

Bank Treasurers' Views on Liquidity Requirements and the Discount Window

10.12.21



Summary¹

In August, September and October 2021, we interviewed the treasurers of seven banks about their views on regulatory and supervisory liquidity requirements and the discount window. The treasurers were from regional banks and Global Systemically Important Banks (GSIBs), domestic banks and foreign-owned banks, including banks with a range of business models.

The treasurers all judged that liquidity requirements had made the financial system more resilient by increasing the amount of liquid assets held by banks but could nonetheless be improved. Liquidity requirements generally require banks to hold stockpiles of liquid assets and indicate that banks are allowed to sell or monetize the assets to meet liquidity needs under stress. None of the treasurers stated that he or she would be willing to use the stockpiles of liquid assets they were required to maintain if doing so put them below a regulatory standard, and several noted that they raised liquidity in March and April 2020 by borrowing at term and selling illiquid assets at a discount specifically to remain in compliance, actions that run contrary to the objective of the requirements. Many of the treasurers suggested that the requirements would be improved if they included a specific buffer that was intended to be used in times of financial stress without triggering a regulatory or supervisory response.

All of the treasurers stated that they were unwilling to borrow from the discount window apart from bridging temporary payment system disruptions. They pointed to the long-standing stigma of discount window borrowing, including resistance from internal senior management and disapproval by examiners as the main reasons that they would not utilize the discount window. Most judged that the stigma associated with borrowing would only go away if borrowing were seen as a business-as-usual occurrence, which would not be easy in light of ingrained opinions. A few noted that public comments by Fed leadership that borrowing was normal and even beneficial might help, especially if that message were conveyed to Congress. Treasurers all thought the Fed's new Standing Repo Facility could remain stigma-free, but only if using it were seen by examiners, bank management and the public as normal from the outset, a view that could not be maintained if banks were not able to assume use of the SRF in their liquidity contingency plans.

Introduction

An important purpose of liquidity regulations is to prevent banks from responding to a systemic liquidity shock in a way that contributes to a broader liquidity crisis. In a liquidity shock, banks generally become less certain of their ability to borrow in the market and of their counterparties' ability to repay borrowings in a timely manner. At the same time, the cost of appearing to have liquidity problems increases exponentially. As a result, banks are inclined to borrow at term and

Bill Nelson

202.589.2454

bill.nelson@BPI.com

Brett Waxman

646.736.3961

bwaxman@BPI.com

¹ Yasmeen Abdul-Razeq provided research assistance.

become reluctant to lend at term. If the liquidity stress is significant, banks may sell assets at fire-sale prices to raise cash. Such actions could amplify the liquidity event.

Liquidity regulations require banks to hold large amounts of high-quality liquid assets (HQLA) in part so that in such circumstances banks would be more confident in their own liquidity situation and more confident in their bank counterparties' ability to repay. Consequently, in theory, if there is a liquidity shock, banks subject to the requirements should be more willing to lend at term and not sell assets at fire-sale prices (because liquid assets can be sold without a decline in price or monetized without sale via repo).

The success of liquidity regulations in accomplishing these objectives depends critically on bank behavior. Will having large stockpiles of HQLA encourage banks to keep lending to each other at term and prevent banks from selling illiquid assets at a discount to generate liquidity? Will banks use their HQLA if necessary, and will they expect their bank counterparties would use their own HQLA? Reportedly, in spring 2020, banks were not willing to use their stockpiles of liquid assets if doing so put them out of compliance with or close to regulatory standards, but the existence of those stockpiles helped maintain counterparty confidence.

A closely related question is under what circumstances banks will be willing to borrow from the discount window. Major banks maintain large amounts of collateral at their Federal Reserve Banks which could be used to secure a discount window loan. Borrowing from the discount window against collateral to meet a liquidity need is similar to using HQLA to meet a liquidity need; in particular, the implication for remaining creditors and the FDIC insurance fund is the same – good assets have been tied up to pay off short-term creditors. Likewise, the perception that a counterparty bank has abundant borrowing capacity should increase confidence that the counterparty will meet its obligations in a timely way. However, banks remain extraordinarily unwilling to borrow from the discount window. Similarly, banks pledge collateral to the Federal Reserve to obtain daylight credit capacity, but some banks now appear unwilling to use that capacity.

