LIQUIDITY

Core Analysis Decision Factors

Examiners should evaluate the Core Analysis in this section to determine whether an Expanded Analysis is necessary. Click on the hyperlinks found within each of the Core Analysis Decision Factors to reference the applicable Core Analysis Procedures.

Do Core Analysis and Decision Factors indicate that risks are appropriately identified, measured, monitored, and controlled?

C.1. **Are policies, procedures, and risk limits adequate?** ***Refer to Core Analysis Procedures #5-7.***

C.2. **Are internal controls adequate?** ***Refer to Core Analysis Procedures #8-10.***

C.3. **Are the audit or independent review functions adequate?** ***Refer to Core Analysis Procedures #11-13.***

C.4. **Are information and communications systems adequate and accurate?** ***Refer to Core Analysis Procedures #14-17.***

C.5. **Are the management and use of alternative and rate sensitive funding sources reasonable?** ***Refer to Core Analysis Procedures #18-25.***

C.6. **Does the overall assessment of liquidity, including cash flow analysis and contingency funding plans, indicate liquidity needs can be met without adversely affecting operations or financial condition?** ***Refer to Core Analysis Procedures #26-40.***

C.7. **Do the board and senior management effectively supervise this area?** ***Refer to Core Analysis Procedure #7; Procedures #9-10; Procedure #14-17; & Procedures #41-48.***

LIQUIDITY

Core Analysis Procedures

Examiners are to consider the following procedures but are not expected to perform every procedure at every bank. Examiners should complete only the procedures relevant for the bank's activities, business model, risk profile, and complexity. If needed, based on other identified risks, examiners can complete additional procedures. References to laws, regulations, supervisory guidance, and other resources are not all-inclusive.

Preliminary Review

1. **Identify previous liquidity and funds management concerns by reviewing prior examination reports, file correspondence, and audits.**

2. **Review Uniform Bank Performance Reports (UBPRs), financial statements, and other applicable data to develop a preliminary assessment of liquidity trends and risk.[1] Identify significant trends or changes in source and use of funds that may require further analysis. For banks with moderate to significant asset or loan growth, identify specific funding sources that may require further analysis.**

3. **Review board or committee minutes and information packets presented to the directorate for evidence of oversight, responsibility, routine management reports, and any identified liquidity concerns.**

4. **Determine whether there are recent or planned changes in operations, management, oversight, or strategic direction relating to liquidity and funds management (such as growth, new products, mergers, or acquisitions). Discuss these items with management as necessary and consider the potential liquidity risks and benefits.**

Policies, Procedures, and Risk Limits

5. **Review liquidity and funds management policies to ensure the guidelines include sufficient management guidance and reflect the board's risk tolerances and oversight responsibilities. Prudent liquidity guidelines, which may also be found in investment, loan, or other policies, typically:**
   - **Authorize an individual(s) or committee to conduct activities and delineate planning, management, and reporting responsibilities;**
   - **Describe diversification targets for funding sources and address acceptable terms for each funding source. Such targets may be segmented to address short-, medium-, and long-term funding needs and limit exposures to, or concentrations in, single providers, market segments, wholesale funding types, investment securities, marketable loans, other assets, etc.;**

[1] **Average balances may provide useful indicators of operating liquidity levels.**

- **Emphasize the importance of cash flow forecasting as a primary measurement and monitoring tool;**
- **Define and place limits on funding sources and uses, such as:**
  - **Maximum loan-to-deposit ratio or loan-to-asset ratio,**
  - **Reliance on less stable funding of longer-term assets,**
  - **Individual and aggregate limits on wholesale and rate sensitive funds by type and source,**
  - **Target amounts of unpledged liquid assets,**
  - **Maximum level of illiquid asset concentrations such as complex financial instruments or bank owned life insurance (BOLI)[2], and**
  - **Off-balance sheet positions;**
- **Require monitoring of bank policy compliance and policy-exception handling and reporting;**
- **Set targets for unencumbered, liquid asset reserves;**
- **Provide contingent liquidity plans for unexpected cash flow mismatches, including periods when unsecured borrowing lines, brokered and high-rate deposits, and other similar funding sources may be unavailable or cost prohibitive;**
- **Include risk limits and funding strategies for material activities (such as securitizations, derivatives, trading, international activities, or backstop-lending for commercial paper) that are subject to adverse financial market events;**
- **Emphasize the importance of comprehensive and timely reports to management and the directorate that address current conditions and stressed scenarios; and**
- **Include a framework for stress testing liquidity risk commensurate with the risk profile and activities of the bank.**

6. Determine whether funds management policies, procedures, and risk limits are reasonable in relation to management abilities, risk appetite, strategic plans, current economic conditions, and the complexity, and overall financial condition of the bank.

7. Evaluate the frequency and timeliness of policy reviews and updates by the board.

Internal Controls

8. Determine whether sufficient separation of duties (or comparable controls) exists over the preparation of reports used in managing the liquidity function.

