Banks, Nonbanks, and Interest Rates

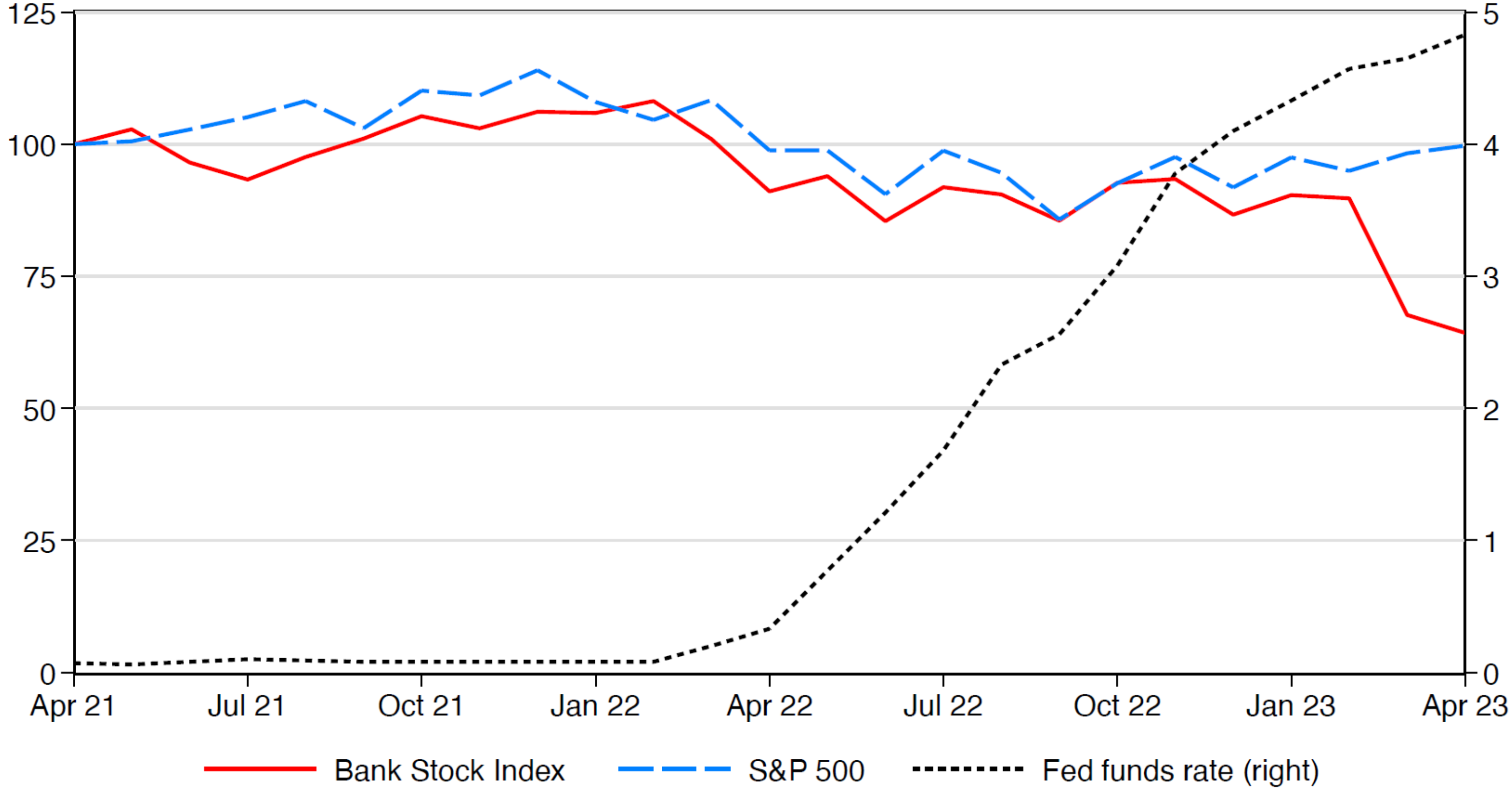
Philipp Schnabl

NYU STERN

Bank Assets

- Since 2021, the Fed has raised short-term rates by 5%
  - long-term rates, which reflect expected future short rates, are up 2.5%
- Banks hold $17T of long-term loans and securities with average duration 4 years
  - implied loss of 0.025 x 4 x 17 = $1.7T
  - not hidden or complicated
  - very large compared to $2.2T bank equity