Given the importance of bank behavior for the success of liquidity regulations and the discount window in accomplishing their objectives, in August, September and October 2021, we interviewed seven bank treasurers about how liquidity regulations affected their behavior and how they viewed the possibility of borrowing from the Federal Reserve. The questions asked during those interviews are included as an appendix to this note.

Liquidity Requirements

BACKGROUND

The banks we interviewed are subject to a range of liquidity requirements including the liquidity coverage ratio (LCR), the net stable funding ratio (NSFR), internal liquidity stress testing requirements contained in Regulation YY and resolution liquidity requirements. We will collectively refer to these regulatory, supervisory and resolution requirements as “liquidity requirements.”

The LCR requires a bank to maintain a stock of HQLA that is sufficient to meet its expected net cash outflows over a 30-day time horizon; the metric is defined as the ratio of HQLA to net cash outflows, and the requirement is that it be at least 100 percent. While the definition of HQLA is restrictive, generally the assets that qualify are easily and immediately convertible into cash with little or no expected loss of value

during a period of liquidity stress. Cash outflows and inflows are determined by applying standardized assumptions about the effects of the liquidity stress to the banking organization's assets and liabilities.

The NSFR requires banking organizations to maintain sufficient stable funding to support their assets, commitments and derivatives exposures over a one-year time horizon. The NSFR is measured via a ratio that compares the amount of available stable funding to the amount of required stable funding, and banks are required to maintain a minimum ratio of 100 percent. Similar to the LCR, the NSFR utilizes standardized assumptions to determine the available stable funding of a banking organization's assets and the required stable funding of a banking organization's liabilities, utilizing conservative assumptions.

Regulation YY requires that banks conduct internal liquidity stress tests and hold a liquidity buffer sufficient to meet their projected net stressed cash-flow needs over a 30-day time horizon. Banks are generally required to conduct these tests at least monthly across a variety of time horizons – overnight, 30 days, 90 days, one year and any other time horizon relevant to their liquidity risk profile. These liquidity stress tests must use scenarios including (1) adverse market conditions, (2) an idiosyncratic stress event, (3) combined market and idiosyncratic stress, (4) any other appropriate scenario based on a BHC's financial condition, size, complexity, risk profile, scope of operations or activities. Banks are permitted to make their own cash flow projection assumptions and own determinations of "highly liquid assets" but are subject to annual supervisory horizontal liquidity reviews that often lead to changes in those assumptions.

Resolution liquidity requirements include Resolution Liquidity Execution Need (RLEN) & Resolution Liquidity Adequacy and Positioning (RLAP). RLAP requires firms to estimate standalone liquidity needs for each material subsidiary over a minimum of 30 days of stress, and ensure sufficient liquidity is either pre-positioned in the subsidiary or otherwise available at the parent as HQLA to meet deficits. The parent must hold sufficient HQLA to cover the sum of all net liquidity deficits at every material subsidiary. RLEN requires firms to further account for the estimated liquidity needed post-bankruptcy filing to support the surviving or wind-down subsidiaries, which can lead to a requirement for even more liquid assets at the subsidiary level. The size of the liquidity requirements imposed by RLAP and RLEN are treated as confidential supervisory information; however, many large banks have reported that resolution liquidity requirements are the most binding constraint.

TREASURER VIEWS

Bank treasurers were unanimous in their view that liquidity requirements have made the financial system more resilient by boosting the amount of liquid assets that banks hold. Several noted, in addition, that the internal stress tests and annual horizontal reviews had led them to improve their ability to assess their liquidity and determine potential liquidity needs under stress. A few noted that the regulations were generally well designed; however, all observed that the regulations could be improved, with several mentioning certain aspects of the LCR's calibration.

