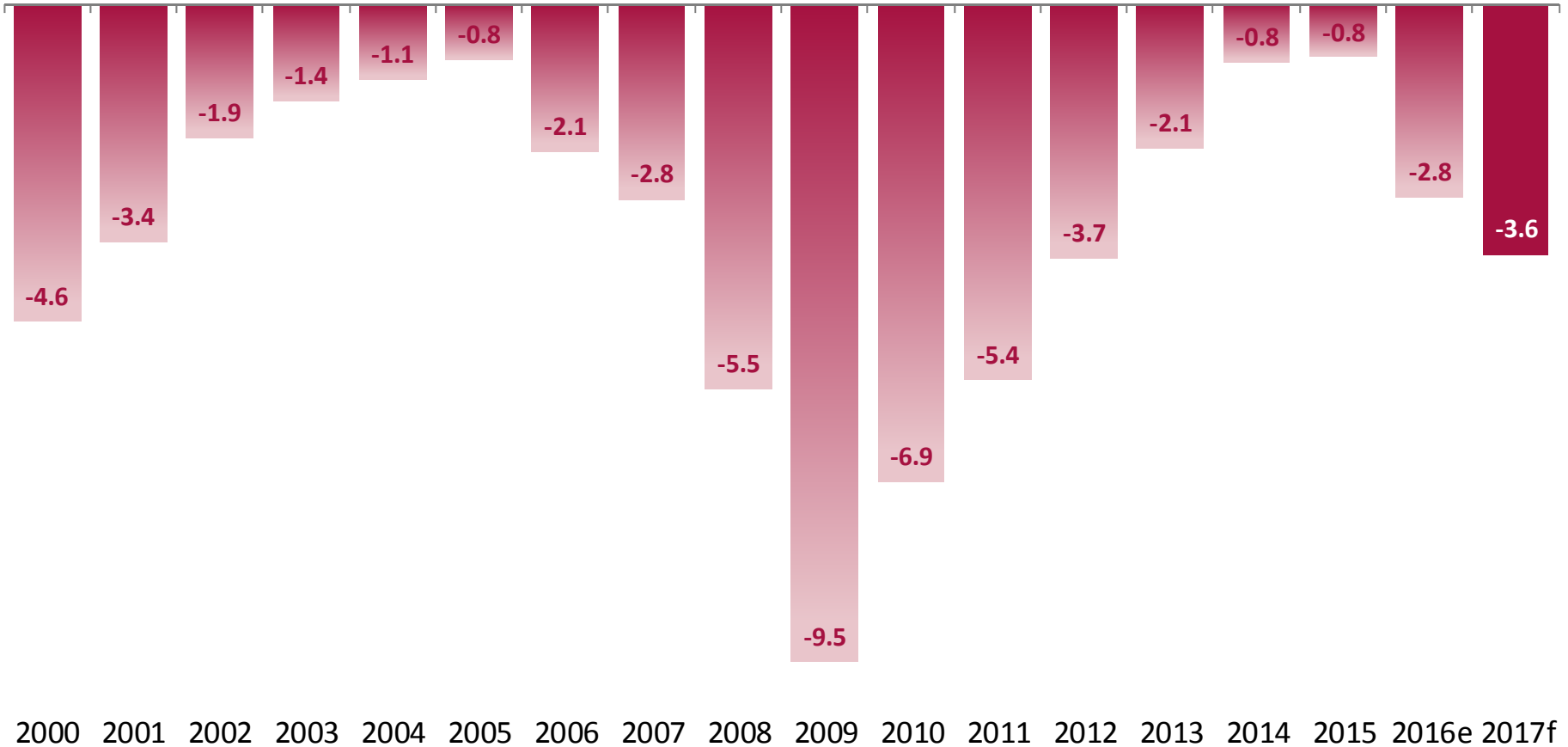
Note: Government securities in MFIs portfolio as a share of GDP in Dec.07=1.4%, Dec.08=2.1%, Dec.09=7.0%, Dec.10=9.4%, Dec.11=10.6%, Dec.12=11.6%, Dec.13=11.1%, Dec.14=11.3%, Dec.15=11.2%, Dec.16=10.9% and Feb.17=10.5%.

Source: Ministry of Public Finance, National Bank of Romania, National Institute of Statistics

# General government balance

(according to ESA2010)

