Enhancing liquidity risk management frameworks in response to regulatory changes and market events: Lessons from recent bank collapses

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Executive summary

The collapse of Silicon Valley Bank (SVB), First Republic Bank (FRB) and Signature Bank has exposed various gaps in the liquidity risk management landscape, resulting in heightened regulatory focus in the US and EU regions throughout the spectrum of risk management. These aspects include capturing risks from new products, enhancing risk governance and escalation frameworks and, finally, improving banks' ability to incorporate diverse stress scenarios and both systemic and idiosyncratic triggers into their risk models. The focus is on ensuring that banks demonstrate resilience in managing adequate liquidity during periods of stress through capabilities testing.

It is therefore imperative for banks to bridge gaps in liquidity risk management and strengthen their current frameworks to ensure prudent risk management, adequate model sustainability and efficient escalation processes. In addition to complying with actual regulatory changes, banks should pre-emptively capture the enhancements recommended by the regulators via guidance issued after the collapse of SVB and FRB.

Regardless of whether these recommendations are finalised as regulations, banks should enhance their ultra-short-term risk capture and mitigation practices. They must also be prepared to demonstrate operational capabilities to adjust models by incorporating real-time stress triggers in their risk management metrics.

Table of contents

Risk capture and pathway (introduction of incremental metrics)

Banks must capture risks arising from both existing and new products across stress scenarios using bank-specific and stress data of peer banks with similar balance sheets in accordance with regulatory metrics, as well as internal bank-specific risk metrics.

Capturing the risk pathway requires projections across time periods, including peak stress, stabilisation and recovery periods, using metrics such as long-term stress, bankruptcy scenario, intraday stress and internal liquidity adequacy assessment process (ILAAP). Accordingly, the following sections discuss the gaps in the current risk management framework based on regulatory guidance and insights from recent market events:

1. Revamping risk models based on regulatory changes

a. Plausible introduction of the 5-d Fed liquidity coverage ratio (LCR) for mid- to large-sized banks (>USD 100 billion in assets)

Acting Controller of the Currency Michael Hsu, in his January 2024 speech,[1] highlighted potential changes to regulatory requirements including the introduction of the 5-day LCR, in addition to LCR with higher run-off factors for uninsured deposits.

- **Driver:** Potential changes have been discussed after the >25% single-day uninsured flows recorded at SVB in March 2023, indicating the need for a run-off factor exceeding 10%, as defined by the LCR.

- **Implication for banks:** Considering the speech by the Office of the Comptroller of the Currency (OCC), banks should pre-emptively increase run-off rates for uninsured deposits based on actual bank-specific stress data or stress data of peer banks. Measures should include bank-specific management buffers to mitigate the risk driven by speedy one-click withdrawals during periods of stress.

- Banks may also choose to incrementally calibrate outflow risk metrics for 5-day, 12-month and 18-month scenarios to assess their resilience across time spans, ranging from ultra-short-term to long-term stress, in addition to the existing LCR.

- **Impact on liquidity risk management:**
  a. Increased pre-funding requirements for uninsured deposits
  b. Reduced dependency on uninsured deposits through funds transfer pricing (FTP) as lower rebates are transferred to deposits, increasing business for uninsured deposits
  c. Lower outflows during stress because of lower dependence on uninsured deposits

1. Hsu, Michael. 2024. 'Building Better Brakes for a Faster Financial World'. Transcript of speech delivered at Columbia Law School, 18 January 2024: https://www.occ.gov/news-issuances/speeches/2024/pub-speech-2024-4.pdf10. https://www.rbi.org.in/Scripts/QuarterlyPublications.aspx?head=Household+Financial+Savings

b. Possibility of mandatory compliance with Fed daily LCR by Category III (USD 250 billion–USD 700 billion in assets) and Category IV (<USD 250 billion in assets) banks

- Based on the OCC speech,[2] Category III banks may be required to produce daily LCR metrics for frequent monitoring and escalation of stress events and effective contingency funding planning (CFP).
- **Implications for banks:**
  a. Increased resource requirement for production of daily metrics
  b. Need to maintain prudently calibrated playbooks indicating CFP actions required at various levels of early warning indicators (EWIs)
- **Impact on liquidity risk management:**
  a. Better visibility of banks' stress metrics through daily calculation of such metrics (e.g. LCR, net stable funding ratio [NSFR] and internal Pillar 2 metrics)
  b. Banks' adherence to playbooks for taking contingent funding planning actions based on EWIs systematically during stress events

c. Imperative requirement for incremental bankruptcy stress scenario and currency-level outflows by Single Resolution Board (SRB)[3] in the EU region under the 2021 SRB guidance

