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An overview of the LCR, NSFR and LR

12 April 2016

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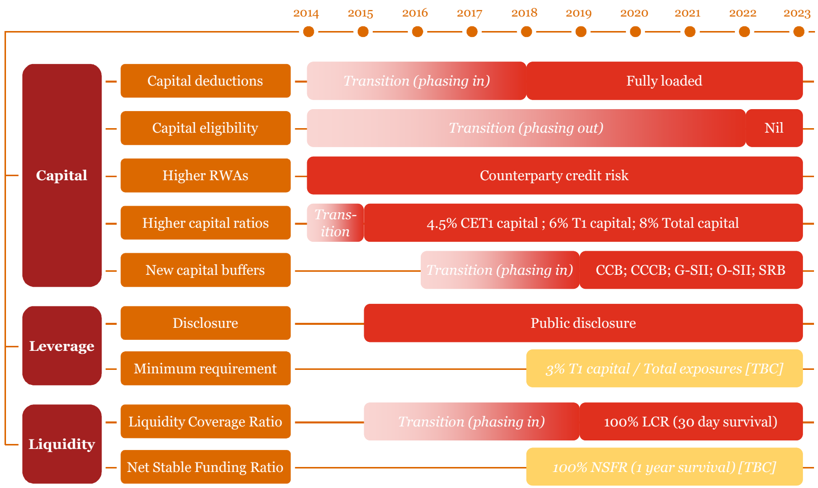
Agenda

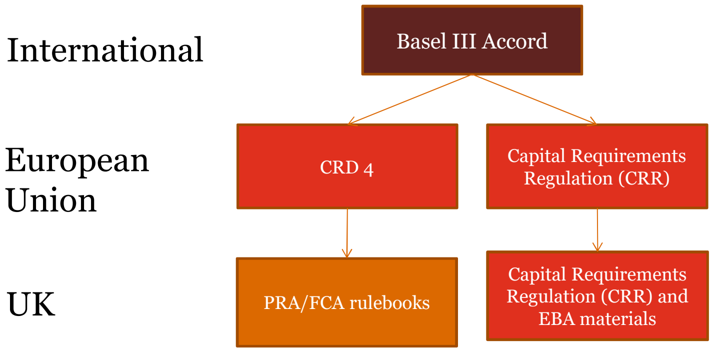
1. Basel III overview – where these ratios fit in
2. Leverage Ratio
3. Liquidity and Net Stable Funding
4. Interaction between the ratios

1. Basel III overview – where the ratios fit in

Basel III: Overview and timeline



Basel III: Regulatory hierarchy



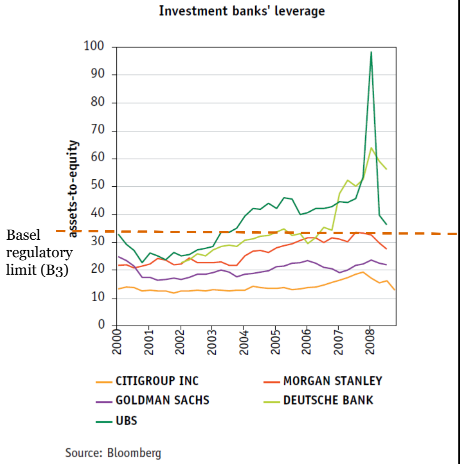
2. Leverage ratio

Constraining Leverage

Leverage (# of times) = $\dfrac{\text{Exposure*}}{\text{Capital}}$

(assets – on & off balance sheet, additional treatment for derivatives and SFTs)*

When banks are forced to deleverage, as we saw in the financial crisis, it can have a destabilising effect on the market e.g. amplified downward pressure on asset prices, which could have systemic effect.



