



# Monitoring the lending developments to non-financial companies and household sectors

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**BANCA NAȚIONALĂ ROMÂNIEI**



# Monitoring the lending developments to non-financial companies (NFC) and households (HH)

1. Why is it important?
2. How it is done?
3. The Romanian case

# 1. Why is it important?

## **Many channels of interaction between real and financial sectors:**

*The borrower balance sheet channel* – the inability of lenders to (i) fully assess borrowers' risks and solvency, (ii) fully monitor their investments and (iii) fully enforce their repayment of debt

- Bernake and Gertler (1989); Carlstrom and Fuerst (1997) - borrowers face an “external finance premium”
- Kiyotaki and Moore (1997) – collateral constraints

*The bank balance sheet channel* – shocks in financial institutions' balance sheets can entail sharp contractions in credit and in economic activity

- Bernake and Blinder (1988) - traditional bank lending channel
- Holmström and Tirole (1997), Stein (1998), Heuvel (2002) etc. - bank capital channel

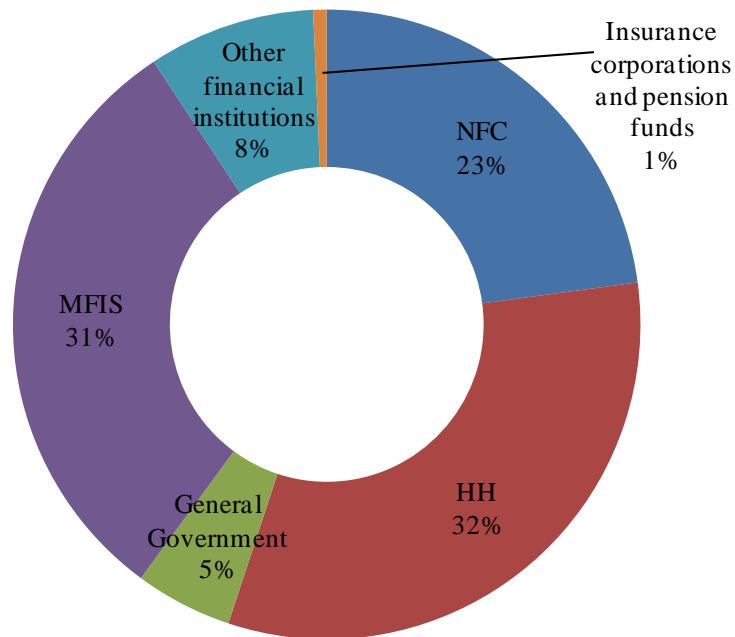
*The liquidity channel*

- Diamond and Rajan (2005), Brunnermerier and Pedersen (2009) etc. – highlighted by recent crisis

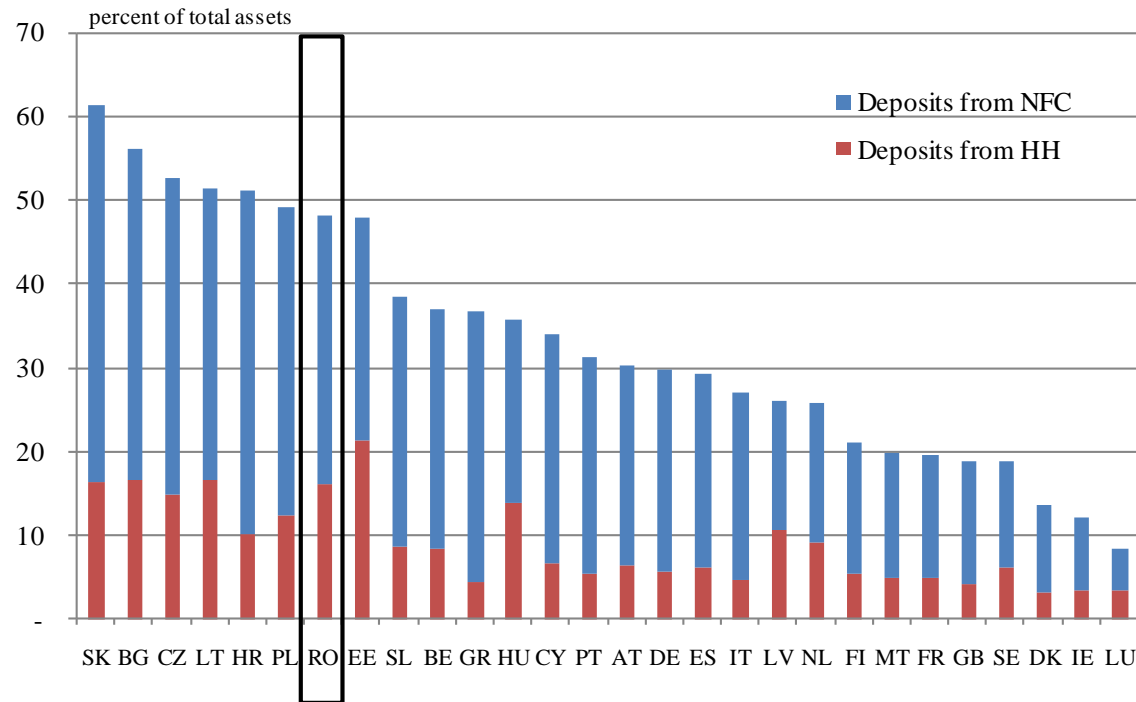
# 1. Why is it important?

**NFC and HH have an important role in the European MFIs balance sheets**

Structure of European MFIs' loans (September 2013)



