

Evolution of liquidity risk in an environment of higher interest rates

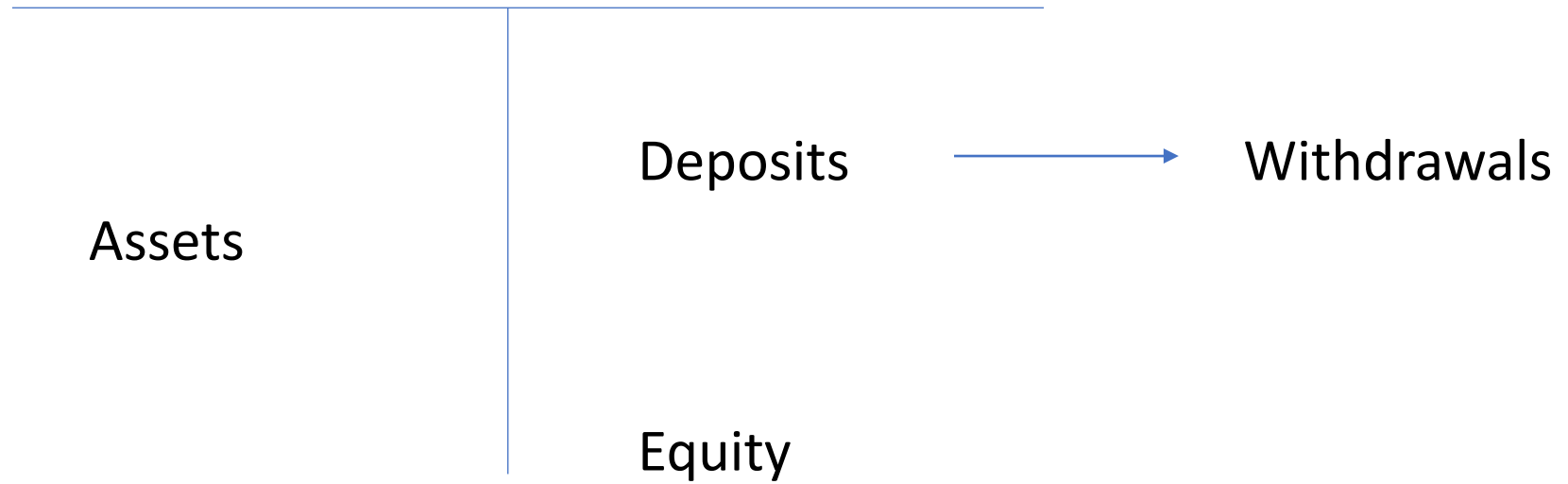
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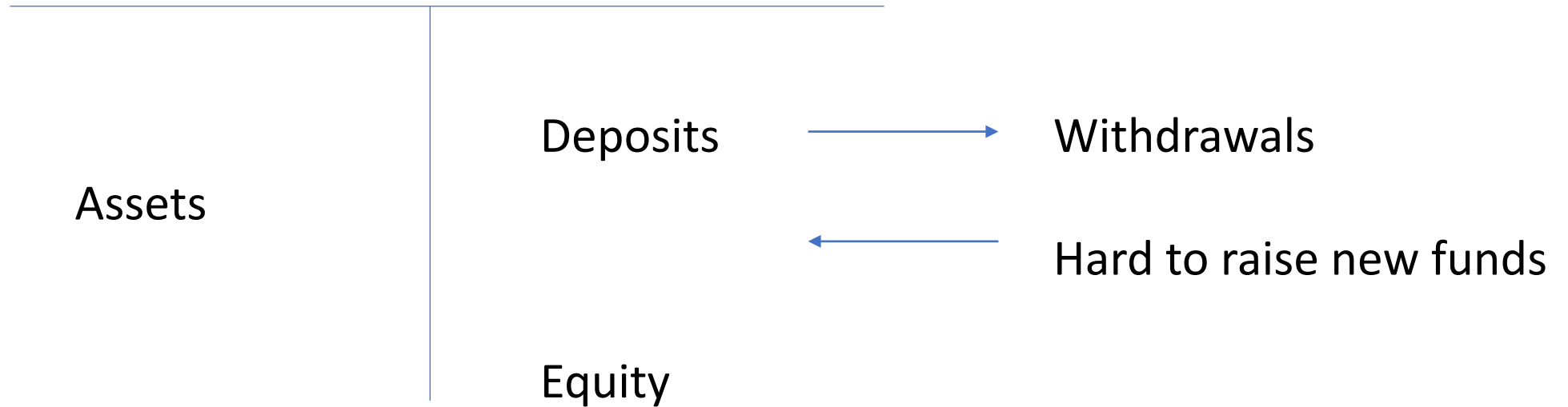
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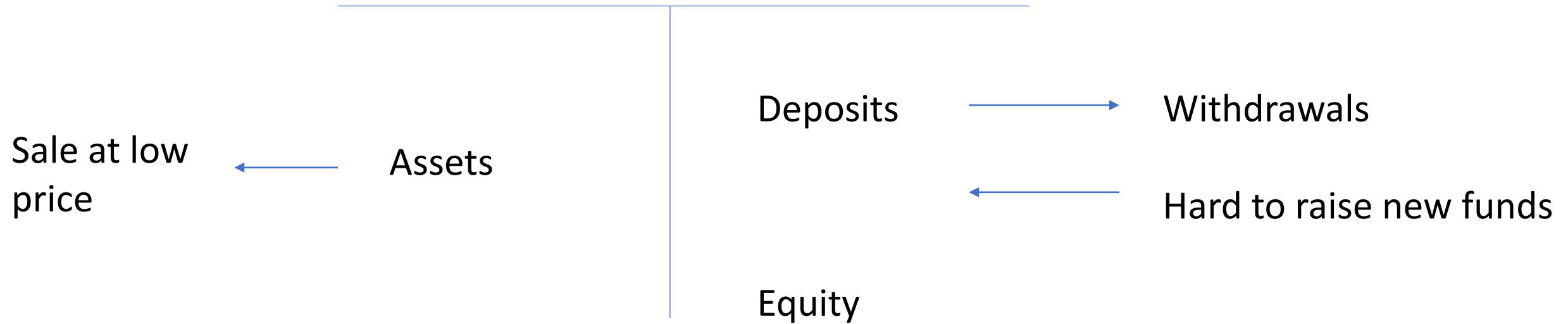
Adverse shock (1)



