Banking Supervision, Monetary Policy and Risk Taking: Big Data Evidence from 15 Credit Registers

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QUESTION STUDIED IN THE PAPER

What are the consequences of moving from national (local) to supranational (centralized) banking supervision?

Important question in general:

Banking supervision key challenge for modern economies

Lies at the heart of a rich body of economic research

Important question in recent Euro Area context:

Crisis that in part has been attributed to poor supervision

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Discussion around zombie-lending, ever-greening, etc.

STRATEGY

- First paper to combine credit registers of different countries!
- Use variation generated by introduction of the Single Supervisory Mechanism (SSM) in the Euro Area
 - Across time: pre and post introduction of SSM
 - Across banks: size cutoff for SSM eligibility
 - Across countries: non-EA countries for Placebo test
 - Interaction with monetary policy: high-frequency identification

RESULTS

- 1. Baseline result: interaction between firm-risk and centralized supervision dummy has negative effect on credit supply
 - Credit supply more risk-sensitive under centralized supervision
- 2. Interaction between sector-level labor productivity and centralized supervision gives null effect on credit supply
 - Interpreted as no effect on 'productive risk taking'
- 3. Baseline result operates through large banks
 - Interpreted as evidence of 'capacity hypothesis'
- 4. Baseline result holds in interaction with monetary policy, i.e. monetary easing results in less risky credit supply

MY COMMENTS

- $1. \ \mbox{Suggestions to open up baseline result:}$
 - $1.1\,$ Quantities versus prices
 - 1.2 Report result across industries
- 2. Productivity results: issues with firm vs. sector level

- 3. Mechanism results: find additional evidence
- 4. Smaller language comment: "big" data?

COMMENT 1: UNDERSTANDING THE BASELINE

- Baseline result: interaction of firm-risk and centralized supervision dummy has negative effect on credit supply
- Effect is isolated based on a host of rich fixed effects, in my view this is a very credible result
- It would be interesting to open up further what this effect is driven by

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Two specific suggestions

COMMENT 1: UNDERSTANDING THE BASELINE FIRST SUGGESTION: QUANTITIES VERSUS PRICES

- Left-hand side in all regression is the quantity of credit
- But <u>how</u> does a bank lend in a more risk-sensitive way?
 - Could ration the amount of credit to risky firms
 - Could charge higher interest rate to risky firms
 - Could also vary the maturity (or maturity-rate schedule)
- I would be very curious to understand this, as I have been wondering about lack of cross-sectional dispersion of rates
 - US corporate loans (Dealscan): standard deviation of LIBOR spread \approx 150 basis points
- I understand that data limitations come into play here, but testing effect on interest rates would be extremely interesting

COMMENT 1: UNDERSTANDING THE BASELINE SECOND SUGGESTION: REPORT RESULT ACROSS INDUSTRIES

- It would be helpful to see the baseline coefficient reported separately across industries
- This would allow us to understand in which parts of the economy centralized supervision bites most
- Interesting since industry heterogeneity was crucial in the (build-up to the) crisis:
 - E.g. construction boom in periphery economies
- Could interact this also with the size split that is implemented to study the mechanism (see comment 3)

COMMENT 2: PRODUCTIVITY RESULTS

Whether increased risk-sensitivity comes at the cost of reduction in credit to productive (yet risky) firms, is definitely the next relevant question to ask

However using industry-level labor productivity is problematic

- Could be that banks cut back credit to productive firms in unproductive sectors
- Even at the firm level, labor productivity can be poor measure of productivity

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Merging information on firm-level productivity measures, even for a subset of the data, would be a worthwhile endeavor

COMMENT 3: MECHANISM

Baseline result could be explained either by better resources or by decreased vulnerability to local regulatory capture

'Capacity' versus 'incentive' hypothesis

- The authors interpret the fact that the results are driven by large banks as evidence of the capacity hypothesis
 - But bank size is a pretty crude proxy in the context of getting at this mechanism

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I understand it is difficult to test the mechanism directly, but is there a way to provide more evidence for the capacity effect?

COMMENT 3: MECHANISM

- If capacity effect is about handling opaqueness, is there other variation that captures such opaqueness?
- For example, could study effect for bank size-firm size or bank size-firm industry breakdowns
 - Large banks that lend to small firms vs. large banks that lend to large firms
 - Large banks that lend to more vs. less opaque industries
- Providing some direct anecdotal evidence for a capacity increase may be helpful as well:
 - How many supervisors worked at the central bank of Slovakia in the pre-SSM era?
 - What is the SSM staff count that covers Slovakia today?

COMMENT 4: SMALL LANGUAGE COMMENT

- Disclaimer: this is a pedantic comment
- The paper uses the buzz word "big data"
 - Definition of this term is fuzzy, but my understanding is that it refers to large, unstructured data sets that require new tools (e.g. machine learning) to even make sense of their content
- In this sense, credit registry data is not "big data", it is much better than that!
- Rich, well-structured data set that allows the authors to use transparent and well-established econometric techniques
- I do not see the need to give this a funky label

- Important research question and fantastic data
- Baseline results are very credible, could potentially be opened up further in interesting ways
- In my view, need to re-examine productivity effects and put a bit more meat behind the analysis of the mechanism