FEDERAL HOUSING FINANCE AGENCY

ADVISORY BULLETIN

AB 2018-07

FEDERAL HOME LOAN BANK LIQUIDITY GUIDANCE

Purpose

This advisory bulletin (AB) communicates the Federal Housing Finance Agency's (FHFA) guidance for maintaining sufficient amounts of liquidity[1] that will enable Federal Home Loan Banks (FHLBanks) to provide advances and fund letters of credit for members during a sustained capital markets disruption. Although this guidance sets expectations for how FHLBanks may best measure and maintain sufficient liquidity, the FHLBanks should also use liquidity metrics that are commensurate with their funds management strategies and that provide a comprehensive assessment of their liquidity risk to ensure that sufficient funds are available at a reasonable cost to meet potential demands.

Contemporaneously with the issuance of this AB, the Division of Federal Home Loan Bank Regulation (DBR) is issuing a supervisory letter to the FHLBanks that identifies the initial thresholds for the various measures of liquidity described herein. DBR will periodically assess conditions in the financial markets to determine whether they warrant revisions to those thresholds. DBR will issue supervisory letters to notify the FHLBanks of any subsequent revisions that it believes to be appropriate in light of any material changes in market conditions, and will provide an appropriate notice period for the FHLBanks to make appropriate adjustments to their liquidity management practices.

This guidance rescinds the March 6, 2009 Liquidity Supervisory Letter as of March 31, 2019, but does not supplant existing regulations that pertain to liquidity at the FHLBanks.[2]

Background

Liquidity risk is the risk that a financial institution will be unable to meet its financial obligations in a timely and cost-efficient manner. Strong liquidity risk management enables a FHLBank to be financially sound, so that it may continue to perform its mission, while limiting and controlling shortfalls in cash. This AB describes key elements of a strong liquidity management program,

[1] For purposes of this bulletin, "liquidity" includes non-advance cash inflows during the measurement period plus certain high quality liquid assets (Treasury securities with remaining maturities of 10 years or less held in the Trading Account or Available-for-Sale accounting categories, and that are uncommitted and unencumbered).

[2] The regulatory provisions addressing FHLBank liquidity are located at 12 CFR 1236, Appendix, Standard 5 (Liquidity and Reserves) and 12 CFR 1270.3 (reserves for deposits from members).

including cash flow measurement, funding gaps, stress testing, and a contingency funding plan (CFP).

FHFA has adopted a series of prudential management and operations standards (PMOS) for the FHLBanks and the Enterprises, one of which addresses the adequacy of an entity's liquidity and reserves.[3] A FHLBank's failure to meet any of the prudential standards may invoke the remediation provisions of the PMOS statute,[4] and may also constitute an unsafe and unsound practice that would provide grounds for FHFA to invoke its other administrative enforcement powers.[5] This AB complements the provisions of Standard 5, which describes the FHFA's general expectations for an effective liquidity risk management framework. More specifically, Standard 5 provides that a FHLBank should articulate an appropriate liquidity risk tolerance; establish a process for identifying, measuring, and controlling its liquidity position and liquidity risk exposures; and develop a funding strategy that includes diverse sources of funding. In addition, Standard 5 states that FHLBanks should conduct regular stress tests to identify sources of potential liquidity strain, and should establish a CFP. Of most relevance to this AB, Standard 5 states that a regulated entity should maintain adequate reserves of liquid assets, including marketable securities that can be liquidated to meet unexpected needs. The management of liquidity risk is also an element of an entity's overall risk management process that is addressed by Standard 8 of the PMOS, which describes the responsibilities of boards of directors and senior management and the need for the FHLBanks to establish risk management practices that measure, monitor, and control liquidity, market, credit, and operational risks. Management of liquidity risk should also be addressed as an element of a regulated entity's enterprise-wide risk management program that is required by FHFA regulations.[6]

The principal sources of funding for the FHLBanks are the global capital markets, into which the FHLBanks issue their consolidated obligations (COs), on which they are all jointly and severally liable. Because the FHLBanks are government-sponsored enterprises (GSEs), they can issue debt at lower interest rates (controlling for tenor) than can their members. Though the FHLBanks have that funding advantage over their members, their GSE status makes them ineligible to borrow from the Federal Reserve Bank's discount window, nor do they have daylight overdraft privileges at a Federal Reserve Bank, both of which funding sources are generally available to depository institution members. Consequently, during periods of disruption or duress in the capital markets, systemic or otherwise, or in the FHLBanks' operating environment, it is essential that the FHLBanks have established adequate reserves of liquidity to ensure their ability to continue funding advances and letters of credit for their members, as provided in Standard 5 of the PMOS. This AB is intended to provide guidance to assist the FHLBanks in maintaining a level of liquid assets that is consistent with the expectations of Standard 5.

