

NABE Panel
March 4, 2025



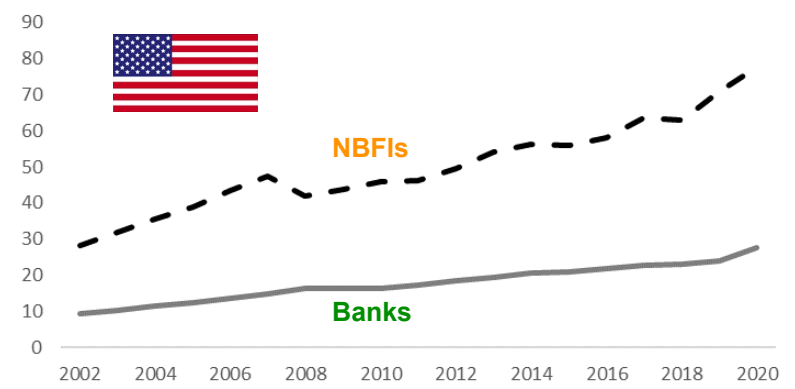
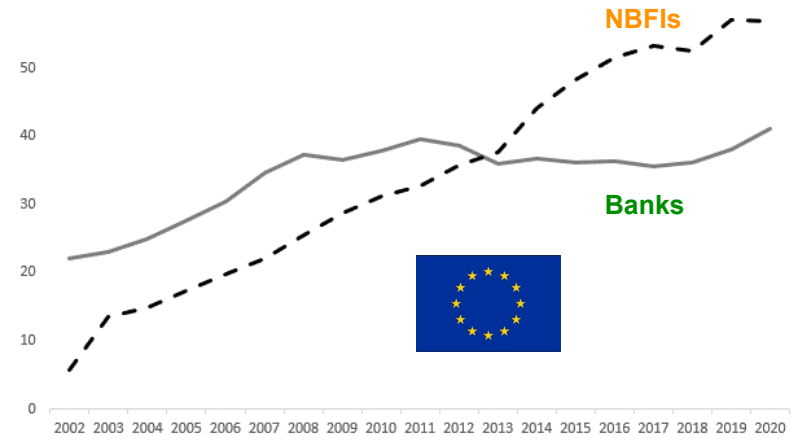
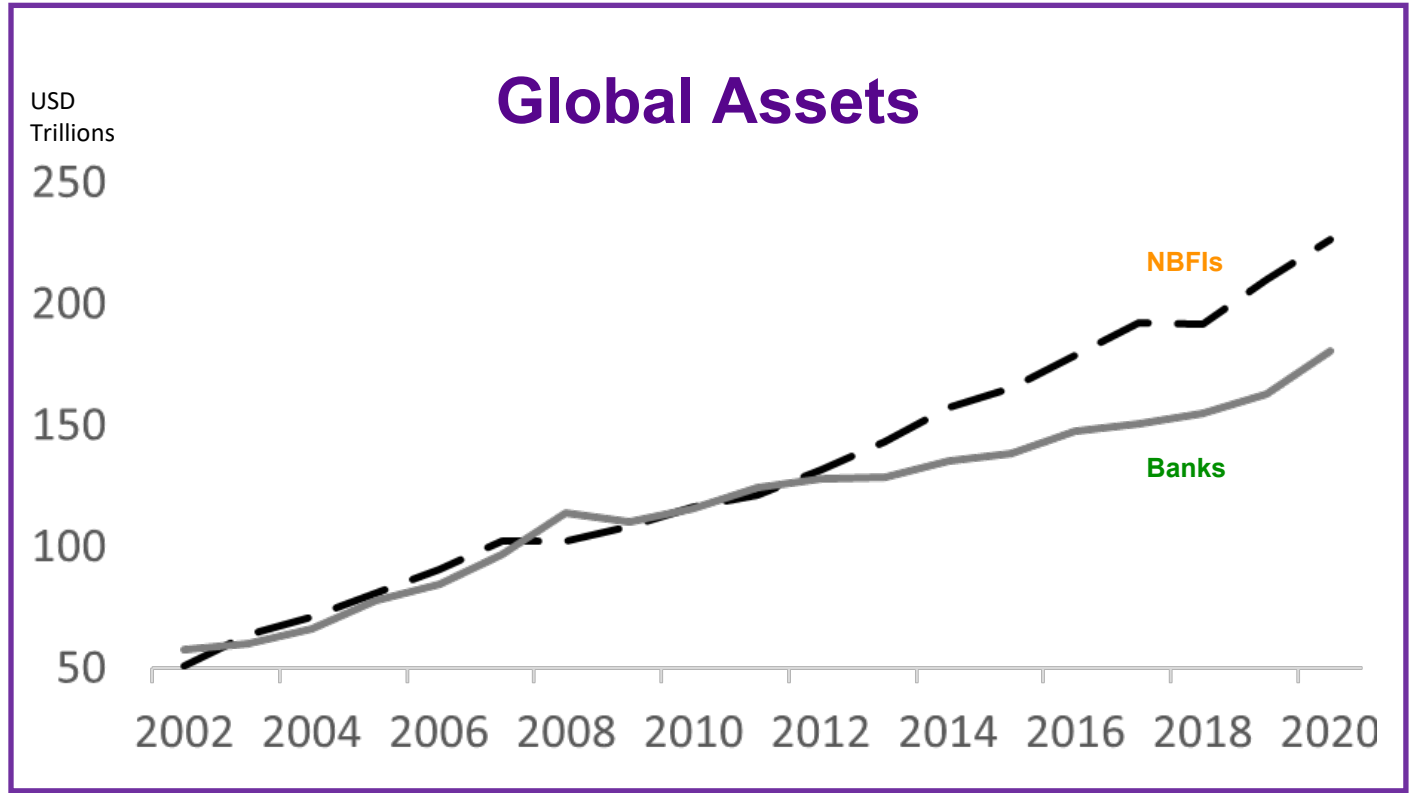
**STERN SCHOOL
OF BUSINESS**

