BASEL COMMITTEE ON BANKING SUPERVISION

BANK FOR INTERNATIONAL SETTLEMENTS

Basel III Liquidity Standards

FSI Seminar on Select Issues in Financial Stability

Basel, Switzerland

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Basel Committee on Banking Supervision

Agenda

- Lessons learnt from the recent crisis
- The BCBS Liquidity Standards
- Transitional Arrangements

Lessons Learnt

- Short-term wholesale funding leaves banks particularly exposed to a dry-up in funding liquidity.
  - Through increased reliance on repo financing
  - Through granting liquidity backstops to their off-balance sheet vehicles
- Liquidity should no longer be viewed as a freely available public good
- Risk management should address cross-border issues

The Response of the Basel Committee: The Introduction of a liquidity risk framework

- Revision of *Principles for Sound Liquidity Risk Management and Supervision*
- Development of two internationally harmonised minimum standards for funding liquidity
  - Quantitative requirements are needed to place a floor on excessive risk taking but are not sufficient to assess overall risk
- Development of a set of monitoring metrics

Intention of the reforms

- Improve liquidity risk management of banks
- Reduce reliance of banks on short-term wholesale funding
- Certainly many questions remain unresolved around liquidity risk
  - One-size-fits-all liquidity requirement?
  - Narrow bank v. universal bank?
  - Is liquidity a central bank issue?
- Not a "perfect" solution but a "good-enough" solution:
  - International efforts started in 1975. However, failed agreement on international liquidity risk management
  - Major issue is, can banks behave well with non-binding principles or even regulators?

Liquidity risk sound principles

- A fundamental review of the 2000 *Sound Practices for Managing Liquidity in Banking Organisations*
- *Principles for Sound Liquidity Risk Management and Supervision* issued in September 2008
  - Had banks followed the 2000 version, many of the liquidity problems could potentially have been averted
- 17 principles covering:
  - Fundamentals
  - Governance
  - Measurement
  - Disclosure
  - Role of supervisors

Liquidity risk sound principles

- Key aspects for effective liquidity risk management:
  - the board and senior management oversight
  - the establishment of policies and risk tolerance
  - the use of liquidity risk management tools such as comprehensive cash flow forecasting, limits and liquidity scenario stress testing
  - the development of robust and multifaceted contingency funding plans
  - **the maintenance of a sufficient cushion of high quality liquid assets to meet contingent liquidity needs.**

Liquidity standards

- Two internationally harmonised standards published in December 2010 document: *Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring*

  - Liquidity Coverage Ratio (LCR)
  - Net Stable Funding Ratio (NSFR)

Liquidity standards

- Liquidity Coverage Ratio

$$\frac{\text{Stock of high quality liquid assets}}{\text{Total net cash outflow over 30-day period}} >= 100\%$$

  – Promote short-term resilience by requiring sufficient high-quality liquid assets to survive acute stress lasting for 30 calendar days

- Net stable funding ratio

$$\frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} >= 100\%$$

  – Promote resilience over longer term through incentives for banks to fund activities with more stable sources of funding

- Taken together, prevent the types of pre-crisis vulnerability to liquidity shocks

LCR reflects liquidity stress event

- LCR assumes a severe stress that combines idiosyncratic and market-wide shock
- Scenario's main features:
  - Partial loss of retail deposit and wholesale funding capacities
  - primary and secondary asset markets (incl. repo and securitizations) dry up, except for assets that are assumed liquid under this standard
  - 3-notch downgrade (triggers)
  - Additional collateral or other liquidity needs
  - draw on credit and liquidity facilities offered to financial institutions (incl. to SPVs etc)
  - Need for buying back debt to mitigate reputational risk

LCR numerator: high-quality liquid assets

- Characteristics of high-quality liquid assets
  - Fundamental characteristics
    - Low credit and market risk
    - Ease and certainty of valuation
    - Low correlation with risky assets
    - Listed on a developed and recognised exchange market
  - Market characteristics
    - Active and sizable market
    - Presence of committed market makers
    - Low market concentration
    - Flight to quality
    - Ideally be eligible for central bank intraday needs and overnight liquidity facilities

Liquidity coverage ratio

- Stock of high quality liquid assets in relation to net cash outflows over 30-day stress period should be at least 100%
- Definition of liquid assets: two levels of assets
  - Cash and government bonds
  - Corporate bonds and covered bonds subject to a 40% cap
- Treatment for jurisdictions with insufficient liquid assets

LCR: Liquid Assets Pool

Illustrative Template for the LCR

Item	Factor (to be multiplied against total amount)	Total amount	With factor applied
Stock of high-quality liquid assets			
A. Level 1 assets:			
Cash	100%		
Qualifying marketable securities from sovereigns, central banks, public sector entities, and multilateral development banks	100%		
Qualifying central bank reserves	100%		
Domestic sovereign or central bank debt in domestic currency	100%		
Domestic sovereign debt for non-0% risk weighted sovereigns, issued in foreign currency	100%		
B. Level 2 assets:			
Sovereign, central bank, and PSE assets qualifying for 20% risk weighting	85%		
Qualifying corporate bonds rated AA- or higher	85%		
Qualifying covered bonds rated AA- or higher	85%		
Calculation of 40% cap of liquid assets	Maximum of 2/3 of adjusted Level 1 assets that would exist after an unwind of all secured funding transactions, as in paragraph 36.		
Total value of stock of highly liquid assets			

