U.S. regulatory capital: Basel III liquidity coverage ratio final rule

Overview and key highlights

November 2014

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[1] On September 3, 2014, the Federal Reserve (FRB), Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) (collectively, the U.S. regulators) released Liquidity Coverage Ratio: Liquidity Risk Measurement Standards as a final rule.

U.S. Basel III LCR rule is finalized – key highlights

Remains more stringent than international guidance, but provides some relief

- **The U.S. LCR rule is finalized**
  - Requires banks to maintain minimum amounts of liquid assets to withstand cash outflows over a 30-day horizon, calculated as per prescribed methodology
- **Scope of applicability remains largely unchanged**
  - LCR applies to the largest internationally active banks, while large banks are subject to a less stringent LCR requirement (modified LCR)[2]
  - Nonbank systemically important financial institutions (SIFIs),[3] and foreign banking organizations (FBOs) with assets >$50 billion are exempted, and will be addressed through separate future rulemaking
- **Transition period remains same, however relief provided around calculation frequency**
  - LCR: Transition period remains 2015 to 2017, but postpones daily reporting requirement
  - Modified LCR: Postpones effective date to 2016 and removes daily reporting requirement
- **Additional calculation relief provided in calculation approach**
  - Modified approach for calculating maturity mismatch
  - Expansion of eligible HQLAs
  - Adjustments to certain outflow/inflow rates, etc.
- **However, U.S. final rule remains more stringent in certain areas than BCBS[4] international guidance**
  - Shorter transition timeline (2017 instead of 2019)
  - Maturity mismatch add-on calculation
  - Certain assets (cash, municipal bonds, central bank restricted committed facilities, covered bonds, etc.) considered ineligible as HQLA

[2] The full form of the LCR rule will apply to all Basel III advanced approach banks (i.e., depository institution (DI) holding companies with ≥$250 billion in total assets or ≥$10 billion in foreign exposure and any consolidated DI with assets ≥$10 billion). The modified LCR will apply to DI holding companies with total assets ≥$50 billion.
[3] As designated by the Financial Stability Oversight Council (FSOC)
[4] Basel Committee on Banking Supervision (BCBS)

Observations and impacts of the final rule

May have significant strategic and implementation impacts

- **Certain LCR provisions may put U.S. banks at a competitive disadvantage**
- **LCR requirements will make balance sheet optimization more complex**
  - Higher share of liquid (and low risk) assets will positively impact the overall capital ratio
  - Proposed capital surcharge for short-term funding will positively impact LCR; however, it will have a negative impact on the leverage ratio (as it does not adjust for risk)
  - Increased demand for eligible liquid assets may drive up prices for certain asset classes (e.g., sovereign debt) and make certain ineligible asset classes (i.e., securitization) less attractive
- **Banks are already taking various steps to ensure LCR compliance**
  - Have made significant progress in bolstering their liquidity reserves
  - Incorporating liquidity cost in pricing and profitability measurement of assets and liabilities
- **Certain aspects can be operationally challenging and require infrastructure upgrades**
  - Determining “liquid and readily marketable standard” for each security
  - Identification of financial sector entities
  - Daily calculation and reporting
  - Look-back approach for calculating derivatives market valuation change

Scope and applicability

Applicability is based on the asset size, type of the institution, and activities

Depository institution (DI) holding company[5] with average assets ≥$50 billion

Modified LCR

- Modified LCR is a simpler and less stringent methodology for smaller U.S. banking organizations
- Provides relief in implementation timelines and reporting frequency
- Applicability is based on total consolidated assets for the four most recent quarters

DI holding company[5] with assets ≥$250 billion, ≥$10 billion on-balance sheet foreign exposure, and any consolidated DI with assets ≥$10 billion

LCR

- LCR mandates banks maintain high quality liquid assets equal to projected cash outflows over a 30 calendar-day period
- Relief in reporting frequency with monthly transition to daily
- Applicability is based on total consolidated assets for any single quarter

DI holding company[5] with assets ≥$700 billion, ≥$10 trillion in assets under custody, and any consolidated DI with assets ≥$10 billion

