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Managing Liquidity Risk at Community Financial Institutions: The Liquidity Coverage Ratio

In Challenging Times, Liquidity is Critical.

Back in February 2020, no one would have predicted that the entire world would ban international travel; close restaurants, hotels, churches and factories; and pull children from schools. We have all adjusted to this post-Covid-19 world, and we are hoping for a cure. Our economy is resilient because our people are resilient. Housing construction and the extension of credit by financial institutions are bright spots, offsetting the challenges faced by many industries.

In this time of unprecedented change and economic uncertainty, it pays to be prepared. One of the most important strategic decisions any financial institution's leadership can make is to ensure – with rigorous and disciplined testing – that there are ample and diverse sources of liquidity. We all learned from the 2008 financial crisis that access to liquidity is essential to a financial institution's survival. The liquidity metric that was developed in the aftermath of 2008 by the Basel Committee, and adopted worldwide by the largest international banks, is the Liquidity Coverage Ratio (LCR). While not required for community financial institutions with assets less than $50 billion, VBC believes there is value that can be gained from incorporating a process that measures the LCR.

What is the LCR?

The Liquidity Coverage Ratio (LCR) was designed to promote the short-term resilience of financial institutions in a crisis situation. It does this by ensuring that these institutions have an adequate stock of unencumbered high-quality liquid assets (HQLA) that can be converted easily and immediately into cash to meet their liquidity needs for a 30-day severe stress scenario. This ratio can improve a financial institution's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of failure in a crisis. The regulators developed the LCR in the aftermath of the 2008 Financial Crisis, and it has been implemented worldwide as a part of the Basel III Framework. The LCR was designed to be an extreme liquidity stress test to set a minimum standard for a financial institution's short-term liquidity needs.

The LCR is comprised of two parts:

1. High Quality Liquid Assets (HQLA)
2. Total net outflows based on run-off factors applicable to an institution's liabilities

The big driver of LCR is the run-off factors applied to financial institution liabilities. Financial institutions finance themselves with retail and wholesale deposits, as well as other wholesale funding sources. The LCR defines and classifies these liabilities with run-off factors. The more stable the funding base, the lower the run-off factor. Retail and small business depositors are considered most stable, thus they receive the lowest (best) run-off factor. The less stable the funding sources, such as short-term borrowings from other entities, the greater the potential adverse liquidity impact in a stress scenario. Those are the sources that dry up in a crisis.

What is the value of LCR for Community Financial institutions?

Adds Value to External Stakeholders:

The LCR is a useful tool for community financial institutions to emphasize the stability of their funding sources, and thus their balance sheet strength, to investors. This ratio was implemented for large banks with over $50 billion in assets, with vast holdings of wholesale borrowings and brokered deposits to fund their asset growth. Community financial institutions that are funded by retail and small business depositors can utilize the LCR to show their great stability and financial strength in comparison to larger institutions – and thus their greater long-term lower-risk EPS potential for investors – by volunteering to disclose LCR information on a quarterly basis.

Adds Value to Internal Stakeholders:

The LCR can reveal potential weaknesses in a community financial institution's Liquidity Contingency Plans, if the ratio is below the established minimum level of 100%. Conversely, if the LCR is too high - above 150% - that might imply an opportunity to expand a community financial institution's risk profile, and enhance earnings, while not compromising safety and soundness in the process.

Adds Value for Regulators:

According to the Interagency Policy Statement on Funding and Liquidity Risk Management, SR 10-6, page 6-7, which applies to community financial institutions, "Institutions should conduct stress tests regularly for a variety of institution-specific and marketwide events across multiple time horizons... Stress test outcomes should be used to identify and quantify sources of potential liquidity strain… Management's active involvement and support is critical to the effectiveness of the stress testing process… The results of stress tests should also play a key role in shaping the institution's contingency planning."

The LCR is a relatively simple, straightforward, ratio-based stress test that can be implemented using the call report and existing quarterly financial disclosures. It can be easier for leadership and the board to grasp than potentially more complex cash flow-based and longer-term scenarios. It can be presented with Red-Amber-Green levels for tracking in ALCO and for Board use. And it can be performed on multiple time horizons: a 30-day stress test (LCR) and a 1-year stress test – known as the Net Stable Funding Ratio (NSFR). It is a great liquidity stress test solution for community financial institutions that enhances compliance with the regulatory requirements of SR 10-6 at a low cost, and it is familiar to regulators, as it is already required at larger financial institutions.