9. Determine whether reports concerning liquidity sources and uses are prepared and reviewed with appropriate frequency.

[2] **Refer to the BOLI ED Module for more information.**

10. Determine whether policy exceptions are appropriately identified, reported, tracked, and approved.

Audit or Independent Review

11. Determine whether the scope of audits or independent reviews is sufficient to identify policy, reporting, internal control, and compliance deficiencies.

12. Determine whether audits or independent reviews are properly reported to the board and appropriate operating committee.

13. If recent reviews disclosed deficiencies, determine whether management responses and corrective actions are reasonable and promptly implemented.

Information and Communication Systems

14. Determine whether internal management reports provide accurate and timely information (regarding funding sources and uses) to support ongoing liquidity-management decisions and for monitoring the results of those decisions.

15. Determine whether board and senior management reports provide sufficient and appropriately tailored information to monitor compliance with board policies.

16. Determine whether management performs adequate analysis of funding sources and uses to assure ample funding capacity.

17. Determine whether liquidity needs and risks are effectively communicated to all affected areas.

Analysis of Funding Sources and Uses

18. Compare current liquidity levels and prospective sources of liquidity to present and future funding needs. Consider:

- **Adequacy of funds management reporting and planning;**
- **Stability and diversification of funding sources; and**
- **Financial condition and performance.**

19. Assess the composition and stability[3] of the deposit funding structure, considering:

- **Out of area deposits, including national CDs, internet deposits, money desk operation, and deposit listing services;**
- **Brokered deposits;**
- **Reciprocal deposits;[4]**
- **Public deposits, uninsured deposits, or other large deposit relationships;**
- **Deposits obtained from deposit management programs, such as CD specials, deposit account rate incentives, and internet banking initiatives;**
- **Potential surge deposits;**
- **Maturity distribution; and**
- **Potential deposit rate sensitivity in various market environments.**

20. Assess the composition of the non-deposit funding structure. Identify sources of all significant borrowings or market instruments (e.g., FHLB advances, repos, Fed funds, FRB Discount Window, asset securitization, and complex wholesale borrowings). Review agreements; consider the terms, structure, and collateral requirements of borrowing arrangements; and determine the extent and use of those funds, considering the following factors:

- **Trends in use of such funds, either seasonally or as a more permanent funding vehicle;**
- **Stability and diversification of those sources;**
- **Use of those funds relative to strategic plans, controls, and alternate funding sources;**
- **Remaining borrowing capacity under both secured and unsecured borrowing lines; and**
- **Compliance with collateral eligibility guidelines of each agreement, particularly concerning electronic notes and signatures.**

21. Compare the rates paid for deposits and other funding sources with published indices and local market rates. Determine the cause of any significant variances.

22. Review UBPR aggregate cost data and determine reason(s) for any significant variances or adverse trends in cost of funds, relative to peer data.

[3] Refer to the Brokered and High-Rate Deposits ED Module for further analysis of material exposure to brokered deposits and less stable or rate-sensitive funding sources.
[4] Refer to 12 CFR 337.6(e) for details regarding the limited exception for treating certain reciprocal deposits as brokered deposits.

23. Determine whether management practices or strategies resulted in a funding concentration. If so, determine the use of the funding and whether funding concentrations present elevated risks.

24. Assess the extent of liquidity provided by the securities portfolio and other investments considering:

- **The availability of highly liquid assets that could be sold or pledged to obtain funds under a stress scenario (highly liquid assets include unpledged US Treasury and agency securities);**
- **The volume of assets with limited marketability (e.g., municipals from small issuers, complex financial instruments, BOLI);**
- **The maturity structure, marketability, and vulnerability to market stress (i.e., price risk);**
- **Portfolio depreciation (ensure valuations conform to relevant reporting standards);**
- **Pledging requirements and the availability of unpledged securities;**
- **Significant changes or trends in composition and maturity; and**
- **Legal, regulatory, or operational impediments.**

25. Assess the extent of liquidity provided by the loan portfolio, including pledged assets and cash flows from loan payments or sales.

26. Assess the impact of any other asset pledging and off-balance sheet arrangements (e.g., FHLB standby letters of credit used to collateralize public deposits) on liquidity and contingency funding. Determine whether off-balance sheet liabilities are reported appropriately on Call Report Schedule RC-L, if applicable.

27. Assess the potential impact on liquidity of asset sales that include recourse provisions.

28. Review the use of asset sales or secondary funding sources that were prompted by unplanned liquidity needs and determine whether there were any adverse effects on operations or financial performance.

29. Evaluate management provisions for anticipated but unusual liquidity needs, such as large unfunded loan commitments, maturity of significant volumes of time deposits or borrowed funds, branch closings, new products, mergers, litigation, or growth initiatives.

30. Assess the effect of any other identified trends or material changes in sources and uses of funds.

31. Review historical and projected off-balance sheet funding requirements, and assess the bank's ability to respond to potential funding needs.

Cash Flow Analysis

32. Determine whether the bank has effective methods for projecting cash flows arising from assets, liabilities, and off-balance sheet items over an appropriate set of time horizons (e.g., weekly, monthly, quarterly, and annually).

33. Determine whether internal liquidity and funds management analyses identify primary sources of funding for meeting daily cash outflows, as well as seasonal and cyclical cash flow fluctuations.