LCR with accelerated timelines

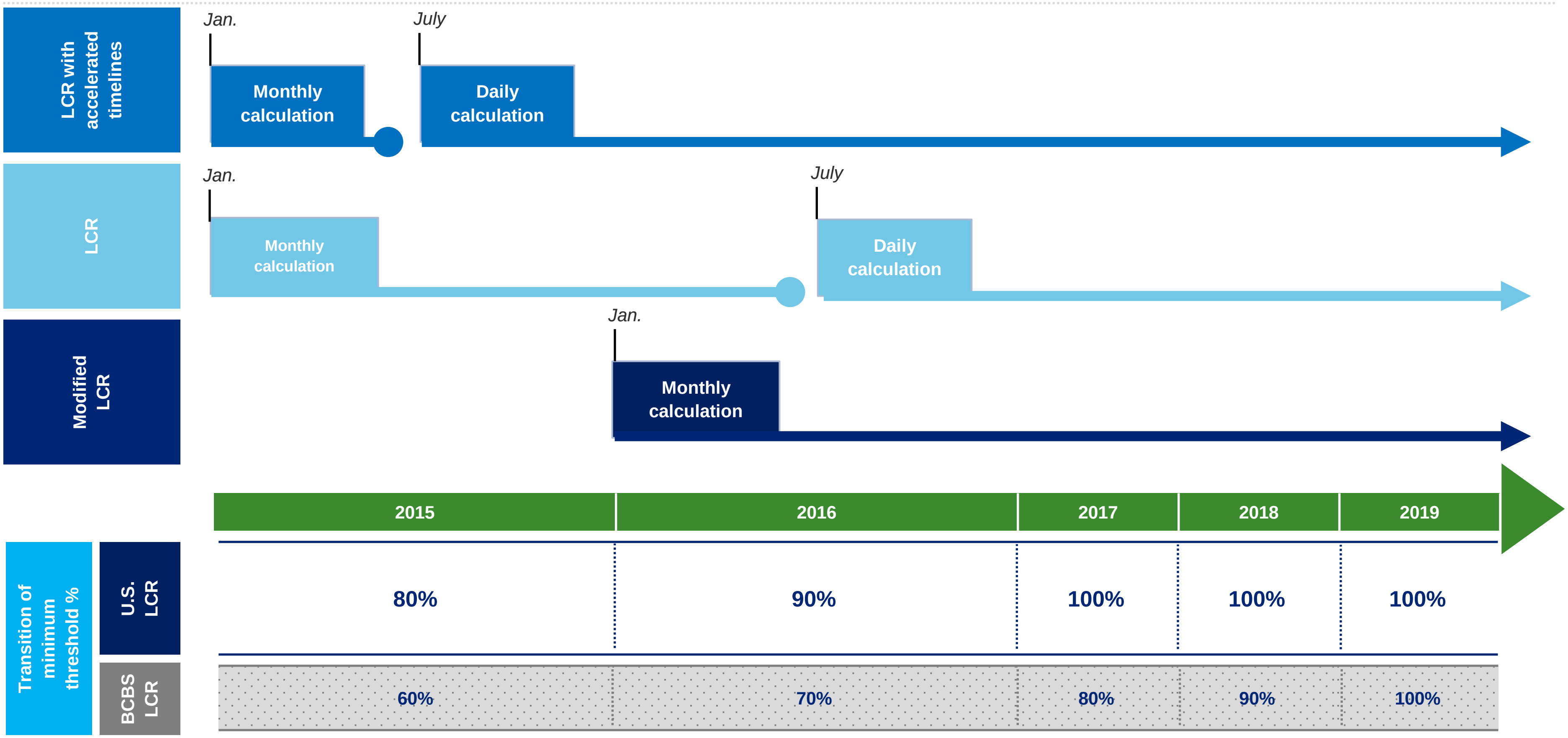
- Calculation is the same as LCR
- Imposes an accelerated timeline for daily reporting
- Applicability is based on total consolidated assets for any single quarter

The final rule does not apply to nonbank SIFIs designated by the FSOC and FBOs or their intermediate holding companies that are not otherwise covered.

[5] DI holding company means a bank holding company (BHC) or savings and loan holding company (SLHC) without substantial insurance or commercial operations.

