Implementation of Basel III Liquidity Requirements in Emerging Markets

Christopher Wilson

Monetary and Capital Markets Department
International Monetary Fund
October 20, 2016
Outline

1. Recap of BIII liquidity framework
2. LCR deep dive
3. General implementation issues
4. Issues for EMDEs
1. BIII Liquidity framework
BIII liquidity framework consists of three elements:

- LCR
- NSFR
- Sound Principles
Basel III introduces two new metrics

Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NFSR)

Two complementary metrics with different time horizons

- **LCR**: to ensure that a bank maintains an adequate level of unencumbered, high quality assets that can be converted into cash to meet liquidity needs for a 30-day time horizon under an acute liquidity stress scenario.

- **NSFR**: a full balance-sheet metric, compares an estimate of reliable funding sources to an estimate of required stable funding over the 1 year horizon, under more prolonged but less acute stress than in the LCR.

<table>
<thead>
<tr>
<th>Stock of High Quality Liquid Assets</th>
<th>Available Amount of Stable Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash out over 30-day period under stress</td>
<td>Required Amount of Stable Funding</td>
</tr>
</tbody>
</table>
BIII also introduced risk management principles

**BCBS 2008**

- **Liquidity risk tolerance**
- **Adequate liquidity cushion**
- **Allocate costs, benefits and risks**
- **Identify & measure full range of liquidity risks**
- **Market discipline**
- **Intraday liquidity risk and collateral**
- **Contingency funding plan**
- **Severe stress scenarios**

Detailed guidance on the risk management and supervision of funding and liquidity risk
BIII is a comprehensive framework for liquidity

Risk management

**Qualitative risk management**
- Governance, Board, ALCO
- Contingency funding plans
- Stress testing, scenario analysis

**Quantitative limits**
- ST Limits e.g. HQLA to total liabilities
- LT limits e.g. maturity mismatch
2. LCR deep dive
Liquidity is central to understanding banks, risks

- Sources of funding
- Cost of funds
- Growth of balance sheet
- Business model

HQLA
LCR provides a solid foundation for supervising short-term liquidity risk

- Based on stressed assumptions of assets and liabilities
- Rigorous eligibility for HQLA
- Encourages better management of liabilities
Aims to encourage ST resilience to liquidity shocks

**LCR**
- Measure for short-term liquidity position (30 days)

**Calculation**
- \( LCR = \frac{\text{Stock of HQLA (high quality liquid assets)}}{\text{Total net cash outflows}} \)
- Total net cash outflows = Total cash outflows minus min\([\text{total cash inflows}, 75\% \text{ of gross outflows}]\)

**Purpose**
- Banks to hold enough HQLA to survive a significant stress scenario lasting 30 days
- Stress scenario includes higher cash outflow and lower inflow
Introduces strict criteria for assets eligible as HQLA

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 assets</td>
<td>100%</td>
</tr>
<tr>
<td>• Coins and bank notes</td>
<td></td>
</tr>
<tr>
<td>• Marketable securities from sovereigns, CBs, PSEs and MDBs with 0% RW</td>
<td></td>
</tr>
<tr>
<td>• CB reserves</td>
<td></td>
</tr>
<tr>
<td>• Domestic sovereign or CB debt for non-0% RW sovereigns</td>
<td></td>
</tr>
<tr>
<td>Level 2 assets (up to 40% of HQLA)</td>
<td>85%</td>
</tr>
<tr>
<td>• Sovereign, CB, MDB and PSE assets with 20% RW</td>
<td></td>
</tr>
<tr>
<td>• Corporate debt securities and covered bonds rated AA– or higher</td>
<td></td>
</tr>
<tr>
<td>Level 2B assets (up to 15% of HQLA)</td>
<td>75% 50% 50%</td>
</tr>
<tr>
<td>• RMBS rated AA– or higher</td>
<td></td>
</tr>
<tr>
<td>• Corporate debt securities rated between BBB– and A+</td>
<td></td>
</tr>
<tr>
<td>• Common equity shares in major index</td>
<td></td>
</tr>
</tbody>
</table>