percent of GDP

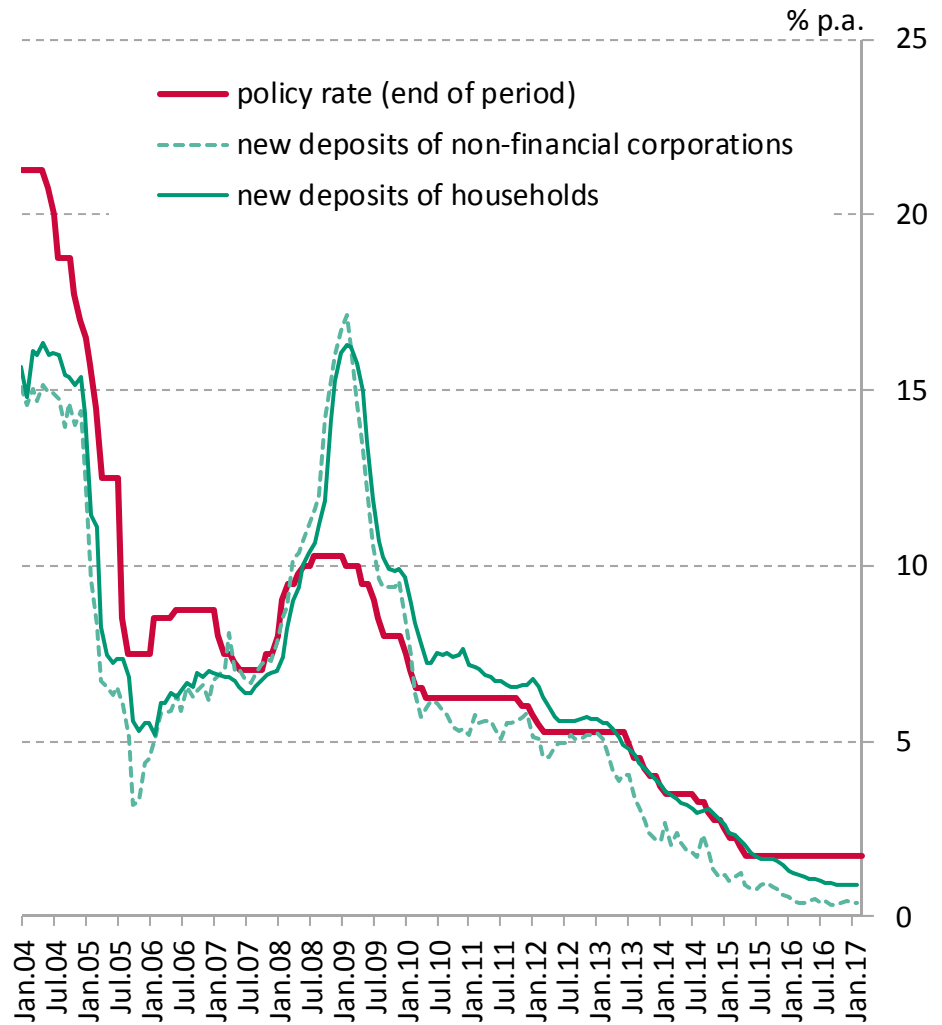
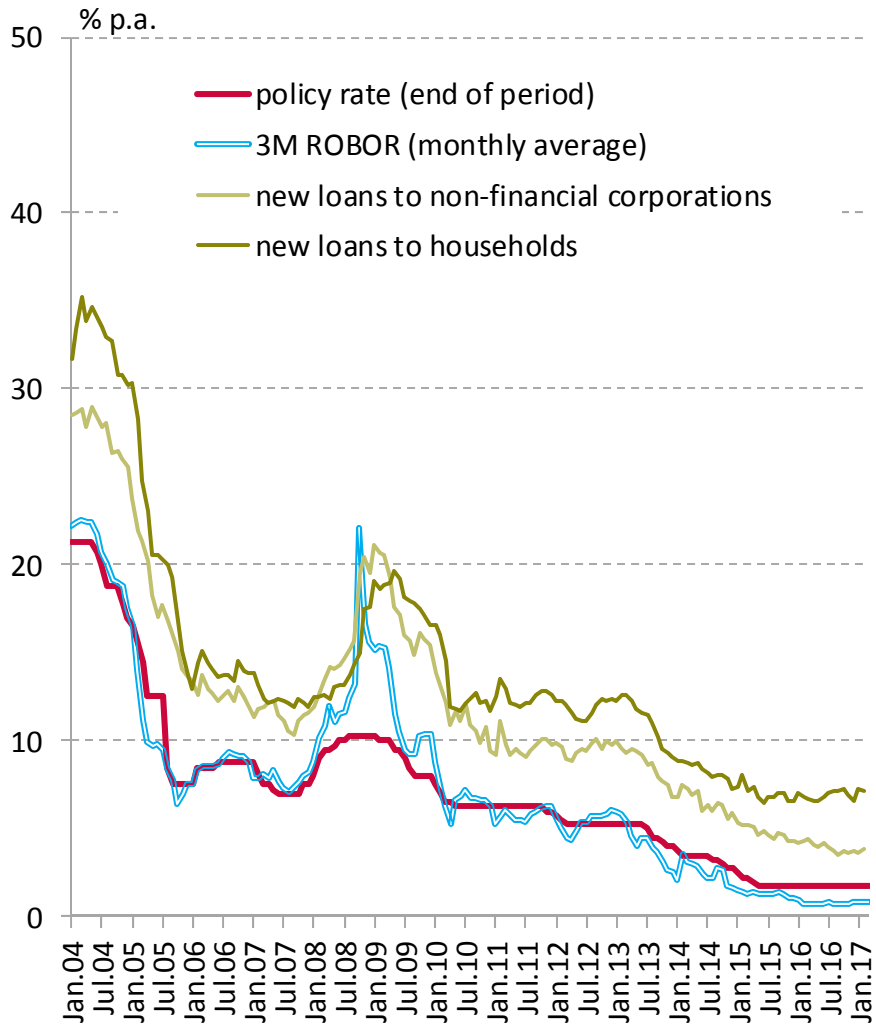