Large banks are required to maintain an LCR above 100 percent. The introduction to the regulation emphasizes that banks may use their HQLA to meet liquidity needs under stress. However, the regulation requires a bank to notify its supervisor immediately if its LCR falls below 100 percent even for a moment and submit a remediation plan if its LCR is below 100 percent for three days. As a result, all banks maintain an additional buffer above 100 percent to mitigate the risk of breaching the regulatory minimum. In Spring 2020 the federal banking agencies

encouraged banks to be willing to use their stockpiles of HQLA.² Nonetheless, the bank treasurers were concerned that if they did allow their LCRs to fall below 100 percent, examiners would later consider it a sign that the bank was not properly managing its liquidity risk. Moreover, any decision to let the bank's LCR go below 100 percent would be overseen, and not viewed favorably, by the bank's internal oversight committees. There were also concerns expressed about the potential public reaction to a bank breaching its minimum LCR requirement, even in the context of the COVID pandemic. Additionally, one treasurer noted that his bank's resolution and recovery plan contained a trigger linked to an LCR shortfall, so breaching the requirement by a certain amount would activate a portion of that plan. Consequently, the treasurers all observed that they would not use their HQLA to meet a liquidity need if doing so caused them to have an LCR below 100 percent.

The unwillingness of banks to use their liquidity during a time of liquidity stress has long been recognized as a severe problem with liquidity requirements, and it had real consequences last year. Two treasurers noted that March 2020 was a time of notable liquidity pressure when many of their business customers drew on their lines of credit.³ To avoid having their LCRs fall below 100 percent, some banks borrowed at term and one bank sold non-HQLA assets at a discount, two actions that can transmit the liquidity pressure onto the rest of the financial system. The treasurers indicated that their banks took those actions solely to protect their regulatory liquidity ratios, not because they judged the steps necessary from a liquidity risk management point of view.

To address this usability problem, bank treasurers recommended that the LCR include both a minimum and a buffer, similar to the existing capital framework. For example, the requirement would remain 100 percent in ordinary times, but in times of stress there would only be a supervisory response if a bank's LCR dropped below 80 percent. The 80-100 percent zone (or some similar zone) would be designed to allow the bank to use some of its liquidity under stress without adverse supervisory consequences including immediate notification or the filing of a remediation plan.⁴

Treasurers also suggested that liquidity assessments be based on stress tests modeled to match the bank's situation, noting that the mechanistic nature of the requirements had negative consequences and did not take sufficient account of each bank's individual situation. While the result of these one-size-fits-all requirements may be that the outputs from each institution's liquidity stress tests are precise and facilitate comparisons across banks, there are concerns that they do not accurately measure each bank's individual liquidity condition. For one, the insistence that banks use the calibration of liquidity risk built into the rules tended to stifle professional judgment about liquidity risks. The treasurer of one bank that is subject to the internal liquidity stress test requirements but not the LCR noted that examiners believe the bank's internal stress tests should largely corresponded to the LCR's assumptions (and those of other banks), even if the bank believes these assumptions are not accurate. If a bank's internal liquidity stress tests did not replicate the LCR, the bank was labelled an "outlier" through the horizontal liquidity exam and encouraged to modify their assumptions in what amounts to a

² "Federal bank regulatory agencies modify liquidity coverage ratio for banks participating in Money Market Mutual Fund Liquidity Facility and Paycheck Protection Program Liquidity Facility," May 5, 2020, <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200505a.htm>

³ When banks participate in a syndicated line of credit, in most cases the banks do not maintain the deposit relationship with the businesses, so when the lines are drawn the participating bank does not benefit from a corresponding deposit inflow.

⁴ There were a number of other suggestions for improving liquidity regulations. Two treasurers flagged trapped liquidity as a concern, including Regulation W and ring-fencing requirements that can make the system less resilient, noting that losses generally don't occur throughout the organizational structure and these restrictions can prevent the transfer of liquidity to related entities in times of need. Two treasurers pointed to the restrictions on counting deposits from hedge funds as operational deposits as a deviation from the Basel framework that is unnecessarily punitive to certain business models. One treasurer noted that the regulations apply higher runoff rates from liabilities of broker-dealers compared with similar liabilities of commercial banks, which is problematic for banks that rely on liquidity from the broker-dealer. One treasurer suggested that the LCR horizon be extended to 90 days with modestly higher allowance for cash inflows and that the runoff assumptions should adjust to account for runoff that has already occurred. The maturity mismatch assumptions in the LCR and the treatment of partially insured deposits were also flagged by a treasurer as problematic.

form of regulation by supervision. For example, one bank found that it can take one to two years for a local municipality to change its bank based on the municipality's own timeline and procedures, but was still forced, begrudgingly, to maintain the LCR-based assumption that the bank would lose a significant percentage of their municipal deposits within 30 days.