Source: ECB, NBR calculations

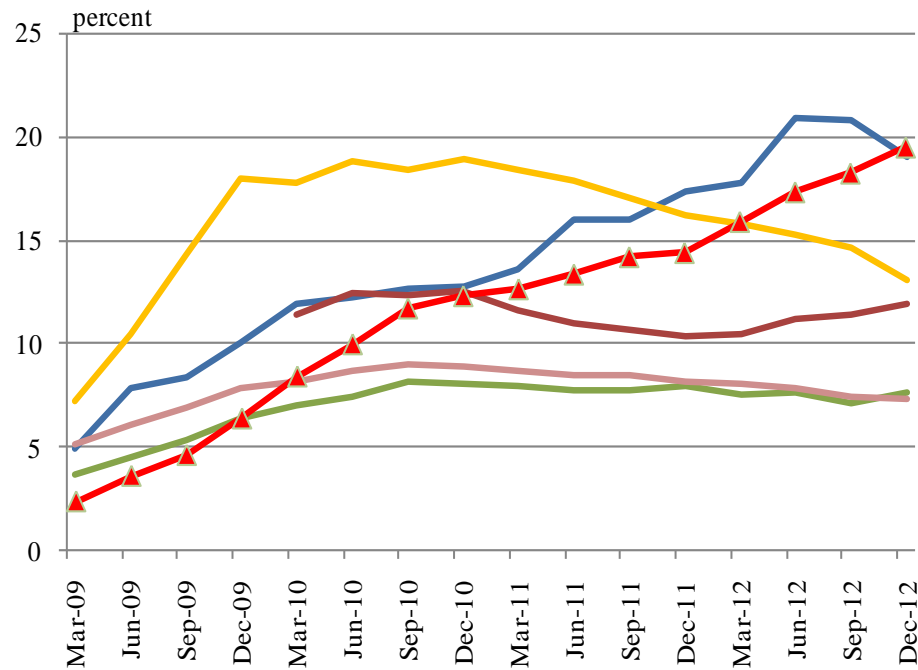


Source: ECB, NBR calculations

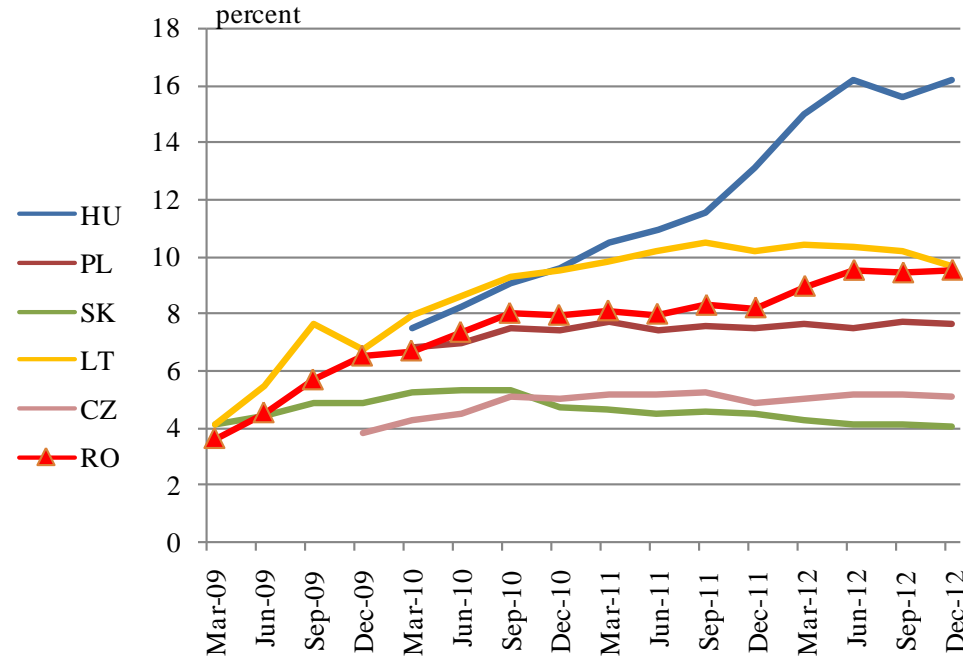
# 1. Why is it important?

**The credit risk stemming from NFC and HH exposure should be closely monitored..**

NFC, NPL ratio\*



HH, NPL ratio\*



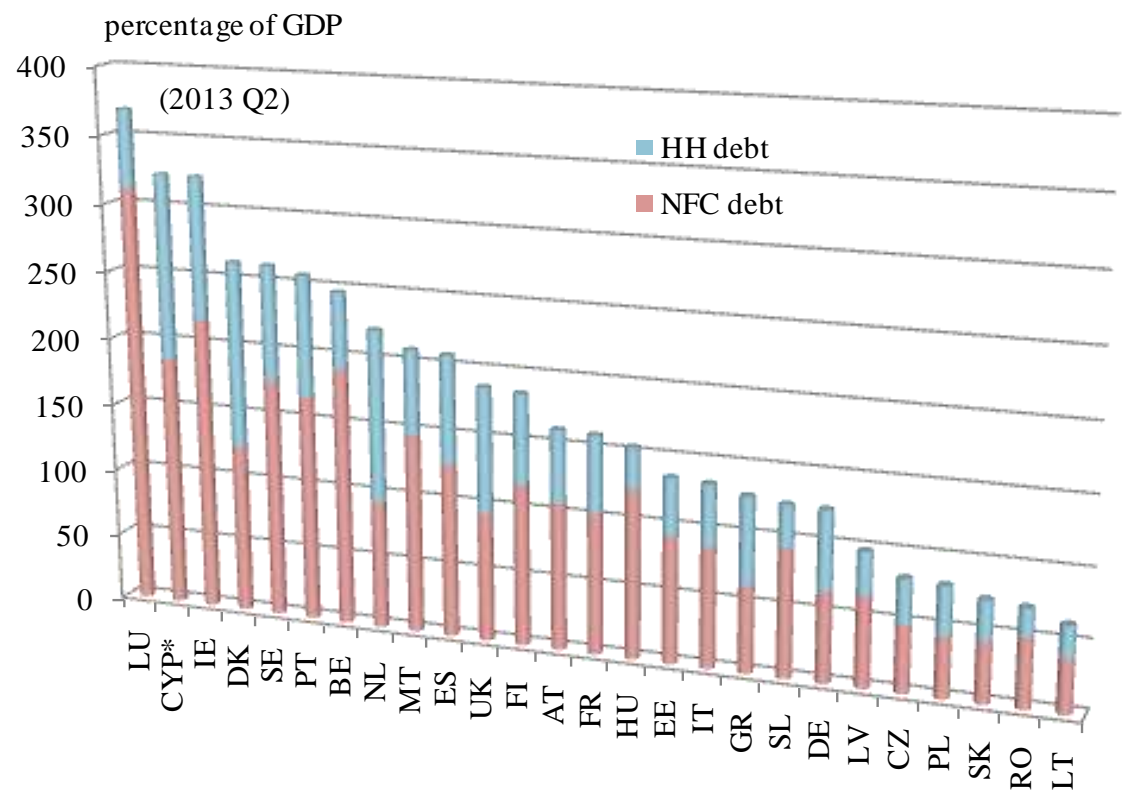
\*Data are not fully comparable across countries, due to differences in national classification practices

Source: European NCBS websites, NBR calculations



# 1. Why is it important?

....and also supports the need for a rethinking of what represents a sustainable level of debt



\* Data as of 2012

Note: non-consolidated data

Source: ECB



# 1. Why is it important?

## **European initiatives:**

-focus on SMEs: joint Commission-EIB initiative for increasing SMEs' access to finance (2013); Funding for Growth Scheme (HU, 2013); Funding for Lending Scheme (UK, 2012)

-shift to long-term financing (EC, Green Paper, 2013)

-encourage banks to clean their balance-sheets (EBA, 2013) in order to boost economic growth by new lending to sound borrowers

## 2. NFC and HH monitoring- how it is done?

- ✓ Financial Stability Reports (18 out of 24 EU countries that publish FSRs have distinct sections on NFC and HH)
- ✓ Bank lending surveys (25 out of 28\* countries, including RO)
- ✓ HH Finance and Consumption Survey – EA (2013)\*\* ; other HH surveys
- ✓ Surveys on the access to finance of enterprises - EC and ECB on 38 countries; ECB on EA17; LT; RO etc.
- ✓ Other publications on NFC and HH developments (Trends in lending- HU; Survey of households with a housing loan – LT etc.)