Implementation and reporting timelines

Rule is effective January 2015 with transition period until 2017



What's next:

- Updated LCR rule proposal regarding certain inclusions for municipal bonds and central bank restricted committed facilities to qualify as HQLA
- Separate LCR rule making for FBOs and SIFIs
- Finalization of new liquidity reporting requirements for LCR
- BCBS finalized net stable funding ratio (NSFR) guidance, U.S. rule is anticipated
- Upcoming short-term wholesale funding limitations, and long-term debt requirements

Ratio calculation overview

HQLAs at least 100 percent of total net cash outflows over a 30-day stress period

Calculation utilizes a supervisory-defined methodology with prescribed factors and rates that takes into account a 30-day stress scenario combining idiosyncratic and market-wide shocks.

Liquidity coverage ratio:

$$\frac{\textbf{Stock of high quality liquid assets}}{\textbf{Net cash outflows over a 30-day stress period}} \geq \textbf{100\%}$$

Main components of the ratio

HQLA	• Includes only those assets with a high potential to generate liquidity through sale/secured borrowing during a stress scenario • Defines three categories of assets with decreasing levels of quality, subject to varying levels of haircuts and inclusion limits (i.e., Level 1, Level 2A, and Level 2B assets) • Subject to operational and general applicability requirements
Net cash outflows	• The expected cash outflow over a 30-day stress period • Prescribes outflow and inflow rates by specific exposure types • Cash inflows cannot exceed 75 percent of cash outflows • Includes an add-on to account for maturity mismatch in inflows/outflows

LCR shortfall actions

Timely remediation plans are required once a shortfall occurs

- When an LCR shortfall occurs (i.e., LCR falls below minimum threshold), banks must notify their primary federal supervisor that business day
- For banks calculating LCR on a <u>daily</u> basis, if the shortfall continues for three consecutive business days, they are required to provide to their primary federal supervisor a plan for remediation
- For banks calculating LCR on a <u>monthly</u> basis, if a shortfall exists, they must promptly consult with their primary federal supervisor if they need to provide a remediation plan

Remediation plan	Supervisory action to address liquidity shortfall
The remediation plan must include: • An assessment of the bank's liquidity position • Actions the bank has taken and will take to achieve full compliance with the final rule • Estimated time frame for achieving compliance • Commitment to report to its supervisor no less than weekly on progress to achieve compliance with the plan until full compliance with the final rule is achieved	• A bank's primary federal supervisor may take supervisory or enforcement actions to address non-compliance with the minimum LCR (and other requirements of the final rule) • A shortfall, at a minimum, would result in heightened supervisory monitoring

