

# How Can Financial Institutions Prevent Liquidity Crises?

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It's vital for depository institutions to follow essential liquidity procedures in any environment, but recent events in the repo market serve as a good reminder for all institutions. Late 2019 saw overnight cash markets garnering mainstream media headlines for the first time since before The Great Recession, as the Federal Open Market Committee (FOMC) embarked on its first post-financial crisis rescue mission to shore-up short-term lending markets last September and the Federal Reserve had to inject liquidity into the repo markets to kick off the new year.

They accomplished this via a sequence of overnight strategies to assist in maintaining funding flows through the banking system, which necessitated the immediate opening of three new diurnal credit facilities. Going forward, the Fed is likely to maintain a cautious approach and continue extending Open Market Operations (OMOs) to key merchants, as they have frequently reiterated their desire to leave ample cash for continuous marketplace functionality as well as a cushion to prevent the volatility we've seen in repo rates in recent months (**Figure 1**).

**Figure 1**

## United States Overnight Repo Rate, 09/01/2019-01/03/2020



Source: tradingeconomics.com | Federal Reserve

### 3 Liquidity Doctrines

Although these recent events are far from a true liquidity crisis, the following three foundational principles for liquidity management can help protect institutions from exogenous liquidity crises.

#### 1. Finance Illiquid Holdings with Core Deposits

This can be recognized as a cornerstone tenet of the depository model. Not always adhered to, many institutions have built asset portfolios much larger in size than their consumer deposit bases, which presents considerable liquidity risk and has been disastrous at times.

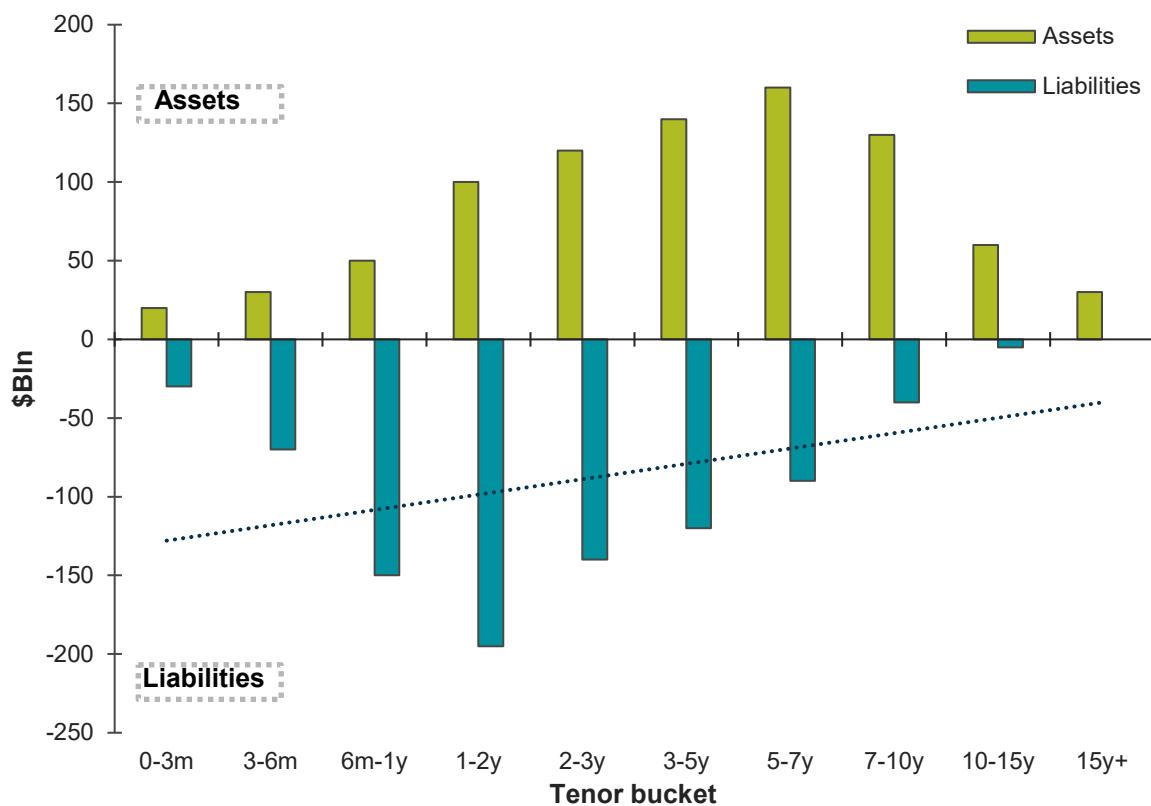
The reasoning is simple: core deposits (by definition) are less volatile than wholesale funding and rate-driven hot money. They have a reduced probability of removal given the economic environment. In fact, there is evidence that shows core deposits increasing during economic stress as clients strive for lower leverage while simultaneously pulling back on cash-heavy consumption. Consequently, financing illiquid holdings with core deposits implies a lower risk of facing a funding challenge in the event of an unfavorable economic environment or a phase of cash flow pressure. It is a responsible banking procedure.