- Banks in Europe, the Middle East and Africa (EMEA) region are required to capture risk outflows for incremental 'slow-moving' scenarios in addition to the pre-existing short-term runway stress scenario and project currency-specific outflows during bankruptcy periods by the end of 2023.
- In slow-moving scenarios, banks are expected to come to a resolution no earlier than 12 months after the start of the crisis.
- **Impacts**
  a. More conservative pre-funding framework which is calibrated as per an incremental stress scenario in addition to usual bankruptcy scenario
  b. Better capability planning to incorporate real-time changes in stress events for better risk mitigation through tested capabilities for taking quicker CFP actions
  c. Increased visibility on currency-specific exposures, leading to improved ability to manage currency or region-specific stress events by avoiding overconcentration

2. 'OCC speech dated 18 January 2024: https://www.occ.gov/news-issuances/speeches/2024/pub-speech-2024-4.pdf
3 . SRB ('Liquidity and Funding in Resolution: Operational Guidance for 2021'. Single Resolution Board. 30 April 2024.) guidance on resolution scenarios in the EMEA region: https://www.srb.europa.eu/system/files/media/document/2021_04_30_public_guidance_on_liquidity_and_funding_in_resolution_final.pdf

2. Self-identified enhancements in response to market events

a. Introduction of concentration monitoring for net pre-funding exposure

- **Drivers – 2023:** The banking crisis has demonstrated the importance of sectoral concentration monitoring, where exposure to certain sectors, geographies etc., can lead to escalated run-offs during stress.

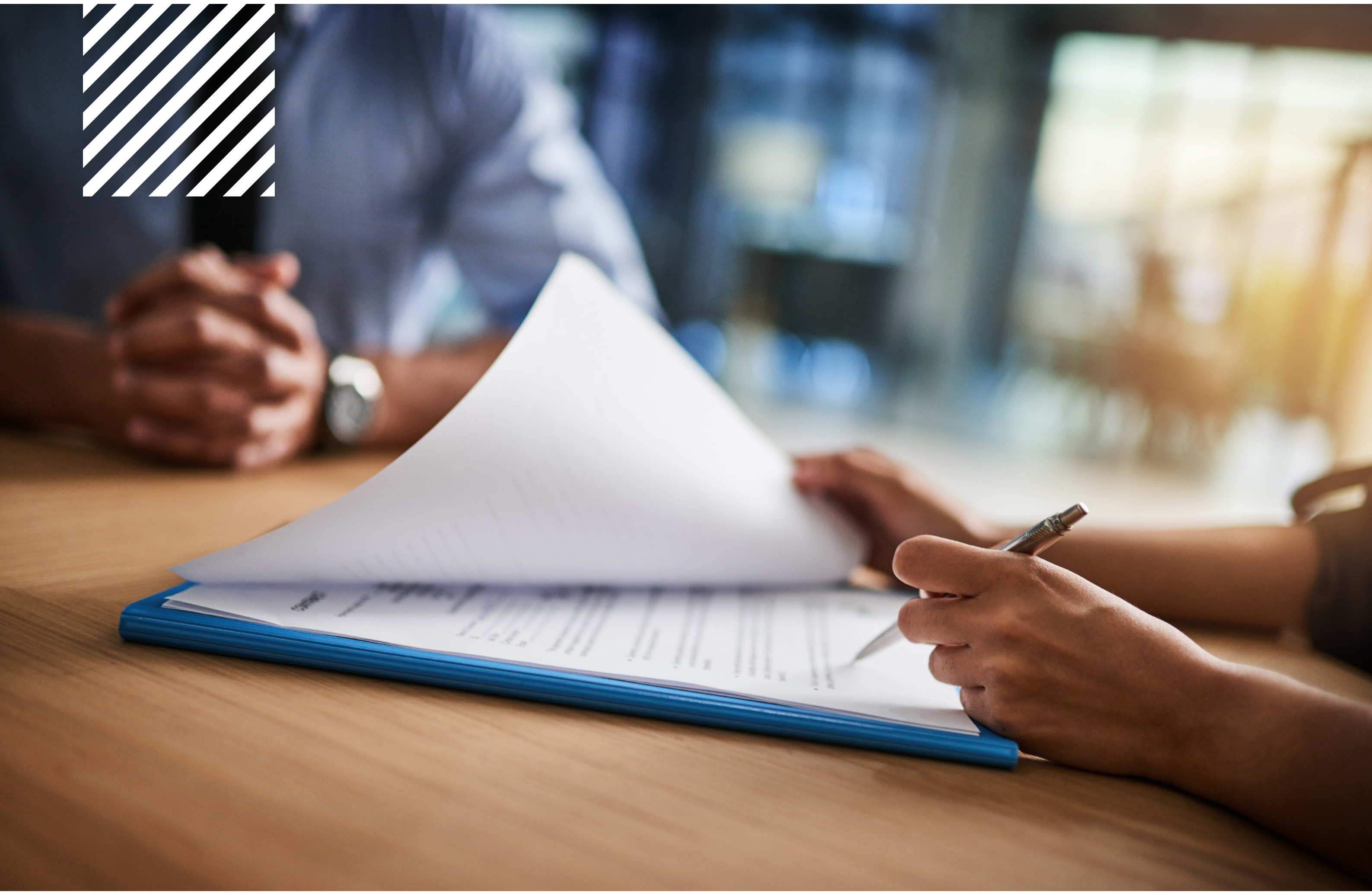
- Therefore, calibrating sectoral and regional limits can help limit the funding concentration and reduce the likelihood of tail risk events during risk events pertaining to specific sectors.