But additional conditions apply

• Need to be traded in large, deep active repo or cash markets
• Proven record even during stressed market conditions
• Not issued by a financial institution or affiliated entities (excl. covered bonds)

Operational requirements also apply

• Unencumbered
• Under the control of the function in charge of liquidity management (e.g., Treasure)
• Under the bank’s operational capability to monetize
• Periodically monetized to test the bank’s access to markets
Applies run–off assumptions to liabilities

### Retail deposits
- Stable deposits covered by eligible DGS: 3%
- Stable deposits: 5%
- Less stable deposits: 10%
- Term deposits with greater than 30 days maturity: 0%

### Unsecured wholesale funding
- Deposits by small business customers: 5% (stable) or 10% (less stable)
- Operational deposits (clearing, custody, cash management): 5% or 25%
- Non–financial corporations, sovereigns, CBs, MDBs: 20% or 40%
- Other legal entity customers: 100%

### Secured funding
- With CB or backed by Level 1 assets: 0%
- Backed by Level 2A assets: 15%
- With domestic sovereign, MDBs or PSEs: 25%
- Backed by Level 2B assets (other than RMBS): 50%
- All other transactions: 100%

### Off balance sheet items
- Maturing ABCP, SIVs SPVs: 100%
- Maturing ABS: 100%
- Commitment lines: 5% – 100% depending on customers
- Trade finance: 0% – 5%
## Allows cash inflows, with haircuts

<table>
<thead>
<tr>
<th>Types of contractual inflows within 30 days</th>
<th>Amount to be added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturing secured lending transactions backed by:</td>
<td></td>
</tr>
<tr>
<td>– Level 1A assets</td>
<td>0%</td>
</tr>
<tr>
<td>– Level 2A assets</td>
<td>15%</td>
</tr>
<tr>
<td>– Level 2B assets</td>
<td></td>
</tr>
<tr>
<td>– RMBS</td>
<td>25%</td>
</tr>
<tr>
<td>– Other assets</td>
<td>50%</td>
</tr>
<tr>
<td>– Margin lending backed by all other collaterals</td>
<td>50%</td>
</tr>
<tr>
<td>– Other collateral</td>
<td>100%</td>
</tr>
<tr>
<td>Credit or liquidity facilities provided to the bank</td>
<td>0%</td>
</tr>
<tr>
<td>Operational deposits held at other financial institutions</td>
<td>0%</td>
</tr>
<tr>
<td>Other inflows</td>
<td></td>
</tr>
<tr>
<td>– From retail counterparties</td>
<td>50%</td>
</tr>
<tr>
<td>– From non-financial wholesale</td>
<td>50%</td>
</tr>
<tr>
<td>– From financial institutions and CBs</td>
<td>100%</td>
</tr>
</tbody>
</table>
3. General implementation Issues
Experience from adopting countries suggests LCR introduced benefits

- Lengthened maturity of wholesale funding
- Lower LDR ratios
- Funding assets now top of mind
- Reduced ST wholesale funding
- Reduced market-based financing
- Greater reliance on customer deposits
- Holding greater HQLA

Funding assets now top of mind
Availability of liquid assets a main challenge

- Some countries do not have sufficient HQLA in their own currency

- Alternatives exist for qualifying jurisdictions
  - Option 1: contractual committed liquidity facilities from the central bank
  - Option 2: FX HQLA to cover domestic currency needs
  - Option 3: Additional use of Level 2 assets with higher haircut
ALA options are there, but aren't simple

**Option 1: CLF**
- Does not change banks' asset and liability characteristics
- Difficult to design and calibrate to provide right incentives

**Option 2: Use of foreign currency HQLA**
- For banking systems with high levels of liquid foreign assets
- Could introduce higher foreign exchange risk

**Option 3: Additional use of Level 2 assets**
- For jurisdictions with deep and well-developed capital markets
- Needs careful assessment of true liquidity of L2 assets during times of stress
Calibration of run-off assumptions also a challenge

- Treatment of non-maturity deposits
  - Is ‘at call’ sticky or not?