Additional prudential requirements

LCR is part of a broader supervisory focus on liquidity risk

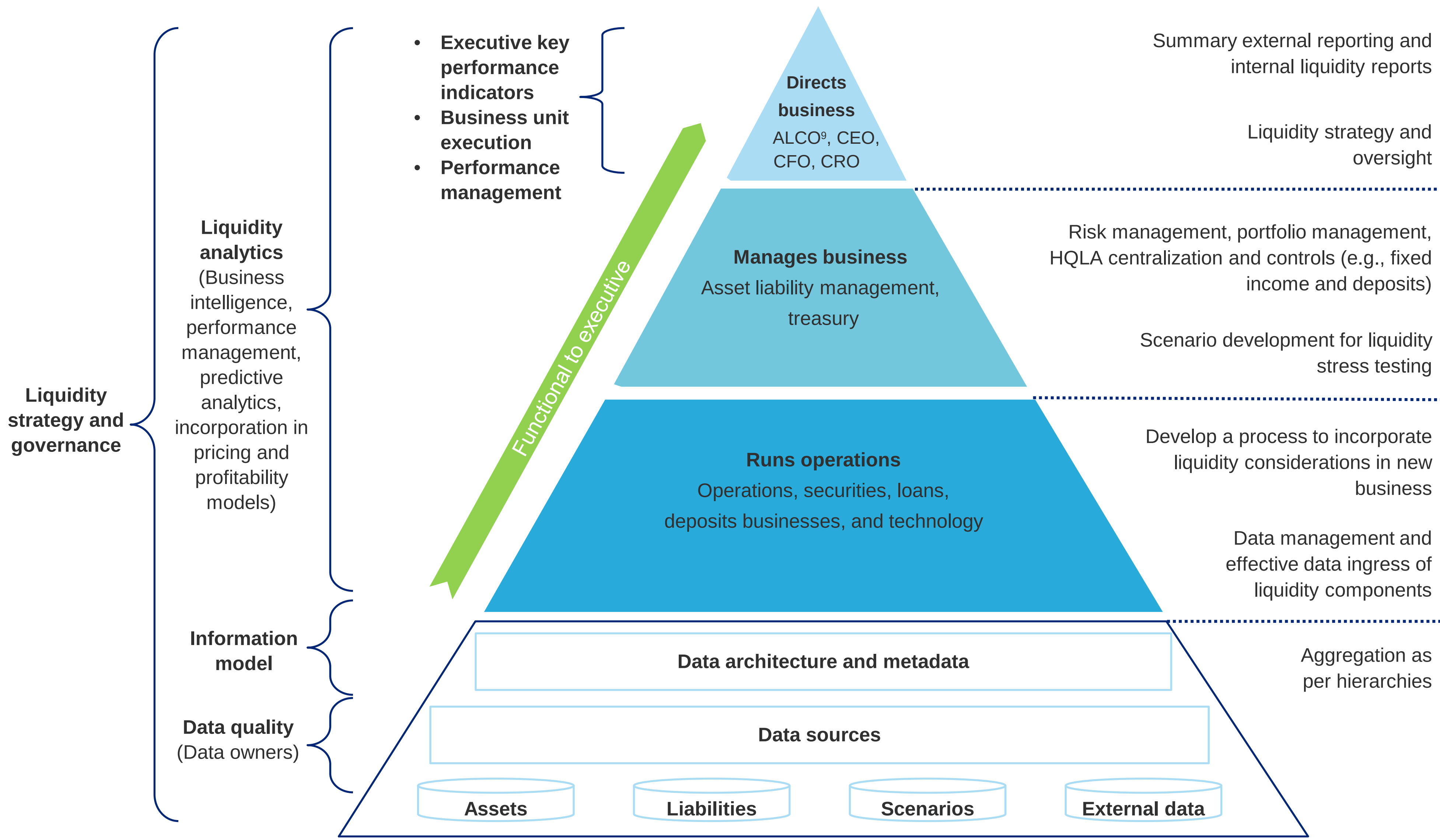
- U.S. global systemically important banks (G-SIBs) are already subject to daily complex institution liquidity monitoring report (FR 2052a) also known as “4G” reporting; FRB is developing enhanced “5G” reporting requirements with more granular data requirements
  - Less-detailed/frequent reporting requirements apply to FBOs with U.S. broker-dealer assets >$100 billion, non-G-SIB BHCs (including FBOs) >$50 billion, and to BHCs (not controlled by FBOs) >$10 billion
- BHCs >$50 billion, including FBOs, are subject to enhanced prudential regulations[6] (Reg. YY) encompassing:
  - Corporate governance provisions
  - Liquidity risk tolerance limits
  - Intraday liquidity risk monitoring
  - Legal entity analysis
  - Liquidity stress testing
  - Contingency funding plan
- The OCC has issued similar heightened standards[7] for DIs >$50 billion in average assets
- U.S. regulators have also issued updated guidance[8] on managing liquidity risk that is applicable to all banks

LCR (and NSFR, once U.S. rule is finalized) establishes a minimum liquidity requirement. Banks are required to hold additional liquidity buffer commensurate with their risk profile, based on internal analysis.

[6] Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations (March 27, 2014)
[7] Heightened Standards for Large Financial Institutions (September 2, 2014)
[8] Interagency Policy Statement on Funding and Liquidity Risk Management (March 17, 2010)

Balance sheet liquidity governance

Liquidity rules require integrated coordination across the bank for holistic implementation