Basel III: Leverage ratio

- Equity (+)
- Preference shares (+)
- High-trigger cocos (+)
- Regulatory capital deductions (-)

$$\frac{\text{Tier 1 capital}}{\text{Total exposure}} \geq 3\%$$

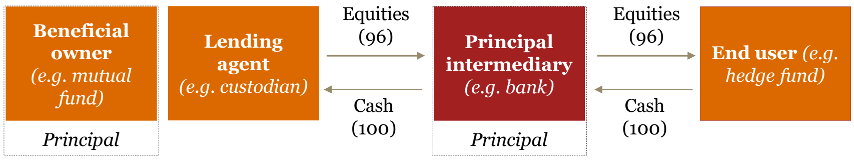
- Total on balance sheet exposures (+)
- Derivative exposures (+)
- Securities financing transaction exposures (+)
- Off-balance sheet items (+)

- Non risk-adjusted backstop to risk-weighted capital ratios
- Limited opportunities to reduce total exposure via netting or collateral
- Results in "belt and braces" approach to capital adequacy

- For large UK banks the minimum requirement is likely to be >3%, proportionate to any risk-weighted systemic or countercyclical buffers
- For large US banks the minimum requirement is 5% at the group level and 6% for individual banking entities.

Basel III: Impact on securities lending (example)

- Securities lending is typically short-term and well-collateralised, leading to relatively low risk-weighted capital requirements.
- As the leverage ratio is not risk-adjusted it can be much more punitive for securities lending transactions, as exemplified here.

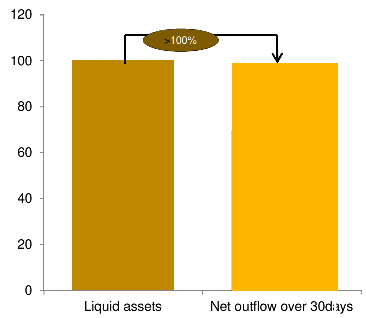


Risk-weighted capital requirement			Leverage ratio capital requirement
Bank gross exposure to mutual fund	100	100	Bank gross exposure to mutual fund
Equity collateral received	(96)	4	Under-collateralisation
Collateral volatility adjustment (e.g. 25%)	24		
Bank net exposure to mutual fund	28	104	Bank total exposure to mutual fund
Mutual fund exposure risk-weight (e.g.)	20%		
Risk-weighted asset	5.6		
Target Tier 1 capital ratio (e.g.)	12%	3%	Minimum Tier 1 leverage ratio
Tier 1 capital requirement	0.67 →	3.12	**4.6 times increase**

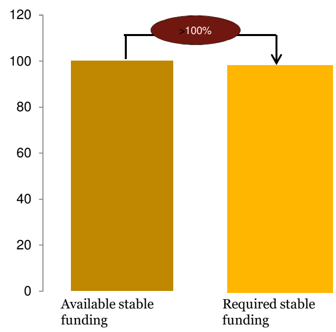
3. Liquidity & Net Stable Funding

Basel III: Liquidity risk

***LCR** – Does the bank have sufficient high quality liquid assets to survive a short term liquidity stress for a period of 30 days?*



***NSFR** – Does the bank have sufficient long term stable funding to fund its long term assets?*



From the credit crisis to LCR compliance…

September 2008
Principles for Sound Liquidity Risk Management and Supervision published by Basel Committee

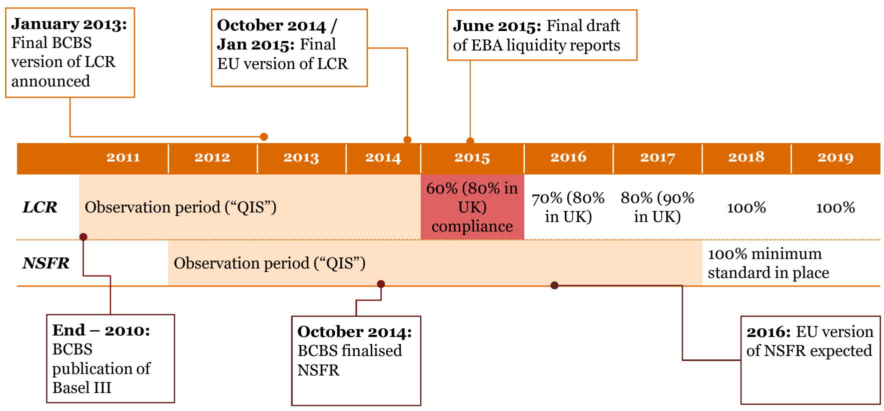
October 2009
Strengthening liquidity standards (including feedback on CP08/22, CP09/13, CP09/14) published by FSA