One consequence of all banks managing to the same liquidity metrics with similar assumptions embedded in their internal liquidity stress tests is concentration risk. In Spring 2020, many banks sought to sell the same type of asset at the same time. But broker-dealers were overwhelmed and at times wouldn't answer the phone.

Regarding the NSFR, almost all treasurers felt it was unnecessary, particularly in light of the requirements around internal stress testing with a one-year horizon contained in Regulation YY. A few treasurers expressed concerns that in the future, the NSFR could become binding precisely when financial market intermediation is needed in a time of crisis because the regulation requires stable funding for repo lending but does not attribute any stable funding to repo borrowing.

All treasurers noted the considerable costs of complying with liquidity regulations. Several focused on the opportunity costs of holding HQLA as opposed to other assets. One treasurer indicated that a few lines of business underwent substantial changes or were significantly reduced in light of the liquidity regulations and another focused on the implementation and maintenance costs from a personnel and technology perspective to ensure compliance with requirements. For example, because the requirements treat secured municipal deposits less favorably than unsecured deposits, one bank stopped doing business with states and municipalities that required that their deposits be secured. One treasurer observed that the costs of liquidity regulations were worth it because of the resulting increased strength of the banking system.

Discount Window

BACKGROUND

The Federal Reserve lends to banks under three different programs – primary credit, which is for financially sound banks; secondary credit, which is for other banks that don't qualify for primary credit; and seasonal credit, which is for community banks with seasonal funding needs. Generally, “the discount window” refers to primary credit and “the discount rate” refers to the primary credit rate. Primary credit was defined in 2003 in Regulation A and in accompanying Qs and As as essentially a no-questions asked facility with no limitations on how banks can use it. Instead, the above-market rate and modest financial soundness criteria were intended to lead banks to use the facility sparingly. The no-questions-asked design was intended to help reduce the stigma associated with borrowing from the discount window. When primary credit was created, banks were notified in SR-Letter 03-15 that primary credit would be a valuable addition to their liquidity contingency arrangements.

Even though Regulation A has not been changed, nor the SR letter rescinded, the Federal Reserve's attitude toward using the discount window appears to have shifted after the Global Financial Crisis. Banks are largely forbidden from assuming that they can use the discount window in their liquidity stress tests and resolution plans, and, as discussed below, examiners reportedly view discount window borrowing negatively.

The Federal Open Market Committee opened in July 2021 a new lending facility, the Standing Repo Facility (SRF). The SRF currently lends funds to primary dealers in the form of a daily auction of \$500 billion in repo financing with an elevated stop-out rate. The facility will open up to large banks that have

the capacity to settle on the tri-party repo platform over time, starting in October. The Fed has indicated that it is still considering how the SRF will be treated in liquidity requirements, in particular, whether banks or bank holding companies will be allowed to assume use of the facility, but that, for now, banks would be required to treat the SRF the same as the discount window.

TREASURER VIEWS

Nearly all of the treasurers indicated that they were not willing to borrow from the discount window under almost any circumstances except perhaps if there were a payment-system outage or power failure that put them into overdraft for one night. The primary reason that they were unwilling to borrow was the stigma associated with use of the discount window. Management, examiners and the public would view such borrowing as a sign of mismanagement or financial weakness.

The view that discount window borrowing should be avoided at all costs is deeply embedded within the banks' corporate culture. Many treasurers noted that their banks' written procedures treat discount window borrowing as a signal of a serious liquidity problem. One treasurer indicated that his bank would borrow for a short-term in an emergency but would never plan on borrowing. In some cases, the treasurers did not have the authority to borrow without consulting their oversight committees. One treasurer noted that an unwillingness to borrow was steeped in long-standing views of bank management. Another noted that their CEO was unwilling to risk being accused by Congress of receiving a "bailout."

All the treasurers noted that if they borrowed, they would immediately inform their bank supervisors, and in most cases this notification would occur prior to borrowing. One bank relayed that the notification of their supervisor would be automatic, because borrowing is one of their "early warning indicators." Another emphasized that if she did not tell her examiner, the examiner would be "furious." Several banks noted that while discount window staff at their Reserve Bank and officials at the Board wanted them to be willing to borrow, they believe it would be viewed quite differently by their examiners, including those from the Federal Reserve. All stated that even if the supervisor indicated in the moment that it was OK to borrow (such as happened in spring 2020), borrowing could be viewed as a red flag that would result in additional supervisory scrutiny down the road. One bank noted that its internal guidelines state that that if the bank borrowed from the discount window, it would be required to immediately provide the Fed a repayment plan because that is what the bank had once been told by a Fed examiner, possibly in reference to borrowing for more than one night.