Where Do Banks End and NBFIs Begin?

The views expressed in this paper are those of the authors and do not necessarily represent those of the Federal Reserve Bank of New York, the Federal Reserve System, or any of their staff.

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NBFIs Surpass Banks as Financial Intermediaries



Usual Views of the Bank and NBFIs Sectors

▪ *Parallel View*

- Banks and NBFIs pursue different/parallel intermediation activities.
- Banks focus on deposits, loans, and payments.
 - Banks are heavily regulated to protect depositors and the real economy.
- NBFIs focus on capital markets.
 - NBFIs can be lightly regulated and allowed to fail.

▪ *Substitution View*

- Business lines and intermediation activities flow from banks to NBFIs
 - at least in part because of relatively burdensome bank regulation.
- NBFIs take on intermediation roles that can be systemically important
 - and require rescue by authorities in times of stress.

Transformation View of Bank and NBFIs Sectors

Transformation	Historically Within Banking	Spread Across Banks and NBFIs
<p>Loans and Mortgages Loans shift from being made and held by banks to being made by NBFIs with collateralized or senior financing provided by banks.</p>	<ul style="list-style-type: none"> • Corporate loans • Mortgage loans 	<ul style="list-style-type: none"> • Banks make senior loans to private credit companies. • Banks make collateralized loans to mortgage REITs. • Banks hold senior tranches of MBS and CLOs.
<p>Activities Using Short-Term Funding Activities that require short-term funding transform from being conducted and funded by banks to being conducted by nonbanks and funded by banks.</p>	<ul style="list-style-type: none"> • Mortgage, CLO, and other ABS origination • Acquisition/LBO financing • Mortgage servicing 	<ul style="list-style-type: none"> • Banks offer warehouse financing to nonbank mortgage, CLO, and other ABS originators. • Banks make short-term loans to private equity companies, including subscription finance loans. • Banks sponsor CP or directly lend to nonbank mortgage servicers.
<p>Contingent Funding While the footprint of NBFIs has grown relative to that of banks, banks retain responsibility for providing contingent funding in the form of credit lines to the NBFIs sector.</p>	<ul style="list-style-type: none"> • Credit lines to nonfinancial businesses • OTC bilateral derivatives 	<ul style="list-style-type: none"> • Banks provide credit lines to NBFIs to be drawn down during periods of stress. • Banks bear mutualized counterparty risk as derivative clearinghouse members and provide credit lines to NBFIs to meet margin requirements.