- **Implication for banks:** Banks should develop mechanisms to calibrate sectoral and geographical concentration limits on a net pre-funding basis using parameters such as funding strategy and historical capability to raise funds in stress situations.

- **Impact on liquidity risk management:**

  a. Enhanced monitoring and escalation frameworks that represent actual risk without the pre-funding amount

  b. Model improvements to ensure lower sectoral or regional concentration on a net basis



Risk governance (monitoring and escalations)

Signalling severity of stress to senior management as per prudently designed escalation playbooks to ensure frequent monitoring of EWIs and timely escalations to the board

1. Revamping risk models based on regulatory changes

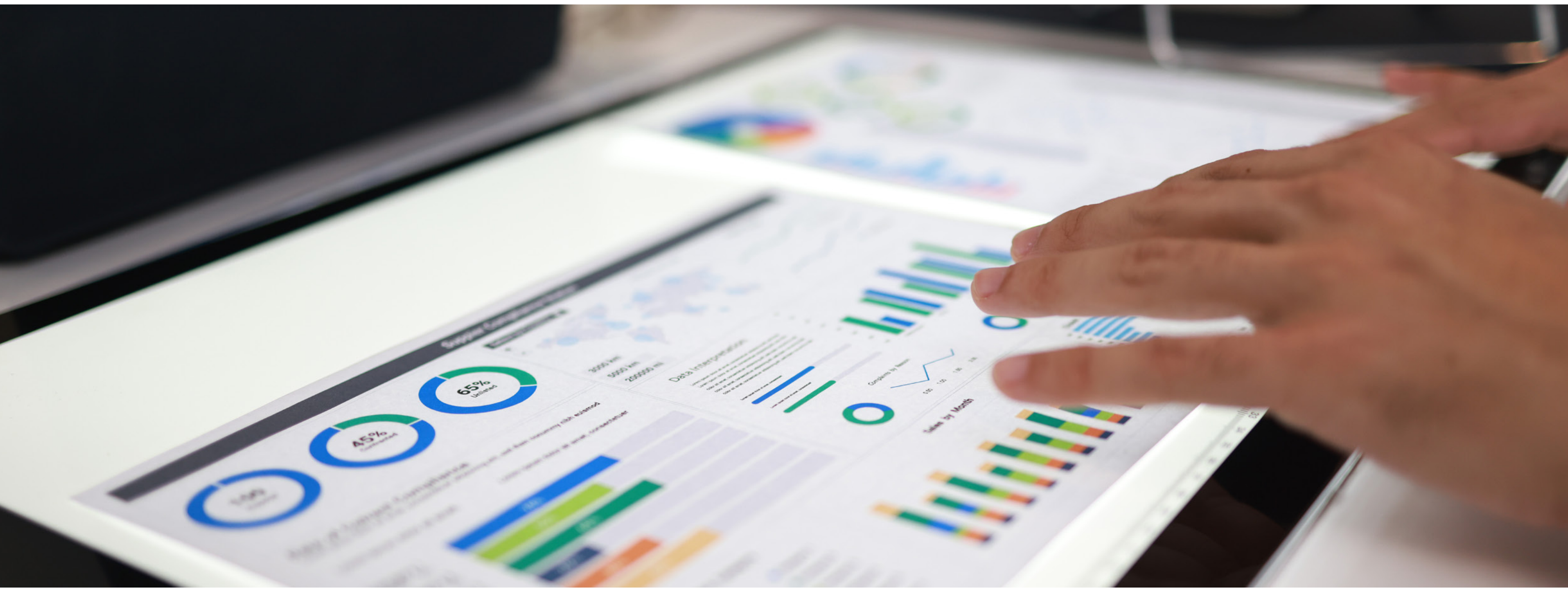
a. Plausible introduction of the 5-d Fed LCR for mid- to large-sized banks (>USD 100 billion in assets)