December 2010 / January 2013
Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools published by Basel Committee

June 2013
CRD IV and CRR published by the European Parliament and European Council

January - June 2015
Final EBA “Delegated Act” on LCR and PRA approach to liquidity supervision

Implementation journey and key future milestones



Overview of the EU LCR

Ensure banks have sufficient high quality liquid assets to withstand a stressed 30-day funding scenario

Definition broader than Basel version

Phase-In

Liquid assets (Level 1 / Level 2a / Level 2b)

Liquidity outflows – Liquidity inflows (max. 75%) ≥ 100%

Includes:
- Retail and operational deposits
- **Secured funding & repo**
- Committed facilities
- Derivatives

Includes
- Maturing customer loans
- **Secured lending & reverse repo**
- Derivatives

EU LCR – Key features of liquid assets

- Three categories of liquid asset – Level 1, Level 2A and Level 2B
- Caps applicable to holdings of each asset type
- Different stressed haircuts applicable for each category
- Strict qualitative and "operational requirements" for liquid assets, including:
  - Marketability, proven liquidity - "deep and active markets"
  - Under control of liquidity management function (in stress)
  - Unencumbered
  - Diversified

EU LCR – Example liquid assets

Regulatory haircuts and caps encourage firms to hold highest quality, most liquid assets to cover stressed outflows

HQLA	Tier	Applicable cap	Haircut
Cash, central bank deposits, high quality government bonds (inc. all EU gvmts), supranational bonds	1 (a)	n/a	0%
Covered bonds (Credit quality step 1)	1 (b)	70%	7%
Covered bonds (CQS 2)	2A	40%	15% +
Non-financial corporate bonds (CQS 1)	2A	40%	15% +
Non-financial corporate bonds (CQS 2)	2B	15%	50%
Major index equities	2B	15%	50%
RMBS / auto loans	2B	15%	25%
Financial corporate bonds / notes	*Ineligible*		
Gold	*Ineligible*		

EU LCR – Implications for securities lending

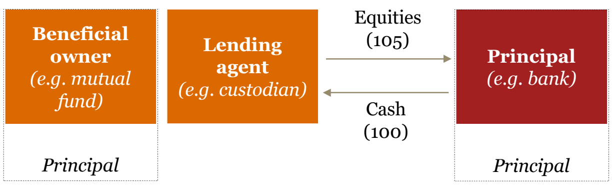
Arrival of LCR and complementary metrics has significantly shifted trader and Treasury behaviours

- LCR treated as a "binding minimum constraint" > Changes in trading behaviours
  - Increase in HQLA lending
  - Flight to quality
  - Term trades pushed out beyond (or brought inside) 30 day window
  - Increased use of non-cash collateral
  - Market uncertainty and shrinkage

EU LCR – Implications for securities lending

Arrival of LCR and complementary metrics has shifted trader and Treasury behaviours

Example: LCR effect of providing cash collateral vs low quality assets

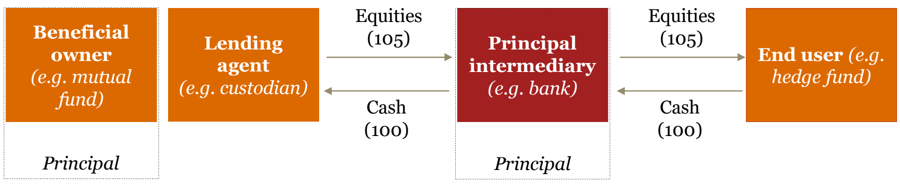


LCR effect: Haircut HQLA decreases by 48.5

EU LCR – Implications for securities lending

Arrival of LCR and complementary metrics has shifted trader and Treasury behaviours

Example: LCR effect of providing cash collateral vs low quality assets

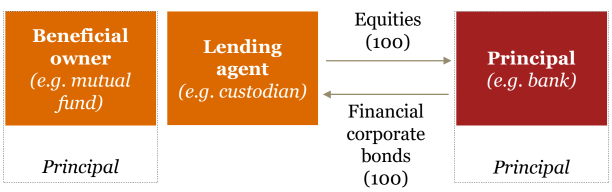


LCR effect: No effect

EU LCR – Implications for securities lending

Arrival of LCR and complementary metrics has shifted trader and Treasury behaviours

