Comments for Session III: Inflation Targeting and Financial Stability

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The views are the author’s alone and do not necessarily represent those of the ECB / Eurosystem.
In the euro area:

- The primary objective of the ECB is price stability.

- With the establishment of the **Single Supervisory Mechanism (SSM)** later this year, a new policy framework in the euro area:
  - **monetary policy** primarily aimed at price stability
  - **microprudential policy** focusing on soundness of individual financial institutions
  - **macroprudential policy** primarily aimed at (system-wide) financial stability
Commenting on two papers:

- **Fazio, Tabak, and Cajueiro (2014):** Inflation Targeting and Banking System Soundness: A Comprehensive Analysis

- **Dell’Arriccia, Laeven and Suarez (2014):** Bank Leverage and Monetary Policy’s Risk-Taking Channel: Evidence from the United States
Both papers are:

- **Well-done**, thorough analyses!

- Related to monetary policy and financial stability. In particular, the role of monetary policy on bank behaviour (stability).

- I will comment the papers on reverse order.
Dell’Arriccia, Laeven and Suarez (2014)

• **Research question:**
  - Paper studies the link between short-term interest rates and bank risk taking.

• **Contributions:**
  2. It constructs *ex ante* measure of bank risk taking (the risk rating of the bank’s *new* loans).
  3. It explicitly links the strength of a bank’s risk taking to bank’s *capital*. 
Main findings:

Ex-ante risk taking by banks is negatively associated with increases in short-term policy interest rates.

- The effect is more pronounced in regions that are less in sync with the nationwide business cycle.
- It is less pronounced for banks with relatively low capital or during periods when banks’ capital erodes (e.g. financial and economic distress).
• The paper does many robustness checks and investigations around the issue…

• …as it tries to provide evidence in support of a *causal interpretation* of the link between interest rates, bank capital and bank risk taking (as stated on page 7).

• …and in particular it wants to tackle the issue of *endogeneity* of monetary policy to banks’ risk taking.
Rubric

Dell’Arriccia, Laeven and Suarez (2014)

• Difficult issues, but…I think the paper succeeds in this pretty well (despite simple OLS estimation methods are applied)!

• The paper is very clear about its limitations:
  • It acknowledges that it is not well suited to answer whether the additional risk taking of banks facing more accommodative monetary policy is excessive.

• It is also very clear that the paper is empirical and that the model is to support empirical analysis.
• The economic magnitude of the effect is estimated to be small:

  • One standard deviation decrease in interest rate would increase risk ratings of new loans by **0.06** (standard deviation **0.80**, mean **3.27**).

  • As authors state: *based on these results alone, it would be hard to argue that financial stability indicator should be added to the Taylor rule!*
Perhaps the analysis has a too narrow focus (also acknowledge by the authors):

- The effect on the overall asset portfolio of the banks could be very different.

In fact, the current low (policy) yield environment has led to a broad-based (global) search for yield phenomenon – including both households and firms (i.e. “investors”).

- Banks are not only to be “blamed” for (excessive) risk-taking, and it is hard to separate demand and supply side effects.
What are the options for “yield hungry” investors?

10 year government bond yields – a very long term perspective

United States
Germany
What are the options for “yield hungry” investors?

<table>
<thead>
<tr>
<th></th>
<th>Lower-rated sovereign bonds</th>
<th>High-yield corporate bonds</th>
<th>CoCos</th>
<th>Equities</th>
<th>Alternatives (e.g. Leveraged loans, Hedge Funds, ETFs, CLOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take macro/credit risk</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Take liquidity risk</td>
<td></td>
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<td>✅</td>
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<td>✅</td>
</tr>
<tr>
<td>Take product risk</td>
<td></td>
<td></td>
<td>✅</td>
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<td>✅</td>
</tr>
</tbody>
</table>
- **Suggestion 1:** could banks’ investment income or asset portfolio returns added to the regressions?
  - In the worst case, this could be proxied by long-term yields and stock returns.