#### 2. Avoid Relying Too Heavily on Wholesale Funding

Over-reliance on wholesale funding can put an institution at increased risk of liquidity shortfalls and excessive cost of funds volatility. A prudent level of wholesale funding varies by lending focus and liquidity risk tolerances. Of course, wholesale funding can be beneficial in cases of over-capitalization.

When wholesale funding is utilized, maintaining a prudent duration profile can help mitigate shortfall risk. This is accomplished by diversifying across the curve using a blend of durations. Favoring longer terms helps diminish the vulnerability of a recurring short-dated turnover threat on general resources.

From the perspective of the entire funding structure, a prudent duration profile is more difficult to characterize, and should be based on the asset profile. The ALM and liability-driven investing (LDI) frameworks both focus not solely on asset volatility, but on the volatility of capital. **Figure 2** visualizes an example of asset and liability funding profiles, and the idea of maintaining a diversified funding structure.

**Figure 2****Asset/Liability Funding Tenors**

Source: John Wiley & Sons, Bank Asset and Liability Management, 2007

In a traditional upward-sloping curve scenario, spacing out financing along the curve will lead to reduced profitability for a depository, all other factors held constant. Nevertheless, maintaining a financing disparity of extremely short-dated liabilities alongside long-term assets is a painless, yet futile means for a depository to generate profits; this clarifies why a diversified funding structure was hard to find among numerous depositories between 2002-2008, and why considerable financing was concerted at the near-term, resulting in devastation through the meltdown that took place following the bankruptcy of Lehman Brothers.

### 3. Maintain a Cushion of Highly Liquid Assets

This principle is typically undertaken through the investment portfolio. High credit quality, highly liquid bonds add to borrowing capacity and to the store of liquid assets. Asset classes such as Agency-backed mortgage backed securities come to mind, along with U.S. Treasury bonds. The reasoning behind maintaining a liquidity cushion is undeniable: during times of tension or scarce liquidity, government and agency securities are the lone remaining fluid investments. Given this, they can be liquidated to free up cash if necessary. In the days following the collapse of Lehman

Brothers in 2008, even extremely liquid securities such as highly rated depository CDs and short-duration notes became thinly traded practically overnight, while securities such as U.S. Treasuries and Agency MBA maintained robust trading and issuance. This reinforces the tenet of maintaining a cushion of high-quality liquid assets (HQLA).

The essence of liquidity management is balancing cash flows to meet liabilities as they occur. While an institution's approach to liquidity management will naturally vary by business model and management's appetite for liquidity risk, these three core principles can help in managing liquidity at an enterprise level. Management should understand their institution's liquidity risks at all times, including how stress scenarios might impact liquidity.

Interested in learning more about liquidity management strategies? [Contact the ALM First team](#) to discuss your institution's specific needs.