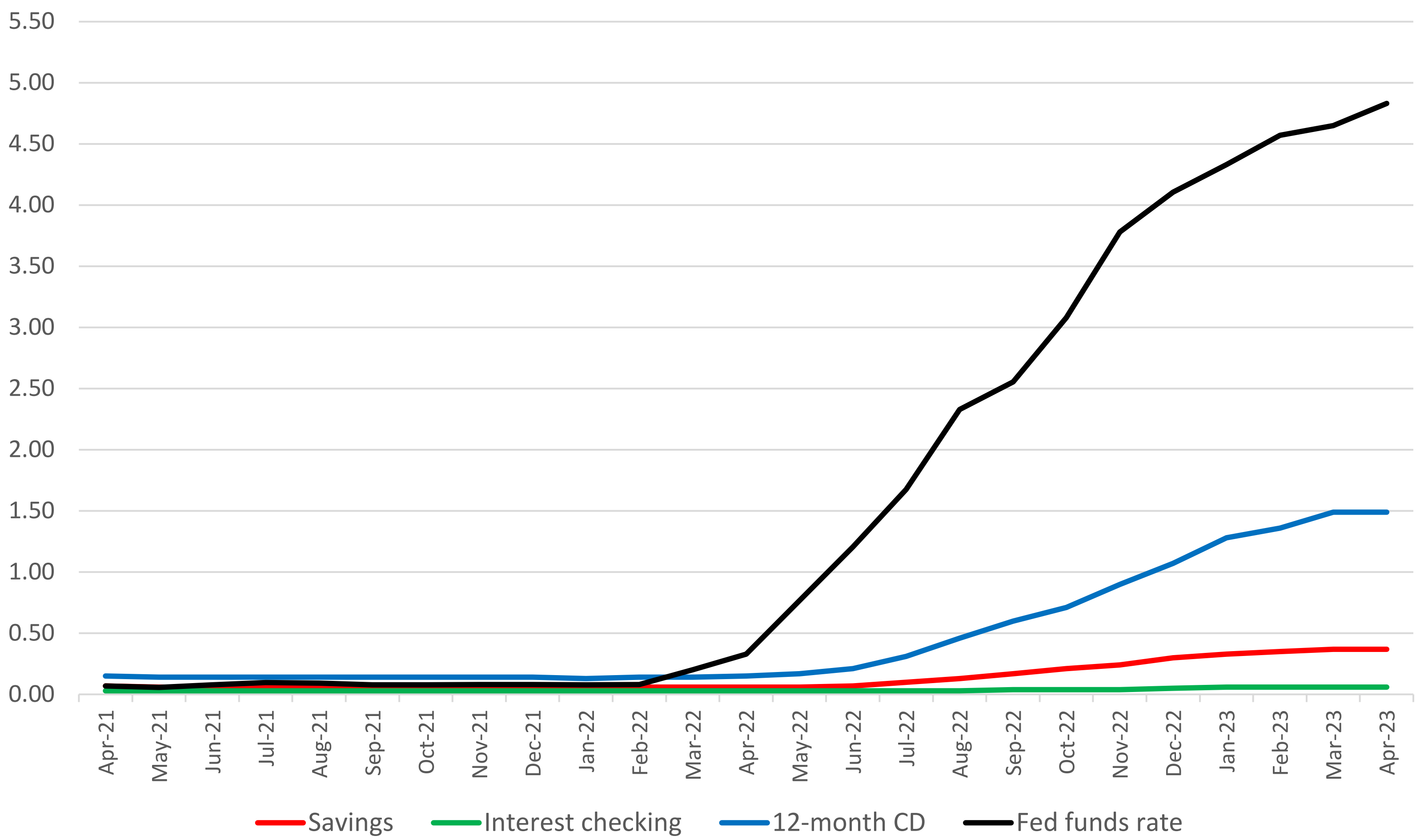
Bank Stocks Held Up Through February; Down 30% in April



