Discussion on "Disciplining Banks through Disclosure: Evidence from CFPB Consumer Complaints"

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Bank Transparency and Depositor Discipline

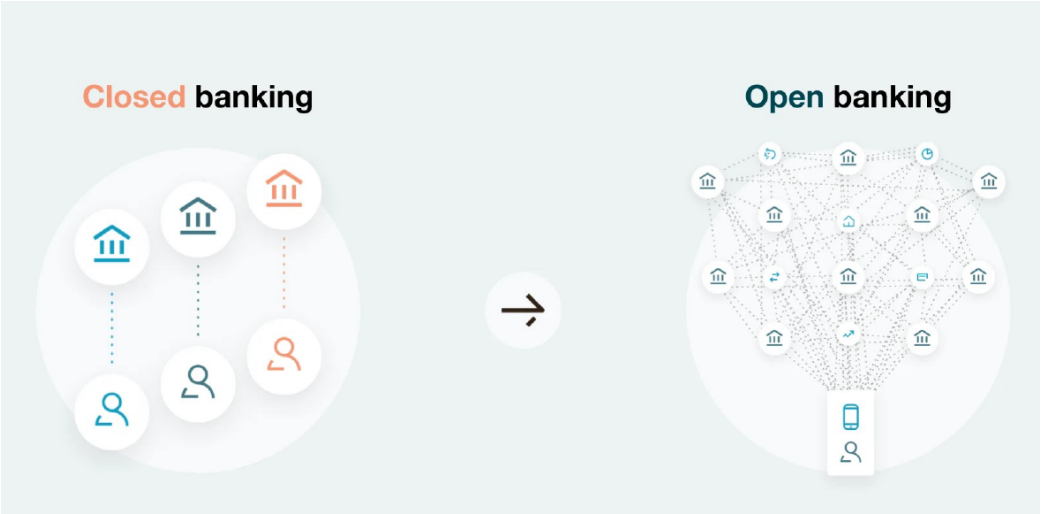
- Bank transparency is an important issue in bank regulations
  - Basel III, open banking
- Depositors provide more than 70% of bank funding (Hanson et al. 2015)
- Uninsured depositors are responsive to bank performance (e.g., Martinez Peria and Schmukler 2001)
- Yet, they are also often viewed as inattentive and unsophisticated (e.g., Morgan 2002; Dreschsler et al. 2017)
- Can they understand information in bank disclosure?
  - Yes, according to Chen et al. (2022) "Call reports"
  - This paper pushs one step further with consumer complaints, and so (uninsured) depositors are indeed sophisticated

Disclosure of Consumer Complaints about Banks

- Setting:
  - Since 2012, Consumer Financial Protection Bureau (CFPB) publishs consumer complaints for big banks (assets>$10B).
  - Since 2015, CFPB publishes consumer complaint narratives.
- Findings:
  - Banks subject to CFPB oversight that receive consumer complaints experience a decline in uninsured deposits.
    - Complaints relating to bank accounts see a larger decline in deposits.
  - These banks respond by increasing offered deposit rates.
  - ChatGPT on narratives: consumer sophistication (no effect) and resolution expectations (positive effect).
- Message: Consumer complaints disclosure serves as a disciplinary mechanism and support regulatory oversight.

A Useful Insight for Theory

- The findings suggest that depositors are very sophisticated.
- A specific context: open banking in Asia, Canada, EU, US...



- Motivation of regulators: increase competition across banks and so lower the interest rates to borrowers
- Goldstein, Huang and Yang (2022):

$$\text{borrowing rate} = \text{deposit rate} + \text{markup}$$

  - Open banking reduces markup through encouraging competition.
  - The deposit rate can increase in response.
- Will depositors respond to transparency (open banking)?

Comments

- Comment 1: Estimation (implementation)
- Comment 2: Interpretation (mechanism)
- Comment 3: Narratives and ChatGPT
- Comment 4: Broader Implications

Comment 1: Estimation

- The key estimation equation is

$$Y_{b,t} = \alpha + \beta_1 Complaints_{b,t} + \gamma X_{b,t-1} + \theta_t + \eta_b + \varepsilon_{b,t}$$

where

$$Y_{b,t} = \text{Natural log of deposit for bank } b \text{ in quarter } t$$

- The story is depositors monitoring and responding to complaints disclosure.
- This reaction takes time! Even if constant monitoring, responding can take time (e.g., CD)
- In addition, $Y_{b,t}$ is seasonal, and not sure whether $X_{b,t-1}$ can fully control it
- Suggestion: normalized deposit changes with lags

$$y_{b,t,q} = \frac{Dep_{b,t+q} - Dep_{b,t}}{Dep_{b,t}} \text{ or } y_{b,t,q} = \frac{Dep_{b,t+q} - Dep_{b,t}}{Asset_{b,t}}$$

for various values of q.