- Acting Controller of the Currency Michael Hsu, in the January 2024 speech,[4] highlighted potential changes to regulatory requirements, including the introduction of the 5-day LCR.
- **Implication for banks:** This raises the need for banks to set up EWIs for 5-day high-quality liquid assets (HQLAs) and 5-day net cash outflows (NCOs) in addition to the 30-day LCR based on internal funding planning strategy and capacity to raise funds during peak stress events. The risk appetite statement (RAS) indicators should also incorporate additional buffers on top of the regulatory thresholds in the future – once the regulator defines the threshold formally.
- **Impact on liquidity risk management:**

  a. Increased monitoring of short-term stress events through 5-day NCO and 5-day HQLA

  b. More timely mitigation of crisis as risks tend to be more front-loaded

  c. Improved short-term resilience of banks



4. Hsu, Michael. 2024. 'Building Better Brakes for a Faster Financial World'. Transcript of speech delivered at Columbia Law School, 18 January 2024. https://www.occ.gov/news-issuances/speeches/2024/pub-speech-2024-4.pdf

2. Self-identified enhancements in response to market events

a. Setting up concentration monitoring limits for net pre-funding exposure

- Lack of transparency of the actual risk to the management and regulators was one of the drivers of the SVB crisis. SVB was exempt from reporting regulatory limits to regulators because of its size.
- A prudent escalation framework is therefore mandatory to ensure resilience during stress.
- **Implication for banks:** Thresholds for senior management or board level escalations should be based on factors such as current exposure levels and bank-specific capability to raise funds at times of stress. based on Michael Barr[5] and Michael Hsu's speech on the 2023 banking crisis.
- Additionally, the calibration of EWI metrics should be independently reviewed at least annually by teams whose incentives are not linked to either profits or risk metrics. Teams should review the data behind the calibration, challenge assumptions and benchmark calibration based on multiple historical or recent stress scenarios.
- **Impact on liquidity risk management:**
  a. Improved resilience in the event of sector - or region-specific tail stress events due to reduced risk of outflows

5. 'The Importance of Effective Liquidity Risk Management' by Michael Barr Transcript of speech delivered at ECB Forum on Banking Supervision, Frankfurt, Germany, 1 December 2023: https://www.bis.org/review/r231204l.pdf

Risk mitigation and risk capabilities testing (corrective actions and systematic simulations)

Banks are required to maintain an asset unwind playbook based on liquidity as part of prompt corrective actions in the CFP playbook, which should evolve based on changes in business strategy.

Furthermore, banks are required to test these actions to ensure that they possess necessary operational capabilities to implement escalation mechanisms and undertake CFP measures during actual stress events.

1. Risk mitigation capabilities based on regulatory changes

a. Guidance on the effectiveness of operational capability to mitigate risks through central bank discount windows in response to the 5-d Fed LCR

- **Implication for banks:** In addition to increased risk factors for higher risk capture from uninsured deposits, the benefit from collaterals pledged against funding-diversified wholesale (FDW) needs to be accounted for in the 5-day LCR.
- To ensure banks' ability to use FDW, capability testing of FDW access for ultra-short-term stress should be conducted every quarter or half-yearly by reviewing asset availability, haircuts involved and model simulation.
- **Impact on liquidity risk management:**

  a. Reduced the stigma associated with FDW usage

  b. Reduced over-reliance on FDW for long-term LCR

  c. Improved short-term resilience of banks in acute stress scenarios

2. Self-identified enhancements in response to market events

a. Plausible enhancement of operational capability to test asset monetisation

- One of the main drivers of SVB crisis was the bank's inability to liquidate assets quickly, highlighting the criticality of a prudent liquidity assessment framework for asset monetisation.
- **Implication for banks:** To ensure operational capability to liquidate assets, risk managers should liaison with trading/repo business desks to understand liquid and readily marketable (LRM) eligibility of assets on at least a quarterly basis by getting trade volumes, actual price or bid offer quotes, and market makers and participants in both stress and business-as-usual (BAU) periods.
- This data can be verified or sourced through systems/external vendors, and the cost of funding charged to the asset desk should reflect the level of LRM eligibility.
- **Impact on liquidity risk management:**

  a. Verified liquidity of assets enabling banks to easily liquidate assets in actual stress scenarios

  b. Improved metrics and lower cost of funding due to decreased dependency on new funding during stress

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