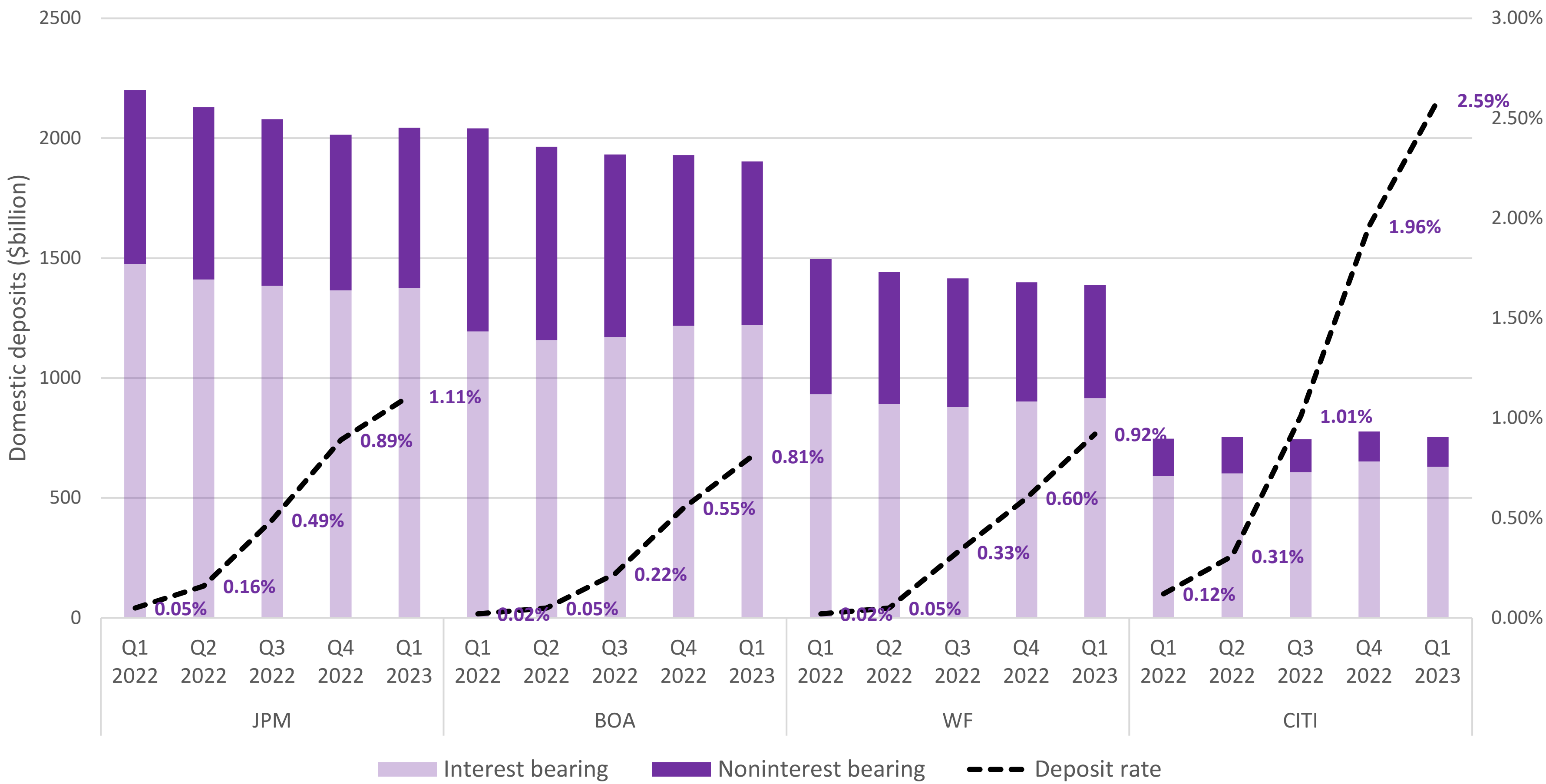
The Deposit Franchise

- What makes banks special is issuing deposits
  - Depositors value their convenience and safety
  - willing to accept very low deposit rates
- When rates rise, deposits become much more profitable for banks
  - "deposit beta" of 0.4 means that deposit rates rise only 0.4% for every 1% Fed funds rate increase
  - banks capture the other 0.6 x Fed funds rate

