Banks and Interest Rates

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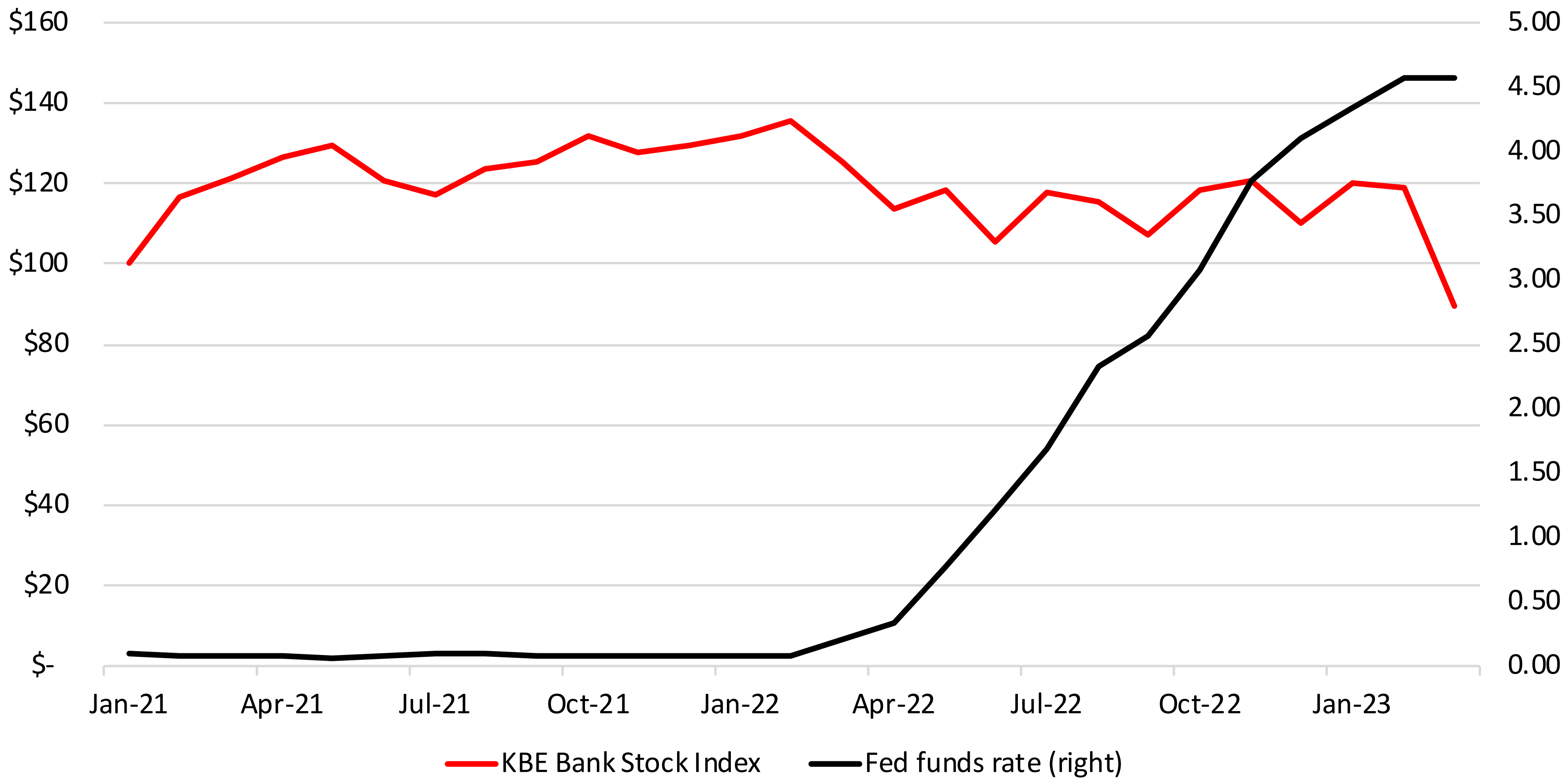
The Problem

- Since 2021, the Fed has raised short-term rates by 4.5%
  – 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