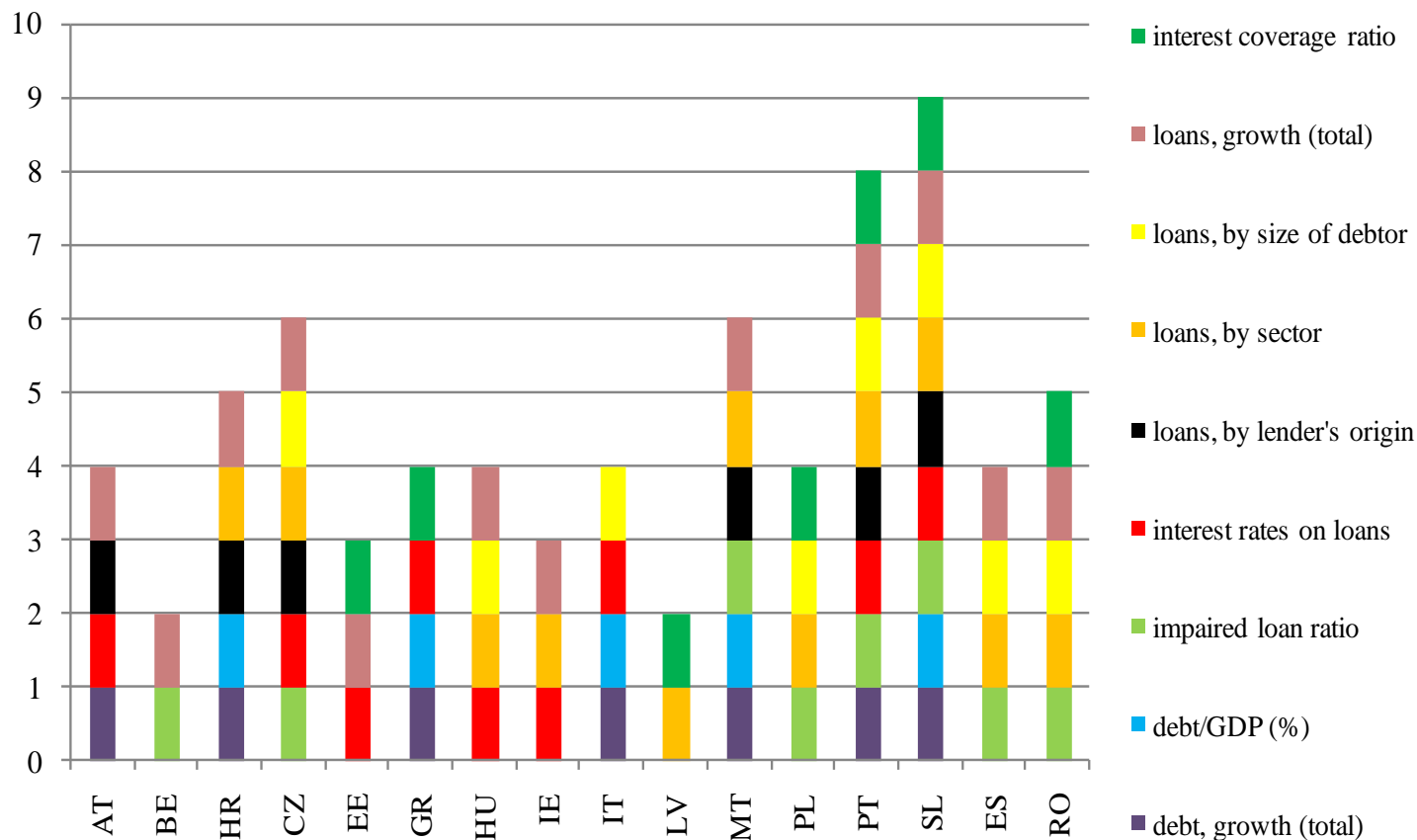
\*ECB publishes BLS at aggregate level for EA countries; NCBs of the Member States can also decide to publish BLS at country level, compiled after the data reported by the domestic banks from the EA banks pool

\*\*15 EA countries participated in the first wave of the survey, with the fieldwork taking place in 2010/2011. Ireland and Estonia will start participating in the HFCS from the second wave of the survey



## 2. NFC and HH monitoring- how it is done?

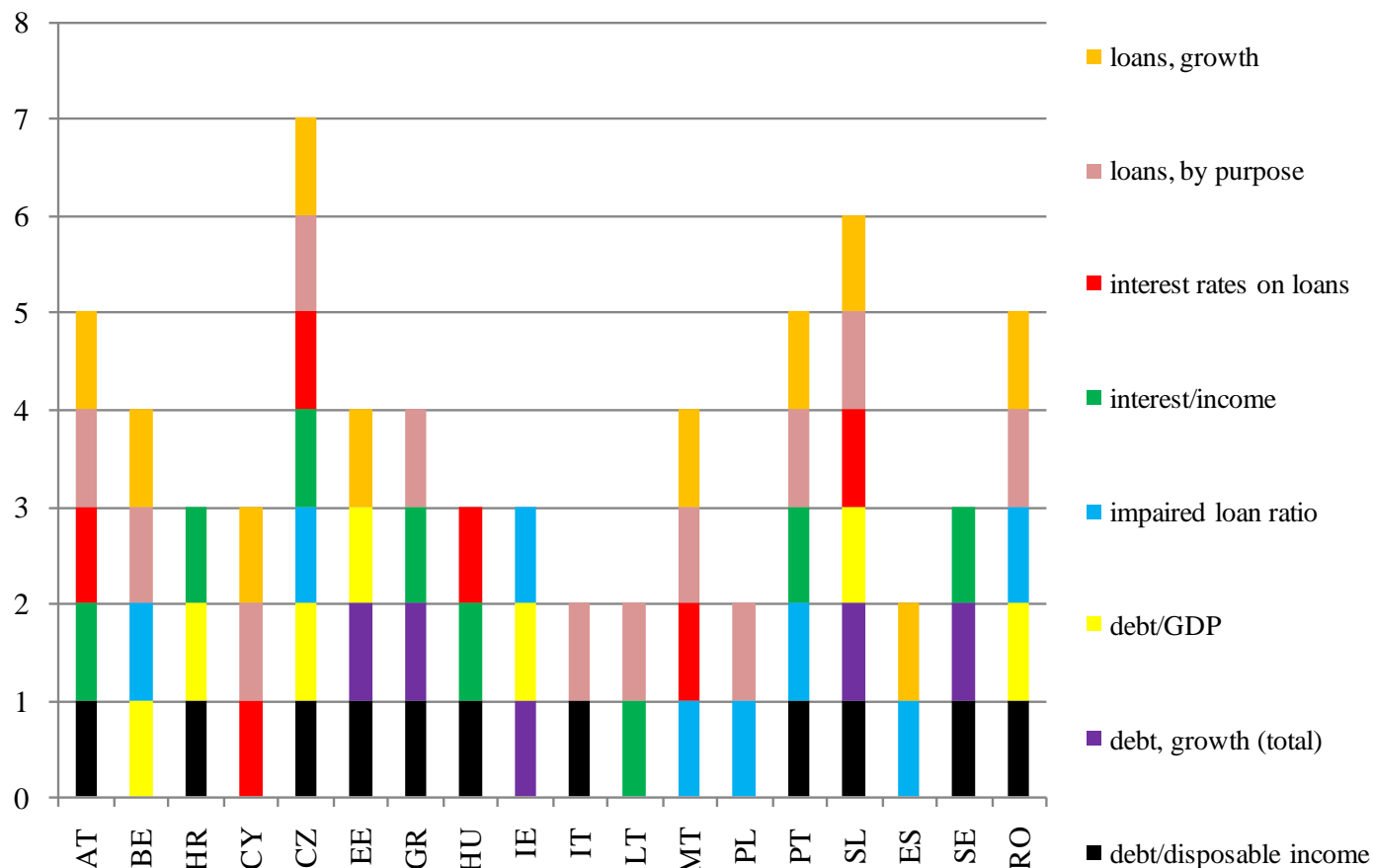
### Tools for monitoring NFC sector:



Source: European NCBs websites

## 2. NFC and HH monitoring- how it is done?

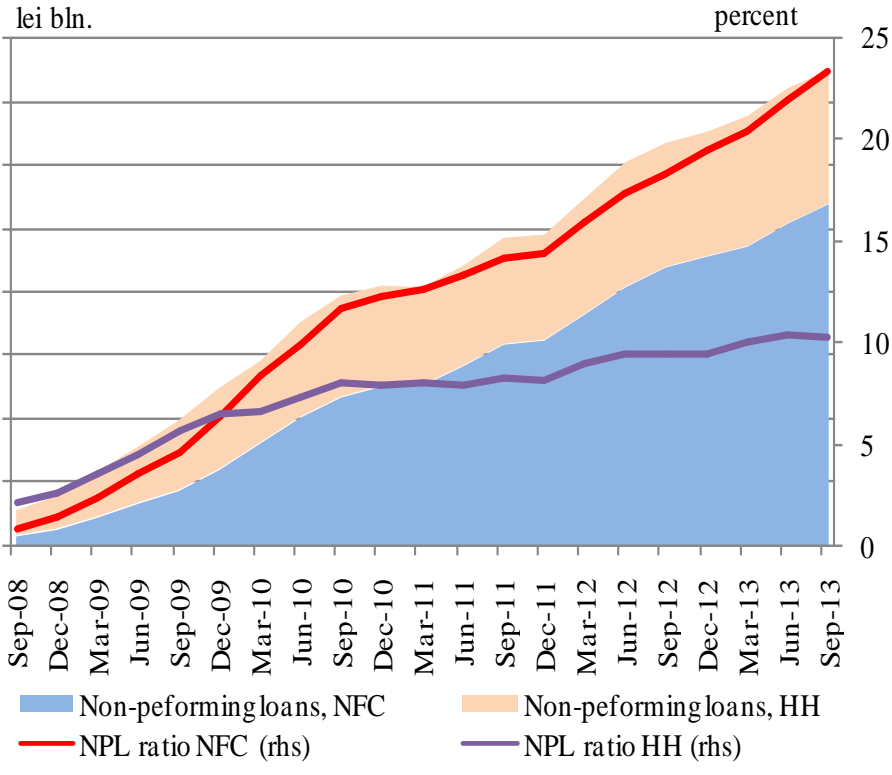
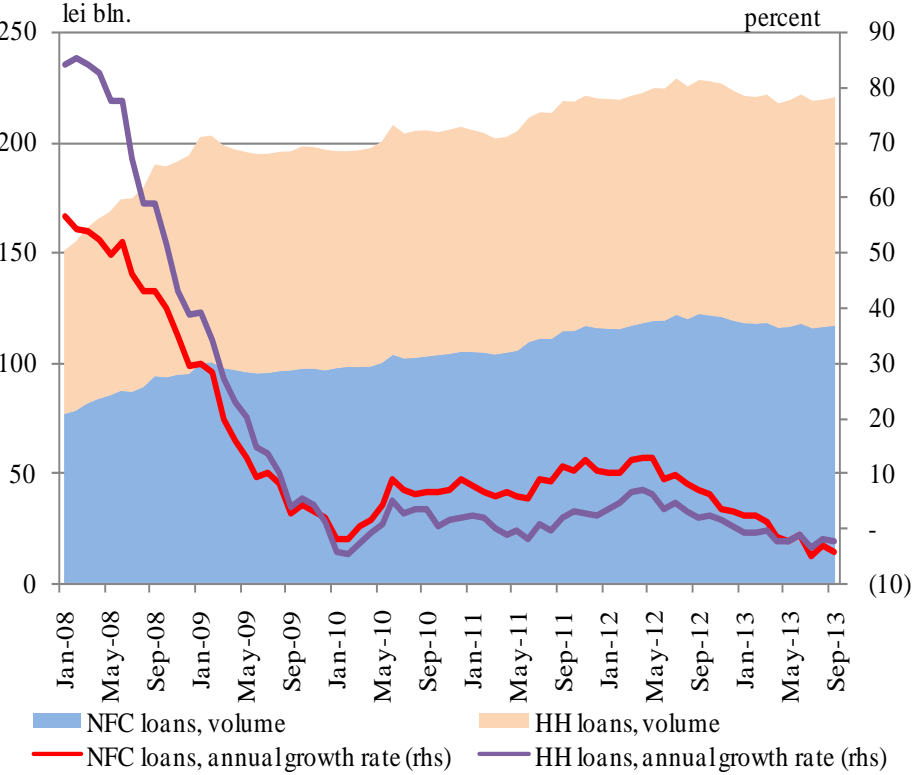
### Tools for monitoring HH sector:



Source: European NCBs websites

# 3. The National Bank of Romania financial stability perspective in monitoring NFC and HH lending developments

## total lending and nonperforming loans (NPL)



Note: The non-performing loan ratio is calculated as the share of loans granted to NFC/HH overdue for more than 90 days or for which legal proceedings have been opened (with company or natural entity contamination) in total loans to NFC/HH

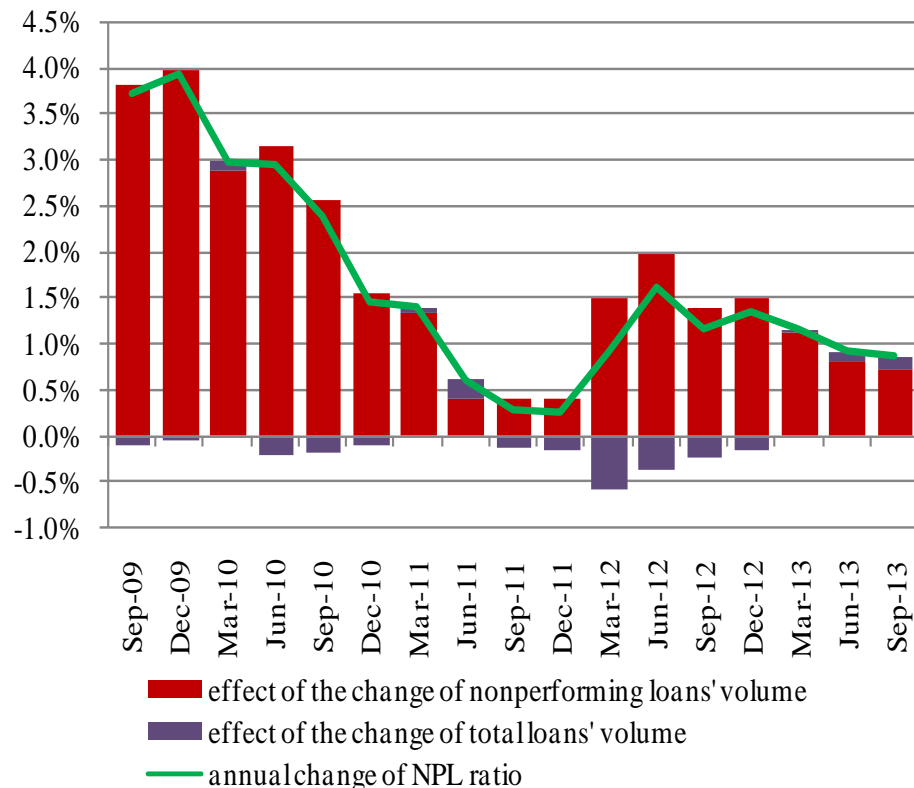
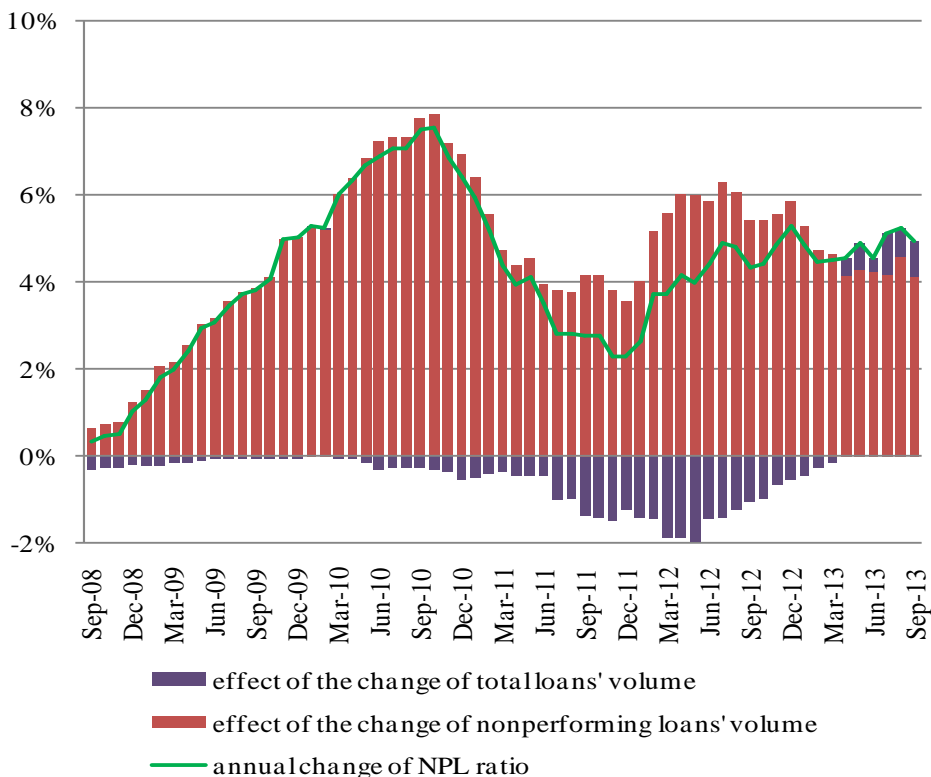
Source: Monetary balance sheet, NBR calculations