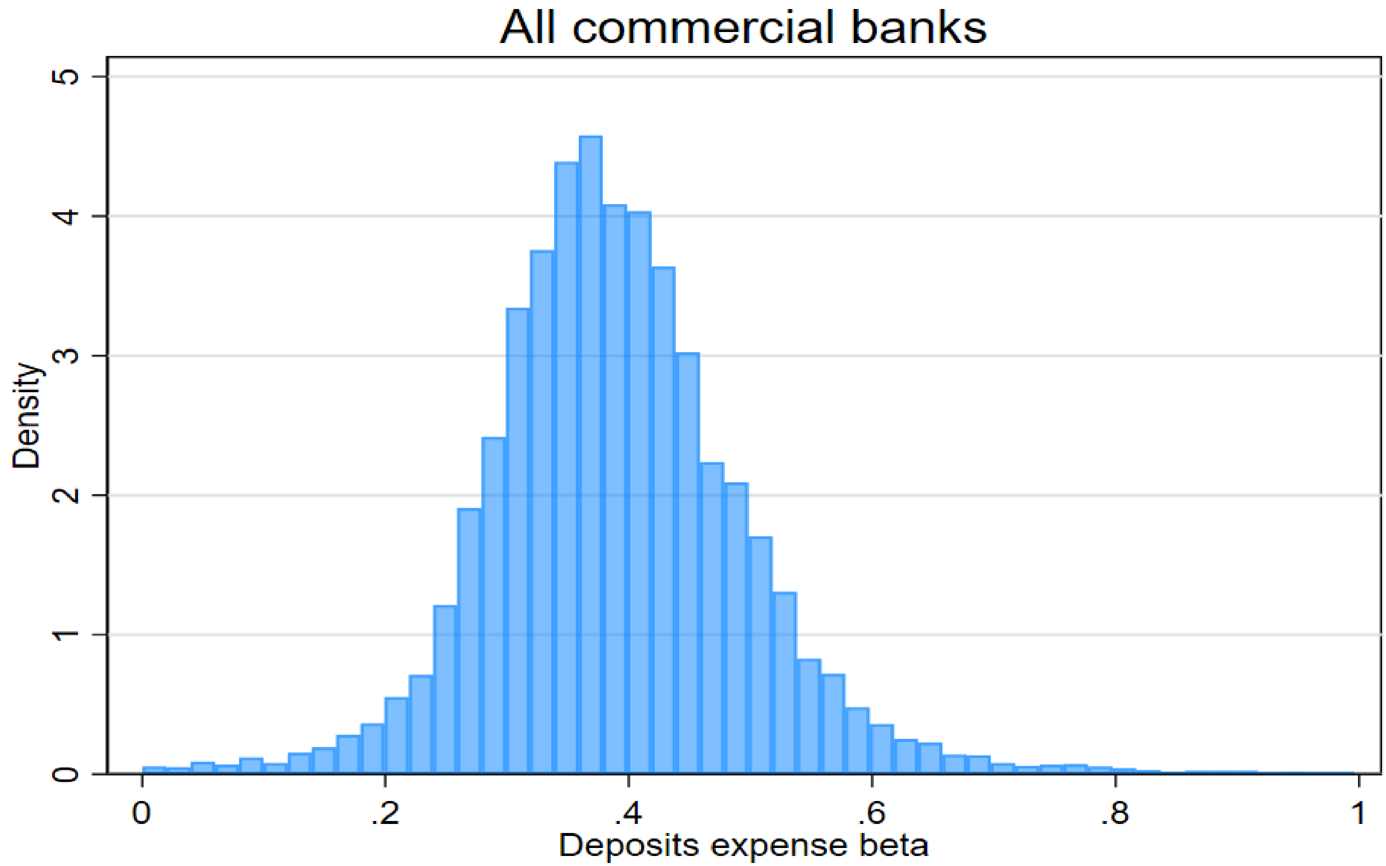
Deposit Rates



Big 4 Banks' Deposit Costs and Mixes



Historical Deposit Betas

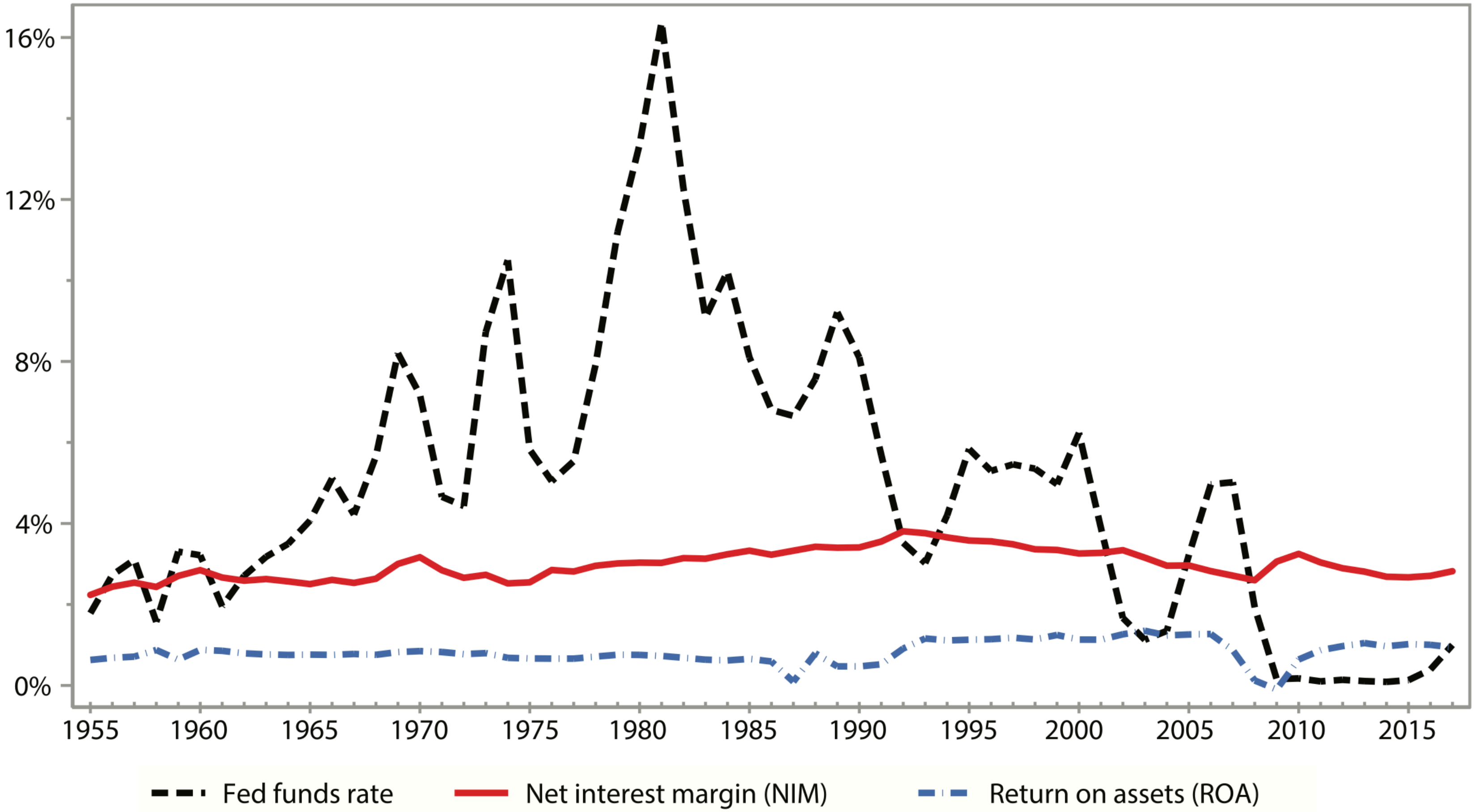


- Deposits betas during this cycle are (still) far below historical betas

The Deposit Franchise Hedge