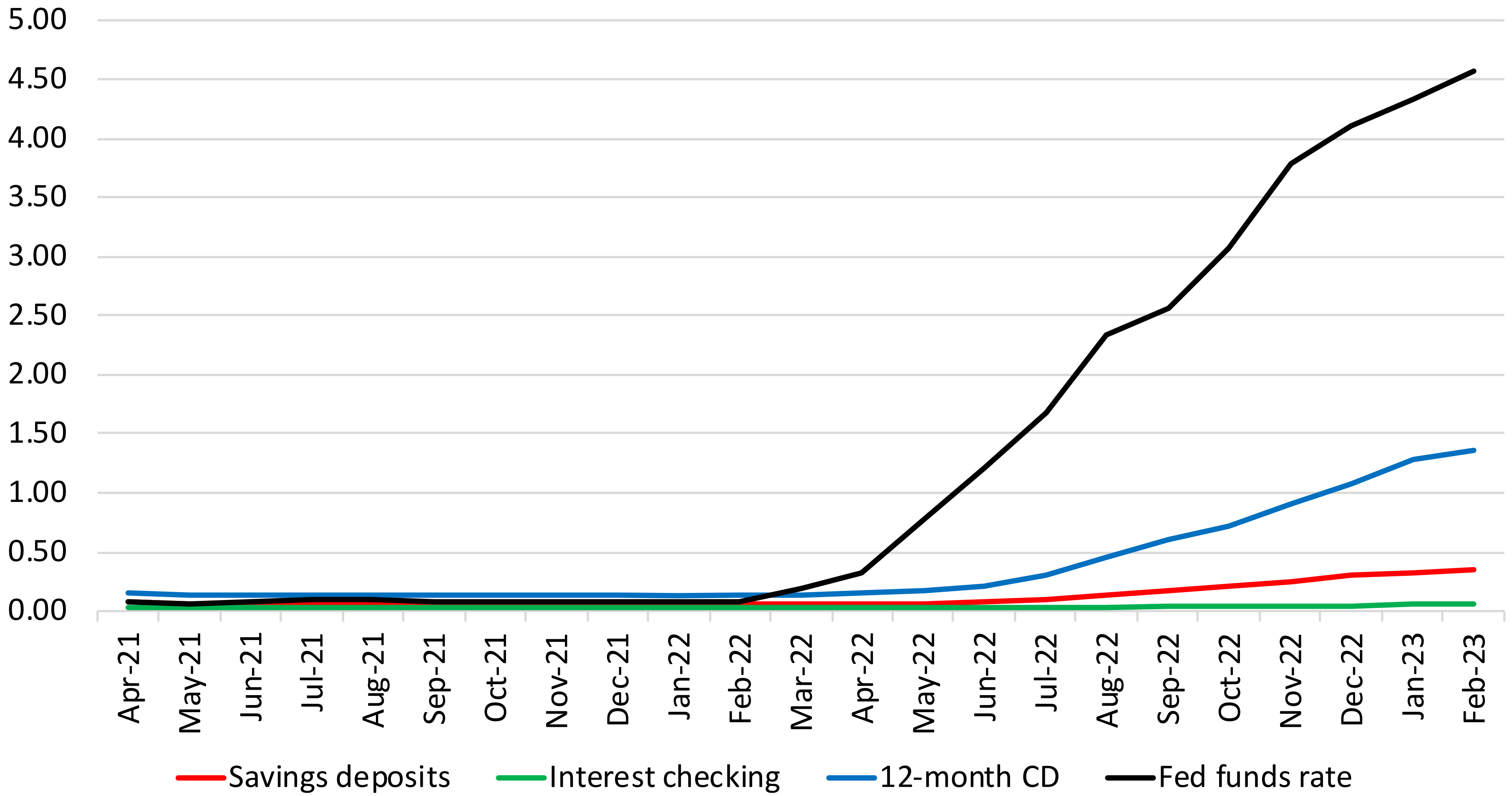
Bank Stocks Held Up Through February; Down 25% in March