Transformation View

Intermediation trans-forms endogenously

i) to loosen regulatory

constraints/ to reduce

regulatory costs;

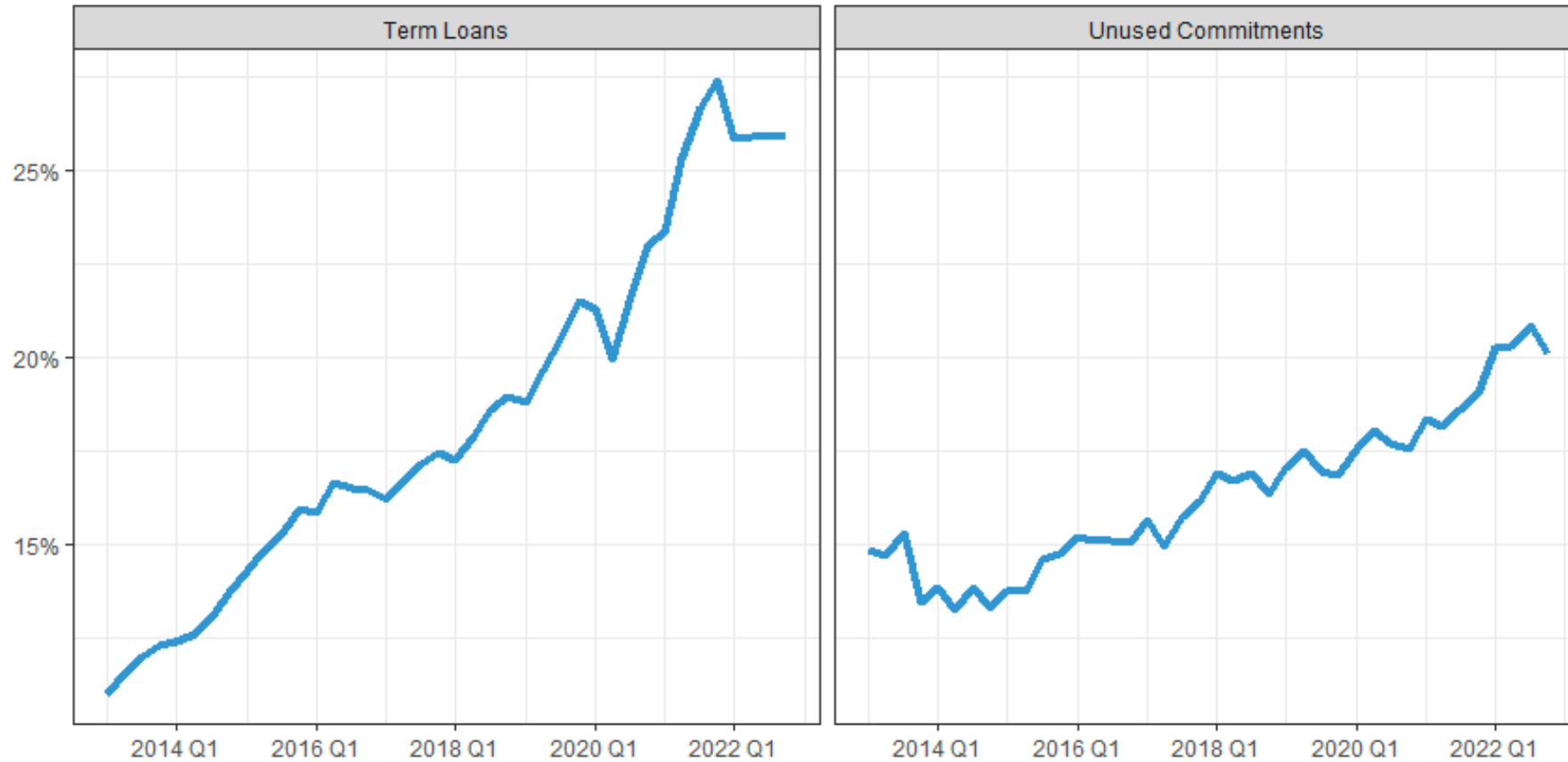
ii) to harness the funding

and liquidity advantages of

bank deposit franchises and

access to safety nets.