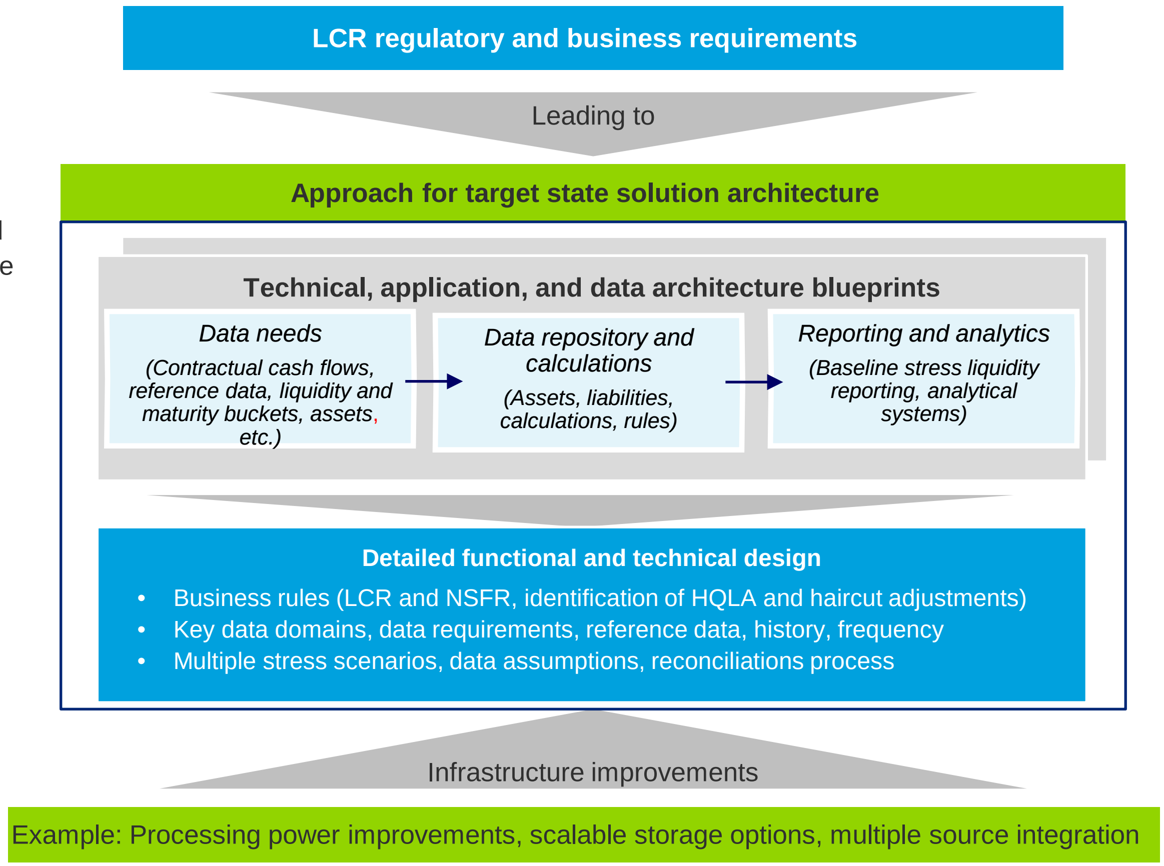
[9] Asset Liability Committee

Technology and data considerations

Data infrastructure needs to be scalable and flexible

Application data architecture blueprints

- View of the business and data components proposed to be in solution architecture
- Logical data repositories and information asset
- Key architectural considerations for daily calculation and reporting requirements
- Architectural recommendations for scale and complexity requirements for treasury systems



Technical data architecture blueprints

- Logical and physical solution architecture focuses data storage and application components
- Data integration requirements detailing data interface, sourcing, extraction, and aggregation leveraging existing data assets
- Technical architectural recommendations on third-party rules engine, vendor calculation products

Technical solution design
(functional and nonfunctional requirements translated to detailed end-to-end architecture component design)

- Detail technical design for liquidity time buckets, contractual run configurations, business rules, scenarios data (baseline, stress)
- Reporting requirements for liquidity management (daily, monthly, quarterly), ad-hoc / real time, qualitative

Final rule highlights

- Changes from the proposed rule
- Numerator: high quality liquid assets
- Denominator: net cash outflow
- Modified LCR approach