e) estimate

Source: Ministry of Public Finance, National Institute of Statistics

f) European Commission – European Economic Forecast, Winter 2017

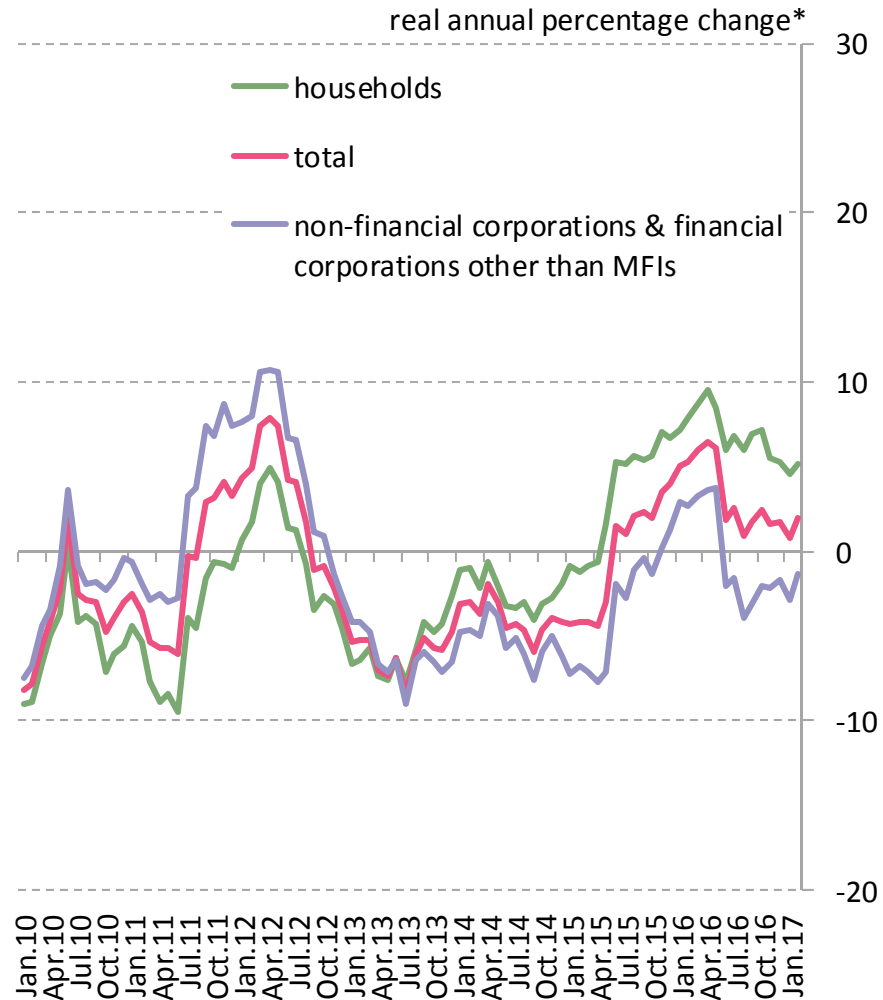
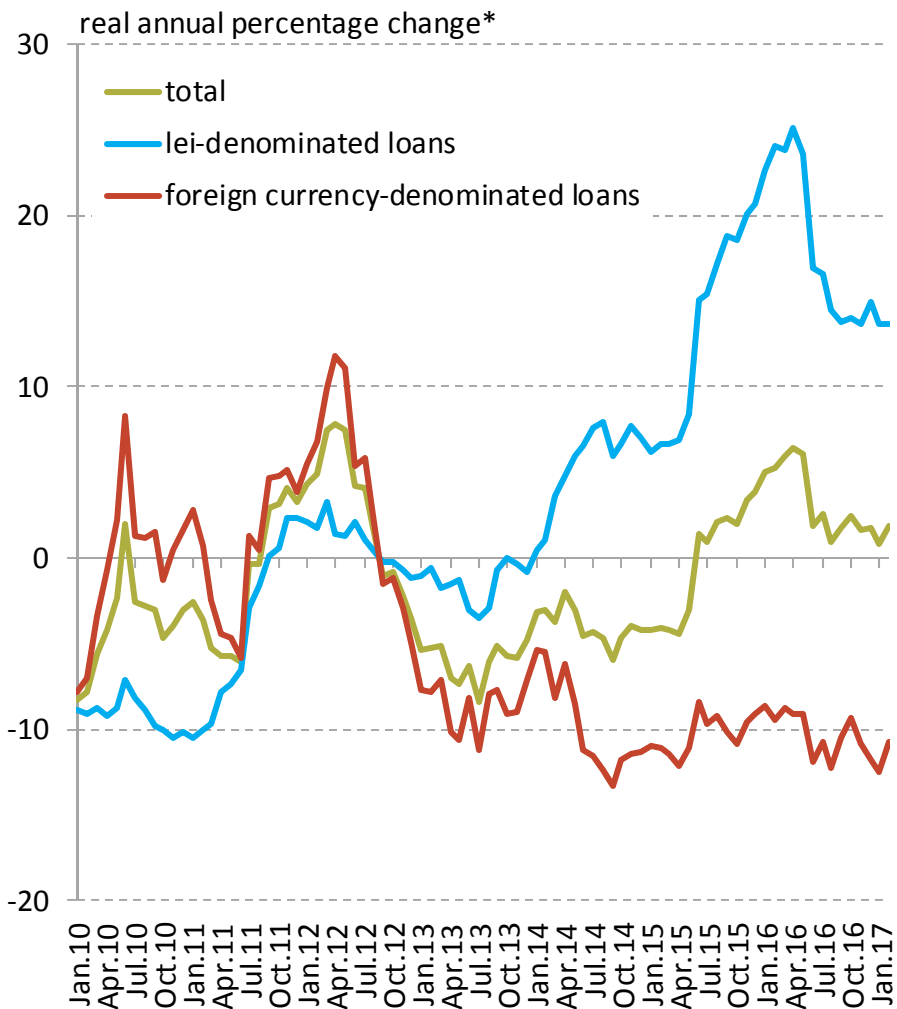
# Policy rate and bank interest rates to non-bank clients