- **Suggestion 2:** The models could control for the margin of the loan or bank’s funding cost.
  - It would be important to understand e.g. whether the bank engages into more risk lending after a certain threshold in the margin.
  - Moreover, what role does the slope of the yield curve play, given the maturity transformation role of banks?
• **Examples of other channels** through which interest rates might affect bank stability:
  • Liquidity
  • Maturity mismatches
  • Profitability

• **Suggestion 3:** I would bring the results from Appendix table 2 more upfront.
  • Findings: the association between interest rates and bank risk taking also varies with bank profitability and liquidity – as expected.
Dell’Arriccia, Laeven and Suarez (2014)

- Other issues:
  - There is very **little variation** in the loan risk ratings that is most likely impacting the results.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fraction of all loans with risk rating of:</th>
<th>Average risk rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1997</td>
<td>3%</td>
<td>11%</td>
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<td>3%</td>
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<td>1999</td>
<td>2%</td>
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<td>2000</td>
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<td>3%</td>
<td>13%</td>
</tr>
<tr>
<td>2002</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>2003</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
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<tr>
<td>All</td>
<td>3%</td>
<td>11%</td>
</tr>
</tbody>
</table>
• Further questions and comments:
  • Are the effects **symmetric** (rising/lowering the short-term interest rate)? **Suggestion 4**: potentially split estimation sample over time.

• There is no discussion on **positive wealth effects** that the borrowing firms face when interest rates go down and increase their ability pay back the loans (however, the dataset would need to have a borrower identifier and be in panel format).

• Potentially use the sampling weights as the survey is stratified.
• Are the authors measuring the relevant issue?

• US is a market-based economy vs. Europe bank-based economy.
  • Also a potential explanation why there has been more research on the topic in Europe.

• The average maturity of bank loans in the sample is very short (1.3 years): data is not measuring firms’ investments, but rather working capital and short-term operations.
• Are the authors measuring the relevant issue?

• The study focuses on banks’ loans to firms.

• However, most of literature finds that banking crises / credit booms / risky lending are due to lending to real estate purchases (particularly to commercial real estate), also involving households.
As authors conclude:

• “Perhaps it is easier to establish the existence of the risk taking channel than to quantify reliably its importance” (also quoting Kashyap and Stein, 2000).
• **Research question:**
  • Paper studies whether (systematically important) banks in countries with inflation targeting (IT) are more stable.

• **Contributions:**
  1. Paper uses large database of banks (3964) from 71 countries over 1998-2012 (5 times 3 year averages), allowing more meaningful interpretations of the results than earlier studies.
  2. It uses bank level data to analyse IT on banking sector stability.
• Main findings:

• Banks from IT countries:
  1. are, on average, more stable
  2. have sounder SIFIs
  3. are less affected in times of global liquidity shortage

Moreover, the paper finds that the results are robust
• to legal background of the country
• central bank being the banking supervisor
• **Important analysis** as there are statements like

  “Assuring price stability, central banks might have overlooked the situation of the banking system and the housing bubbles” (Blanchard et al. 2010).

• Also some confusion of the role of monetary policy regime (IT) and monetary policy actions (unconventional measures, QE).
• Only a few earlier studies focusing on the impact of IT framework on bank stability:
  • Frappa and Mesonnier (JFS, 2010): adv econ
  • Fouejieu (wp,2013): EMEs

• The paper will be an often cited reference, as it allows analysis of bank stability and IT framework across different types of economies (adv/EMEs). Particularly if the dataset will be made available to researchers.
Some questions and clarifications:

• What is the distribution of bank observations in IT countries across EMEs / advanced economies? Is there a difference in findings between these two groups?

• Why create the measure financial fragility of taking the –ln of the z-score (and facing the problems with negative numbers)?

• Could other key bank-specific variables be added (e.g. asset quality)?
Some questions and clarifications:

• The sample includes both commercial banks and **specialised credit government banks**. The latter have strong probabilities of being bailed out in case of financial trouble given the ownership (i.e. not related to monetary policy framework). Could this be controlled for somehow?

• Why a dummy variable if only **two country observations** (instead of three)?
Some questions and clarifications:

• **Inflation targeting** (monetary regimes): Why information on monetary policy regimes is not taken from the IMF (but from Roger (2010))?

• **Legal origins**: some classifications seem not clear: why China, Japan, Korea and Taiwan are classified as German/Nordic?

• **Supervision** as responsibility of the central bank: looking forward the completion of the analysis.
I warmly recommend you to read both papers – I enjoyed reading them and learned a lot!
Thank you for your attention.
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