Changes from the proposed rule

The final rule provides incremental relief in multiple areas

Topic	Description
Scope and timelines	• Exempts covered nonbank companies and their consolidated Dis as well as FBOs • Delays daily reporting from January 2015 to July 2016 for most banks, except the largest
Eligibility of liquid assets	• Removes the requirement for corporate debt securities to be publicly traded • Broadens inclusion criteria of publicly traded common equity shares to Russell 1000 Index, instead of S&P 500 • Excludes consolidated subsidiaries of hedge funds and private equity funds from definition of non-regulated fund
HQLA calculation	• Excludes vault cash from reserve deduction requirements when calculating Level 1 liquid asset amount • Exempts collateralized deposits from secured funding unwind requirements when determining adjusted excess HQLA
Net cash outflows	• Modifies the peak cumulative net outflow calculation by relaxing the assumption that all non-maturity outflows occur on Day 1 and introduces a less punitive add-on approach to address maturity mismatches • Modifies definition of maturity across various product types and allows inclusion of certain non-maturity inflows • Lowers outflow rate from 100 percent to 20-40 percent for various types of retail funding and retail non-maturity brokered deposits • Exempts the inflow leg of an FX derivative from the 75 percent cap, as long as it settles on the same day as the outflow leg • Lowers outflow rates from 100 percent to 10-40 percent for various types of commitments to SPEs (except SPEs that issue securities of commercial paper or are a consolidated subsidiary of an FI entity) • Extends affiliated sweep deposit definition to include all affiliates of a bank, not just consolidated subsidiaries • Caps the outflow rate of a secured deposit to the outflow rate for an unsecured deposit from the same counterparty • Expands the definition of operational deposits and list of operational services • Expands the secured lending definition to include all HQLA instead of eligible HQLA • Recognizes certain inflows from broker-dealer segregated accounts • Clarifies that outflows from terminated hedges should be deducted from fair value of eligible HQLA
Modified LCR	• Changes net cash outflow calculation horizon to 30 days, rather than 21 days, with an adjustment factor of 70 percent • Delays effective date for modified LCR from January 2015 to January 2016 and requires monthly, instead of daily, reporting

Calculation of numerator: HQLA

$$\text{LCR} = \frac{\text{HQLAs}}{\text{Net cash outflows over a 30-day stress period}}$$

HQLA = Level 1 asset amount **+** Level 2A asset amount **+** Level 2B asset amount **-** Greater of [Unadjusted excess HQLA amount ; Adjusted excess HQLA amount]

Parameter	Level 1 asset	Level 2A asset	Level 2B asset
Quality	• Highest quality and most liquid assets	• Relatively stable and significant sources of liquidity	• Lesser degree of liquidity and more volatility
Amount included	• Fair value of all Level 1 assets less reserve balance requirement under section 204.5 of Regulation D (no haircut)	• 85 percent of fair value of Level 2A assets (15 percent haircut)	• 50 percent of fair value of Level 2B assets (50 percent haircut)
Limit to inclusion	• No limit	• Level 2A + Level 2B < 40 percent of HQLA	
		• No individual limit	• < 15 percent of HQLA
HQLA criteria	• Federal Reserve bank balances • Foreign withdrawable resources • Securities issues or guaranteed by the U.S. government • Securities issued or guaranteed by certain sovereign entities and multilateral development bank (MDB)	• Securities issued or guaranteed by a U.S. government-sponsored enterprise (GSE) • Securities issued or guaranteed by certain sovereign entities or MDBs	• Certain investment grade corporate debt securities issued by non-financial sector entities • Certain publicly traded common equity shares of companies included in the Russell 1000 index or eligible foreign index
Eligible HQLA	• Additional requirements to qualify as eligible HQLA – Operational requirements (e.g., capability to monetize HQLAs, maintain appropriate policies, etc.) – Generally applicable requirements (e.g., collateral free of encumbrances and other restrictions, etc.)		