Source: Central Credit Register, NBR calculations



# 3. NFC and HH monitoring by National Bank of Romania

## decomposition of y-o-y change of the NPL ratio for NFC (left) and HH (right) sectors



Note: decomposition with the use of partial derivatives' calculus:

$$\Delta \frac{NPL}{Loans} = \Delta NPL * \frac{1}{Loans_t} - \frac{NPL_t}{Loans_t^2} * \Delta Loans$$

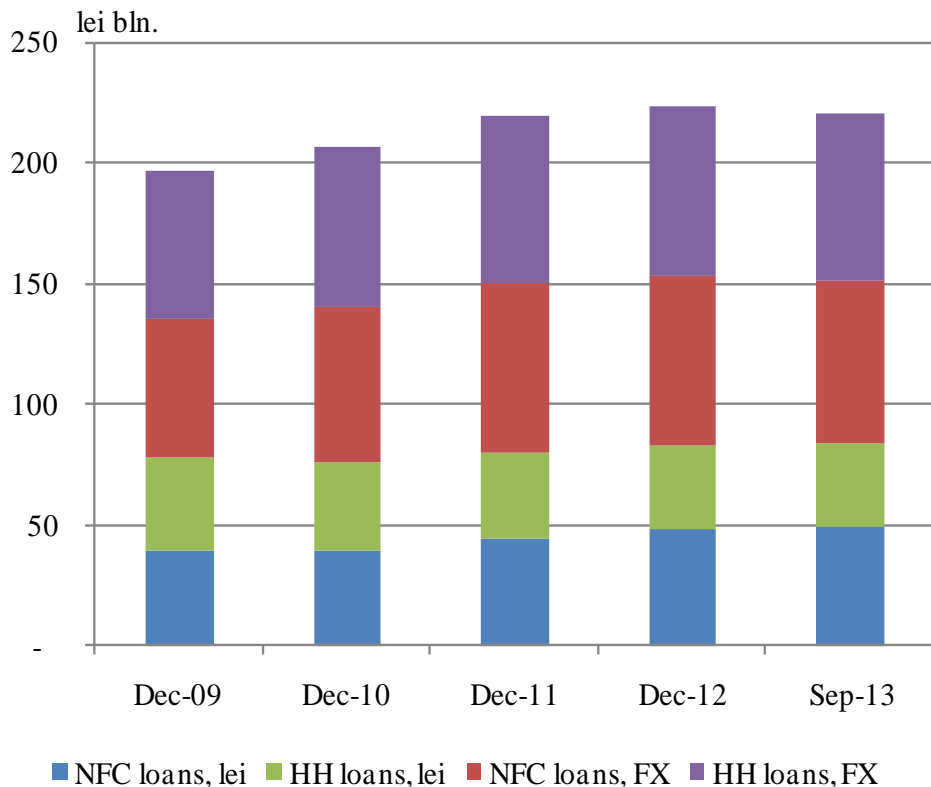
Source: Central Credit Register, NBR calculations

Source: Central Credit Register, Credit Bureau, NBR calculations

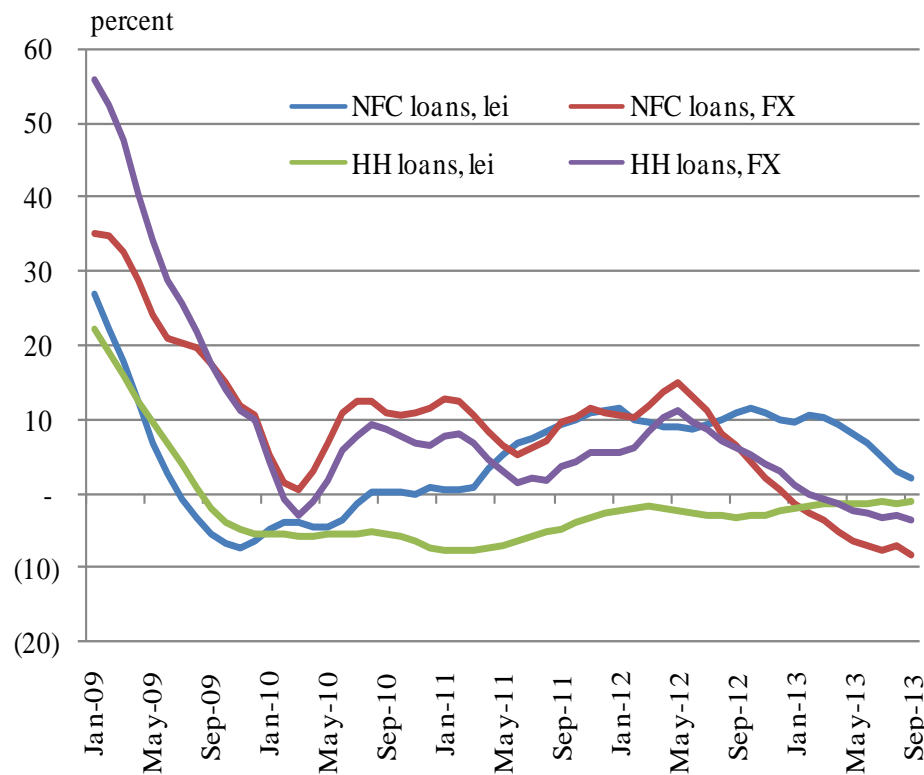
# 3. NFC and HH monitoring by National Bank of Romania

## Lending, by currency

Total loans, volume



Growth rate of loans granted to NFC and HH (annual nominal change)