Source: National Bank of Romania

# Loans to the private sector

– stock –



\*) based on CPI

Source: National Institute of Statistics, National Bank of Romania

# Financial intermediation\*

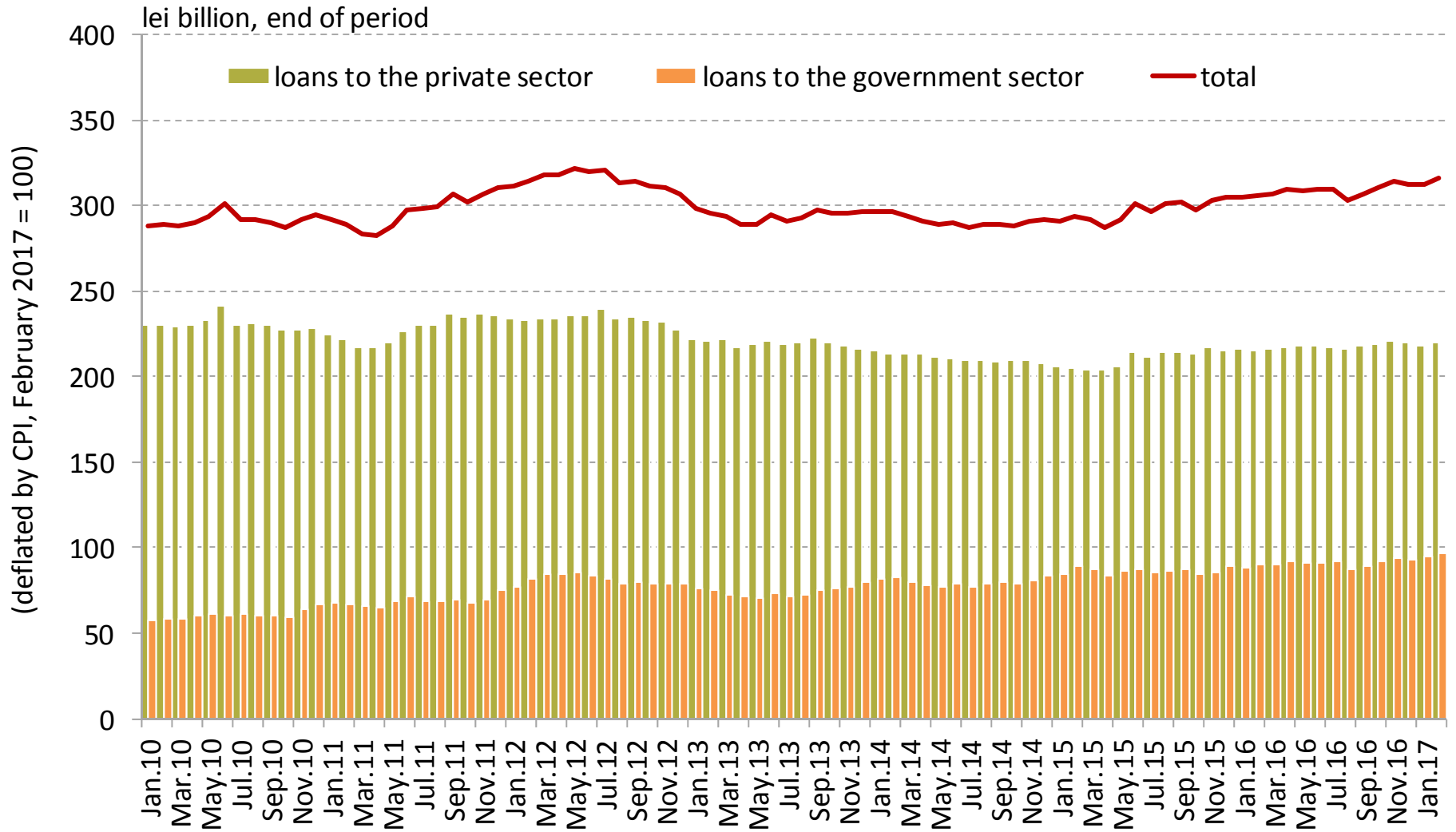
– stock –



\*) loans to the private sector / GDP

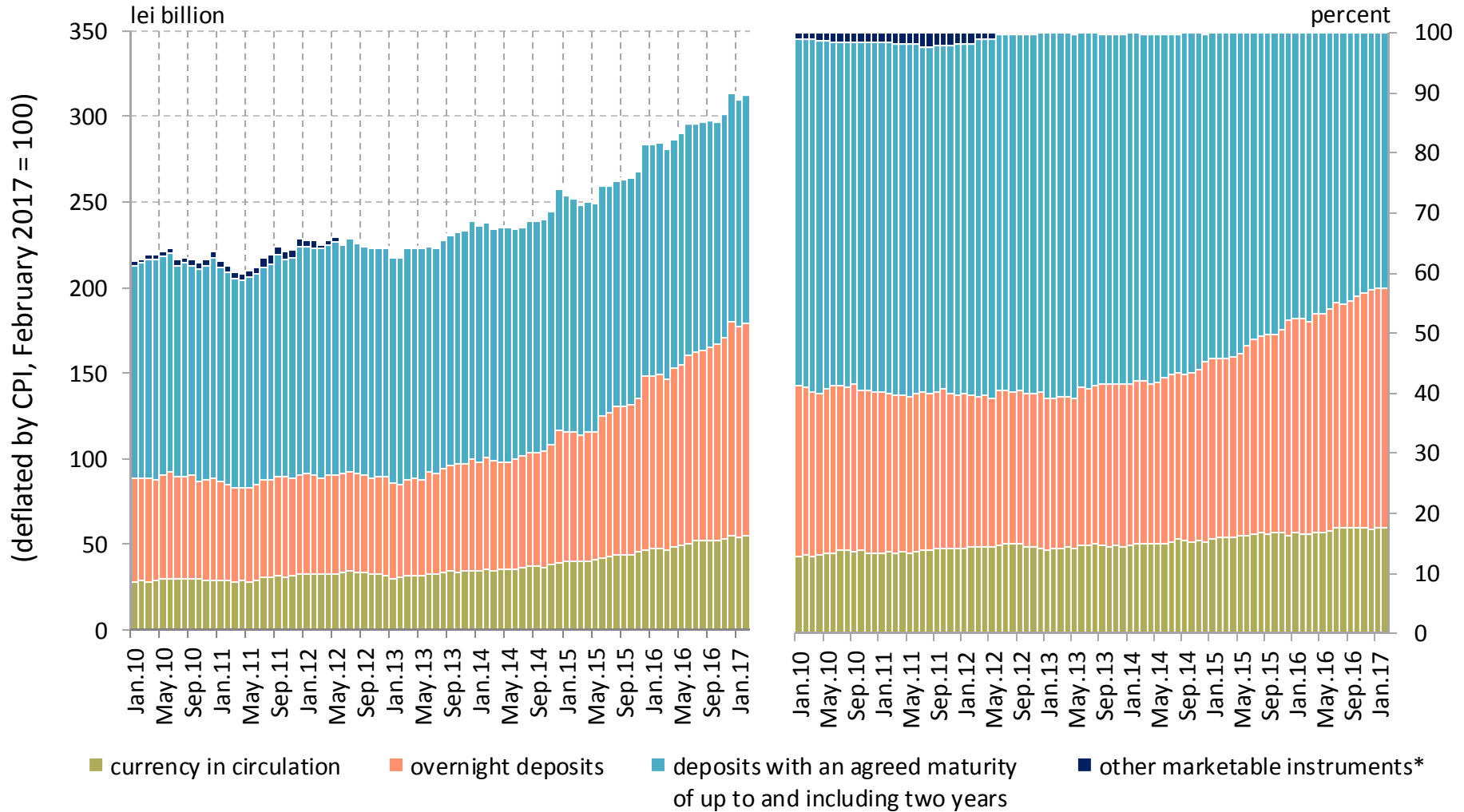
Source: National Institute of Statistics, National Bank of Romania, National Commission for Prognosis

# Domestic credit



Source: National Institute of Statistics, National Bank of Romania

# Broad money (M3)



\*) repurchase agreements, money market fund shares and units, negotiable debt securities with a maturity of up to and including two years

