



**Manfred Kremer**  
ECB  
Financial Research Division  
Manfred.Kremer@ecb.europa.eu

# **“Banks’ Credit Losses and Lending Dynamics”**

by *Peter Raupach* and  
*Christoph Memmel*

## **Discussion**

First Annual Czech National Bank Workshop “Monetary and financial stability policies in a changing economic landscape”, Prague, 13 June 2024

# Overall assessment

- Paper is interesting and relevant, but focus a bit narrow
  - Research question is relevant from several perspectives:
    - Micro: impact of large losses on banks' future lending behaviour; it would be even more relevant if analysis could be expanded on the link to bank capital and on whether any clustering of big losses could accumulate to relevant financial stability risks.
    - Macro: can credit rationing triggered by large losses have material macroeconomic effects (growth, corporate investment)?
  - Data are granular, confidential and carefully prepared; dataset has not been thoroughly explored in the micro-econometric banking literature.
  - Econometric approach is clear and partly novel (identification of credit supply by including synthetic competitor lending).
  - Results are significant, robust and carefully evaluated.

# Comments

- Main results
  - Paper shows that big losses from one industry exposure tend to have significant effects on the new lending of exposed banks to firms in other industries.
    - Between 1.3 and 2.3 euro of reduced lending per 1 euro of big loss
    - Also found that there are no substitution effects, i.e., local competitor banks do not seem to step in as lenders for those firms not being granted new loans by the exposed banks.
      - Any idea of why competitors do not take up the slack, why borrowers seems to end up being credit-constrained?
    - While main result is of interest from a supervisory perspective ...
    - ... are the effects also economically significant for the affected non-financial firms, and perhaps for regional economic activity?

# Comments

- Interpretation of the main result
  - Paper compares estimated elasticity of new lending to big losses with elasticities of lending to a “capital gap” from the literature.
    - How meaningful is this comparison? Are tighter capital constraints likely to be the major factor behind the negative impact of big losses on subsequent new lending? Which other channels are possible?
    - Finding that weaker capitalisation does not amplify the lending effect of a big loss arguably speaks against the capital gap interpretation.
    - Is there a way to put more light on this “missing link” between big losses and new lending?
    - Could a Granular IV approach (e.g., using idiosyncratic losses to build the instrument) in a regression of new lending to capital be an alternative to study the capital gap channel?

# Comments

- The main identifying variable: “**big losses**”
  - Big losses estimated as top decile of loan losses over a moving 6-year window: Why moving 6-year window?
    - To avoid look-ahead bias in loss selection?
    - Could this create or amplify the problem of endogeneity of big losses w.r.t. banks’ risk-taking behaviour which the paper claims to be “excluded” by selecting losses from bank-individual samples?

# Comments

- The main identifying variable: “**big losses**” (cont’d)
  - Paper justifies exogeneity of big loss variable mainly by its unpredictability at the quarterly level.
    - I agree that the exact dating of a big loss event should be basically unpredictable.
    - But is this also implied by ex-ante risk taking? Doesn’t risk taking rather imply a higher probability of a credit event or a higher loss-given-default over longer horizons? A duration model, with time-varying hazard rate, may be able to capture such effects (could be a further robustness test).

# Comments

- **Dummy variable** for big losses

- Why not using the euro (cardinal scale) measure of big losses per total assets as the main explanatory variable?
- Eventually, you spend some efforts to transform the estimated dummy coefficient into a new lending-big loss elasticity in euro to compare the results to the existing literature (Appendix E).
- A dummy variable squashes or stretches the selected observations to a single value, to 1, and equates the non-selected observations to 0.
- This tends to increase the discriminatory power of the analysis, but you may also lose information (e.g., differentiation between big, very big and extremely big losses).

# Comments

- **Dummy variable** for big losses (cont'd)
  - Could mixing both approaches provide a meaningful alternative, i.e. assigning the non-selected (the small) losses the value 0 and keeping the raw score of the big losses?
  - Quantile regression could also be used to estimate non-linear effects of big losses on new lending.



# Comments

- **Identification of loan supply effects**

- Including new lending of a “synthetic competitor” bank as control for loan demand assumes that competitors’ new lending occurs along a flat supply curve. Does this matter for identification? Probably not, just curious ...
- How well does the construction of the synthetic competitor work for smaller banks? Is it reasonable to assume that they share the same customer base and portfolio composition as the exposed bank?

# Comments

- **Identification of loan supply effects (cont'd)**
  - Paper claims that controlling for credit demand is crucial since it leads to overestimation of the effects of big losses:
    - Table 3 shows that the baseline effects of big losses are amplified from -0.255 and -0.260, respectively, to -0.268; this amplification is statistically significant at conventional levels, but economically not very dramatic. Still “crucial”?
  - Data sample 2002Q4 to 2020Q4
    - Do you trust that bank characteristics are stable over such a relatively long sample period? Instability might question the exclusive use of bank fixed effects to capture bank characteristics.

# Conclusion

- Paper is interesting and thus worth reading.
- However, in my view the authors should consider broadening the scope of the analysis to attract more attention.
  - Don't stop with the impact of big losses on subsequent new lending
  - What happens directly to bank balance sheets when experiencing material losses?
    - I would assume that the balance sheet of different banking groups (large banks, regional and local savings and cooperative banks) reacts differently to big losses.
    - In this context, directly explore the bank capital channel.

Many thanks to the authors  
for this interesting read,  
and to the audience  
for your patience!

# Comments

- Are **loan loss provisions** included in the analysis?
  - Are loan loss provisions included in the main variables of interest, loan exposure,  $ex_{t,i,j}$ , or the change in valuation of loan exposure,  $c_{t,i,j}$ ?
  - If provisions are not accounted for in  $c_{t,i,j}$ , could the extent of prior provisioning be relevant for the tightness of the capital constraint after experiencing a big loss in time  $t$ ?
  - If losses are not completely unexpected, loan loss provisions could bring forward some of the total impact of big losses on new lending to previous periods.