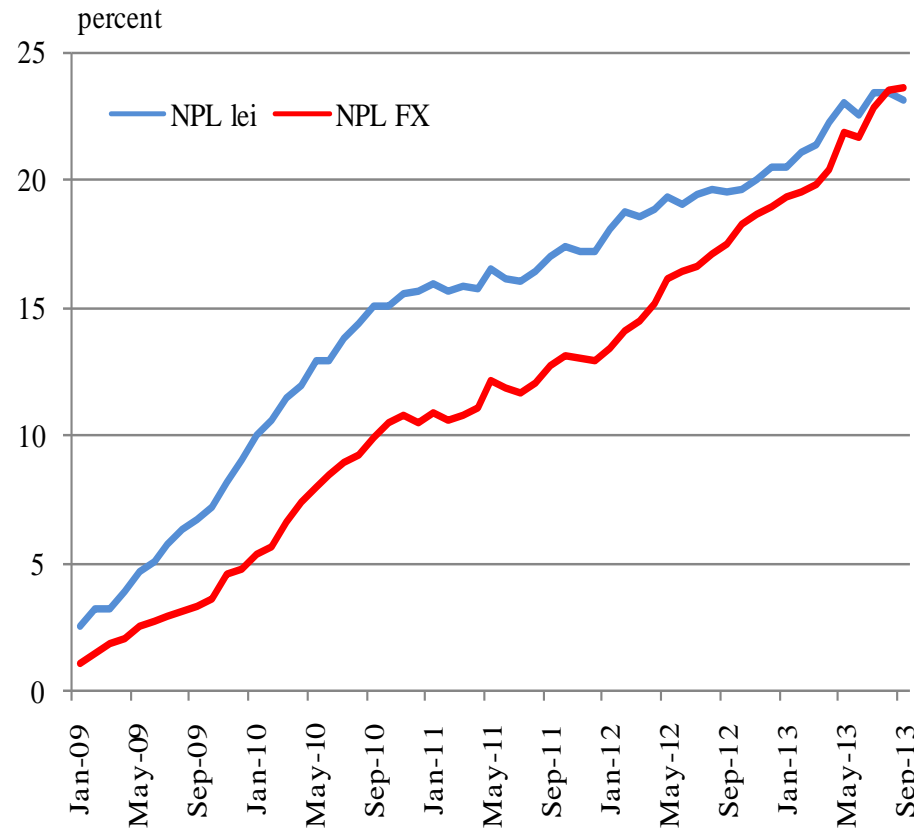
Note: 3 month moving average

Source: Monetary balance sheet, NBR calculations

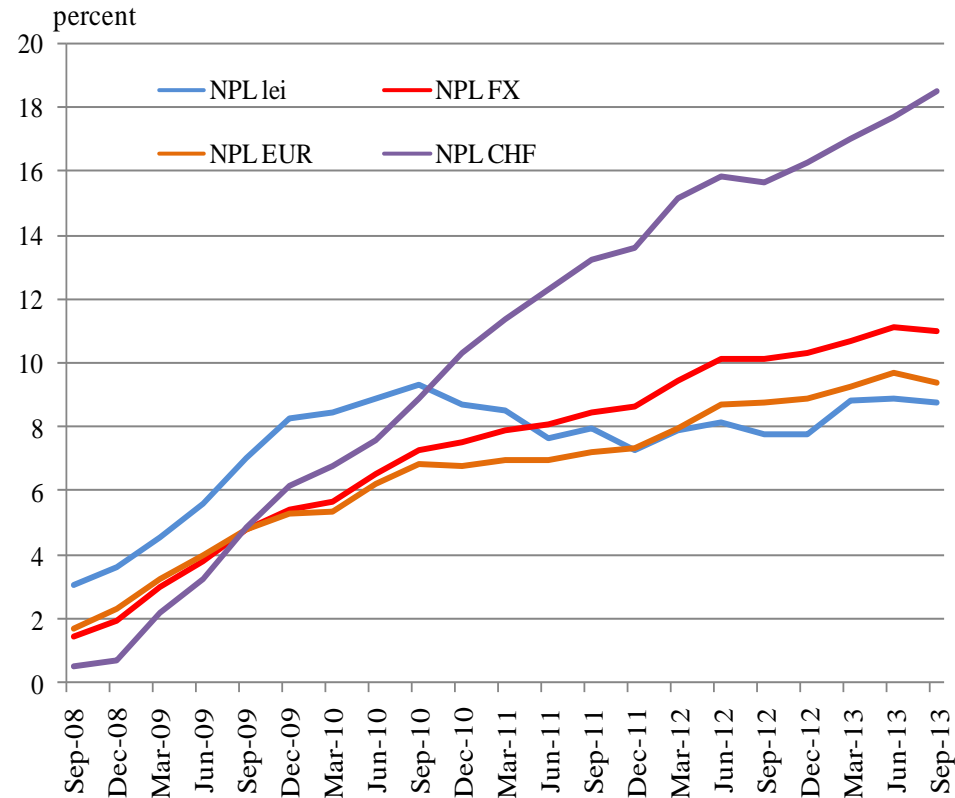
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## NPL ratio, by currency

### NFC



### HH



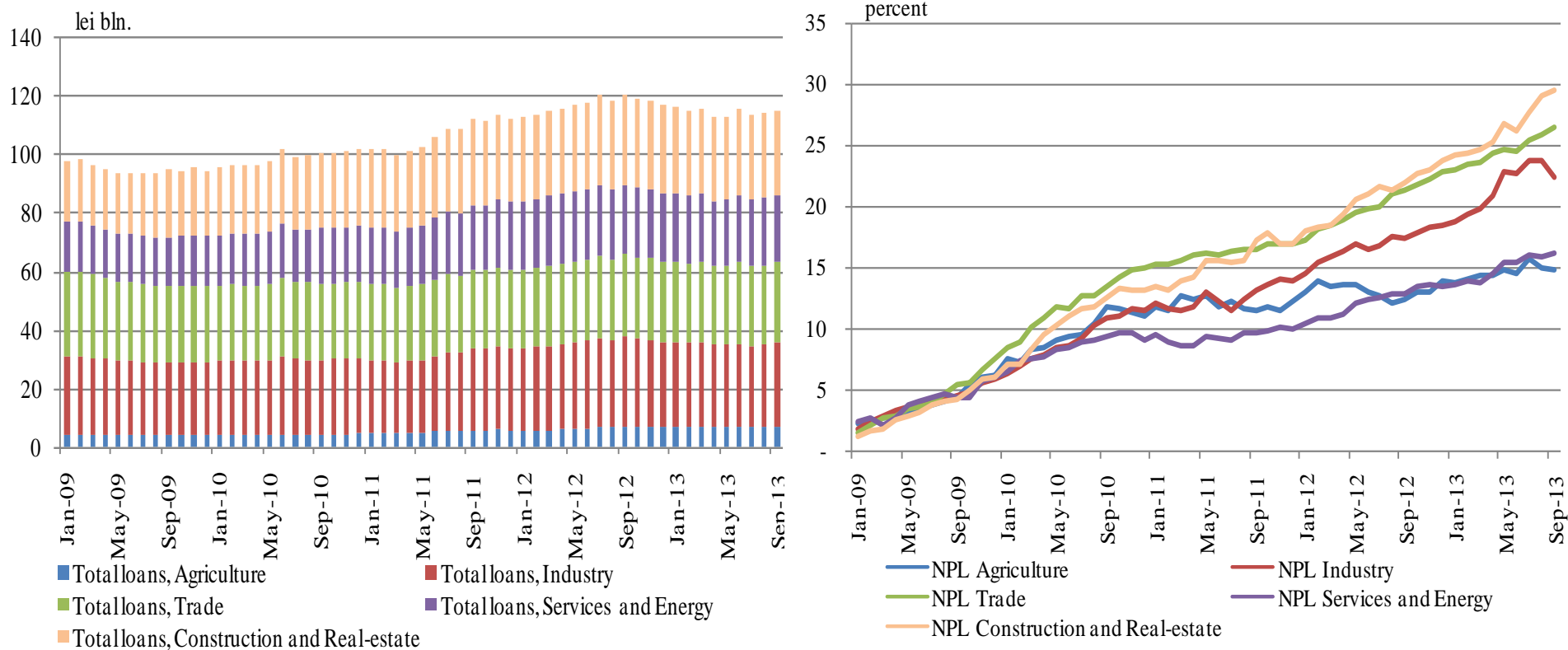
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# 3. NFC and HH monitoring by National Bank of Romania