<u>Guidance</u>

This AB sets out FHFA's supervisory expectations with respect to what may constitute an adequate amount of liquidity for purposes of meeting the PMOS. A FHLBank maintaining a liquidity position at or above the levels described in this bulletin will be presumed to be operating with "adequate reserves of liquid assets" as that term is used in the PMOS.[7] Notwithstanding that presumption, FHFA

[3] 12 CFR part 1236, Appendix, Standard 5
[4] 12 USC 4513b, 12 CFR 1236.4.5
[5] 12 CFR 1236.3(d)
[6] 12 CFR 1239.11(a) (requirement for a board-approved risk management program).
[7] 12 CFR part 1236, Appendix, Standard 5.

will assess the adequacy of each FHLBank's liquid assets and its liquidity risk management program as part of each annual examination, and will take any appropriate supervisory or enforcement action if it determines that a particular FHLBank's liquidity reserves or risk management program are deficient in any material respect.

The guidance below is intended to provide some reasonable assurance that the FHLBanks will be able to conduct their normal business operations – providing advances and standby letters of credit (SLOCs) to their members – for a specified period of time without access to the capital markets. As is the case with guidance adopted by other banking regulators, this AB addresses the level of on-balance sheet liquid assets and funding imbalances, as described in the provisions below relating to base case liquidity and funding gap limits, respectively. As part of the base case liquidity measure, the guidance also includes a separate provision to address liquidity risk associated with a FHLBank's off-balance sheet commitments arising from its issuance of SLOCs.

I. *Base Case Liquidity*

Cash Flow Measurement

Positive cash flow is important to maintaining an adequate liquidity position, as having sufficient positive cash flow will better enable a FHLBank to withstand a sustained capital markets disruption that impedes or limits its ability to issue COs. DBR believes each FHLBank should be able to maintain a positive cash balance during a projected period of time (measurement period) without access to the capital markets for COs or other unsecured funding sources.[8] Under the 2009 Liquidity Supervisory Letter, the FHLBanks assume a 5-day period without access to the capital markets, but they also assume that certain large members would not renew their advances during that period. The federal banking regulators; however, allow those large depository institutions to assume that they will renew 75 percent of their FHLBank advances.[9] This suggests that the assumptions underlying the 2009 Liquidity Supervisory Letter may not be sufficient to cover the FHLBanks' actual liquidity risk associated with those large members' advances. Furthermore, a FHLBank is expected to be a liquidity provider by offering to make advances to all members, even in times of market disruption.[10]

To address those additional risks, FHFA believes that the FHLBanks should maintain larger liquidity positions to allow them to meet their operational needs over a longer period of time without access to the capital markets. Such liquidity reserves are especially important for the FHLBanks because they do not have access to any material off-balance sheet liquidity sources on which they could rely during market disruptions, such as the Federal Reserve Discount Window or the Government Sponsored Credit Facility that expired in December 2009.[11] FHFA believes that a reasonable measurement period

[8] Other unsecured borrowing sources would be limited to member deposits and federal funds purchased. *See* 12 CFR 1270.2 (authorized Bank liabilities).

[9] 12 CFR 249.32(j)(1)(iii). Under these Liquidity Coverage Ratio risk measurement standards (LCR), depository members subject to LCR are only required to provide liquidity coverage of 25 percent of their secured borrowings from U.S. government-sponsored entities that are assigned a risk weight of 20 percent, such as FHLBank advances.

[10] FHFA regulations require that the FHLBanks offer to provide advances to all members with maturities of up to ten years, and allow them to make advances with longer maturities, in both cases consistent with the safe and sound operation of the FHLBank. 12 CFR 1266.5(a). Both the statute and regulations recognize a FHLBank's right to decline to make an advance to a particular member for reasons of safety and soundness. 12 USC 1429; 12 CFR 1266.4(a).