Calculation of numerator: HQLA

LCR = HQLAs / Net cash outflows over a 30-day stress period

HQLA = Level 1 asset amount + Level 2A asset amount + Level 2B asset amount - Greater of [Unadjusted excess HQLA amount, Adjusted excess HQLA amount]

This is the portion of the calculation that applies the inclusion limits for Level 2A and 2B assets:

Unadjusted excess HQLA amount

- Excess HQLA that exceeds Level 2 caps on day 1 of calculation period, calculated as:

Level 2 cap excess amount + Level 2B cap excess amount

Level 2 cap excess amount

Max (Level 2A asset amount + Level 2B asset amount – 0.6667 x Level 1 asset amount, 0)

Level 2B cap excess amount

Max (Level 2B asset amount – Level 2 cap excess amount – 0.1765 x (Level 1 asset amount + Level 2A asset amount), 0)

Adjusted excess HQLA amount

- Calculation process is identical to the process for unadjusted excess HQLA
  - Calculation uses “adjusted” amounts for Level 1, Level 2A, and Level 2B assets
- Adjusted amounts are calculated as the amount that would be held by the bank upon unwinding the following transactions that mature within the 30-day period, where the bank and counterparty exchange HQLAs:
  - Secured funding transactions (other than a collateralized deposit)
  - Secured lending transactions
  - Asset exchanges
  - Collateralized derivatives transactions

Calculation of denominator: net cash outflow

$$LCR = \frac{\text{HQLAs}}{\text{Net cash outflows over a 30-day stress period}}$$

Total net cash outflow amount = Cumulative stressed outflow amounts - Lesser of [Cumulative stressed inflow amounts ; 75% **x** Cumulative stressed outflow amounts] + Maturity mismatch add-on

Stressed outflow amounts are calculated by using the outflow rates for each category and maturity as applicable:

Categories	Cumulative stressed outflow rates
Retail funding outflow amount	Ranging from 3 to 40 percent
Structured transaction outflow amount	100 percent or the maximum contractual amount
Net derivative cash outflow amount	100 percent
Mortgage commitment outflow amount	10 percent
Commitment outflow amount	Ranging from 5 to 100 percent
Collateral outflow amount	Ranging from zero to 100 percent
Brokered deposit outflow amount for retail customers or counterparties	Ranging from 10 to 100 percent
Unsecured wholesale funding outflow amount	Ranging from 20 to 100 percent
Debt security buyback outflow amount	3 percent for non-structured securities or 5 percent for structured securities
Secured funding and asset exchange outflow amount	Ranging from zero to 100 percent
Foreign central bank borrowing outflow amount	As per standards established in the foreign jurisdiction: otherwise, as per the secured funding and asset exchange section
Other contractual outflow amount	100 percent

Calculation of denominator: cash inflows

$$\text{LCR} = \frac{\text{HQLAs}}{\text{Net cash outflows over a 30-day stress period}}$$

Total net cash outflow amount = Cumulative stressed outflow amounts - Lesser of [Cumulative stressed inflow amounts; 75% **x** Cumulative stressed outflow amounts] + Maturity mismatch add-on

Stressed inflow amounts are calculated by using the inflow rates for each category and maturity as applicable:

Categories	Cumulative stressed inflow rates
Net derivative cash inflow amount	100 percent
Retail cash inflow amount	50 percent
Unsecured wholesale cash inflow amount	• 100 percent from financial sector entities, their consolidated subsidiary, or central banks • 50 percent from non-financial sector entities or their consolidated subsidiary
Securities cash inflow amount	100 percent
Secured lending and asset exchange cash inflow amount	Ranging from zero to 100 percent
Broker-dealer segregated account inflow amount	100 percent
Other cash inflow amount	Zero percent

Provides rules for determining maturity for all exposure types, including options and non-maturity exposures. This is used for calculating outflow and inflow amounts, as well as maturity mismatch add-on, as applicable.

Maturity mismatch add-on
Uses the difference between the peak day net cumulative maturity mismatch and the net cumulative outflow on the 30th day value:
Max (0, peak day net cumulative maturity outflow amount for any of the 30 calendar days) – Max (0, Net cumulative maturity outflow amount on the 30th day)

Modified LCR approach

- Modified LCR is a simplified version of the LCR for DI holding companies with ≥$50 billion in average total assets based on the previous four quarters
- Effective starting 2016 (90 percent), fully phased in by 2017
- Monthly calculation requirement
- **Numerator:** The calculation of HQLA is the same as the LCR methodology
- **Denominator:** Modified LCR uses the same 30-day liquidity stress scenario as the LCR, however there are two key differences:
  - Net cash outflows calculation end result is adjusted by a factor of 0.7
  - Not required to calculate maturity mismatch add-on

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