Adverse shock (2)



Adverse shock (3)



Which way does causality run?

- 1) Withdrawals -> sale -> drop in asset price : liquidity problem
- 2) Drop in asset value -> withdrawals : solvency problem

Analogy with auctions (1): Private values vs common values

- 1) Private values: different bidders have different valuations (some like Basquiat, others don't)
- 2) Common values: all bidders value the asset in the same way (but may have different private information)

Analogy with auctions (2): Loans and Treasuries

- 1) Private values: different banks have different valuation for a given loan

One bank has higher valuation because knows borrower's business & how to monitor it

- 2) Common values: all banks value the asset in the same way

Treasuries have same value for all banks

Analogy with auctions (3): Liquidity and solvency

- 1) Private values: different banks have different valuation for a given loan

Drop in price at time of sale because loan bought / bank with lower monitoring skill

Liquidity problem

- 2) Common values: all bidders value Treasury bond in same way

Drop in price at time of sale = just mark to market of previous drop in value

Solvency problem

Silicon Valley Bank and Crédit Suisse: solvency problem

SVB :

Drop in asset value due to rise in high interest rates -> withdrawals -> sales -> recognize drop

Crédit Suisse:

Severe governance problems -> losses -> low asset value -> withdrawals

And for other banks: Is it about solvency or just liquidity ?

“We mark to market losses on banks’ assets due to the interest rate increases from Q1 2022 to Q1 2023. Asset values declined on average by 10% and the \$2.2 trillion decline was on the order of aggregate bank capital...

10% of banks have larger unrecognized losses and lower capital than SVB...

almost 190 banks with assets of \$300 billion are at potential risk of insolvency.”

Jiang, Matvos, Piskorski, Seru (2023)

Sounds like some banks face solvency problems

But aren't deposit withdrawals just a liquidity problem?

As argued above not if withdrawals motivated by drop in bank's asset value

Nor if withdrawals motivated by search for higher rates, which bank can't offer because its assets earn low rate

So maybe this panel should have been titled

Evolution of solvency risk in an environment
of higher interest rates

What about Europe: is there a similar problem?

We don't know, because data publicly available for US banks not for European banks

Jiang, Matvos, Piskorski, Seru (2023): ``We obtain the asset maturity and repricing data for all FDIC-insured banks in the regulatory filings (Call Report Form 031 and 051)''

Acharya, Chauhan, Rajan, Steffen (2023): ``We use FDIC's Summary of Deposits – Branch Office Deposits data to obtain branch-level deposit values, Call Reports of the FDIC for bank balance sheet data.''

Vuillemeey (2023): ``I rely on balance sheet data from call reports, covering all banks in the US... From the Summary of Deposits (provided by the FDIC), I obtain data on the location and amount of deposits in each branch of a US bank for the years 2002 and 2022.''

Such data not available to researchers for European banks: best way to get better sense of systemic risk in Europe: make data available to researchers