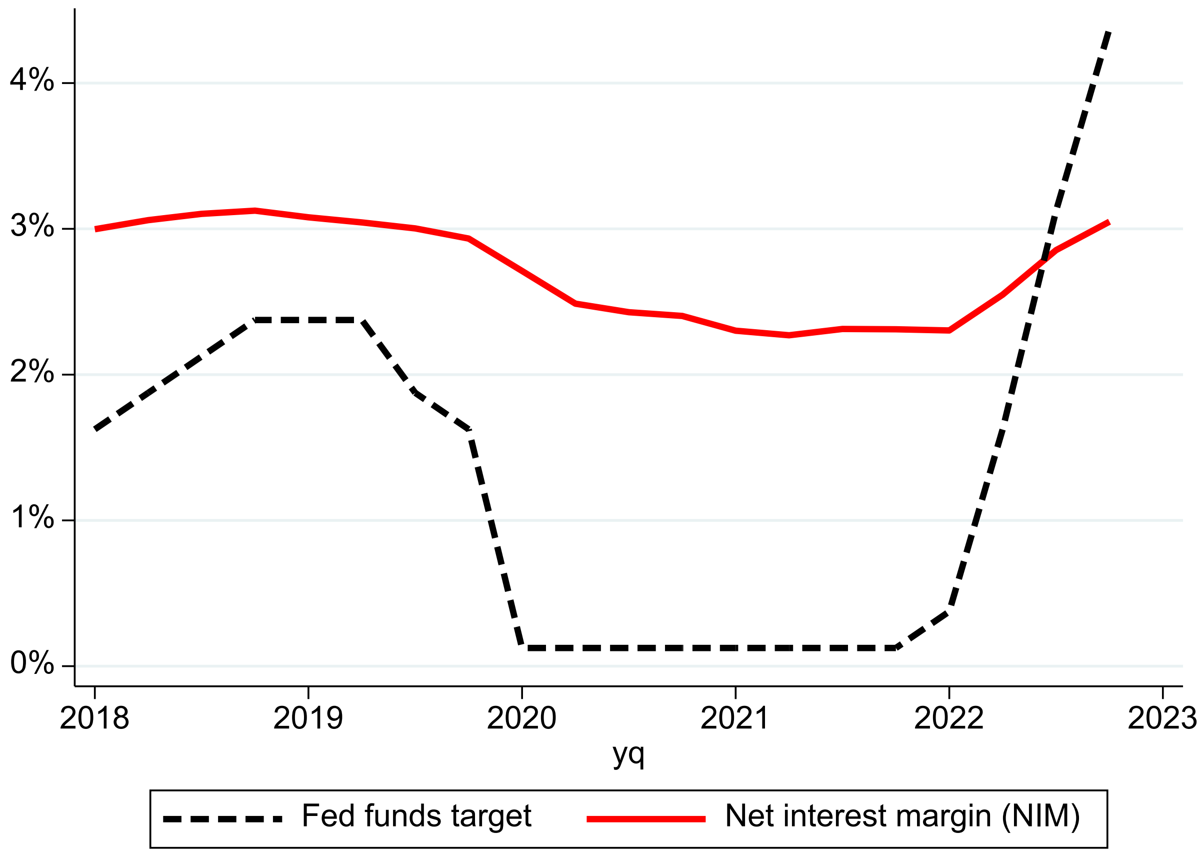
- There are \$17.5T of deposits
  - banks earning 5% x 0.6 = 3% deposit spread
  - 0.03 x 17.5 = \$525B more income per year!
- Enough to offset losses on assets in 3 years
  - deposits went from unprofitable to extremely profitable
  - baseline estimate suggests a full offset,
  - explains why bank stocks didn't fall through Feb
  - Generates stable net interest margin (NIM)

Stable Net Interest Margin (1955-2018)



Source: Drechsler, Savov, and Schnabl (Journal of Finance 2021)

Stable Net Interest Margin (2018-2023)