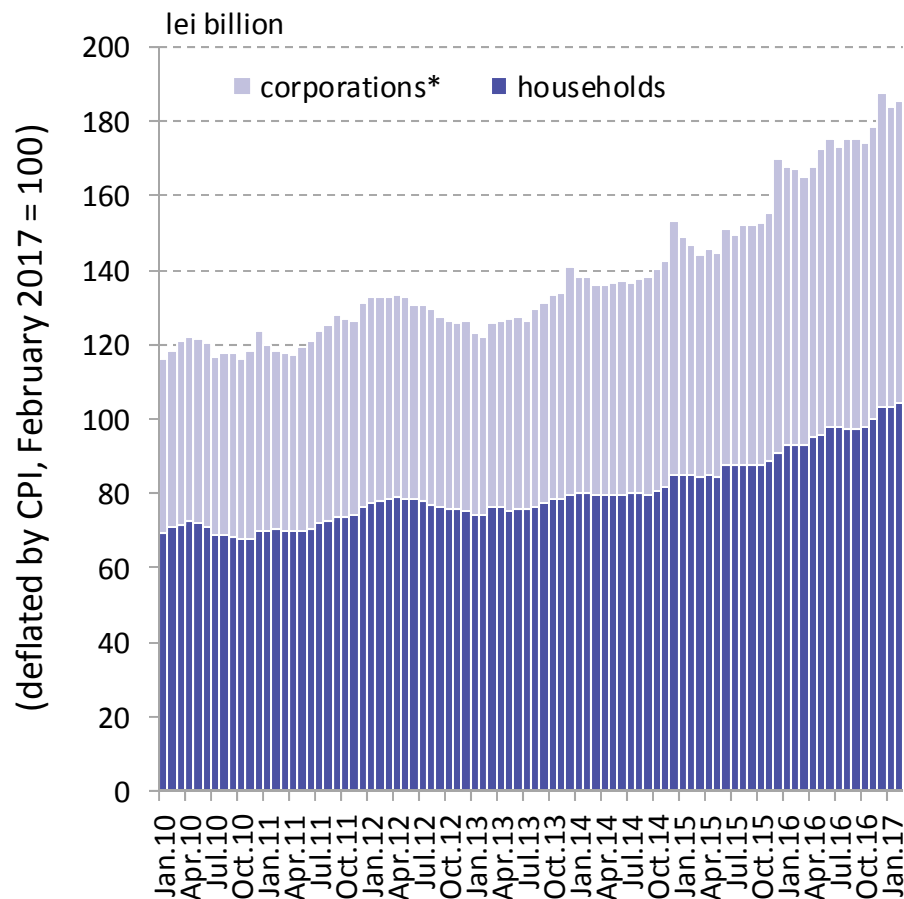
Source: National Institute of Statistics, National Bank of Romania



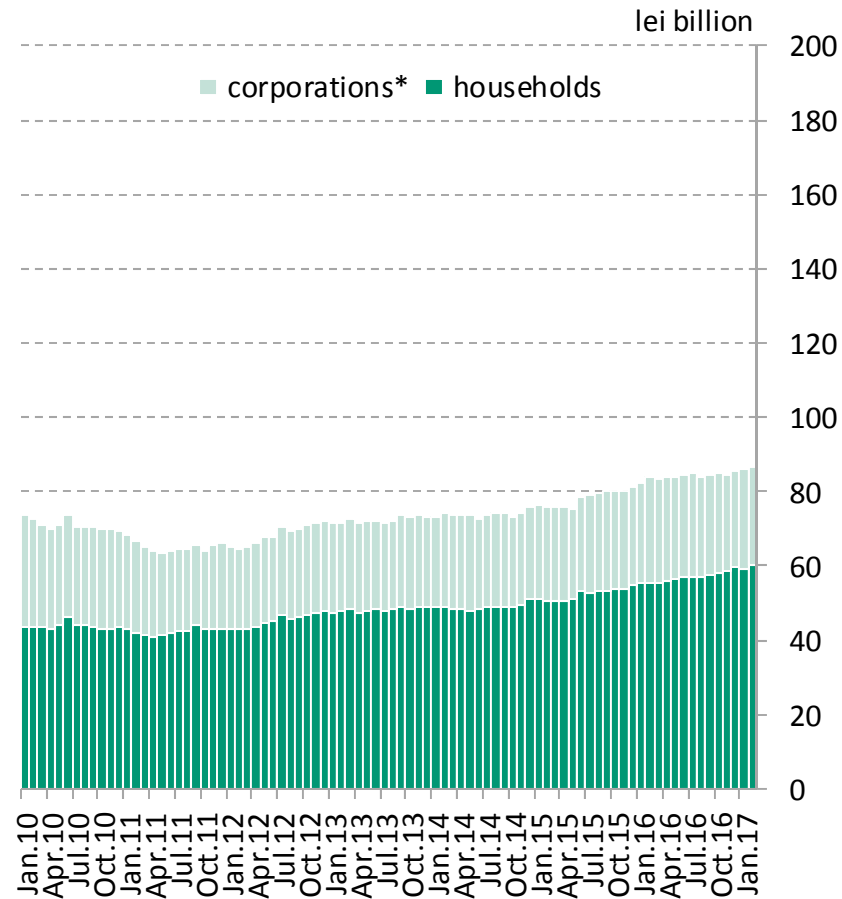
# Private sector deposits

(in real terms)

## lei-denominated deposits



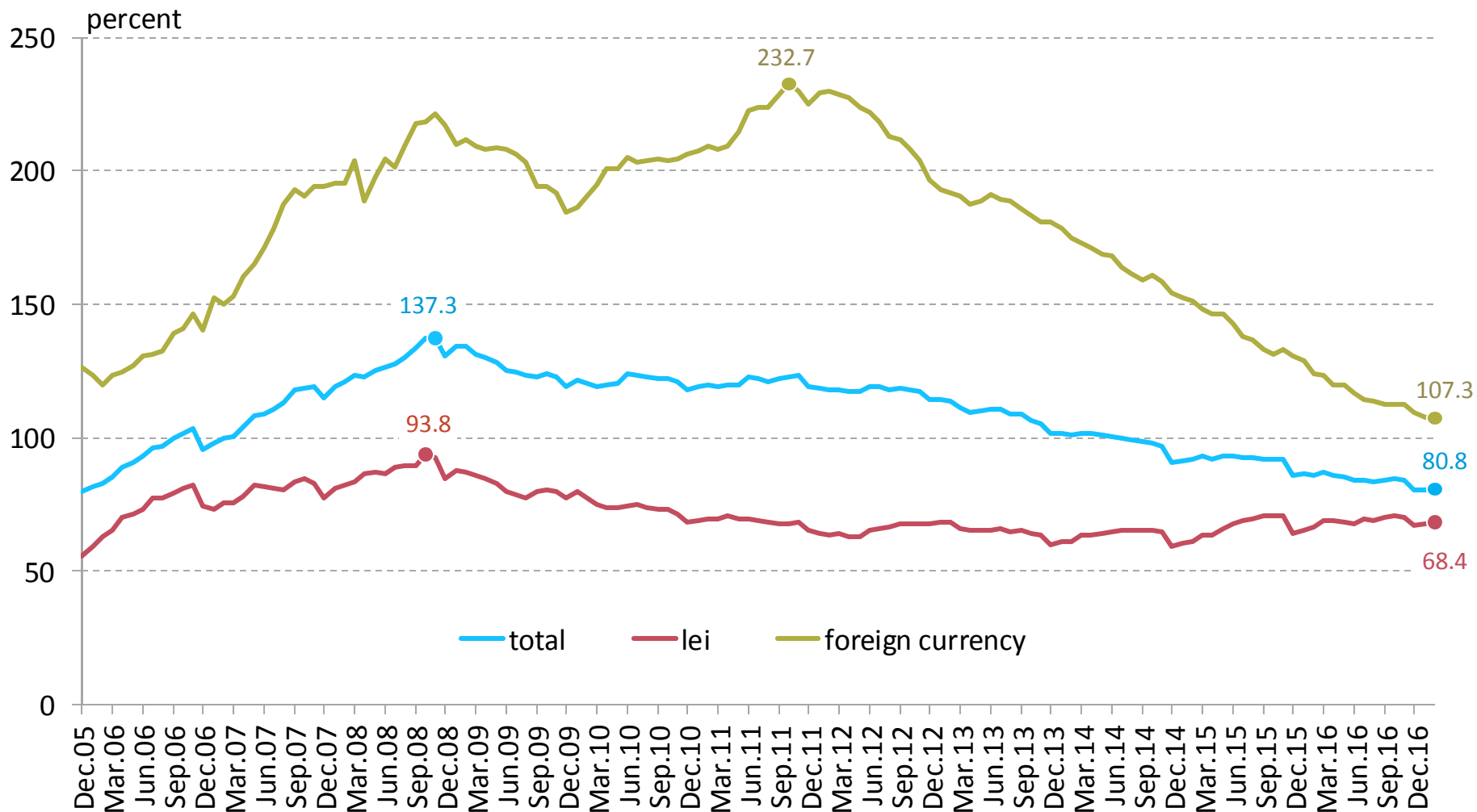
## foreign currency-denominated deposits