What are the components of the LCR calculation?

There are two components to the LCR – the Numerator (HQLA) and the Denominator (Net Cash Outflows). The ratio, shown below, is expected to be greater than 100%.

$$\text{LCR} = \frac{\text{High-Quality Liquid Assets}}{\text{Net Cash Outflows}} > 100\ \%$$

The numerator or HQLA can be visualized as follows:

Bank Assets (HQLA)	Haircut
Level 1: Fed Reserves	0%
Level 1: US Treasuries	0%
Level 1: Reverse Repos	0%
Level 2A: Agency MBS (FNMA, FRMC, FDIC)	15%
Level 2B: Investment-Grade Corporate Debt	50%

While it may appear that you can satisfy the requirement with large holdings of Agency MBS, there is an important nuance in the LCR calculation. The emphasis is on Level 1 assets, as they are considered to be most liquid in a crisis situation. Therefore, the LCR sets limits: Level 2 assets can be no more than 40% of total HQLA and there are haircuts applied depending on the Level 2 asset type.

The denominator, Net Cash Outflows, is the more complex portion of the LCR. It is split into Estimated Cash Outflows, offset by Expected Cash Inflows.

Bank's Liabilities (Outflows)	Runoff Factor
Retail Deposits	5% - 10%
Term Deposits >30 days	0%
Unsecured Wholesale funding:	
Financials	100%
Non-Financial Corporation	75%
Secured Wholesale Funding	0%
Derivatives, SIVs, ABS, other	100%

Retail Deposits are split between Stable Deposits (5% run-off) which includes originated retail and small business depositors, and Less-Stable Deposits (10% run-off) which includes brokered deposits and deposits above the FDIC insurance limit. Fixed term deposits greater than 30 days are excluded entirely from run-off as they are deemed safe for the 30-day stress period. Unsecured wholesale funding from financial institutions, especially short-term, are deemed to be most volatile in a crisis with a 100% run-off assumption. Wholesale funds secured by a financial institution's own assets, however, are deemed safe with a 0% run-off assumption.

Cash Outflows are partially offset by a conservative assumption of Cash Inflows expected over the same 30-day period. These are cash flows from loan payments and securities payments, with a crisis haircut applied to simulate a stress scenario.

How can a Community Financial institution implement an LCR calculation?

VBC has developed a straightforward, intuitive proprietary tool, applying interagency rules (Fed, OCC, FDIC), to calculate a Community Financial institution LCR from call report data and other existing financial disclosures. We can work with your ALM team to enhance and finalize the ratio, and to bring results and recommendations to ALCO and to the Board. Additionally, we can help you learn to use this information in a way that protects a community financial institution, and possibly, enhances earnings as well, depending on the results. VBC has segmented LCR results into 3 Red-Amber-Green categories, which would drive our recommendations:

LCR %	Rating	Recommendation
> 150%	A	ST Liquidity / Funding Profile could be excessive - need to optimize investments
100% - 150%	G	ST Liquidity / Funding Profile is optimal
< 100%	R	ST Liquidity / Funding profile may not be sufficient in a crisis - update Contingency Funding Plan

Depending on where a community financial institution falls in this RAG framework (which can be customized), results can be used to enhance strategic planning, as well as supplement existing ALM/ALCO reporting and analysis. For example, if the LCR ratio is <100% consistently over time, then the optimal solution would be to add additional high-quality liquid assets to the investment portfolio, and / or enhance the liability mix. If the LCR ratio is >150%, the financial institution has a comfortable liquidity cushion and may have opportunities to expand the balance sheet to enhance earnings for shareholders. VBC can provide solutions and recommendations for each rating scenario.

The 30-day LCR, and the 1-year NSFR, can be used to supplement compliance with Interagency Policy Guidance 10-6 on funding and liquidity risk management, which emphasizes the importance of "diversified funding sources, stress testing, a cushion of liquid assets, and a formal, well-developed contingency funding plan (CFP) as primary tools for measuring and managing liquidity risk." While we encourage financial institutions to maintain and continue to enhance cash-flow based stress testing processes, the LCR is a high-level view for management to quickly assess each of these items.

Implementing an LCR solution is an opportunity for Community Financial institution leaders to have greater insight into liquidity risk. This is not just about avoiding disaster. It is about identifying vulnerabilities on the balance sheet, and – potentially – about identifying opportunities to do more with the balance sheet to enhance earnings as well as overall safety and soundness.