[11] The U.S. Treasury Department established the Government Sponsored Enterprise Credit Facility on September 7, 2008 as a back-up credit line for emergency use by Fannie Mae, Freddie Mac, or the FHLBanks. A fact sheet describing the facility can be located at https://www.treasury.gov/press-center/press-releases/Documents/gsecf_factsheet_090708.pdf.

of days without access to the capital markets generally would be between 10 and 30 calendar days, depending on market conditions. As noted previously, DBR is issuing a supervisory letter to the FHLBanks identifying the number of days for the initial measurement period.

FHFA believes that a prudent measure for assessing the adequacy of a FHLBank's liquidity position is whether it has sufficient positive cash balances to cover its expected funding needs over the specified number of days in the measurement period. Determining the positive cash balances is largely a function of a FHLBank's cash inflows and outflows. In order to ensure that there is consistency in how each FHLBank calculates its cash balance liquidity positions, FHFA has developed a series of assumptions regarding cash inflows and cash outflows that each FHLBank should use in establishing its Base Case liquidity position. The initial cash flow assumptions are also described in the supervisory letter that DBR is providing to the FHLBanks. Accordingly, each FHLBank, on a daily basis, should project forward (for the duration of the measurement period) and maintain positive cash balances net of cumulative daily cash flows, assuming the renewal of all maturing advances, according to the following formula: [12]

$$Base\ Case\ days\ of\ liquidity\ \left(bc_{days}\right) \geq n\ (where\ 10\ \leq n\ \leq 30)$$

$$bc_{days} = Min(i) - 1\ where \sum_{\mathrm{k=1}}^{\mathrm{i}} (\text{Cash inflow}_k - \text{Cash outflow}_\mathrm{k}) < 0\ ; \quad \mathrm{i} = 1, \dots, 31$$

Standby Letters of Credit Measurement

The FHLBanks have experienced significant growth in SLOCs, which they issue at the request of their members for the benefit of third parties. Beneficiaries can draw against the SLOC by presenting a demand to the FHLBank. SLOCs totaled $149.4 billion at year-end 2017, up materially from $29.2 billion at year-end 2007. Much of the growth in SLOCs has occurred over the past five years as depository institution members have used the product to optimize their liquidity.[13] The substantial growth in this off-balance sheet product has created a greater risk to the FHLBanks. Specifically, there is now greater possibility that beneficiaries will demand more payments under their SLOCs in a short period of time, which creates a potential liquidity exposure for the FHLBanks. Consequently, any measure of an adequate level of liquidity should include some amount to cover that potential exposure. To ensure that a FHLBank will have adequate funds available to support its SLOC commitments, FHFA believes that it should maintain a liquidity reserve of between 1 percent and 20 percent of its outstanding SLOC commitments.[14] The supervisory letter that DBR is providing to the FHLBanks also identifies the initial percentage that FHFA believes would provide adequate liquidity for these instruments in light of current market conditions.

[12] Renewing advances is a simplifying assumption for the advances book of business given that the maturities of most advances are short-term and advances have steadily grown since 2012 (after contracting for several years after the financial crisis). The assumption is based on the premise that FHLBanks should continue to provide advances during a period of impeded CO market access.

[13] A frequent use of SLOCs by depository members is to secure public unit deposits, which then allows the members to use their highly-rated securities to meet their own liquidity requirements rather than pledge them as collateral for the public unit deposits.

[14] For a variable balance letter of credit, the gross commitment should be used as the notional amount outstanding.

II. *Funding Gaps*

Funding gap metrics measure the difference between a FHLBank's assets and liabilities that are scheduled to mature during a specified period, and are typically expressed as a percentage of the FHLBank's total assets.[15] Operating within appropriate funding gap limits reduces large structural imbalances, which provides for more stable asset and liability balance sheet structures. Furthermore, maintaining appropriate funding gap limits reduces the amount of liquidity transformation and pro-cyclical funding behavior. By maintaining prudent funding gap limits for three-month and one-year time horizons, the FHLBanks may reduce the liquidity risks associated with a mismatch in their contractual asset and liability maturities, including an undue reliance on short-term debt funding, which increases their debt rollover risk. Depending on conditions in the financial markets, FHFA believes that maintaining funding gap limits within the range of negative 10 percent to negative 20 percent for the three-month horizon, and negative 25 percent to negative 35 percent for the one-year horizon, would provide reasonable assurance that a FHLBank would have adequate liquidity to address the risks associated with possible asset and liability maturity mismatches. The supervisory letter that DBR is providing to the FHLBanks also identifies the initial percentages within those ranges that FHFA believes would be appropriate in light of current market conditions.

