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 $1.7T
  - not hidden or complicated
  - very large compared to $2.2T bank equity
Bank Stocks Held Up Through February; Down 25% in March

KBE Bank Stock Index
Fed funds rate (right)
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

Savings deposits
Interest checking
12-month CD
Fed funds rate
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
Stable Net Interest Margin

Source: Drechsler, Savov, and Schnabl (Journal of Finance 2021)
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
After SVB failed, $160B in deposits went from small to large banks

Last week, flows from small to large banks stopped
Bank deposits $\rightarrow$ Money Market Funds

- Deposit outflows from banks to MMFs before SVB: $20B/week
- After SVB failed, outflows increased to $116B (~0.7% of deposits)
- Last week, outflows declined to $66B