LCR: Inflows and Outflows

LIQUIDITY COVERAGE RATIO (LCR) : INFLOWS AND OUTFLOWS*

	Outflows		Inflows
RETAIL AND SMALL BUSINESS CUSTOMERS COUNTERPARTIES			
Term Deposits (mat>30 days)**	0%	Repayments and interest received on loans.	50%
Stable Deposits	5%		
Less stable deposits	10%		
UNSECURED WHOLESALE FUNDING / LENDING			
Operational relationships***	25%	Operational deposits	0%
Cooperative banks in a network (applies to centralised institution (CI))	25%	Qualifying deposits with CI	0%
Non-financial corporates, sovereigns, CBs and PSEs****	75%		50%
Other legal entity customers (eg FIs, hedge funds etc)	100%	Lending Bank	100%
SECURED FUNDING / LENDING			
Backed by Level 1 assets, any counterparty	0%	Lending Bank	0%
Backed by Level 2 assets, any counterparty	15%	Lending Bank	15%
Backed by non-Level 1 or 2 assets, & domestic Sov., CB or PSE counterparty	25%	Lending Bank	100%
Other secured funding (including from FIs)	100%	Lending Bank	100%
DERIVATIVES, STRUCTURED FINANCE (SF) AND OTHER CONTRACTUAL FLOWS			
Net derivatives payable	100%	Net derivatives receivable	100%
Other contractual cash outflows	100%	Other contr. cash inflows	100%
Triggers in derivative and other trans. (for collateral calls up to 3 notch downgrade)	100%		
Valuation changes on non Level 1 collateral securing derivatives and other transactions	20%		
ABS, covered bonds, other SF, ABCP, conduits, SIVs, SPVs etc (maturing or returnable)	100%		

Net stable funding ratio

- Relation between available amount of stable funding (ASF) to required amount of stable funding (RSF) should be greater than 100%
- ASF: eg capital, liabilities above 1 year, portion of other deposits
- RSF: assets held by the bank multiplied by a specific RSF factor – the more liquid the asset, the lower the factor

NSFR: Required Stable Funding Factors

NSFR: REQUIRED STABLE FUNDING FACTORS (RSF) *

	LOANS					MARKETABLE SECURITIES and GOLD					
	Financial Entities	Corporate	Sov./CB/PSE/MDBs..	Retail & small business customers	Residential Mortgage [35% RW]	Financial Entities	Corporate & Covered Bonds		Sov./CB/PSE/ MDBs..		Gold & Equity
							≥ AA- (Level 2)	A+ to A-	0% RW (Level 1)	20% RW (Level 2)	
Mat <1 Year	0%	50%	50%	85%***	65%	0%	0%	0%	0%	0%	50%
Mat ≥ 1 Year	100%	100%**	100%**	100%***		100%	20%	50%	5%	20%	

* All assets are unencumbered. Cash is assigned a 0% RSF. Securities held where the institution has an offsetting reverse repo are assigned a 0% RSF. A 5% RSF is applied to the undrawn portion of conditionally revocable and irrevocable credit and liquidity facilities to any client.

** other than those qualifying for the 35% RW.

*** Other than residential mortgage.

NSFR: Available Stable Funding Factors

<table>
<tr><th colspan="7">NSFR: AVAILABLE STABLE FUNDING FACTORS (ASF)</th></tr>
<tr><th rowspan="2"></th><th rowspan="2">Regulatory Capital</th><th rowspan="2">Preferred Stock (not in regulatory capital)</th><th colspan="2">Borrowings and liabilities</th><th colspan="2">Demand and/or Term Deposits</th></tr>
<tr><th>Other</th><th>Unsecured and provided by Non FI corporate, Sov., CB, MDB and PSEs.</th><th>Stable</th><th>Less Stable</th></tr>
<tr><td>Mat <1 Year</td><td rowspan="2">100%</td><td>0%</td><td>0%</td><td>50%</td><td>90%</td><td>80%</td></tr>
<tr><td>Mat ≥1 Year</td><td>100%</td><td colspan="2">100%</td><td colspan="2">100%</td></tr>
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Monitoring QIS process

Year 2010 QIS results

- LCR:169 banks provided sufficient data. End-2009
  - The average LCR was 83% for group 1 banks (ranging from 50% to 140%) and 98% for group 2 banks (ranging from around 50% to 180%). 46% of banks already meet or exceed. Shortfall of Euro 1.73 trillion.
- NSFR:166 banks provided sufficient data. End 2009
  - The average NSFR was 93% for group 1 banks (ranging from 80% to 110%) and 103% for group 2 banks (ranging from 80% to 120%). 43% banks already meet or exceed. Shortfall of Euro 2.89 trillion.

Transitional arrangements

The introduction of internationally harmonised liquidity standards represent unprecedented challenges, so careful transition and implementation is vital

- LCR revision by mid 2013, fully applied 1-1-2015
- NSFR revision by mid 2016, fully applied 1-1-2018

the observation period is used to review the implication of the standards for financial markets, credit extension and economic growth, addressing unintended consequences as necessary.

Ongoing work of the Committee

The Committee established a number of workstreams to analyse the impacts of the standards on markets, macro economy and central bank operations

- QIS and FAQs
- Bank interviews
- Penalty function and draw down of the liquidity pool
- Impact on central bank operations
- Remaining issues surrounding the NSFR
- Common reporting
- Sound principle review
- Additional criteria for level 2 assets
- Intraday liquidity
- Development of new products
- Jurisdiction without sufficient high quality liquid assets
- Scope of application

Closing remarks

- Comprehensive response from the BCBS to address liquidity risk and lessons from the crisis
- Benefits for having appropriate liquidity buffer and a robust liquidity profile
- The introduction of internationally harmonised liquidity standards represent unintended challenges, so careful transition and implementation is vital

Thank you!