Overview: FSA aims to strengthen liquidity standards

- Identifies ten liquidity risk drivers, which analyze liquidity strength of financial institutions
- Liquidity risk drivers are included in liquidity stress scenarios, which in turn are used to size the liquidity buffer
- No standard rules used to build stress scenarios or size liquidity buffer (except for “simpler firms”). Instead the FSA will make an individual determination based on a detailed liquidity audit

### Ten Liquidity risk drivers
- Wholesale funding
- Intra-group liquidity
- Intra-day liquidity
- Cross-currency liquidity
- Retail funding
- Off-balance sheet liquidity
- Franchise-viability risk
- Marketable assets
- Non-marketable assets
- Funding diversification

### Liquidity Stress Scenarios
- Idiosyncratic stress scenario
  - Acute cash outflows (no rollovers) in first two weeks followed by a sustained gradual leakage of funds long term
- Market-wide scenario (3 months)
  - Gradual leakage of funds

### Liquidity Buffer
- Cash and government securities from following countries
  - European Economic Area (EU)
  - Switzerland
  - United States
  - Canada
  - Japan
  - Australia

### Individual Liquidity Adequacy Standards (ILAS)

### Individual Liquidity Adequacy Assessment (ILAA) and Supervisory Liquidity Review Process (SLRP)

### Individual Liquidity Guidance (ILG) including size of liquid asset pool
Individual Liquidity Adequacy Standards (ILAS)

- Premise of ILAS:
  - **Adequate Liquidity**
    - Firms have adequate liquidity at all times, and to limit the amount of liquidity risk they run.
  - **Self-sufficiency**
    - Branch not permitted to rely on other part of their group to satisfy the overall liquidity adequacy rule. Therefore must be:
      - Under the day-to-day control of the branch’s senior management;
      - Held in the account with one or more custodians in the sole name of the UK branch;
      - Unencumbered;
      - Attributed to the balance sheet of the branch.
    - Equivalence assessment of home regulator.
    - Creditor preference not to detriment of UK depositors.
    - All modifications.
Bank conducts Individual Liquidity Adequacy Assessment (ILAA)
- Stress test performed at least once a year and results analyzed.
- Senior management reviews and reports outcome to Board.
- Board involved in:
  - optimal size of liquid asset buffer;
  - develops contingency funding plan (CFP);
  - Internal limits or day-to-day liquidity management policies

FSA conducts Supervisory Liquidity Review Process (SLRP)
- Reviews results of ILAA using a risk-based approach.
- Iterative process between FSA and bank.
- Confirms satisfaction of bank ILAA.

FSA issues Individual Liquidity Guidance (ILG)
- Size of liquid asset buffer & funding profile that “ensures” firm passes combo stress test.
- Bank must stick to ILG at all times - excluding phase-in.
- Proactively report a breach, with immediate use CFP to remedy it.
ILAA - the stress testing environment

FSA:
- Specific
- Systemic
- Combined

CFP:
- Stress test results feed into design.
- Identify a range of potential funding sources that can be utilised during a liquidity stress.
- Amount, speed of access, environment & risks of use.
- Approved & reviewed by Board.

SLRP

ILG
ILAA - stress testing assumptions

- **MM**
  - Wholesale deposits fail to roll over & retail leakage;
  - Repo funding only active in Government securities;
  - Downgrade triggers;
  - Contingent Liability.

- **Collateral**
  - Government debt;
  - EU, AU, CA, CH, JP & US (min: Aa3).

- **FX**
  - No access for the first 2 weeks.

- **Survival Period**
  - 14 days (standard), but vary between individual institutions;
  - Stress period 12 weeks.

- **Use of CB facilities - NO**
  - OMO – probably;
  - BOE SLF – possibly.

<table>
<thead>
<tr>
<th>First two weeks of stress</th>
<th>Remainder out to three months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflowsyncratic impact</td>
<td>Sustained leakage of funds</td>
</tr>
<tr>
<td>Inability to roll over wholesale funding that is: (i) unsecured from credit-sensitive depositors or (ii) not secured on the most liquid securities.</td>
<td>Sustained outflow</td>
</tr>
<tr>
<td>Sizeable retail outflow</td>
<td>N/A</td>
</tr>
<tr>
<td>Reduction in amount of intra-day credit provided to a customer by its settlement bank; Increase in payments withheld to a direct participant by its counterparties; and Increase in need for all firms (both direct and indirect participants) to make payments.</td>
<td>N/A</td>
</tr>
<tr>
<td>Closure of FX markets</td>
<td>N/A</td>
</tr>
<tr>
<td>Intra-group deposits repaid at maturity, intra-group loans treated as evergreen.</td>
<td></td>
</tr>
<tr>
<td>Downgrade of long-term rating, proportional impact of all other downgrade triggers.</td>
<td></td>
</tr>
<tr>
<td>Market-wide impact</td>
<td></td>
</tr>
<tr>
<td>Uncertainty as to the accuracy of the valuation of a firm’s assets and those of its counterparties.</td>
<td></td>
</tr>
<tr>
<td>Inability to realise or ability to realise only at excessive cost particular classes of assets.</td>
<td></td>
</tr>
<tr>
<td>Risk aversion among participants in the markets on which the firm relies on for funding.</td>
<td></td>
</tr>
<tr>
<td>Uncertainty as to whether many firms will be able to meet liabilities as they fall due.</td>
<td></td>
</tr>
</tbody>
</table>

Source: FSA document 09/16
Liquidity Buffer

- **Assets:**
  - High quality Government bonds.
  - Multi-lateral development banks.
  - Eligible central bank reserves & their tradable securities.