The Fed discloses the industry aggregate level of discount window borrowing each week on the H.4.1 statistical release and full details on each individual borrowing after two years. Two treasurers mentioned the disclosures as a secondary concern, despite the delay in public reporting, noting that in some cases it may be possible to determine the bank from the weekly aggregate statistical release.

Treasurers unanimously stated that the only way the stigma associated with the discount window could be removed was if the borrowing was viewed as business-as-usual rather than an extraordinary event. While not overly optimistic that stigma could be reduced given how engrained it has become over time, a few indicated that a public education campaign by Board members could be helpful. It was seen as particularly necessary to educate Congress that members are increasing financial stability risk when they tarnish banks that borrow from the discount window.

All the treasurers thought it was possible that the new SRF would be stigma-free because receiving funds through repo with the Fed was seen as different from borrowing from the Fed. Treasurers noted that using the facility would only be free of stigma so long as borrowing from it was viewed as unremarkable. Several noted that using

the SRF would not be seen as unremarkable if the Fed forbids banks from planning to use it while under liquidity stress. One regional bank treasurer indicated that the bank was considering using the SRF, but to do so the bank would have to pay a clearing bank to be able to have the capacity to settle on the triparty repo platform, and it was somewhat cost-prohibitive. The treasurer observed that if the bank could not plan on using the SRF in its liquidity stress tests, it would not be worth it to them to get access.

Most of the treasurers indicated that they perceived no stigma associated with using daylight credit as its use was still seen as simply a normal business decision, even though use was now rare. One treasurer indicated that his bank's management was concerned that using daylight credit could also be characterized by Congress as a bailout and therefore best avoided. Another indicated that borrowing from the Fed should be avoided, whether it was overnight or during the day, and that avoiding a daylight overdraft was the simplest way to avoid ending up borrowing from the discount window.

Appendix: Questions That Were Asked the Bank Treasurers

LIQUIDITY REGULATIONS

1. Are liquidity regulations well designed to accomplish the objective of making the banking system more resilient to liquidity shocks? If not, how can they be improved?
2. What liquidity regulations or supervisory expectations are most relevant for determining the level of liquidity risk that your institution takes?
3. Do you view your bank's HQLA as an available resource to meet liquidity needs even if using the HQLA would put your bank out of compliance with a liquidity regulatory minimum or supervisory expectation? If not, what changes would make you more comfortable using your bank's HQLA?
4. Does your stock of HQLA make you more willing to lend to other banks? Does your awareness that other banks are subject to liquidity requirements make you more willing to lend to them?
5. What are the costs to your bank of complying with liquidity regulations?
6. What separate purpose is accomplished by the NSFR as opposed to the LCR and other requirements?
7. If you were designing liquidity regulations from scratch, would you design them differently? If so, how?

DISCOUNT WINDOW

8. How much collateral does your bank maintain at the discount window and what is its composition?
9. Under what circumstances, if any, would your bank borrow from the discount window?
10. In your view, does the Fed want you to be willing to borrow from the discount window?
11. If you borrowed from the discount window, would your supervisors know? How? If so, would they want an explanation or disapprove?
12. What changes would make you more willing to borrow from the discount window?

13. How would the following possible adjustments by the Fed change your willingness to borrow from the discount window?
 - a. Lower the discount rate to be closer to market rates.
 - b. Only accept higher-quality collateral.
 - c. Make it easier to pledge collateral.
 - d. Tighten the financial soundness criteria.
 - e. Conduct monetary policy in a way that makes discount window borrowing more frequent.
 - f. Educate bank examiners that borrowing is OK.
 - g. Public statements by Federal Reserve officials that borrowing is OK.

14. Would your bank be more willing to borrow from a standing repo facility than borrow at the discount window? If so, why?

DAYLIGHT CREDIT

15. How much collateral does your bank have pledged to the Fed to secure daylight overdraft capacity and what is its composition?

16. Is your bank reluctant to run a daylight overdraft? If so, why?

17. What adjustments could make your bank more willing to run a collateralized daylight overdraft?