“Deposit Insurance Premiums and Arbitrage”
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Background

• Effects of deposit insurance premiums on bank demand for reserves and interbank lending

• This is critical for monetary policy implementation

• It is challenging to establish a causal effect

• There is a growing body of literature on the effects of deposit insurance premium on bank behavior (Kreicher, McCauley, and McGuire 2013; Keating and Macchiavelli, 2017; Banegas and Tase, 2017; Kandrac and Schlusche, 2018)

• Theoretical literature on monetary policy (Martin, McAndrews, Palida, and Skeie, 2013; Afonso, Armenter, and Lester, 2018; Kim, Martin, and Nosal, 2018; Schulhofer-Wohl and Clouse, 2018)
Aims of the Paper

• Literature on optimal deposit insurance pricing (Buser, Chen, and Kane, 1981; Kanatas, 1986; Ronn and Verma, 1986; Acharya and Dreyfus, 1989; Chan, Greenbaum, and Thakor, 1992; Giammarino, Lewis, and Sappington, 1993; Craine, 1995; John, Saunders, and Senbet, 2000; Boyd, Chang, and Smith, 2002; Pennacchi, 2006; Acharya, Santos, and Yorulmazer, 2010; Allen, Carletti, and Marquez, 2015; Davila and Goldstein, 2016)

• This paper discusses the effect of Fed deposit insurance premiums, measured by the unconditional initial assessment rate, on banks’ reserve behaviour

• The authors provide a detailed discussion on why to use a regression kink design (RKD) to recover the initial assessment rate (because the unconditional initial assessment rates are cut off below 5 points and above 9 points)
Main Findings

• They also conduct several robust tests to show that the method is appropriate for recovering the assessment rate.

• The main finding is that deposit insurance premiums reduce the bank demand for reserves and increase the federal funds sold.

• Interest on excess reserves (IOER) arbitrage profitability can be reduced due to higher deposit insurance premiums (increasing with assets) and consequently the Fed use of IOER for short-term rates control can be distorted.

❖ Criticism

• The main motivation is this trade-off between higher IOER and higher deposit premiums due to IOER arbitrage.

• However, this contradicts the sample selection and empirical analysis which uses banks mostly out of IOER arbitrage practices and Fed funds purchases (demand side).
Structure of the Paper

- Overall impression
  - Linkages between sections weak
  - Convoluted exposition
  - Weak readability
  - Related literature
  - Unclear rationale (and description) for the methodology
  - Conclusion
  - Future research
Discussion

Criticism

- As I am not familiar with the approach proposed by the authors, I do not comment on the methodology but provide my thoughts on the paper.
- Confusion of using RKD: The main purpose of using RKD is, as the authors claim, that the initial assessment rate used by the FDIC is cut off below 5 points and above 9 points.
- Hence, in order to recover the rate before cut-off, RKD is chosen.
- However, Figure 2 shows the number of observations of the initial assessment rates are from 0 to 15 basis points. The figure implies that you have the uncut-off observations?
- If so, then you probably do not need to use RKD; if not, then you probably need to explain/check why there are observations outside 5—9 range, as I feel confused when I saw the figure.
Discussion

Criticism

- I suppose that the RKD-recovered initial assessment rates are from six measures (I say suppose because the steps in Section 4 are not very clear to me)
- Therefore, the impact presented in Section 5 (Tables 2 and 3) might be indirect
- The authors could put those measures together with the proposed estimator to see if the variable of interest is still significant
- Hence, the results might be driven by other factors
- i.e. Tier 1 leverage ratio, Loans past due 30-89 days / gross assets, Nonperforming assets / gross assets, Net loan charge-offs / gross assets, Net income before taxes / risk-weighted assets, Adjusted brokered deposits ratio
Discussion

Criticism

- This paper has a good motivation: tying insurance premiums to the most common monetary policy tools
- There are several foreign banks that have US branches, but not subsidiaries that have insured deposits: they are grandfathered in
- Those might be interesting cases to look to narrow in on an effect
- A 1 basis point rise in the assessment rate lowers excess reserves by 85% (5 million dollars)?
- This is implausibly large (that is at most a 20% assessment rate increase 5 to 6 basis points) for even that range and it seems ambiguous to extrapolate
Discussion

Criticism

- So many banks are going to be paying 2, or 3 higher basis points, and should not hold excess reserves very quickly. For a $100 million bank, entirely funded by deposits, that is an expense of $10,000. Do the authors propose a direct channel for such an effect?
- It appears there is not an effort to model the decision to hold excess reserves period. Page 10 points out clearly how important that is since many banks do not hold reserves.
- Using a linear effect when you are spanning two orders of magnitude has problems.
- It appears the authors comment on using log amounts in several places (not sure if always), which is good, yet are quoting the $6 to $1 million in linear terms for shock value.
Discussion

- Criticism
  - Does this pattern hold for say, using excess reserves as share of reserves (or as a share of assets which should just be mechanically related)?
  - Page 11 mean and standard deviations makes me worry
  - The other assessments of the RKD make sense
  - The use of the most recent (not each quarter’s) CAMELS rating in the risk category determination for the whole period (2011-2016) could create bias if there is significant fluctuation of this rating during the 6-year period. Is it stable?
  - It would be useful to clarify this point and offer more robustness checks
  - I did not get a clear sense of how authors adjust for this in the paper
Discussion

ideos

Criticism

• Additional capitalisation and profitability bank-specific variables are included in the dataset. Since both capitalisation and profitability are part of the CAMELS rating, what is the value added to include such proxies once more?

• A time-varying systemic risk factor assigned to each bank as an additional bank-specific variable could be added.

• It is good that the authors try to discuss the policy implications.

• Nevertheless, the contribution on this aspect is not clear. Many policy related questions do not receive an explicit answer.

• The small banks included do not engage in IOER arbitrage and rarely purchase federal funds. Given this fact, how can we generalise for the whole financial system the results of deposit insurance premium effects?
Discussion

- Criticism
  - It is stated that less than 4% of the number of commercial banks hold more than $5 billion of total assets
  - The authors should disclose the share held by the small banks included in the sample of total excess reserves at the Fed and their share in the interbank market
  - If the sample banks hold a significant share of both reserves and interbank transactions, then the generalisation of deposit insurance premium effects would be reasonable
  - If the major players are the Large and Highly Complex Institutions, then the results cannot be generalised for the whole system with significant overall monetary policy implications
  - The paper does not offer thorough discussions after showing the results
Discussion

- Criticism
- Minor Comments
  - The current version of the Introduction is relatively distracting and unfocused
  - The authors should highlight the importance of using the sample of small banks, and how the results differ from the existing literature
  - Section 4 could be written in a more friendly way for those who are not familiar to the methodology
  - The authors could provide an intuitive reasoning on why the initial assessment rate can affect banks’ reserves
  - Figure 3 and 4 are not clear. I am not sure what role the six measures play in the RKD smoothness
Conclusion/Summary

- Interesting Paper
  - Vague finish
  - Relating back to all posed questions
  - Regulatory and policy implications: what regulators and market participants can learn from the results of the paper?
- Directions for Future Research
  - Theoretical
  - Empirical
  - Application
THANK YOU FOR YOUR ATTENTION

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