\*) non-financial corporations and financial corporations other than MFIs

Source: National Institute of Statistics, National Bank of Romania

# Loan-to-deposit ratio\*

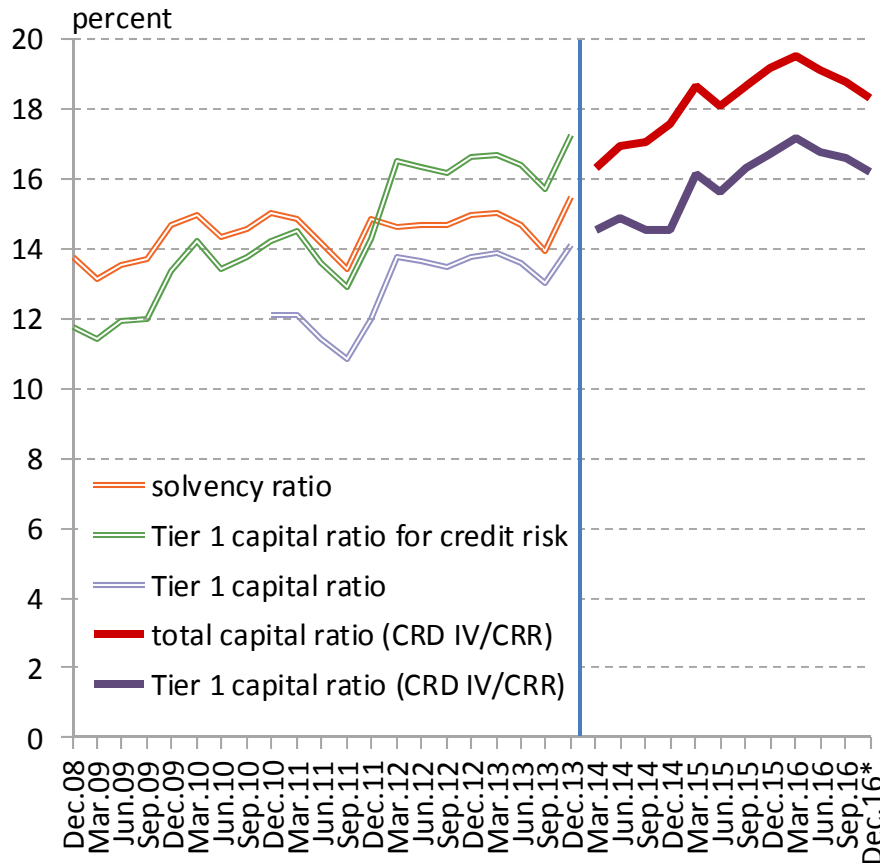


\*) based on data in the monetary balance sheet

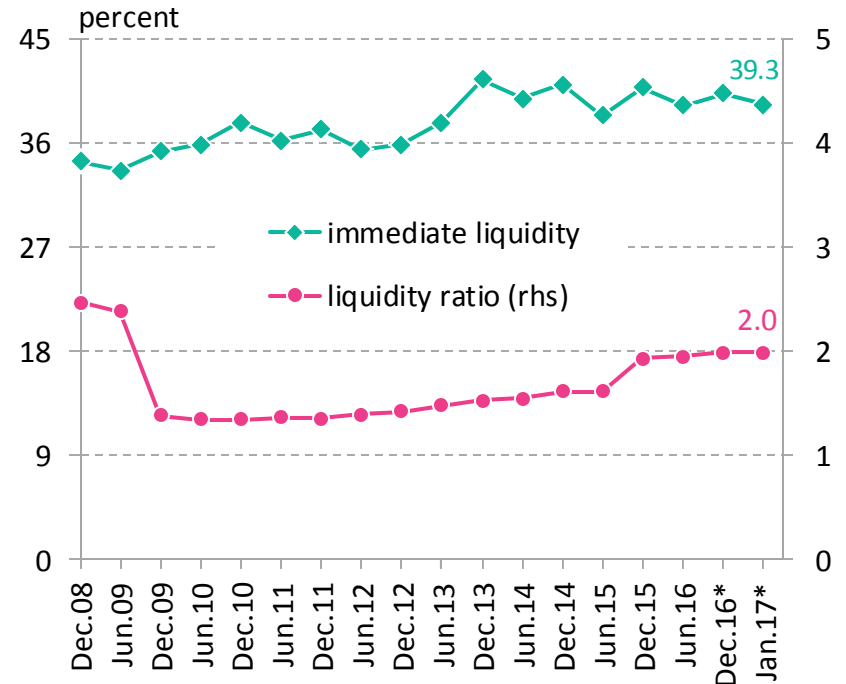
Source: National Bank of Romania

# Analysis ratios for the banking system

## Capital adequacy indicators



## Liquidity indicators



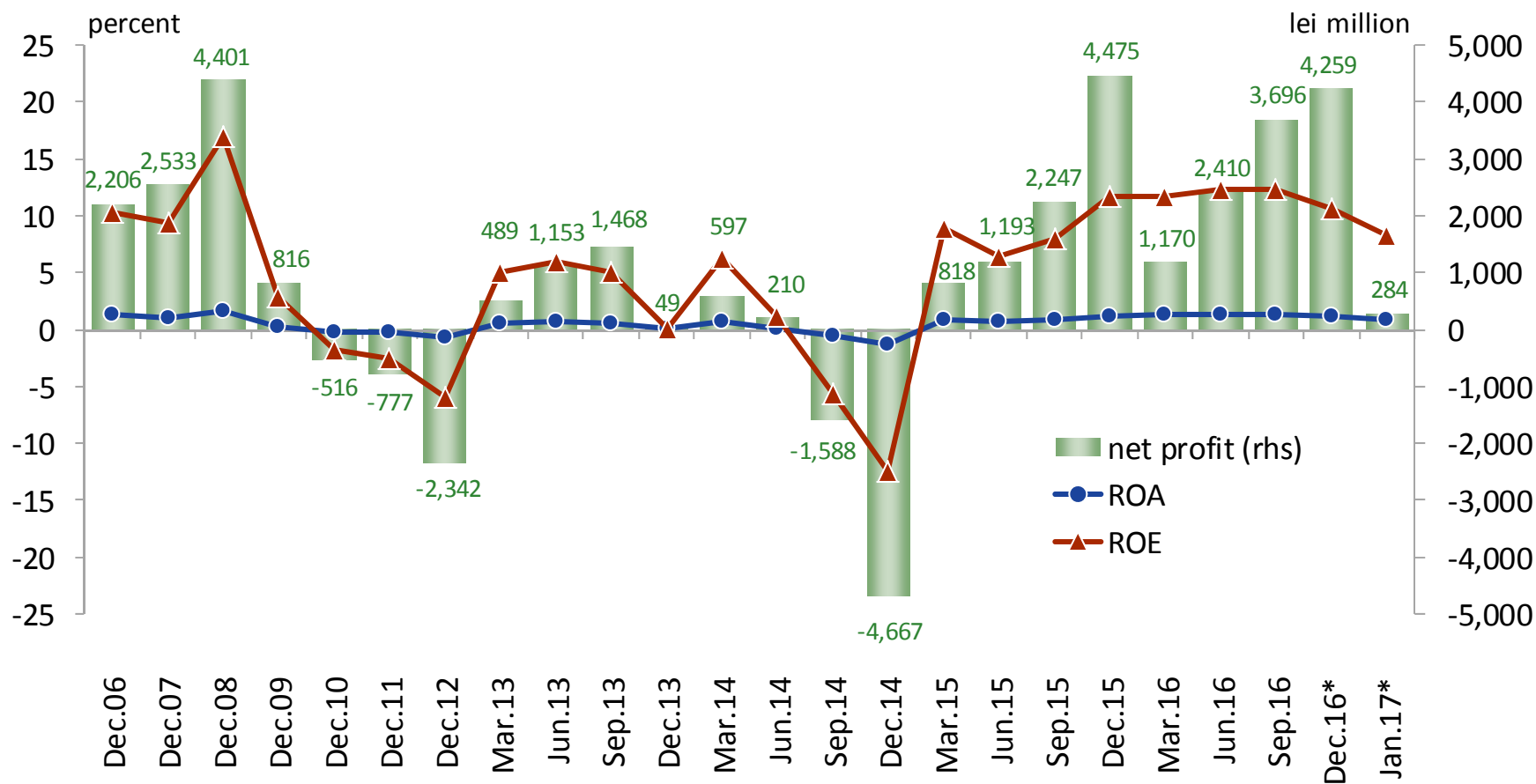
**Immediate liquidity** = (cash, demand deposits and time deposits with banks+ unpledged government securities)/ Total liabilities (prudent level > 30%)

**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: National Bank of Romania

## Banking system profitability



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

Note: Starting January 1, 2012, Romanian credit institutions apply the IFRS for accounting purposes.

Source: National Bank of Romania

# Banking indicators

percent

Indicators	Dec.12	Dec.13	Mar.14	Jun.14	Sep.14	Dec.14	Mar.15	Jun.15	Sep.15	Dec.15	Mar.16	Jun.16	Sep.16	Dec.16*	Jan.17*
<b>Capital adequacy</b>															
1 Total capital ratio (former solvency ratio)	14.9	15.5	16.3	17.0	17.1	17.6	18.6	18.1	18.7	19.2	19.5	19.1	18.8	18.3	x
2 Tier 1 capital ratio (Tier 1 capital / total risk exposure amount)	13.8	14.1	14.5	14.9	14.5	14.6	16.1	15.6	16.3	16.7	17.2	16.8	16.6	16.2	x
3 Common equity Tier 1 capital ratio (common equity Tier 1 capital / total risk exposure amount)	...	...	...	...	14.5	14.6	16.1	15.6	16.3	16.7	17.2	16.8	16.6	16.2	x