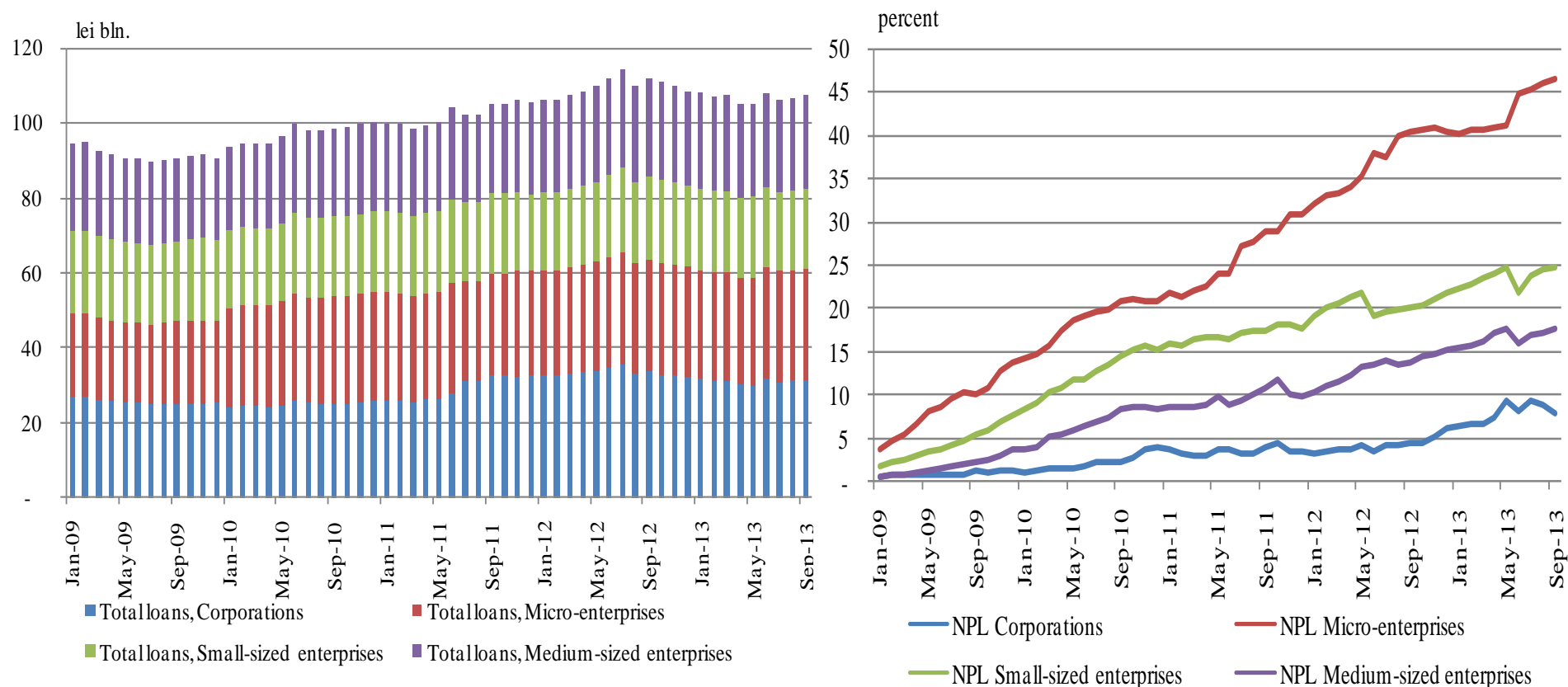
## NFC lending and NPL ratio by business sector



Source: Central Credit Register, Ministry of Public Finance, NBR calculations

# 3. NFC and HH monitoring by National Bank of Romania

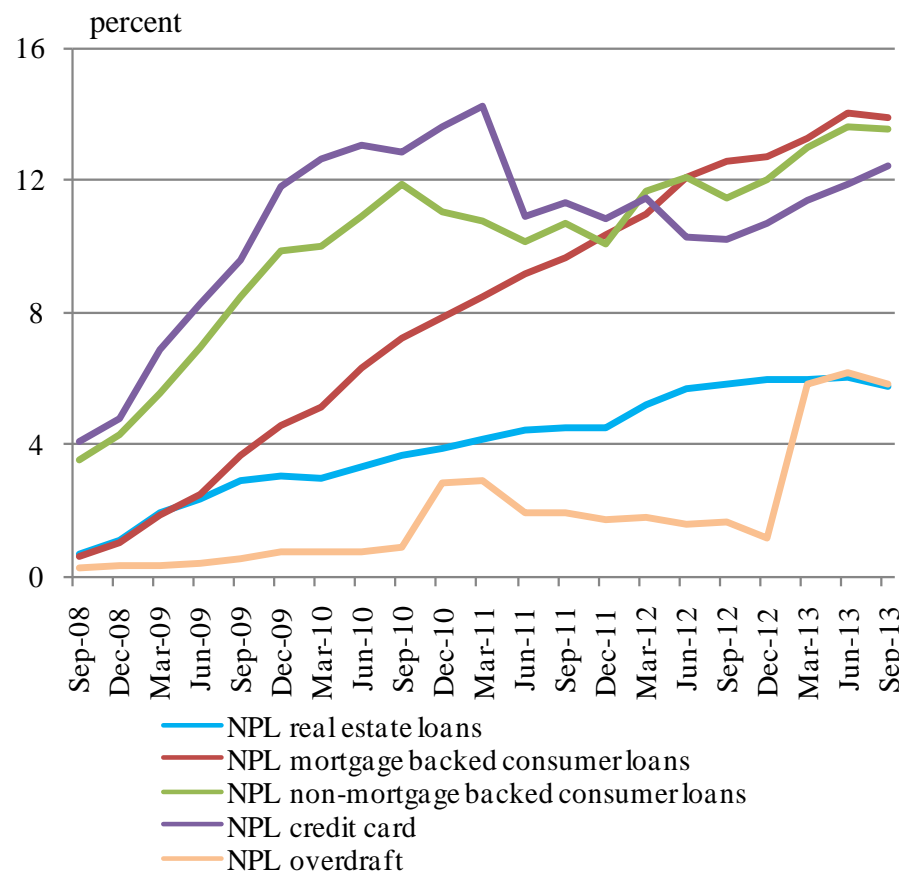
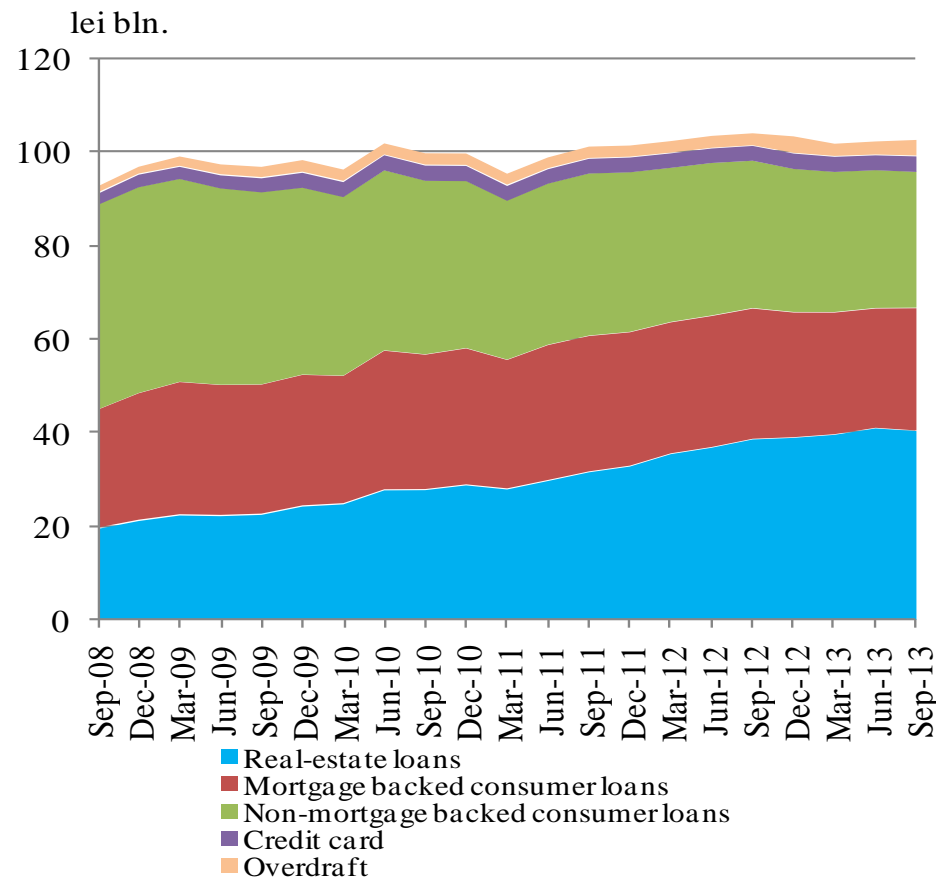
## NFC lending and NPL ratio by size of debtor