Source: FRED Quarterly Banking Profile

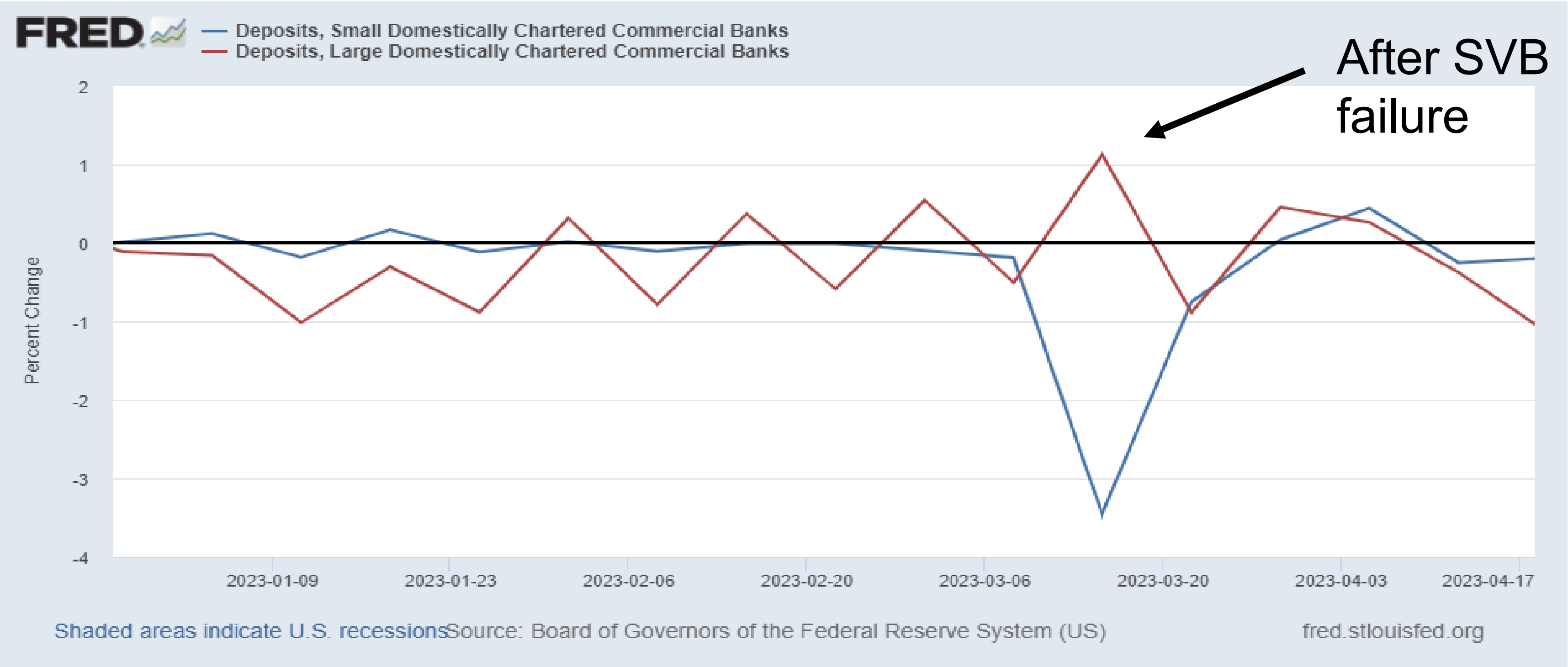
Deposit Risks

1. Deposit hedge only works if deposits stay in the bank
   - Runs destroy the deposit franchise and the hedge fails
   - Regional lenders with uninsured deposits are at risk

2. Deposit beta may "reset"
   - Uninsured depositors "wake up" and move to higher-paying alternatives outside the banking sector

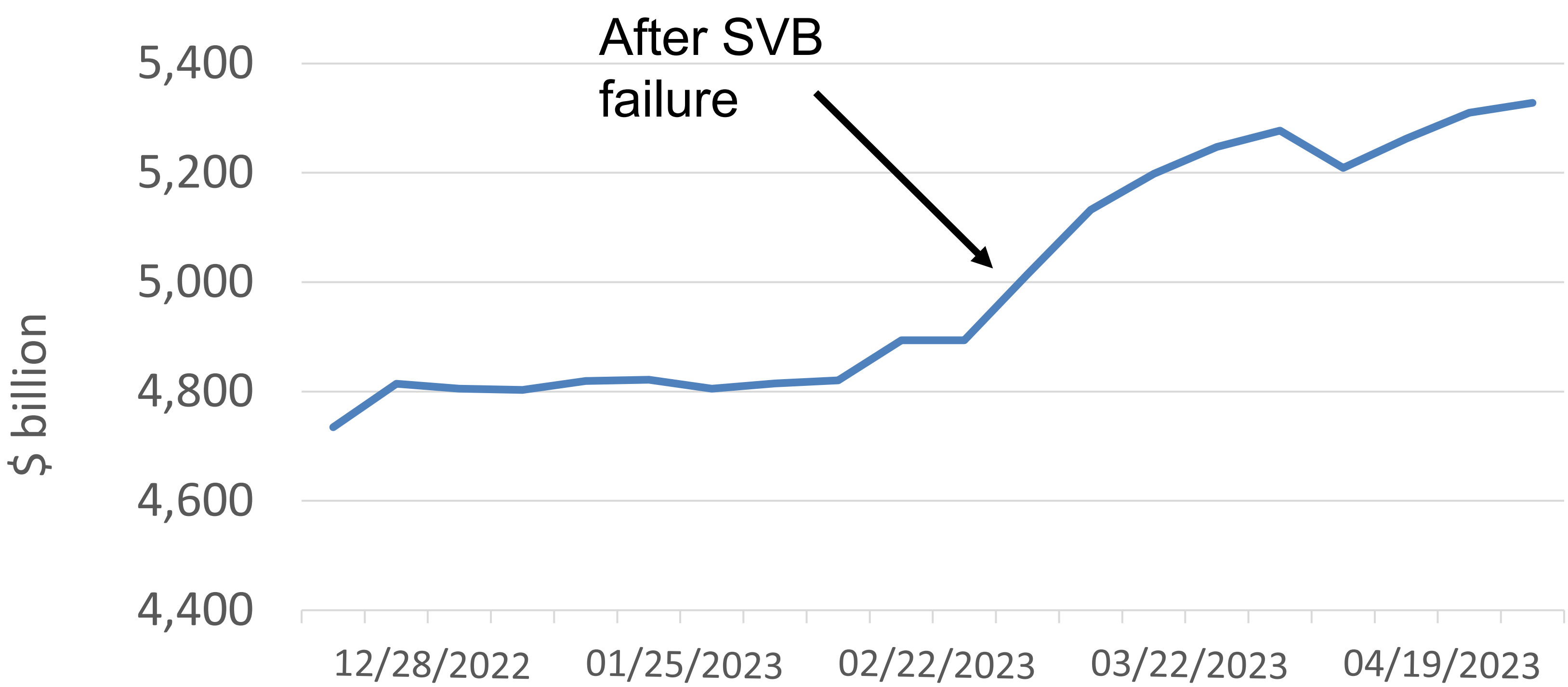
3. Regular monetary policy ("deposits channel")
   - Price-sensitive depositors move as deposits become more expensive