In order to ensure that there is consistency in the way in which the FHLBanks calculate their funding gap ratios for FHFA's supervisory purposes, FHFA has developed a formula, set out below, that each FHLBank should use to calculate its funding gap ratios. When measuring their funding gaps, the FHLBanks should do so as of calendar month-end, using the average ratio for the most recent three month-ends.[16]

$$Funding\ gap = \frac{Assets_{with\ remaining\ maturity<x} \ - \ Liabilities_{with\ remaining\ maturity<x}}{Total\ assets};$$
$$where\ x = 90\ or\ 360\ days$$

III. *Counter-Cyclical Liquidity Supervisory Approach*

The financial crisis demonstrated that financial intermediaries should maintain prudent levels of liquidity to protect against unexpected disruptions in funding. During periods of prolonged market stress, a FHLBank may need to use the liquidity that it established during a non-stress period. To that end, the DBR Deputy Director may, based on ongoing monitoring of market conditions, reduce the measurement period under the base case liquidity provision or increase the negative funding gap thresholds through a supervisory letter to the FHLBanks. Any such actions will be guided by what is necessary to preserve the safety and soundness of the FHLBanks, even if that entails allowing the FHLBanks to maintain liquidity positions outside of the ranges described herein. In addition, if a FHLBank experiences a prolonged funding event, it promptly should inform the Deputy Director of its need to reduce its liquidity holdings or increase its negative funding gaps. At a minimum, any such

[15] A FHLBank may include estimates for expected cash inflows, including anticipated prepayments, from mortgage assets as part of assets in the funding gap ratio numerator. Mortgage cash flow estimates should be consistent with estimates the FHLBank uses for its market risk measures. For purposes of calculating funding gap measures, Banks may include U.S. Treasury Securities meeting the definition of HQLA held in a Trading account as short-term (T+1) assets. All other U.S. Treasury Securities should be reported in funding gap measures at their maturity.
[16] For example, Funding Gap = [Funding Gap current month-end (T_0) + Funding Gap month-end ($T\text{-}_1$) + Funding Gap month-end (T-2)] divided by 3.

notice should describe the source of the funding stress, the expected duration of event, and how and when the FHLBank expects to restore its liquidity positions.

FHFA recognizes that a FHLBank infrequently may need to draw upon its liquid assets to function as a liquidity provider for its members during short-term market disruptions or other short-term events that impair access to funding.[17] Accordingly, this Advisory Bulletin does not preclude a FHLBank from temporarily decreasing its liquidity position, in a safe and sound manner, below the levels described herein, as necessary for providing unanticipated extensions of advances to members or draws on letters of credit to beneficiaries.[18] In such instances, the FHLBank should notify its examiner-in-charge of the cause of any temporary liquidity shortfall, anticipated duration of the temporary shortfall, and when and how a FHLBank expects to restore its liquidity back to the identified level set forth in FHFA's separate supervisory letter. DBR will evaluate any such temporary liquidity shortfall as part of the FHLBank's annual examination.

IV. *Liquidity Stress Testing*

Liquidity stress testing allows the assessment of vulnerabilities to FHLBank-specific, entity-specific, and market-wide exposures across a range of time horizons. Stress test results may identify sources of potential liquidity strain that can be mitigated by appropriate liquidity risk management strategies. A FHLBank may use results of stress tests to adjust its liquidity management policies and procedures, positions and practices, and to develop effective contingency plans. The PMOS states that regulated entities should conduct stress tests on a regular basis and use the results to keep their liquidity risk exposures within the bounds of their established risk tolerances, as well as to adjust the elements of their risk management programs. To allow FHFA to assess each FHLBank's alignment with this provision of the PMOS, the FHLBanks should report the results of this stress test to the FHFA annually, using financial data as of June 30 of each year. FHLBanks that conduct liquidity stress tests more frequently than annually should continue to do so, but need not report those additional results to FHFA. FHFA will review results of all stress tests as part of the liquidity framework assessment during examinations.

V. *Contingency Funding Plan*

The PMOS provide that a regulated entity should have a formal CFP that establishes strategies for addressing liquidity shortfalls in emergencies, and that is tested periodically. The CFP should represent management's best estimate of balance sheet changes that may result from a liquidity event based on stress testing and scenario analysis and should be integrated into a FHLBank's overall liquidity risk management. A CFP should establish plans, courses of action, clear lines of responsibility, and escalation procedures to ensure liquidity sources are sufficient to fund normal operations during potential temporary, intermediate-term, and long-term liquidity disruptions.

