

Discussion: "The Dynamics of Deposit
Flightiness and its Impact on Financial Stability"
by Blickle, Li, Lu, and Ma

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The paper in one slide

Idea: savers heterog. (convenience over rates) key for dynamics

Data:

Across-bank flows more rate-sensitive after aggregate inflows, QE

Pattern robust to controls (uninsured, leverage, deposit type etc)

Transaction account level data shows that depositors quick to move across banks also quick to exit the banking system

After Covid: massive inflow of rate sensitive accounts

Model:

Heterg. liq. value, choice b/w risky banks & outside option

Marginal depositor type key for run-risk & deposit flows

Policy implication: MP should take into account depositor flightiness to not unintentionally increase fragility

Counterfactuals:

QE shifts equilibrium depositor type to less convenience seeking

(i) QE induced rate-sensitive deposit inflows increased fragility

(ii) Slow policy rate adj. allows rate-sensitive depositors to leave slowly

Discussion

Very interesting paper! Nice facts!

Plausible & underappreciated: depositor heterogeneity drives dynamics

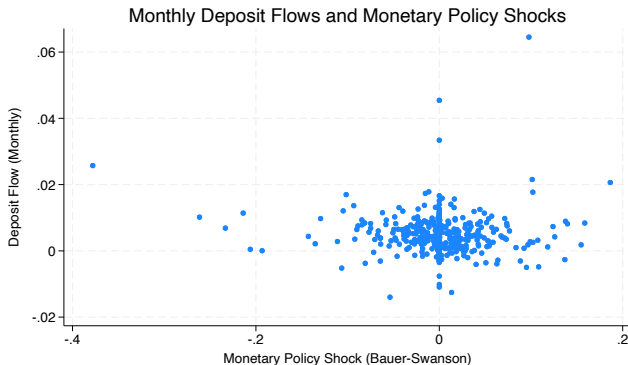
1. Model mechanism
2. Replication of key motivating facts
3. What drives changes in depositor type?

Paper emphasizes QE

Alternative: flight to safety/ lack of trust in outside option

Discussion

Classic money demand argument: shocks to the opportunity costs of holding money should move deposits



Noisy link b/w agg. deposit flows and monetary policy shocks

Deposit flows moved *not only* by rates

This paper argues that depositor type determines sensitivity to rates

Discussion

Very interesting paper!

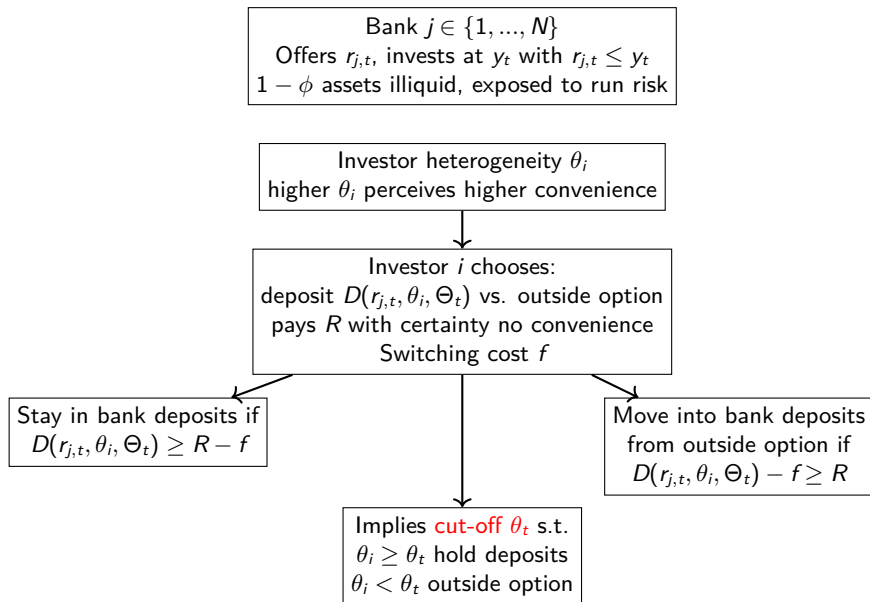
Plausible & underappreciated: depositor heterogeneity drives dynamics

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Marginal investor's deposit valuation θ_t



Deposit Flows and marginal investor

Symmetric equilibrium $r_{j,t} = r_t$ for all $j = \{1, \dots, N\}$

Given $r_t(y_t, \theta_{t-1})$ threshold deposit values define flow direction

$$D(r_t(y_t, \theta_{t-1}), \theta_t) = \begin{cases} R - f & \text{if } \theta_t > \theta_{t-1} \Rightarrow \text{outflows} \\ (R - f, R + f) & \text{if } \theta_t = \theta_{t-1} \text{ inaction} \\ R + f & \text{if } \theta_t < \theta_{t-1} \Rightarrow \text{inflows} \end{cases}$$