Source: Central Credit Register, Ministry of Public Finance, NBR calculations

# 3. NFC and HH monitoring by National Bank of Romania

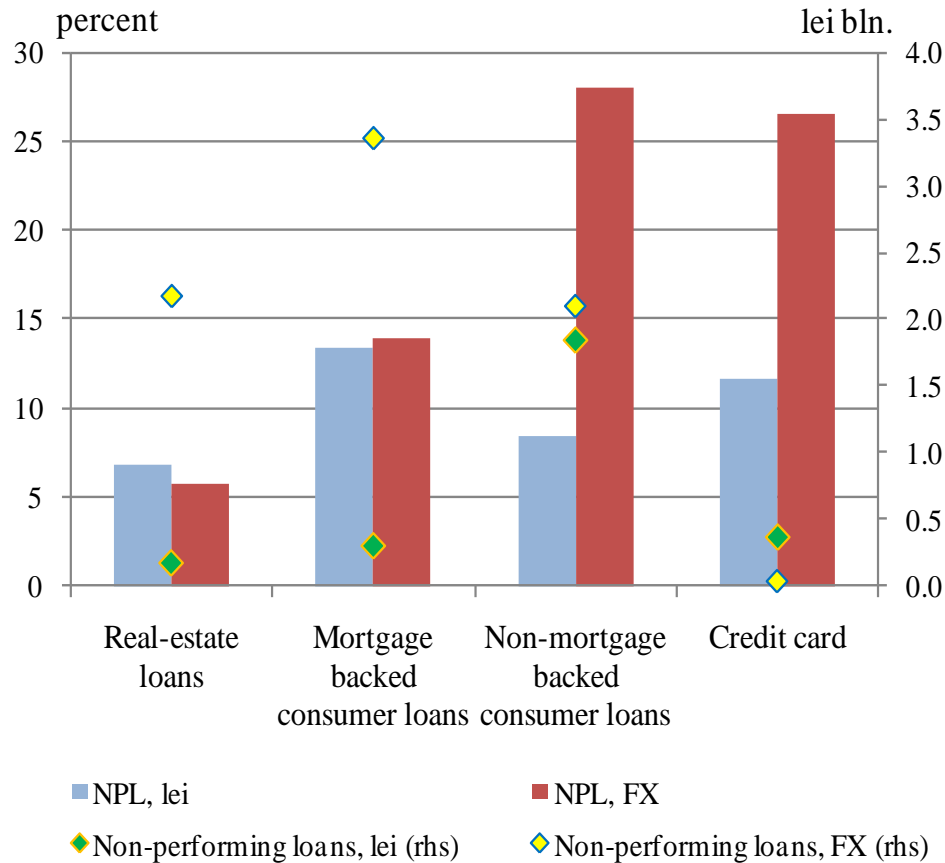
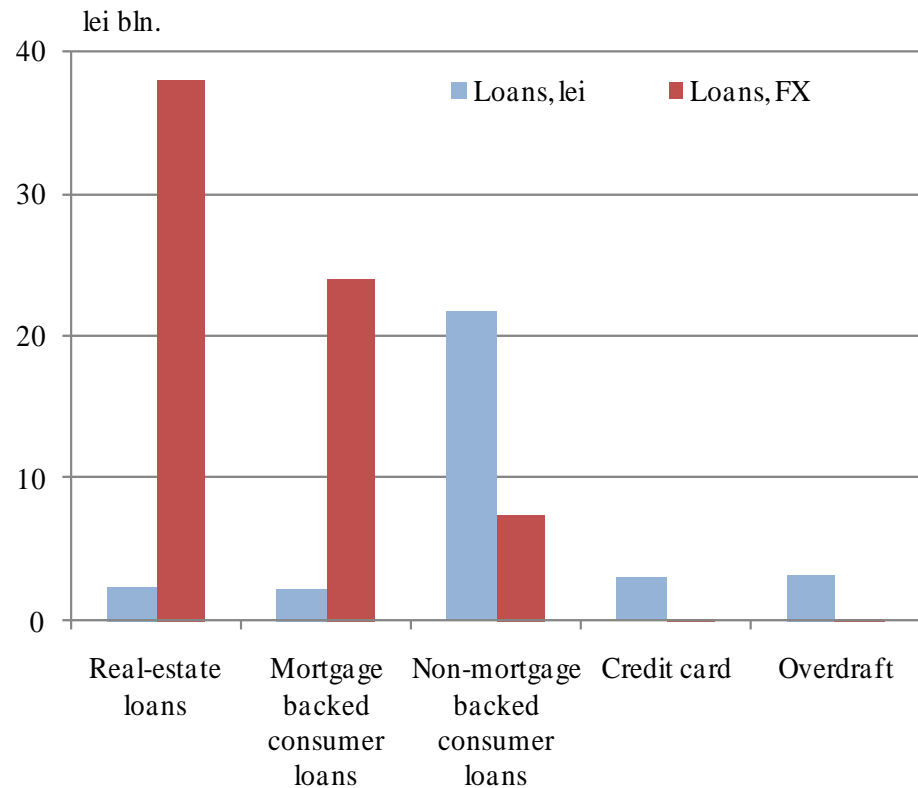
## HH lending and NPL ratio by type of loans



Source: Central Credit Register, Credit Bureau, NBR calculations

# 3. NFC and HH monitoring by National Bank of Romania

## HH lending and NPL ratio by type of loans and currency (September 2013)



Source: Central Credit Register, Credit Bureau, NBR calculations

Thank you!