### The Economics of Market-Based Deposit Insurance Edward T. Kim, Shohini Kundu, and Amiyatosh Purnanandam

2024 Financial Stability Conference Financial Stability: Emerging Risks in a Time of Interconnectedness and Innovation

> Discussion by Vikas Agarwal (Georgia State University) November 21, 2024



## What is this paper about?

How does reciprocal-deposit-based deposit insurance affect (a) the behavior of banks and depositors, and (b) industrial organization of the banking system?



## What does this paper do?

Reciprocal deposit insurance allows banks to increase deposit insurance coverage beyond the regulatory limit of \$250,000 per depositor per bank provided by FDIC

Uses a regulatory change that incentivized some banks to join the reciprocal deposit insurance network to compare the differences in depositor and bank behavior across banks with and without access to the network

Unlike FDIC deposit insurance coverage that has only some time-series variation that is likely to be correlated with economic conditions and regulations, reciprocal deposit insurance provides a nice setting for a DID-type analysis



## What are the main findings?

Network banks (small and midsize) paid lower interest rates on deposits, increased in size, and increased their market share of local deposits

O At the same time, network banks also increased their exposure to interest rate risk – increased holdings of longer maturity securities and larger mismatch in the maturity of assets and liabilities



## Skin in the game

- Interesting parallels with the liquidity management and financial fragility concerns associated with NBFI such as mutual funds
  - □ interfund lending arrangements (Agarwal and Zhao, RFS 2019)
  - □ redemption in kind (Agarwal, Ren, Shao, and Zhao, RFS 2023)
- No centralized insurance available only market-based solutions!
- Both tools require approval from the SEC and cannot be obtained immediately after a crisis
- Help prevent fund runs and allow funds to invest in illiquid securities





### **Overall view**

- Important and relevant study to better understand the tradeoffs associated with a market-based deposit insurance system
- Careful empirical analysis with multiple clever identification strategies (83 pages, 9 figures and 17 tables in the main paper; 8 figures and 9 tables in the Online Appendix)
- Thought provoking results with important policy implications
- Suggestions/comments
  - □ Costs of reciprocal deposit insurance
  - □ Window of analysis and generalizability
  - DID versus cross-sectional analyses

Other issues



## #1: Costs of reciprocal deposit insurance

Why there is still not heavy usage of reciprocal deposit even after the passage of Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) that exempted reciprocals from being classified as brokered deposits

- ❑ Less than 2% of total deposits in small banks increased to 3.1% by 2022Q4, and less than 1% at midsize banks increased to 1.6%
- Even after the SVB crisis, total deposits only jumped from 3.1% to 6% for small banks and 1.6% to 5.8% for midsize banks.
- Why there is not a greater increase in the deposits? What are the costs?



# #1: Costs of reciprocal deposit insurance (contd.)



Even after BD exemption, fraction of banks on network went up from about 20% to 32%, and eventually increasing to 42%

Why are some banks reluctant to join?



# #1: Costs of reciprocal deposit insurance (contd.)

#### User banks increase their interest rate risk

- □ Is this risk excessive?
- □ Can it increase the probability of failure of network banks?
- □ Can it reduce depositor welfare and be a threat to financial stability?

Reciprocal deposits can increase the interconnectedness in the banking system that can lead to financial contagion

If counterparty to reciprocal deposit fails, it can lead to a domino effect where depositors can run on all the banks connected to the failed bank on the network



# #1: Costs of reciprocal deposit insurance (contd.)

Although it is interesting to observe an increase in interest rate risk by network banks after the crisis, it would be useful to also extend the analysis to examine changes in credit risk to get a complete picture

User banks could increase their credit risk – jump in the commercial real estate lending should be associated with significant credit risk in addition to interest rate risk

How do we know if user banks did not simultaneously increase their hedging of interest rate risk?





### **#2: Window of analysis**

Why is the analysis restricted to only a short window around the SVB crisis?

Post-crisis effects may not be generalizable

If reciprocal deposits can truly change the behavior of banks and depositors, it should not be conditional on crisis



## #2: Window of analysis (contd.)



(a) Insured Deposits

Why does the growth rate in insured and total assets for network banks not persist after the crisis?

Is it simply a panic response?





## #2: Window of analysis (contd.)



Positive spread between
uninsured and insured
deposit rates was also
high during the 2008
financial crisis

Why didn't we observe similar investor and bank behavior during the earlier crisis?

> Georgia<u>State</u> University

## **#3: DID versus cross-sectional analyses**

#### DID analysis with switchers is much better than the crosssectional analyses earlier

UWhy not match the switchers with non-switchers for this analysis?



Switcher analysis can be done between 2018 and 2023 instead of 2015 and 2020 as the big jump in the switch came after the BD exemption in 2018





### **#4: Other comments**

How do depositors find out about the bank participating in the network?

IV analysis in Table 11 is comforting to see but does the IV meet the exclusion criterion?

Increase in the market share of network banks seems to be rather modest (0.22%) - can it significantly change the industrial organization of the banking system?



## #4: Other comments (contd.)







Include the confidence intervals in Figure 7a or report the regression estimates of equation (4) in a table

If latter, plot the raw numbers instead of coefficients in Figure 7a to complement the regression analysis to establish parallel trend