- Segregation of assets into buckets
  - ‘Stable’ vs ‘less stable’

- Applying accurate run-off rates based on historical experience
  - Adequate data
Other considerations

Over-crowding of certain assets
- Concentrations
- Assets may become illiquid and/or more expensive

Interaction between liquid assets, profitability, asset quality and capital
- Drag on yield

Reliance on external credit ratings
- LCR uses the risk-weights of Basel II Standardized Approach; Downgrade and cliff risks
Implementation challenges for EMDEs similar, but more acute

- Higher reliance on deposit for funding, but stability of deposits?
- Lack of capital markets as a source of bank funding, no secondary markets
- Dearth of highly liquid assets, even domestic sovereign bonds may not be easily cashable
Additional implementation issues for EMDEs

- May further entrench the bank–sovereign loop
  - In the case of higher sovereign credit risk, may increase the risk profile of banks and banking systems

- Fixed or pegged exchange rate, the LCR has the potential to introduce several policy questions
  - Prudent reserve management practices to ensure increased demand for FX does not place a stress on FX reserves needed to support the currency
  - Potential pressure on the peg in the event central bank is called upon to provide liquidity to the system

- Supply of dollar liquidity
  - For EMDEs that are dollarized, the central bank is the lender of last resort but not able to print FX
4. Implementation for EMDEs
Liquidity Regulation post crisis

BCBS MEMBERSHIP

- Argentina
- Australia
- Belgium
- Brazil
- Canada
- China
- European Union
- France
- Germany
- Hong Kong
- India
- Indonesia
- Italy
- Japan
- Korea
- Luxembourg
- Mexico
- Netherlands
- Russia
- Saudi Arabia
- Singapore
- South Africa
- Spain
- Sweden
- Switzerland
- Turkey
- United Kingdom
- United States

Internationally Active Banks

- NSFR
- LCR

SOUND PRINCIPLES

Non-Internationally Active Banks

LOCAL RULES

SOUND PRINCIPLES

Compliance with Basel Core Principles
Practical Approach to Implementing the LCR

- Conduct QIS
- Understand composition of assets and liabilities
- Identify liquidity situation based on a standardized LCR calibration

National discretion

- Look into stability of liability items (e.g., deposits) and liquidity of asset categories (Level 2B assets)
- Consider use of national discretion to adjust the LCR framework

ALA treatment

- See how much HQLA will be needed and whether it would be practical to expect banks to increase their HQLA holding
- Consider use of ALA treatment, carefully examining pros and cons of each option
# Implementation through a strategic roadmap

<table>
<thead>
<tr>
<th>Basel III – Liquidity</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity Coverage Ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishment of a team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perform initial stock-take from QIS 1 and issue draft guidelines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue QIS with specific guidance to industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assess QIS 2 results and issue final regulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance the current long-term liquidity ratio framework</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enhancement of Supervisory Framework</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate the ICAAP (SREP) review with the onsite supervision activities to produce a more risk-based approach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systemize and deepen the relationship management supervision model for Bank and consider extending this approach for other banks (particularly D-SIBs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redefine the role of offsite teams to ensure they have better linkages into the continuous risk assessment of banks (e.g., CAMELS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LCR monitoring tools will help strengthen offsite supervision
If not implementing LCR now?

**LCR: good benchmark for own requirements**

- Definition of liquid assets robust enough?
- Penalize Short-term wholesale funding?
- Reward stable source of funding (e.g., retail deposits)?
- Cover all possible cash outflows (e.g., off-B/S items)?

**Convergence to LCR as a future target**

- Follow the key concepts of LCR
- Gradually move closer to LCR
Summary

- **B3 reforms**
  - Comprehensive regulatory framework for liquidity
  - Significantly strengthen resilience of banks to liquidity shocks, disruptions to funding markets
  - Binding for internationally active banks
  - Changed business models, almost there

- **Liquidity regulation for non-internationally active banks**
  - Sound Principles, Basel Core Principles and local prudential ratios
  - Basel III desirable on a time line that makes sense, takes into consideration local characteristics,
  - TA proved effective at identifying issues, helping transition
Key resources

- *Managing Liquidity Risk*, Swift, June 2011
Questions?

Contact: cwilson@imf.org