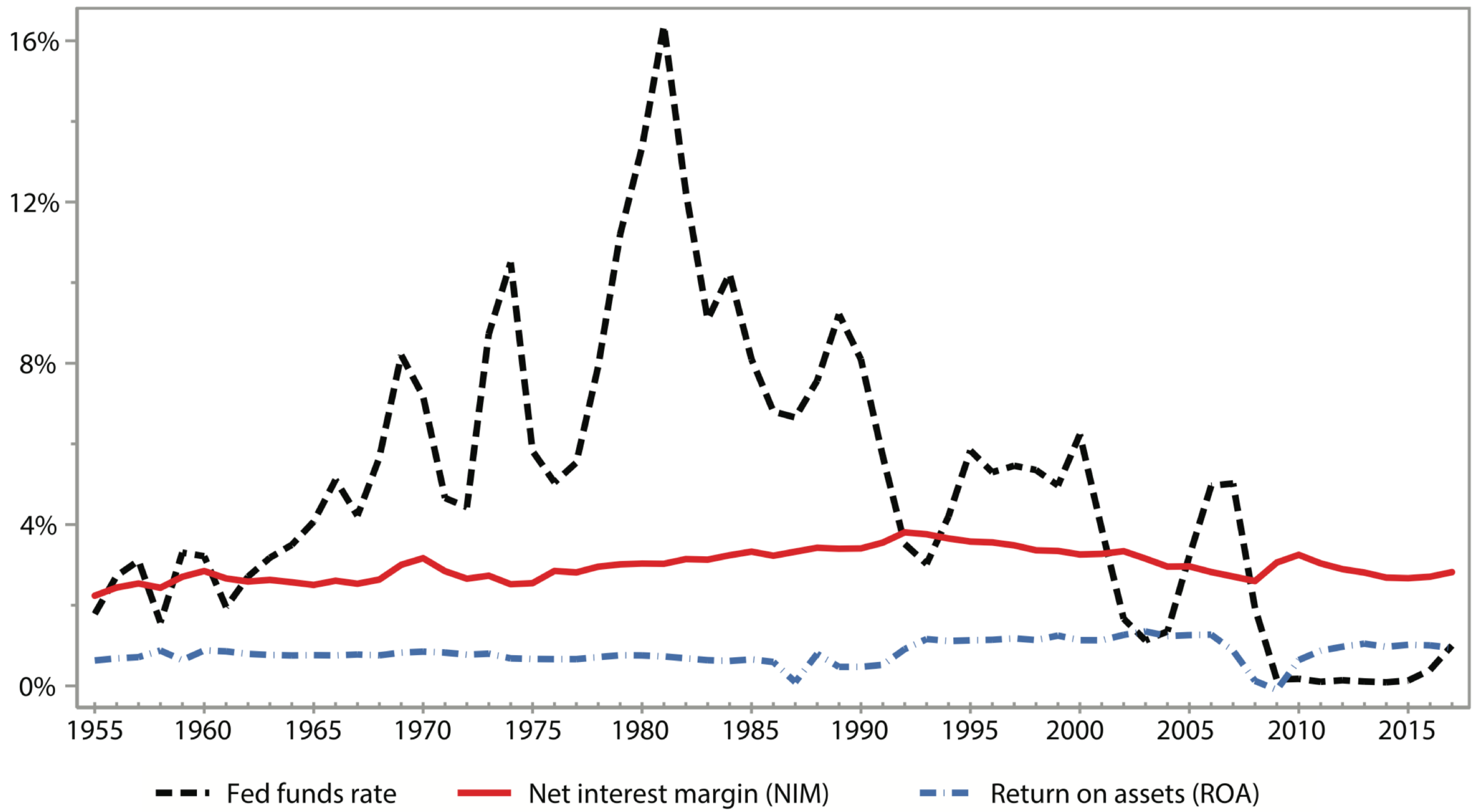
The Deposit Franchise

- What makes banks special is issuing deposits
  - people like deposits for their convenience and safety
  - willing to accept very low deposit rates
- When rates rise, deposits become much more profitable for banks
  - "deposit beta" only 0.2 – deposit rates rise only 0.2% for every 1% Fed funds rate increase
  - banks capture the other 0.8 x Fed funds rate

Deposit Rates



Stable Net Interest Margin



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

The Deposit Franchise Hedge

- There are $17.5T of deposits
  - average deposit rate about 0.9%
  - banks earning 4.5-0.9 = 3.6% deposit spread
  - 0.036 x 17.5 = $630B 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

Risks

- The deposit hedge only works if most deposits stay in the bank
  - depositors may run if they are uninsured
    - a bank run destroys the deposit franchise and the hedge fails
  - deposit betas may rise if depositors seek out higher-paying alternatives
    - if the deposit beta doubles to 0.4, only 1/3 of losses offset
    - the risk is larger for regional banks (big banks could see betas fall)
- Key risks going forward are to the deposit franchise