What are the key determinants of Non-performing loans in CESEE? - Discussion

Remi Boutant – EBA – Oversight- Risk analysis
Overview of the paper

- Macro-approach at a regional level: Macro-economic drivers of NPL in BG, CZ, HR, HU, PL, RO, RU, SK, UA taken together as an aggregate (CESEE region); how drivers are linked to the percentage changes in NPL to total loan ratios using panel technique and quarterly data (2004-2012).

- Changes in NPL ratios for a given period depends on the following drivers, with some lags:
  - Real GDP (1 lag): most important driver – changes in GDP are negatively correlated to changes in NPLs, the level of which *first and foremost* depends on the *near immediate* economic conditions
  - Private credit to GDP (6 lag): NPL are a by-product of lending and *root cause* of increase in NPLs lies in the excesses of the past (credit bubble) and changes in credit patterns have lasting effects on NPLs
  - Forex lending (1 lag): high share of forex lending in CESEE makes borrower near-immediately vulnerable to depreciation of local currencies vis a vis their borrowing currency
  - NPL ratio (1 lag): NPLs sustain themselves via feedback effects on the economy (not further considered in the paper)
  - Stock exchange (5 lag): changes in stock exchange are negatively correlated with changes in NPL, predictive value of the stock-exchange

- No significant impact of profitability (RoA and its changes) on the level of NPLs

- Policy implications: enhanced monitoring of financial deepening and restrictions on forex lending
Why focusing on CESEE is relevant

- Although not extensively exposed to products linked to the 2008-2009 financial crisis, financial interconnectedness and repercussions of financial turmoil and Euro sovereign crisis have negatively impacted asset quality in CESEE.

![European Non-Performing Loans (NPLs) after the Global Financial Crisis](image)

**Figure 1. Europe: NPLs after the Global Financial Crisis**

Nonperforming Loan Ratios, 2008–14

- Green = less than 5% ; Yellow = between 5% and 10%; Red = above 10%

Sources: FSIs and country authorities.
Note: The FSIs are computed using consolidated bank data and therefore do not reflect only domestic NPLs. For example, in Spain the postcrisis peak and 2014 figures based on domestic data only are above 10 percent (13.5 percent and 12.5 percent, respectively).

IMF – A Strategy for Resolving Europe’s Problem Loans March 2015
What are NPLs?

- No uniform definition of NPL during the period under review – use of the national definitions of NPL (no reprocessing?) to decrease the significance of the differences in national definitions in the analysis (the model uses the developments of each national NPL time series)

- Though biases identified by Barisitz (2011, 2013) are minimised, they surely still matter – as an example, for a given country one can find different NPL ratios with different changes over time.
Considerations on the NPL drivers and policy options (1)

- Incidence of real GDP growth on NPLs consistent with other studies with similar or different regional focus (Nkusu 2011; Beck, Jakubik, Piloiu 2013; Klein 2013)
  - What about the variation of the GDP of the Euro area? (Klein 2013)
  - Real GDP growth proxy for other variables like unemployment?

Past credit growth matters to understand the dynamics of NPLs

- Denominator and numerator effects controlled via the use of different lags
- Not only positive credit growth creates NPLs as a by-product (materialisation over time of bad loans from boom years) but also negative credit growth (“credit crunch” because of NPL due to supply and demand factors slowing down the economy and increasing NPL)
- Feedback effect not considered in the paper – though lagged NPL ratio with significant impact on present NPLs indirectly shows that the negative consequences on credit growth, GDP etc. of NPLs create new NPLs

- Impact of existing NPLs on future NPLs: distortion due to different write-off rules?
  - The more delayed the write-off, the likely persistence of NPLs will be found as significant

- Forex lending: restructuring may cloud the analysis more than offsetting interest rate effects
  - Interest rate effects could have happened even without depreciation and not in the control of banks
  - Restructuring can decrease NPLs on the banks’ or public authorities decisions
Considerations on the NPL drivers and policy options (2)

- **Stock exchange** seems to have a real but limited impact on NPL ratios
  - Is it consistent with the role attributed to markets as early warning/indicators of economic performance and evolution of future drivers of NPLs (future GDP and currency developments)? The longer the lag the higher the incidence should be?
  - More impact on corporate borrowers versus retail?
  - Would cross-border investment flows (FDI and portfolio investments) be a more relevant indicator for assessing the incidence of external environment on NPL ratios?

- No incidence of **management quality** (no linkages with changes in RoA) on the development of NPL
  - Other study finds incidence of bank-level factors (quality of management, capital level, excessive risk-taking nature) on NPLs whether in crisis time or not in crisis-time (Klein 2013)
  - Incidence of factors may be more difficult to spot in a macro-level analysis at country/region level
Considerations on the NPL drivers and policy options (3)

- As a by-product of lending, NPLs are consubstantial to financial deepening
  - Paraphrasing Mishkin (2006) on financial globalisation, financial deepening is not inherently good or bad, but the issue is to do it right

- Continuum of tools to manage ex ante consequences of NPLs of forex lending & credit growth
  - Forex: stricter criteria for borrower selection to outright ban of forex lending – issue also with indirect forex lending (loans hedged by IR or cross-currency swaps referencing a forex or IR variable)
  - Credit growth: from macroprudential measures (CCyB, RW, LR, LTI, LTV) to credit quotas
  - Increase the quality of financial information available, for supervisors (reporting, ex. harmonised NPE definition), markets (disclosures for market discipline to play), lenders (centralised credit record/bureau to allow better selection of borrowers – stick to higher lending standards)
  - Improve corporate governance and compliance with the sound credit granting policies

- Ex post the consequences of NPLs are to be dealt with a different set of tools
  - Supervisory tools: enforcement of adequate provisioning policies or regulatory overlay, strengthening of the capital situation, push for resolution strategies
  - Broader environment: adequate judiciary, legislative and tax framework fit for resolution of NPLs
Possible further area of research

- Harmonised definition of NPL now available
  - Main results of the analysis may not extensively vary but harmonised definition would allow to focus on the pure macro-economic drivers if disaggregation of the model at jurisdiction level

- Macro-level analysis nevertheless, some disaggregation may help further understanding the drivers for NPLs
  - Disaggregation at the **jurisdiction** level
    - Are all the lags the same for each CESEE jurisdictions? How do the lag vary depending on the drivers (ex: shorter lag for credit growth means shorter credit cycles?) and economic environment?
  - Disaggregation at the **portfolio/exposure class** level
    - Not all exposure types may be sensitive to the same drivers (Louzis, 2010) or with the same lag
    - Different sensitivities can be due to borrower’s selections but analysis at portfolio levels may allow to better control for selection effects
  - Focus on **restructured loans**: drivers for restructured loans
    - Matters especially to have a comprehensive view on the causes for credit-riskiness of the forex lending portfolio

- Incidence of capital on the level and evolutions of NPLs?

- Further analysis may first require increase in the granularity and consistency of data available to researchers