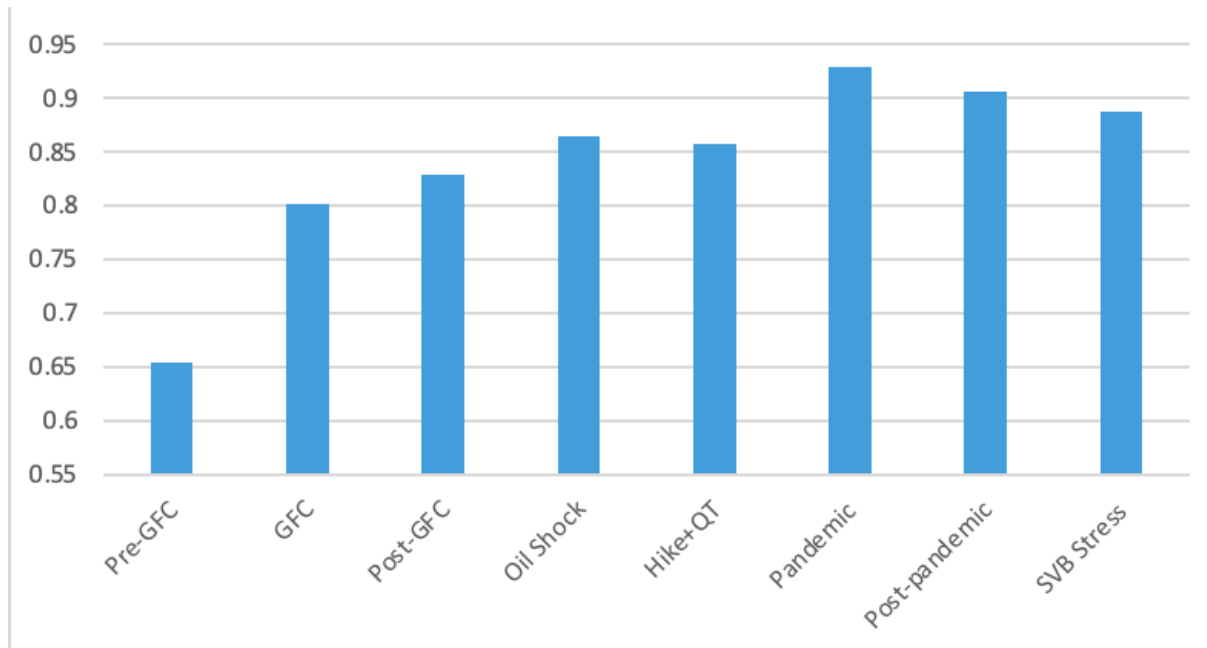
NBFI Share of Bank Loans and Commitments