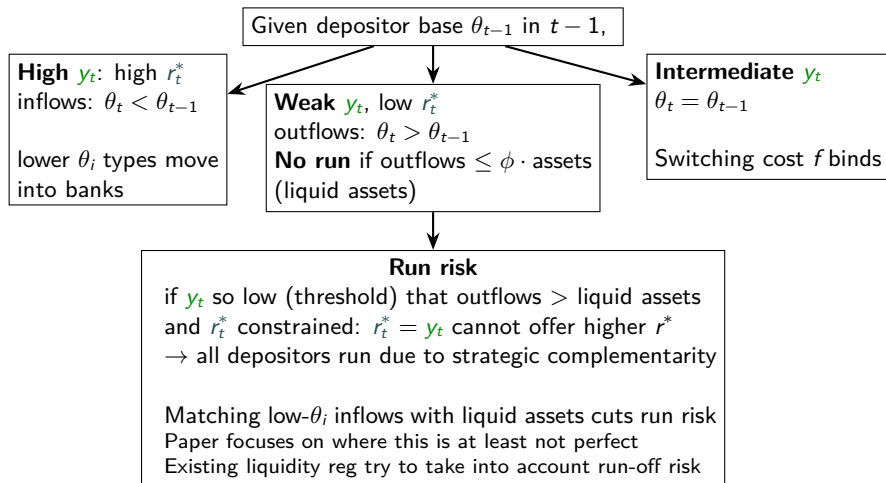
Note: lower θ_t means

- marginal depositors values deposits *less*
- marginal depositors *less* likely to stay in banks
- overall *more* investors are in banks
- *higher* sensitivity to deposit rates, willingness to switch

Deposit Flows, Runs, and Rates in Equilibrium

Equilibrium deposit flow depends on (state) existing depositor base θ_{t-1} and exogenous y_t

Given fundamental y_t and θ_{t-1} , banks set optimal $r_t^* \leq y_t$



Takeaways from the model

Flow sensitivity depends on marginal depositor's valuation for convenience

Inflows of deposits are from rate-sensitive depositors

Run risk up when fundamentals y_t weak

Run risk up when last period's marginal depositors value convenience less

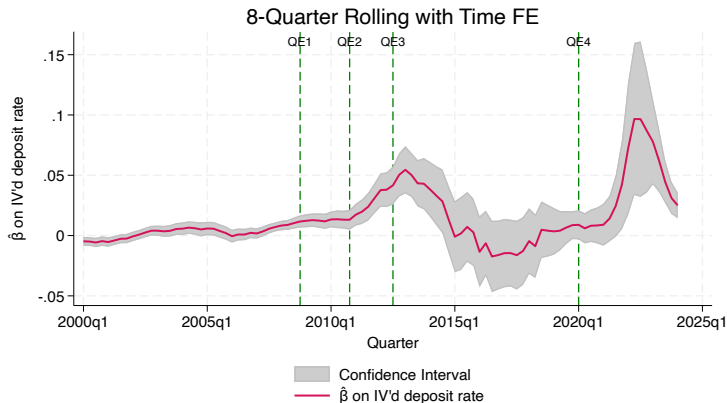
Total Deposit Flow Sensitivity: Replicating Main Figure

Balanced 1998Q1-2024Q1, bank-level call reports

How sensitive are bank-level deposit flows to deposit rates?

Bank j quarterly deposit flow $j_{j,t} = \beta r_{j,t} + \gamma_t + \varepsilon_{t,j}$

Instrument $r_{j,t}$ with salary and real estate costs



Idea: deposit inflows from rate-sensitive depositors

Total Deposit Flow Sensitivity: Replicating Table 1

	Dependent Variable: Δ Log Deposits			
	(1)	(2)	(3)	(4)
Deposit Rate (IV)	-0.03 (0.00)	-0.01 (0.00)	-0.02 (0.00)	-0.02 (0.00)
Deposit Rate (IV) $\times$ Cum Flow	0.37 (0.06)	0.30 (0.06)	0.23 (0.04)	0.09 (0.05)
Insured Ratio			-0.09 (0.00)	-0.17 (0.00)
Equity Ratio			-0.11 (0.01)	-0.21 (0.02)
Non Deposit Ratio			-0.10 (0.01)	-0.22 (0.01)
Bank FE	No	Yes	No	Yes
Time FE	Yes	Yes	Yes	Yes
Adjusted R^2	-0.06	-0.05	0.00	0.03
N	446,405	446,405	446,405	446,405

S.E. below (Sample 2000Q1-2024Q4)

Agg. deposit inflows increase across-bank deposit flow rate sensitivity

Increase of r_t by 1% given a 0.5T agg. deposit inflow increases deposits by 2.5%