Comment 2: Interpretation

- Bank profitability:

Table 6: Effect of Total Complaints on Deposits by Bank Profitability

This table presents OLS estimates of the effect of total consumer complaints on deposits partitioned by high and low ROA. The sample period is from 2010 Q1 to 2019 Q4. The sample includes 722 banks with assets between \$1 and \$25 billion in total assets as of 201[9] Q4. *Total complaints* is the total number of complaints received by bank b in quarter t. The p-values of the Wald statistic testing for differences in coefficients between columns (1)-(4), (2)-(5), and (3)-(6) are 0.223, 0.416, and 0.371, respectively. Bank controls are lagged by one quarter. Robust standard errors clustered by bank and quarter. All variables are defined in Appendix A. ***, **, and * represent statistical significance at the 1%, 5% and 10% levels, respectively.

	High ROA			Low ROA		
	Total Deposits	Insured Deposits	Uninsured Deposits	Total Deposits	Insured Deposits	Uninsured Deposits
	(1)	(2)	(3)	(4)	(5)	(6)
Total complaints	-0.002	0.000	-0.002	-0.001	0.002	-0.003*
	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)

- The paper argues that bank profitability does not affect the story
- I see the opposite — the results are concentrated in low-performing banks

Two stories:

- Depositors care only when the banks are bad: Complaints $\Rightarrow$ check whether banks are bad $\Rightarrow$ deposit withdraw.
- Bad banks have bad management and so trigger both complaints and deposits withdraw.

This difference is important, since it is about the story/mechanism.

Comment 3: Narratives and ChatGPT

The paper relies on ChatGPT to produce two key measures: resolution expectation and complaint sophistication

Table 10: Effect of Complaint Sophistication on Deposits

This table presents the regression results of ChatGPT-generated textual analysis of consumer complaint narratives assessing the sophistication of the narrative. *Sophistication score* is the average sophistication score of complaint narratives for bank b in quarter t. The sample includes 79 CFPB-supervised banks from 2015 Q1 to 2019 Q4. Bank controls are lagged by one quarter. Robust standard errors clustered by bank and quarter. All variables are defined in Appendix A. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

	Total Deposits	Insured Deposits	Uninsured Deposits
	(1)	(2)	(3)
Sophistication score	0.017	0.139	0.090
	(0.130)	(0.144)	(0.192)

Table 11: Effect of Complaint Resolution Expectation on Deposits

This table presents the regression results of ChatGPT-generated textual analysis of consumer complaint narratives assessing the narratives' resolution expectation. *Resolution expectation* is the average resolution expectation of complaint narratives for bank b in quarter t. The sample includes 79 CFPB-supervised banks from 2015 Q1 to 2019 Q4. Bank controls are lagged by one quarter. Robust standard errors clustered by bank and quarter. All variables are defined in Appendix A. ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively.

	Total Deposits	Insured Deposits	Uninsured Deposits
	(1)	(2)	(3)
Resolution expectation	0.018	0.014	0.025*
	(0.013)	(0.020)	(0.014)

- On sophistication, the paper states:

> Table 10 presents the results of this estimation using the sophistication measure. Across all measures of deposits (total deposits, insured deposits, and uninsured deposits), there is no statistically significant effect of complaint sophistication on deposit flows. In other words, higher degrees of sophistication in the consumer narrative, as measured by regulatory awareness and financial terminology, do not lead to changes in deposits. This finding indicates a somewhat surprising conclusion: more sophisticated depositors (in terms of their financial understanding) are no more likely to withdraw their deposits than unsophisticated depositors. Ex ante, economic intuition would suggest sophisticated depositors are more stringent monitors of banks and would be more sensitive to bank issues. However, our results do not support this view.

- But:

$$\textit{Complainants} \neq \textit{Depositors}$$

  (Think about mortgage borrowers vs. salary savers)

- How much overlapping?

Leverage the content of narratives:

- Complaints are always bad news
- Can ChatGPT analyze the content and score the severity of the bad news?
- Make sure to control the time bias too.

Comment 4: Broad Implications

- What are the real regulatory motivations of CFPB?
- Can it achieve consumer protection?
- Bank valuations? Stock returns?
- Inform theories:
  - Transparency can be either good (discipline, reducing agency cost; Calomiris and Kahn 1997)
  - Or bad (by harming the role of banks in producing informationally insensitive claims as a medium of exhange and liqudiity risk sharing; Dang et al. 2017)
- What about financial stability?

Conclusion

- A great paper with an informative message that depositors, in particular, uninsured depositors, are indeed sophisticated and carefully monitoring.
- Suggestions on estimation, interpretation, leveraging narratives, and more discussions on regulation implications.