34. Assess management's process for establishing and maintaining a level of liquid assets that supports day-to-day operations and includes an additional buffer to address unforeseen circumstances.

35. For banks engaged in significant payment and settlement activities, determine whether internal liquidity monitoring captures intraday liquidity risks associated with derivative activities.

36. Determine whether liquidity stress scenarios are conducted across multiple time horizons, use reasonable modeling assumptions under various stress scenarios, and are commensurate with the bank's complexity and level of risk exposure. Typical liquidity stress scenarios consider the realistic availability of liquidity, given potential haircuts on borrowings, FHLB restrictions, deposit runoff, and likely market conditions during stress events. Possible stress scenarios include:

- **Unexpected loan growth;**
- **Loan losses or reduction in loan repayments:**
- **Changes in economic conditions, market perception, or disruptions in financial systems;**
- **Price fluctuation in the securities portfolio;**
- **Inability to renew or replace maturing funding liabilities;**
- **Unexpected deposit withdrawals or draws on off-balance sheet credit commitments;**
- **Disruptions in payment and settlement systems due to operational failures or local disasters;**
- **Increased FHLB collateral requirements;**

- **Restrictions imposed by correspondents on borrowing availability or terms;**
- **Prompt Corrective Action downgrades, and statutory and regulatory restrictions on brokered deposits and interest rates paid on deposits;**
- **Downgrades of the bank's investment rating by a Nationally Recognized Statistical Rating Organization (for larger organizations) or other rating agency (for smaller organizations); and**
- **Reaching early amortization triggers on pools of assets securitized by the bank.**

Contingency Funding Plan (CFP)

37. Review the CFP to determine whether it provides adequate funding under stressed operating environments, including situations that, while relatively infrequent, could significantly affect the bank. Appropriate plans address shortfalls in emergency situations, including systemic adverse financial market events and reflect the complexity, risk profile, activities, and scope of the bank's operations. Consider whether the CFP:

- **Identifies stress events that could harm the liquidity position;**
- **Addresses levels of severity and timing during a contingent liquidity event by identifying temporary, intermediate, or longer-term disruptions;**
- **Establishes a monitoring framework, such as triggering mechanisms and early warning indicators;**
- **Addresses funding sources and needs during a stress event through a quantitative projection of funding needs and funding capacity;**
- **Identifies potential sources of contingency funding and considers the time needed to establish them;**
- **Assesses the reliability of contingency funding (e.g., irrevocable, as available, revocable);**
- **Identifies terms and conditions of alternative or contingency funding arrangements; and**
- **Establishes a crisis management team, realistic action plans, and provisions for more frequent and detailed liquidity reporting if stress situations intensify.**

38. Confirm whether the CFP is regularly tested, updated, and operationally sound. Consider the following:

- **Maintaining and updating the liquidity event management process, including roles and responsibilities;**
- **Frequency of testing the operational components of the contingency funding plan;**
- **Assessing the mobility of cash and collateral when needed;**
- **Stress testing for collateral devaluations;**
- **Identifying the availability of contingent funding lines of credit when needed;**
- **Maintaining and updating the monitoring framework for contingent events; and**
- **Testing various elements of the contingency funding plan, including standby liquidity sources that are rarely used, such as:**
  - **The sale or securitization of loans,**
  - **Repurchase agreements (repos), and**
  - **FRB Discount Window borrowings.**

39. Determine whether the board and senior management have contingency plans to assist management in taking appropriate and prompt action if the bank becomes less than well capitalized.[5] Consider:

- **Statutory and regulatory restrictions on rates paid for deposits;**
- **The need to seek approval from the FDIC to accept and renew brokered deposits for adequately capitalized banks; and**
- **The inability to accept brokered deposits for less than adequately capitalized banks.**

40. If the bank originates or purchases loans for asset securitizations, determine whether the liquidity risk monitoring system includes contingency plans for possible liquidity strains because of early amortizations.

Board and Senior Management Oversight

41. Determine whether the board and senior management adequately plan and articulate the future direction of the organization, noting projected growth levels, the source of funding for the growth, and associated changes in the overall asset and liability mix.

42. Determine whether the board and senior management have a defined funds management strategy or programs for gathering deposits, and assess the process for developing the strategy or programs. Assess the purpose of the funding strategies or programs and determine how those funds are being used, such as funding normal operations or targeted asset growth.

43. Evaluate the effectiveness of the oversight and control structure for the organization's liquidity practices.

44. Determine whether the board has allocated sufficient resources to liquidity management.

45. Evaluate the technical and managerial expertise of individuals involved in liquidity management.

46. Determine whether the board and senior management established clear lines of authority and

[5] Refer to Prompt Corrective Action Guidelines (Section 38 of the FDI Act, 12 USC 1831) and the Brokered and High Rate Deposits ED Module as needed.

responsibility for monitoring adherence to policies, procedures, and limits.
47. Determine whether senior management effectively monitors liquidity risk for subsidiaries and other affiliates on an ongoing basis.
48. Determine whether organizational practices are consistent with established bank policy.
End of Core Analysis. If needed, Continue to the Expanded and Impact Analyses.