Deposit Flow Sensitivity & cumulative agg. reserve flow

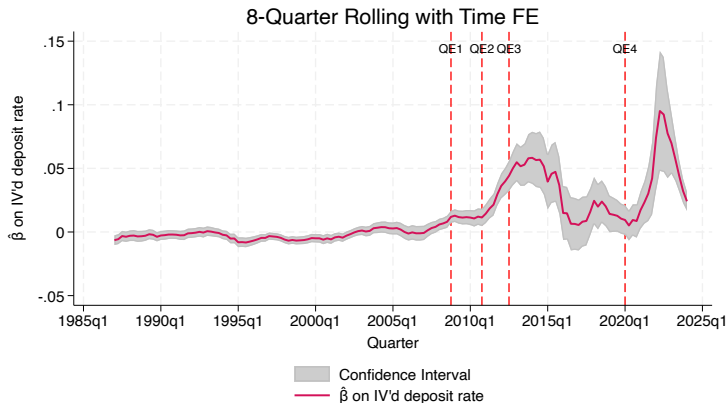
Same message as paper: reserve flows increase flow's rate sensitivity

	Dependent Variable: Δ Log Deposits			
	(1)	(2)	(3)	(4)
Deposit Rate (IV)	-0.01 (0.00)	-0.00 (0.00)	-0.01 (0.00)	-0.02 (0.00)
Deposit Rate (IV) $\times$ Cum Reserve Flow	0.32 (0.05)	0.30 (0.06)	0.21 (0.04)	0.13 (0.05)
Insured Ratio			-0.08 (0.00)	-0.17 (0.00)
Equity Ratio			-0.10 (0.01)	-0.20 (0.01)
Non Deposit Ratio			-0.09 (0.01)	-0.21 (0.01)
Bank FE	No	Yes	No	Yes
Time FE	Yes	Yes	Yes	Yes
Adjusted R^2	-0.03	-0.03	0.00	0.03
N	481,401	481,401	481,401	481,401

Works also with cumulative reserves, directly pushes authors' story
Increase of r_t by 1% given a 0.5T agg. reserve flow increases deposits by 4.5%

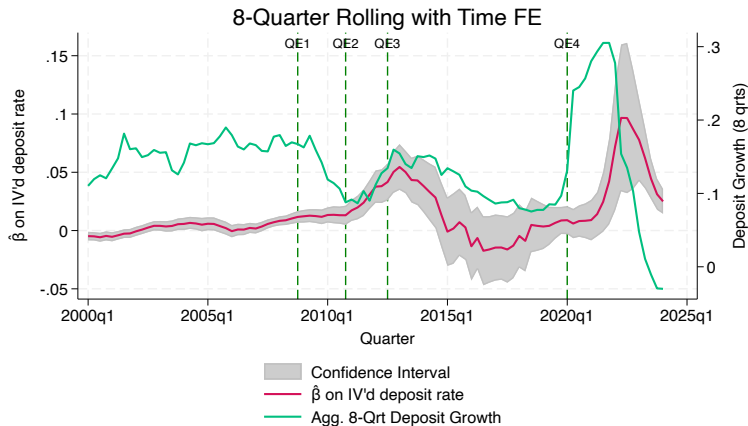
Robust in time series

≈ 0 sensitivities pre-2008, cyclical sensitivities post GFC



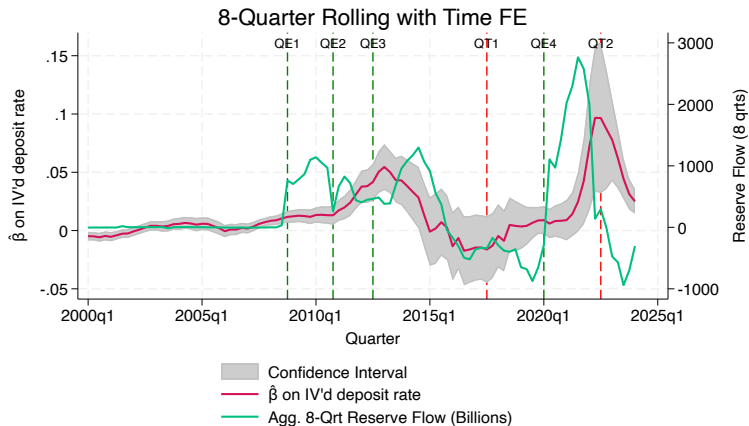
Drop balance requirement; require $\geq 50\%$ presence

Back to motivating figure



Deposit growth alone (green line, right y-axis)
does not always lead to more sensitivity

Back to motivating figure



Unique to post-GFC when reserves expanded (green line, right axis)

What drives flightier investors into banks post GFC?

