BANQUE DE FRANCE
EUROSYSTÈME

DISCUSSION BY **G. HORNY** OF:

DETERMINANTS OF BANK PERFORMANCE: EVIDENCE FROM REPLICATING PORTFOLIO?

C. ALTAVILLA, L. BURLON, J. BEGENAU AND **F. HÜNNEKES**

MPC TF BANKING ANALYSIS FOR MONETARY POLICY
8TH RESEARCH WORKSHOP, SEPTEMBER 13, 2022

THE PAPER IN A NUTSHELL

- **Main question**: What real effects for bank profitability ?
- **Literature:** Concensus that banks profitability affects lending through various channels
  - Profits improve capitalization, hence reduces funding costs (balance sheet constraints) and/or allows for more loans at a constant leverage (risk bearing)
  - Decreasing profitability incentives banks to reach for yield
- The authors build replicating portfolio, in the spirit of Begenau and Strafford (2018), to compute bank-level edges (i.e. gaps between observed net incomes and computed ones, normalized). They then analyze how edge affect banks loans and firms investment
- **Data :** IBSI (bank-level), Anacredit (loan-level), SHSG, CSDB, IHS Markit iBoxx, ECB-SDW
- **Methodology** : extract in a first stage component of edge related to cost inefficiency, then regress in a second stage variable of interest (e.g. loan volumes) on measurement of cost inefficiency
- **Results:**
  - Overall edge is driven by edge on loans and deposits;
  - Low cost efficiency is the main determinant of the edge;
  - Banks with higher edge were able to lend more to firms during the pandemic

GENERAL COMMENTS (1)

Banks profitability VERY topical, received a renewed interest with negative interest rate, then the pandemic and now the monetary policy normalization

Some BdF colleagues nowadays work on models to forecast the effect of the MP

The reader has to be convinced by the superiority of this unusual approach!

Why computing an edge ?

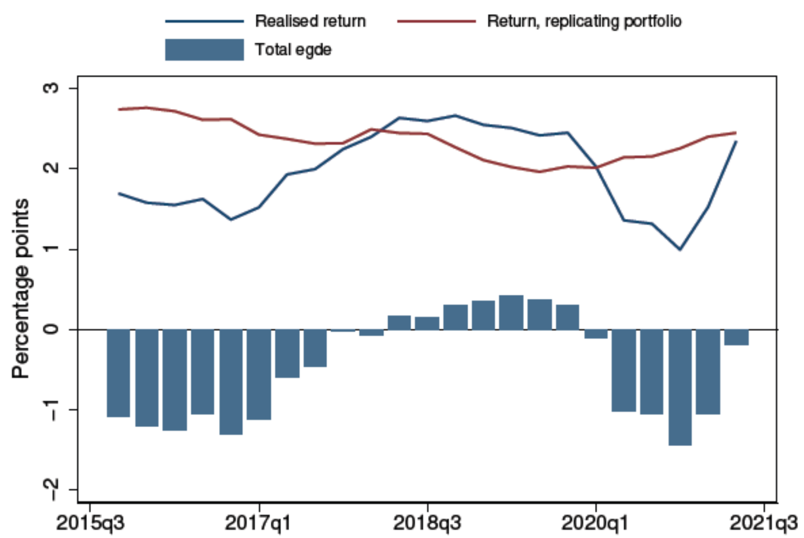
$$Edge_t = \frac{\sum_{k=0}^{3} net\ \ income_{t-k}}{1/5 \sum_{k=0}^{4} book\ \ equity_{t-k}} - \frac{\sum_i A_t^i \times RP_t^i - \sum_j L_t^j \times RP_t^j}{1/5 \sum_{k=0}^{4} book\ \ equity_{t-k}}$$

- Most of the literature uses direct measurements for profitability, either from accounting data (NIM, ROA…) or equity market data
- I understand the edge here has a (normalized) measurement for banks' margin, derived from the **difference between observed NIM and a counterfactual frictionless NIM**
- The expected benefit is a measurement for bank « excess-margins » due to frictions. **Still, to what extent does it depart and improve over observed margins? Doesn't it introduce more measurement errors** than what is in accounting data, or a simple cross section of loan - deposit interest rate spread?

BANQUE DE FRANCE
EUROSYSTÈME

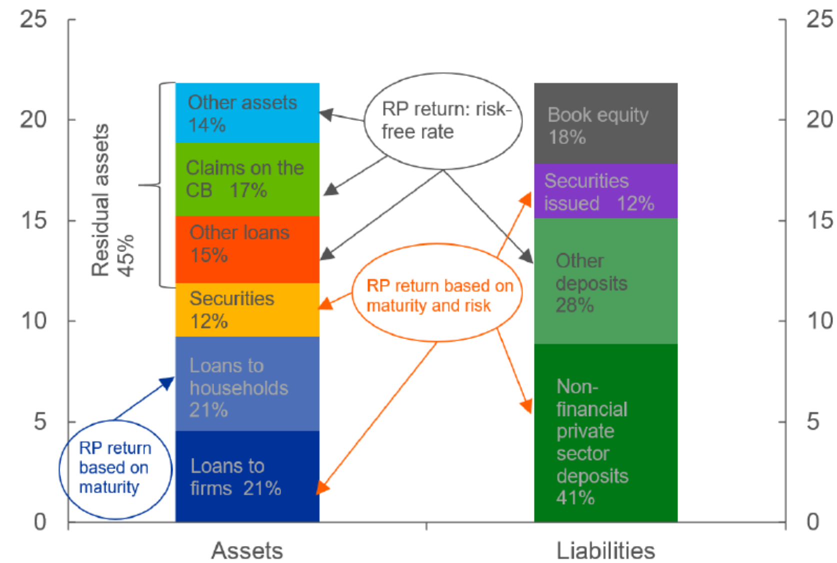
GENERAL COMMENTS: PROS AND CONS OF REPLICATING PORTFOLIO?