Regional Bank → Large Bank Deposit Flows



- After SVB failed, $240B in deposits went from regional to large banks
- Anecdotally, banks have to pay <u>significantly higher deposit rates</u>
- Creates opportunities for non-bank lenders

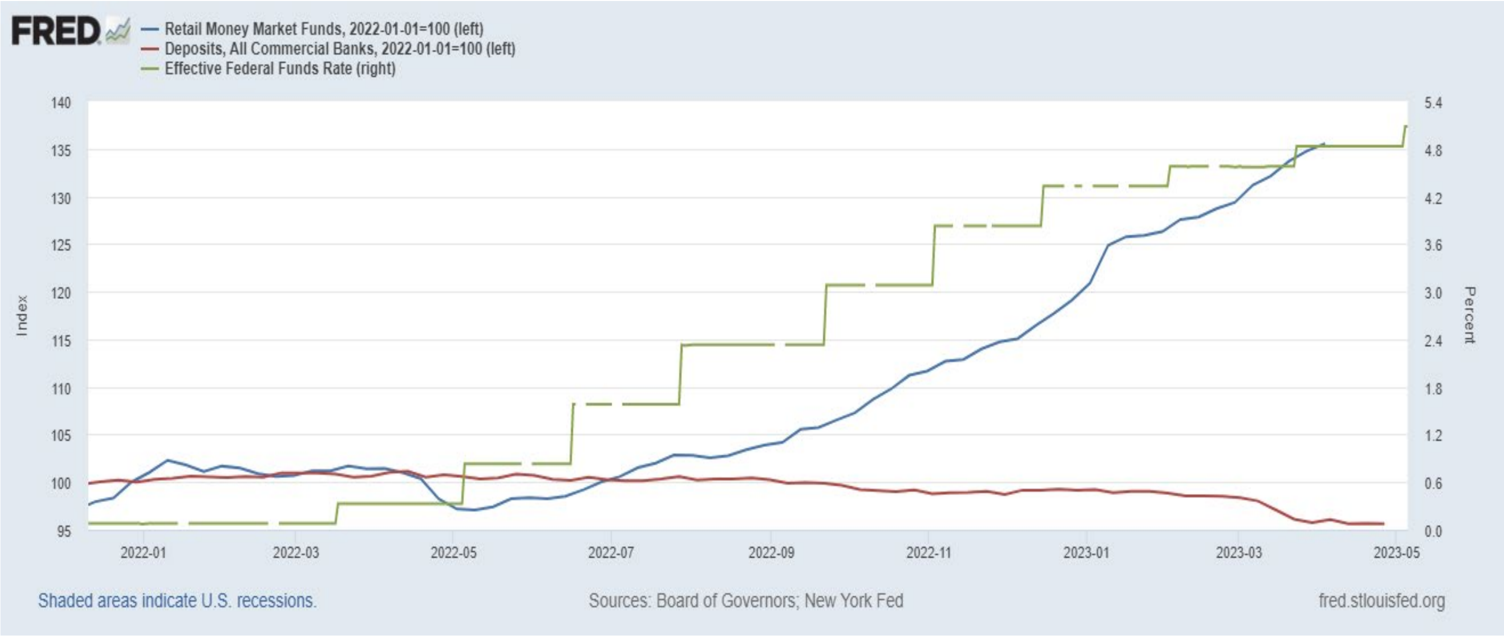
Bank deposits→ Money Market Funds (MMFs)



Source: Investment Company Institute

- About $550 billion moved from banks to MMFs (~3% of deposits)
- Most of deposit outflows went to institutional funds

Deposits channel at work



- Deposit channel outflows <u>before SVB failure</u>: ~$20B/week
- Average weekly outflows in <u>April and May 23</u>: ~$20B/week

➔ (Presumably) intended effect of monetary policy tightening