4 Leverage ratio (1)	8.0	8.0	8.6	7.9	7.6	7.4	8.3	8.0	8.3	8.2	8.7	8.6	8.6	8.3	x
<b>Asset quality</b>															
5 Impaired loans to non-bank clients (gross value) / Total loan portfolio to non-bank clients (gross value)	21.9	24.3	25.0	23.7	20.6	19.7	19.3	18.1	17.6	15.7	15.4	12.8	11.4	11.2	11.3
6 Impaired loans to non-bank clients (net value) / Total loan portfolio to non-bank clients (net value)	12.0	11.6	12.2	11.4	10.2	9.4	9.1	8.4	7.9	7.0	6.8	5.6	5.2	4.8	4.8
7 Impaired loans to non-bank clients (net value) / Total assets (net value)	7.0	6.5	6.9	6.5	5.8	5.1	5.0	4.7	4.5	3.8	3.8	3.1	2.9	2.6	2.7
8 Non-performing loan ratio (2)	...	...	20.4	19.2	15.3	13.9	13.9	12.8	12.3	...	...	...	...	...	...
9 Non-performing loan ratio (3)	...	...	...	...	21.5	20.7	20.2	16.2	15.7	13.5	13.5	11.3	10.0	9.5	9.8
10 IFRS provisions for NPLs / NPLs	...	...	68.9	68.4	66.2	69.9	70.2	69.0	69.4	...	...	...	...	...	...
11 IFRS provisions for NPLs / NPLs (EBA's definition)	...	...	...	...	54.1	55.6	55.7	56.2	58.1	57.7	58.2	55.6	54.5	56.2	56.8
<b>Profitability</b>															
12 ROA (net profit / total assets, average)	-0.64	0.01	0.67	0.12	-0.60	-1.32	0.91	0.66	0.83	1.24	1.26	1.27	1.30	1.10	0.87
13 ROE (net profit / own capital, average)	-5.92	0.13	6.30	1.10	-5.58	-12.45	8.88	6.44	7.98	11.77	11.69	12.28	12.32	10.67	8.35
<b>Liquidity</b>															
14 Immediate liquidity (4)	35.9	41.5	40.4	39.8	38.4	41.1	40.5	38.4	38.4	40.8	38.7	39.2	39.2	40.3	39.3
15 Liquidity ratio (effective liquidity / required liquidity) (5)	1.42	1.53	1.53	1.55	1.60	1.62	1.58	1.62	1.68	1.94	1.92	1.95	1.97	1.99	1.99