Source: Form FR Y-9c

Bank-NBFI Systemic Risks: Correlation/Causation

20-day Rolling Correlations
Bank and NBFI % Changes in Sector-Wide SRISK



Granger-Causality Tests
Bank and NBFI Abnormal Returns

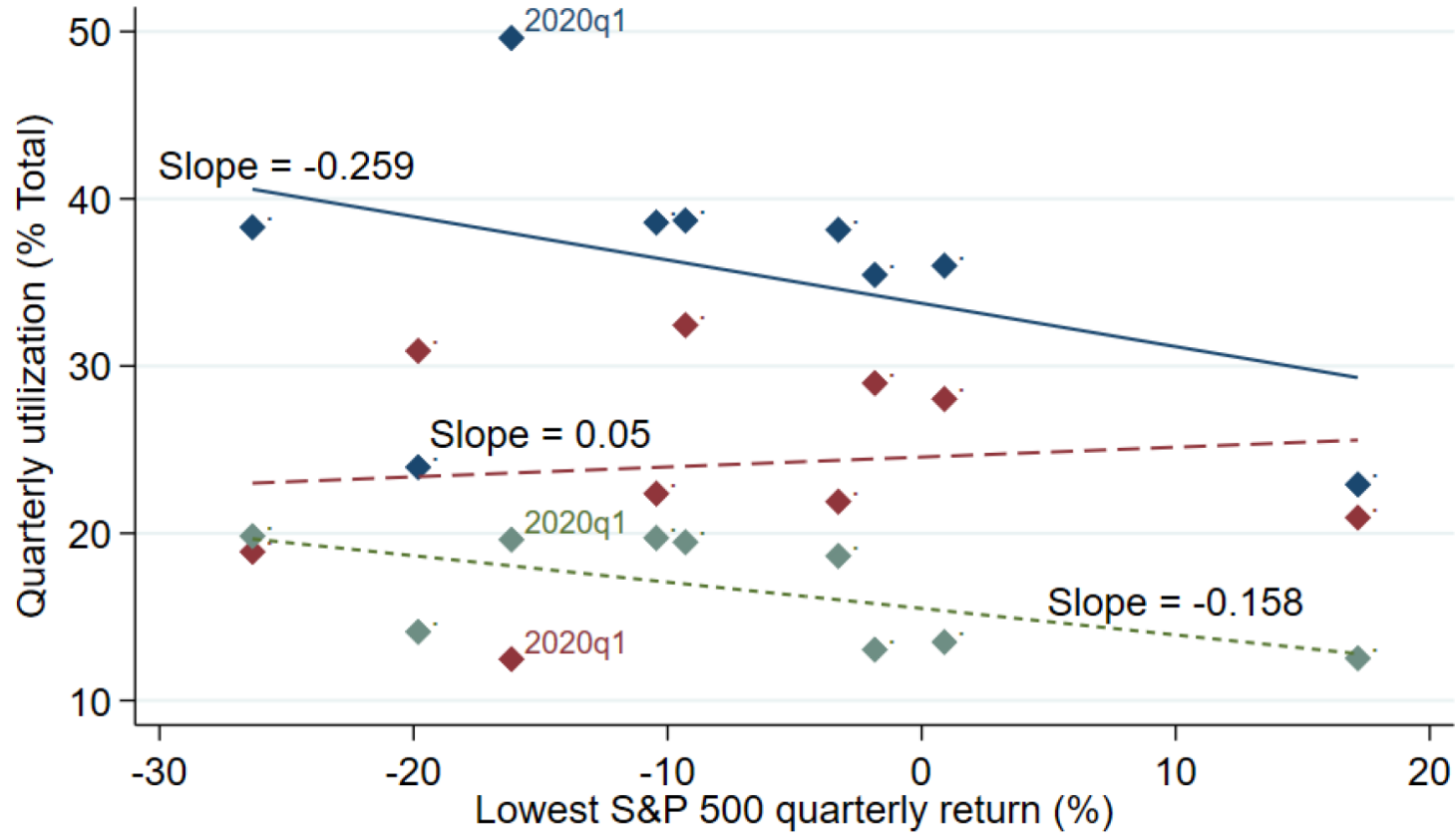
Period	Fraction of days w p-value <10% when	
	Banks cause NBFIs	NBFIs cause Banks
Pre-GFC	13%	5%
GFC	33%	25%
Post-GFC	18%	18%
Oil Shock	9%	0%
Rate Hike + QT	13%	15%
Pandemic	36%	31%
Post-Pandemic	26%	67%
SVB Stress	24%	62%

Shadow Always Touches the Feet: Implications of Bank Credit Lines to Non-Bank Financial Intermediaries