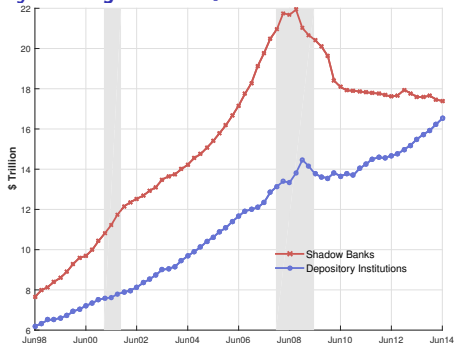
Paper makes the case for unconventional monetary policy consistent with reserve regression and figures

QE: FED buys assets → pays in reserves → seller gets bank deposits

Direct link why QE asset sellers investors get deposits

Why were sellers willing to sell?

Flight to safety or "just" QE?



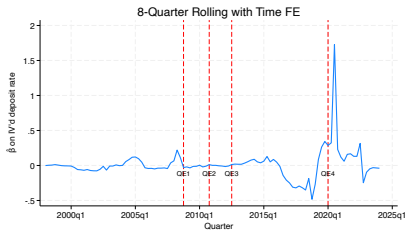
Shadow vs traditional bank assets: Source: Flow of Funds Sample 1998-2014

- GFC put brakes on growth in "money-like" asset creation outside banks
- Expansion of regulatory umbrella to previously less-regulated banks (e.g., GS)

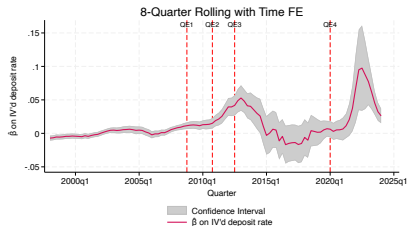
↑ in flightiness an unintended result of QE or implication of flight to safety?

- Matters for optimal central bank's balance sheet size (Lopez-Salido and Vissing-Jorgensen, 2025)
- Matters for how QT affects depositor flightiness if outside option not safe
Investor compares $\max\{D_{i,t}, \mathbb{E}_t((1 - \mathbb{I}_{default}) \times R_t) - f\}$

Cross-sectional variation in deposit rate sensitivities



Largest 100 banks with balanced sample



Small banks (less than top 100)

Largest banks huge spike directly after Covid (flight to safety?)

Large bank estimates very noisy (dropped CI)

General shape of sensitivities driven by small banks

Linking the IV Coefficient to the Model

IV regression from the data

$$\underbrace{[\ln D_{j,t} - \ln D_{j,t-1}]}_{\text{deposit growth } g_{j,t}} = \alpha_t + \hat{\beta} \hat{r}_{j,t} + \varepsilon_{j,t}, \quad \hat{\beta} \approx \frac{\partial \ln D_{j,t}}{\partial r_{j,t}}.$$

Model-implied semi-elasticity

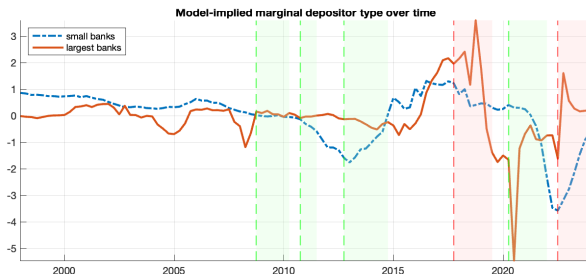
$$\frac{\partial \ln D_{j,t}}{\partial r_{j,t}} = \sigma \lambda \frac{1 - \frac{1}{N}}{N^{1/(\sigma-1)}} \underbrace{G(\theta_t)}_{\text{in bank share}} \times \int_{\theta \geq \theta_t} \frac{1}{\theta} dH(\theta)$$

Mapping data to theory

Given $H(\theta)$, λ , N , γ σ from calibration $\Rightarrow \hat{\beta}_t$ pins down θ_t

Back out θ_t for large and small banks, use the same parameters for both

Large and small banks' marginal depositor type over time



Standardized values; lower θ_t more deposit rate sensitive depositors in banks

Different depositor base at large banks vs small banks

- Post QE 2: increase in flightiness in smaller banks, but not in large banks
 - Covid QE: immediate and short-lived increase in fragility in largest banks
 - Both QT episodes affect large banks seemingly more (reduce flightiness)
 - Maybe less worried about flightiness at small vs. large banks
- How does QE/QT affect large vs. small bks' flightiness w/ risky outside option?

Conclusion

Great paper on an important and policy-relevant question!

Takeaway

Unconventional monetary policy can unintentionally increase depositor flightiness and therefore fragility of banks

What drives the flightiness of depositors?

Outside option is not safe

QE or flight to safety? A mix of both? (Quantify?)

Across all banks versus the largest banks?

Pinning down *why* θ_t moves post-08 will make the results even more policy-relevant