Note:

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

(1) Tier 1 capital / Total average assets (net value) until end-December 2013 (according to the NBR definition). Once Implementing Regulation (EU) No. 680/2014 entered into force, the indicator was included in the reporting statements in compliance with the said technical standards and is reported accordingly by credit institutions.

(2) Based on data reported by all banks (both those calculating the minimum capital requirement for credit risk according to the standard approach and those applying internal rating-based models). The NPLs represent gross exposure of loans and related interest overdue for more than 90 days and/or for which legal proceedings were initiated. The definition is in line with the IMF's recommendations and allows international comparisons.

(3) EBA-defined indicator, according to which non-performing exposures are those that satisfy any of the following criteria: (i) material exposures which are more than 90 days past due; (ii) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due. In June 2015, the methodological notes on the FINREP framework at solo level were amended so as to include cash balances with the central bank and other demand deposits with credit institutions in the non-performing exposure report form.

(4) The numerator of this ratio is represented by cash, demand and time deposits with banks at net value plus unpledged government securities, while the denominator includes total liabilities.

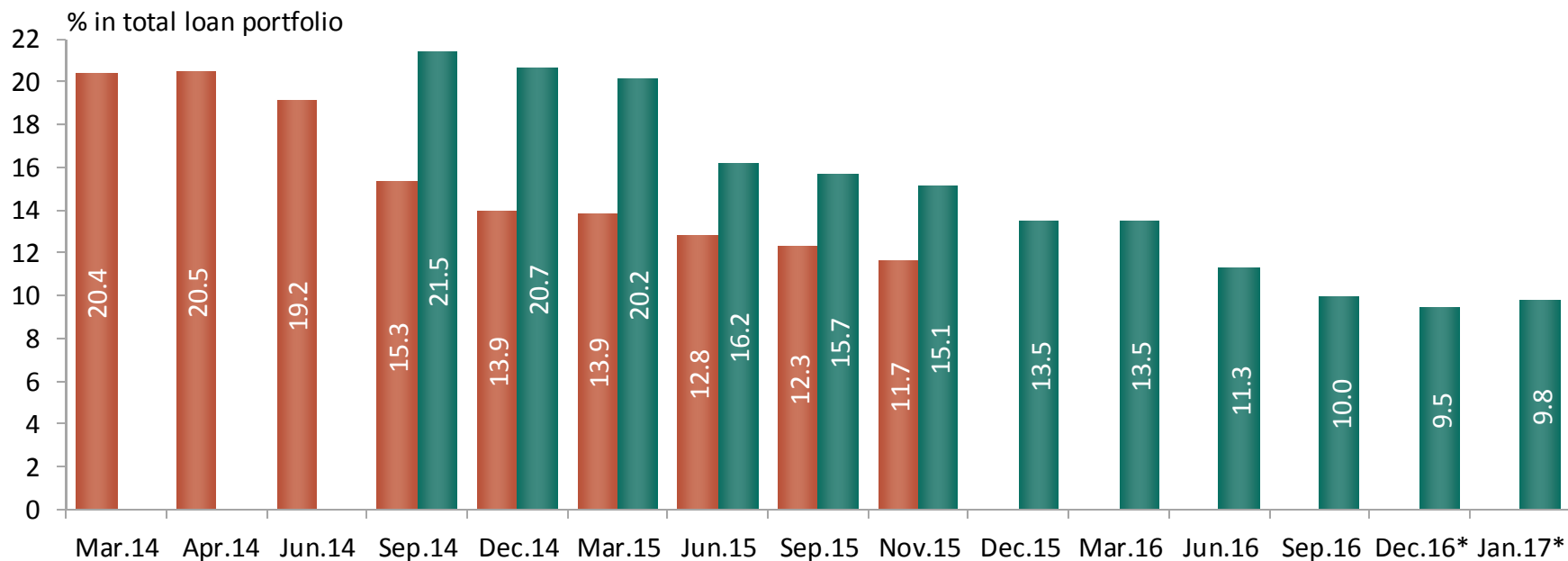
(5) According to NBR Order No. 22/2011 and NBR Regulation No. 25/2011; the liquidity ratio is expressed in units.

x = it is not the case because the frequency is quarterly.

"..." = missing data

Source: National Bank of Romania

## Developments in non-performing loans



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

Indicator calculated based on prudential reports submitted by all banks (both banks that determine the minimum capital requirement for credit risk based on the standardised approach and banks using internal models-based approach) for loans meeting the non-performance criteria (debt service longer than 90 days and/or where judicial proceedings have been initiated).

EBA – defined indicator, determined as the ratio between **a) the total non-performing exposures represented by loans and advances** (where non-performing exposure is defined as any exposure satisfying any of the following criteria: (i) material exposures which are more than 90 days past due; (ii) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due) and **b) total exposures represented by loans and advances**.

In June 2015, the methodological notes on the FINREP framework at solo level were amended so as to include cash balances with the central bank and other demand deposits with credit institutions in the non-performing exposure report form.

Source: National Bank of Romania