Example: Collateral swaps – LCR upgrade



LCR effect: Haircut HQLA increases by 50

Overview – Stable Funding (NSFR)

Key components:
- Own funds (T1/T2 capital instruments)
- Retail deposits
- Long-term liabilities from non-financial customers
- Long-term liabilities from financial customers

Phase-In

Items providing stable funding

Items requiring stable funding

≥ 100%

Key components
- Liquid assets (from LCR)
- Other securities and money market instruments
- Gold and other precious metals
- Short-term assets

Considerations:
- Requirement for a minimum amount of "stable funding" over 1yr time horizon
- Objective: to ensure stable funding on an ongoing, viable basis to cover an extended, firm-specific stress scenario
- Balance sheet values – not cash flows!

- Categories and weighting to be confirmed by EBA in 2016

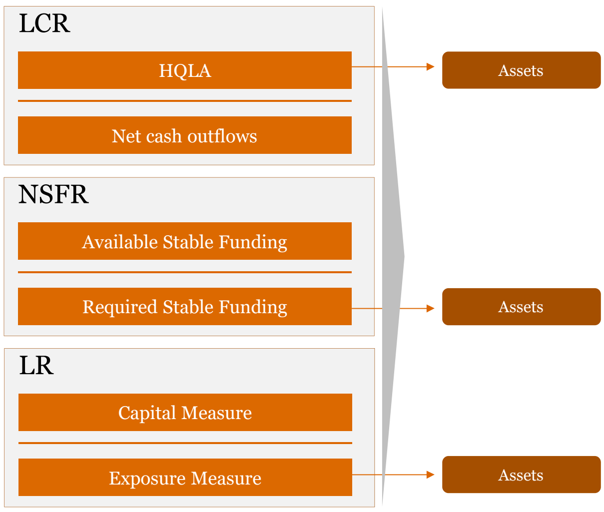
NSFR – Implications for securities lending

We have already started to see banks optimising their balance sheets in preparation for the NSFR, but the impact on securities lending is less pronounced than for LCR

- Stringent conditions on netting of repo/reverse repo (per Basel Leverage Ratio)
- Short-term repo (<6m) not considered as available stable funding; (6m-12m = 50%; > 12m = 100%)

4. Interaction between the ratios

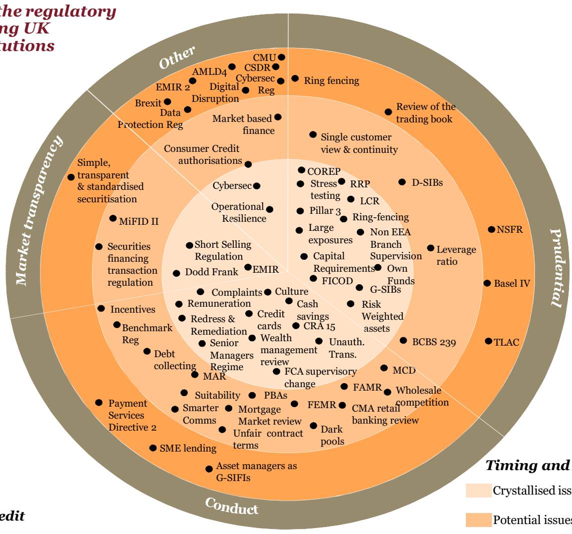
Interaction between the ratios



- LCR will require banks to increase the **stock of HQLA** on their balance sheets
- At the same time, the asset base will require greater levels of '**stable funding**'
- While the LR, will necessitate **greater capital coverage** for larger balance sheets

Regulatory landscape for UK firms

A snapshot of the regulatory landscape facing UK financial institutions



Timing and relevance

- Crystallised issues – Compliance currently required
- Potential issues firms need to address in 2016
- Potential 'horizon scanning' issues for firms to comply with in 2017 or later

**** includes consumer credit***

Questions?

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