- **Rating:**
  - At least Aa3/AA-.

- **Collateral Countries:**
  - EEA, CH, US, CA, JP & AU.

- **Currencies:**
  - GBP, EUR, USD, JPY, CHF, DKK, SEK, NOK, CAD & AUD
  - Non-collateral currencies: Firms given limited allowance within ILG when a local supervisor sets a requirement to hold a liquidity buffer in local currency.

- **Make-up:**
  - An appropriate mix of eligible assets and can not be constructed to "chase yield."

- **Turnover requirement:**
  - Sale or repo of liquid assets in private markets.

- **Standing Facilities:**
  - Required to access central bank facilities regularly (BoE, ECB, FED).
Costs

Breakdown of liquidity buffer requirement, by risk type

- Short-term wholesale funding 47%
- Client free cash balances 4%
- Undrawn facilities provided 14%
- Outflows linked to own credit rating 11%
- Corporate deposits 9%
- Intra-day 4%

Effect of reductions in the level of short-term funding on the size of the liquidity buffer

Liquidity buffer shortfall (in £bn) to industry assuming ILG is calibrated as:

<table>
<thead>
<tr>
<th>Reduction in short-term wholesale funding</th>
<th>100% of ILAA stresses</th>
<th>80% of ILAA stresses</th>
<th>60% of ILAA stresses</th>
<th>40% of ILAA stresses</th>
<th>20% of ILAA stresses</th>
<th>Amount of short-term funding in the system (funding &lt; 3 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>620</td>
<td>440</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td>500</td>
</tr>
<tr>
<td>20% reduction</td>
<td>530</td>
<td>370</td>
<td>110</td>
<td>0</td>
<td>0</td>
<td>400</td>
</tr>
<tr>
<td>40% reduction</td>
<td>450</td>
<td>310</td>
<td>70</td>
<td>0</td>
<td>0</td>
<td>300</td>
</tr>
<tr>
<td>60% reduction</td>
<td>370</td>
<td>240</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>80% reduction</td>
<td>290</td>
<td>180</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>100% reduction</td>
<td>210</td>
<td>110</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Cost to industry (in £bn) assuming ILG is calibrated as:

<table>
<thead>
<tr>
<th>Reduction in short-term wholesale funding</th>
<th>100% of ILAA stresses</th>
<th>80% of ILAA stresses</th>
<th>60% of ILAA stresses</th>
<th>40% of ILAA stresses</th>
<th>20% of ILAA stresses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>9.2</td>
<td>6.6</td>
<td>2.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20% reduction</td>
<td>8.5</td>
<td>6.1</td>
<td>2.2</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>40% reduction</td>
<td>7.8</td>
<td>5.7</td>
<td>2.2</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>60% reduction</td>
<td>7.2</td>
<td>5.2</td>
<td>2.1</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>80% reduction</td>
<td>6.5</td>
<td>4.8</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>100% reduction</td>
<td>5.9</td>
<td>4.4</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Source: FSA document 09/16
ILAS and Foreign Banks

- FSA default position
  - “Every UK legal entity and every UK branch must satisfy our quantitative requirements on a ‘self-sufficient’ basis.”
  - “However, branches and subsidiaries can apply for modifications from self-sufficiency, where statutory tests within the Financial Services and Markets Act 2000 are met.”

- Self-sufficiency modifications:
  - Whole firm liquidity modification
    - replaces current Global Liquidity Concession regime;
    - branch will no longer be subject to FSA quantitative ILAS regime;
    - conditions as set out in FSA CP 08/22,
  - Intra-group liquidity modification
    - only partial switch of ILAS regime;
    - branch can rely on some parental funding;
    - importance attached to supervisory equivalence and information exchange;
    - conditions as set out in FSA CP 08/22.
Implementation dates

- **FSA**
  - 1 Dec 2009: Phased introduction of Individual Liquidity Adequacy Standards (ILAS):
  - 31 May 2010: transitional arrangements end.
  - 1 June 2010: New ILG “Flight path” takes effect.

- **EU & RoW**
  - June 2010: Finalisation of common “minimum” recommendations on liquidity regulations. (C-EBS)
  - July 2010: Introduction of new liquidity regulations due in France (BdF/CB) and Australia (APRA) with both proposed to come into force by the end of the year.
Aims

- Over-arching principles of self-sufficiency & adequacy for liquidity resources;

- Enhanced systems & control requirements, which implement BCBS 17 principles;

- Updated quantitative requirements (ILAS), coupled with narrow definition of liquid assets;

- New modifications regime for branches and subsidiaries;

- Granular & frequent reporting requirements.
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