Viral V. Acharya, Manasa Gopal, Maximilian Jager, Sascha Steffen

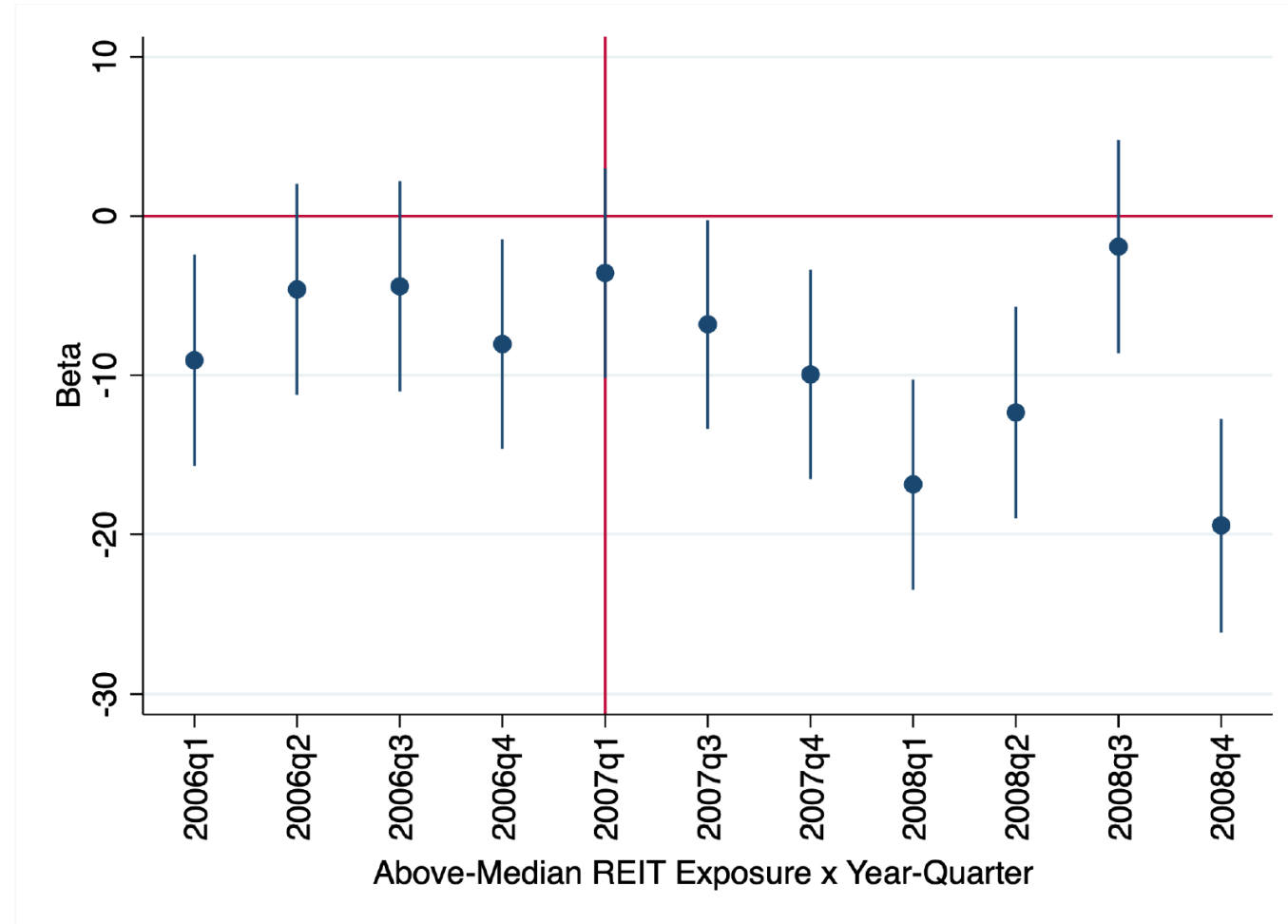
September 6, 2024

Utilization rates of REITs vs other borrowers in crises



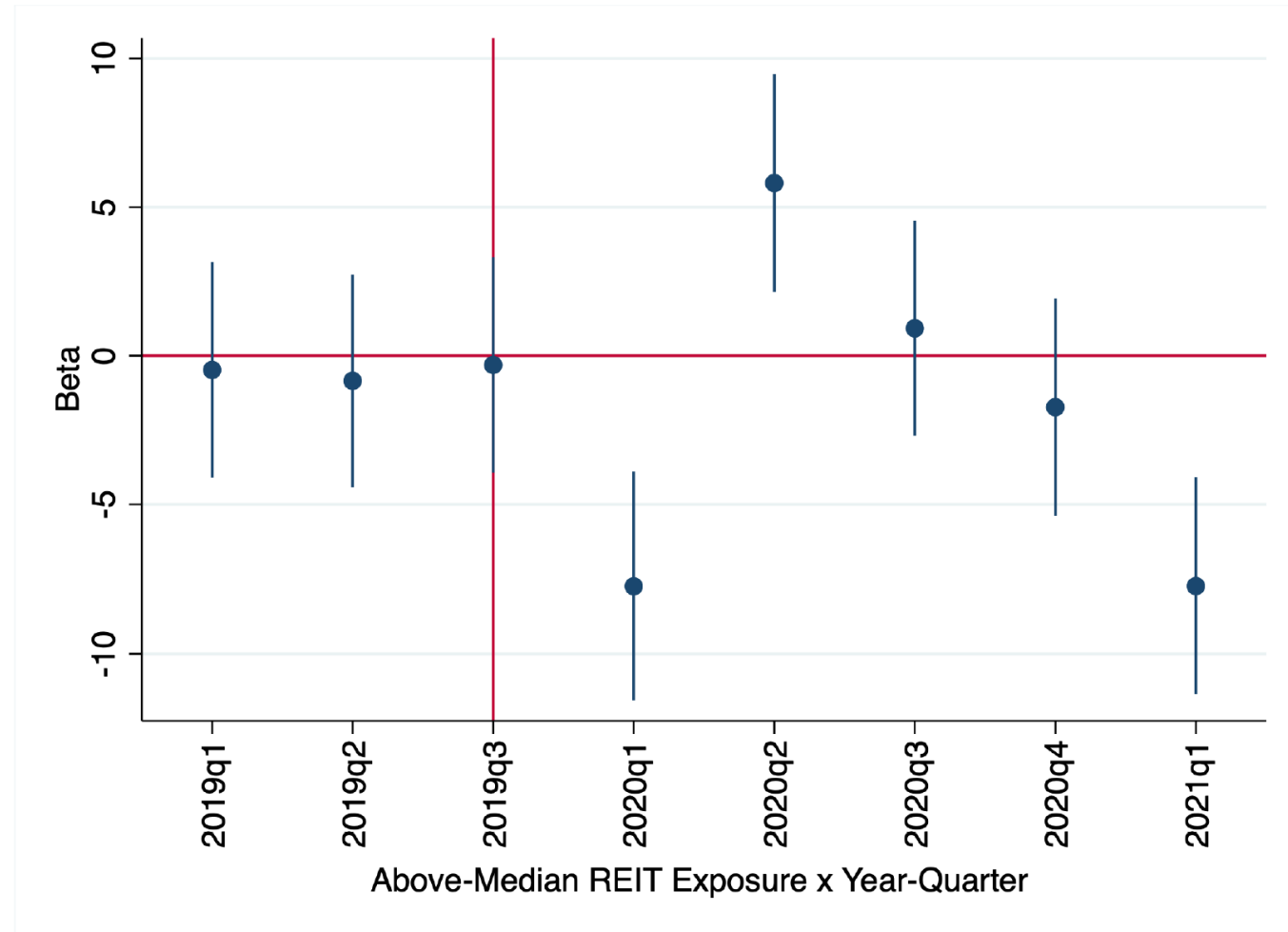
Bank Performance by REIT Exposure - GFC

$$\text{BankStockReturn}_{it} = \beta_{it} \text{High REIT CL Share}_j \times \mathbf{1}_t + X_{it} + \alpha_i + \gamma_t + \epsilon_{it},$$



Bank Performance by REIT Exposure - COVID-19

$$\text{BankStockReturn}_{it} = \beta_{it} \text{High REIT CL Share}_i \times \mathbf{1}_t + X_{it} + \alpha_i + \gamma_t + \epsilon_{it},$$



Possible Regulatory Responses

▪ *Ex-Ante*

- Holistically monitor and supervise banks and NBFIs.
 - ECB (2023), FDIC (2019), FSB (2022); CFTC (2019), BoE (2022)
- Induce banks and NBFIs to internalize systemic risks.
 - Narrow the scope for regulatory arbitrage.
 - **Committed Liquidity Facilities** (Nelson, 2023)
 - **Pawnbroker for all Seasons** (King, 2016)
 - **Federal Liquidity Options** (Tuckman, 2012)

▪ *Ex-Post*

- State-contingent responses to NBFIs stress (pre-announced and credible).
 - NBFIs receiving LOLR become *prima facie* SIFIs (Acharya, 2022)
 - or become subject to corrective action, e.g., deleveraging (Acharya and Tuckman, 2014)