Average returns and egde



- Clearly, the aim is not to enlarge existing samples : does not compute a pseudo-NIM for out of sample banks or periods,

- **Why returns computed in the paper are more stable than the realised ones?** One indeed expects infrequent changes in banks' competition or bank's cost efficiency. But we also expect measurement errors to cancel each others on average
  - **How does a shock on banks' non-interest income (due to fees, NPL, market operations…) affects the edge?** Would it correlate positively or negatively?



Notes: Composition of total assets/liabilities as of 2021Q2 based on sample of 96 banks for which we can compute the edge.

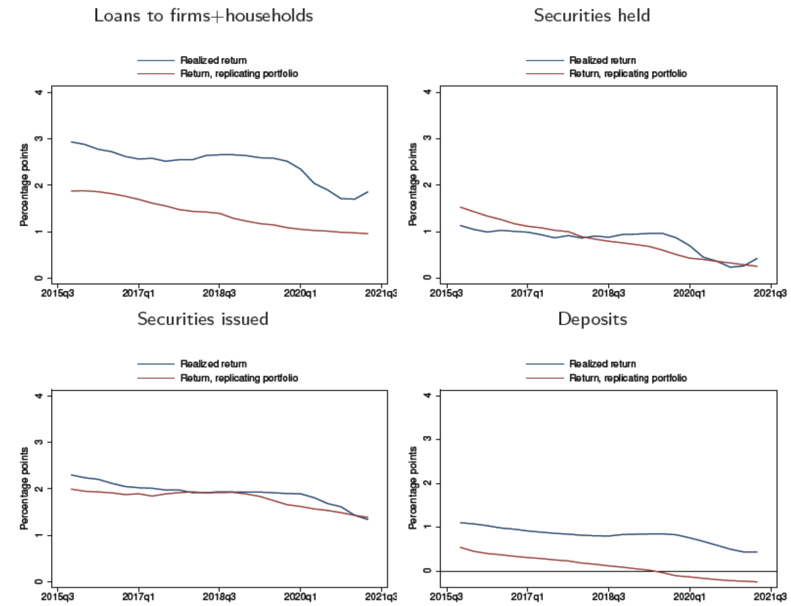
- Bond are still issued by large firms in Europe, while SMEs fund themselves mostly though banks. **Are market data granular enough in terms of credit risk ?** Are yields on speculative bonds detailed enough to provide a good proxy for a bank interest rate on SME loans?

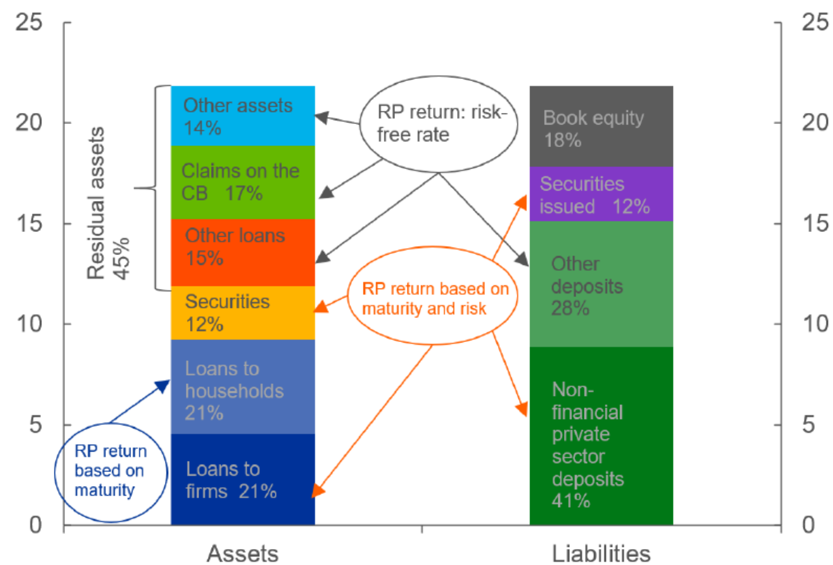
- **What sensitivity** to changes in the parameters (short term rates, long term rates, change in deposit structure…) of the synthetic version of the bank ?

GENERAL COMMENTS: EMPIRICS

- **Results suggest a spread bank loan rate – bank deposit rate larger than what would be achieved on security markets**
  - Intuitive, given balance sheet structures + literature on banks' franchise value, market power, partial passthrough, taxes…
  - Does it mean that a simple spread loan – deposit rate, e.g. derived from IMIR, already contains most of the information?

- **What is the information content of the gap between accounting data and their computed counterparts?**
  - Part of the empirics is to identify how changes in competition, regulation, cost inefficiency and MP affect the edge
  - **Focusing on the edge, don't we answer these questions assuming exogenous balance sheet structure?**
  - Why is a monetary policy tightening reducing the edge? One expects the NIM to increase (Drechsler, Savov, Schnabl, 2017), but why less than the counterfactual NIM?
  - What about informational advantage (e.g. relationship lending, or a better screening technology)? Is this cost efficiency, or competition? Are the sources of changes in the edge orthogonal to each others? Does relationship lending smooth the edge instead of shifting it?





Notes: Composition of total assets/liabilities as of 2021Q2 based on sample of 96 banks for which we can compute the edge.