FHFA expects an effective CFP to clearly specify the roles and responsibilities, including the authority to invoke the CFP, identify alternates for key roles, and include realistic action plans to execute the various elements of the plan for given levels of stress. A CFP should establish more frequent and more detailed internal liquidity risk reporting as the stress situation intensifies. The CFP should recognize the need to coordinate actions and information flows with other FHLBanks and the Office of Finance

[17] The use of liquidity also is anticipated during operational events such as natural disasters, cyber disruptions, etc.
[18] Force majeure events may also cause a temporary decrease in a FHLBank's liquidity position.

and address scenarios where debt issuance is constrained. A CFP should be regularly updated to reflect changes in market or business conditions.

FHFA expects each FHLBank to test periodically its CFP to assess its reliability and operational soundness under stress conditions. Testing should evaluate whether roles and responsibilities are up-to-date and appropriate; whether legal and operational documents are up-to-date and appropriate; whether the FHLBank can transfer cash and collateral where and when needed; and whether the FHLBank can draw on contingent liquidity lines when needed.

VI. *Core Mission Adjustments*

FHFA previously issued an AB that provides guidance about how it will assess each FHLBank's core mission achievement. That bulletin uses a ratio of a FHLBank's "primary mission assets" to its outstanding consolidated obligations as the measure of its mission achievement.[19] To prevent a FHLBank that has invested in high quality U.S. Treasury securities for liquidity purposes from being penalized under the core mission achievement guidance for having made those investments, FHFA has determined that it would be appropriate to exclude those securities when measuring a FHLBank's core mission achievement. Accordingly, a FHLBank may adjust its core mission achievement measure, as defined in AB 2015-05, by deducting from the denominator of the Primary Core Mission Asset ratio the annual average par value of its U.S. Treasury Securities that are held in a Trading account or Available-for-Sale account, as reported in FHFA's Call Report System.

VII. *Transition Period and Dates*

The Deputy Director is issuing a supervisory letter to accompany this AB that sets out the initial measures for each of the liquidity metrics described in the AB, along with the dates as of which FHFA will begin assessing the adequacy of each FHLBank's liquidity position in the manner described in the AB. The supervisory letter includes phased-in measures for the cash flow component of the Base Case Liquidity provisions. Absent a market event that requires a countercyclical use of liquidity, the initial measurement period will begin on March 31, 2019, and full measurement period will begin on December 31, 2019. For the SLOC component of the Base Case Liquidity provisions, the date is March 31, 2019. For funding gap measures, FHFA will begin using those measures on December 31, 2018.

VIII. *Reporting*

DBR will develop new reporting requirements for each of the liquidity measures described in this AB well in advance of the above dates.[20] DBR intends to monitor each FHLBank's liquidity position through their submission of periodic reports, as well as through the examination process.

IX. *Reservation of Authority*

[19] Advisory Bulletin – AB 2015-AB-05, *FHLBank Core Mission Achievement*, July 15, 2015.

[20] Currently FHLBanks provide liquidity data as specified in SDR-2008-03, which will be revised or rescinded when the new reporting requirements are established.

Nothing in this Advisory Bulletin limits the authority of FHFA under any other provision of law or regulation to take supervisory or enforcement action, including action to address unsafe or unsound practices or conditions, deficient liquidity levels, or violations of law.

Related Regulations and Advisory Bulletins

12 USC § 1431(g) – Reserve Requirement for Member Deposits
12 CFR Part 1236 – Prudential Management and Operations Standards
12 CFR Part 1266.5 – Terms and Conditions for Advances
12 CFR Part 1270.2 – Authorized Liabilities
12 CFR Part 1270.3(b) – Investment Coverage of Member Deposits
12 CFR Part 1270.10(b) – Liquidity Certification
Advisory Bulletin – AB 2015-AB-05, *FHLBank Core Mission Achievement*, July 15, 2015

FHFA has statutory responsibility to ensure the safe and sound operations of the regulated entities and the Office of Finance. Advisory bulletins describe FHFA supervisory expectations for safe and sound operations in particular areas and are used in FHFA examinations of the regulated entities and the Office of Finance. Contact SupervisionPolicy@fhfa.gov if you have questions.