EM-51.1

Category: **Liquidity**
Topic: **Liquidity Risk**
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Overview

Liquidity risk refers to the ability to meet debt obligations and fund operations without incurring unacceptable losses or materially adversely affecting the institution's daily operations and financial condition. The primary source of funding for Farm Credit System (System) banks is the issuance of System-wide debt securities in the capital markets, while associations rely on direct loans from the banks as their primary source of funding. Banks and associations must be able to access these funding sources under reasonable terms and conditions and in sufficient amounts to meet liquidity demands. Banks and associations must maintain sound financial condition and performance and effectively manage risks to assure continued access to these funding sources.

If the issuance of System-wide debt securities is disrupted, banks must have the ability to continue funding operations and meeting obligations. Under the System's federated cooperative structure, banks must maintain secondary sources of liquidity (e.g., investments) sufficient to assure continued funding of both the bank and affiliated associations. Although associations are not required to obtain secondary sources of liquidity, they are expected to maintain a loan portfolio that could, at least in part, be readily sold into a secondary market in the event of a bank or System-wide liquidity crisis.

Examination Procedures and Guidance

General

1. Access to Funding:

Evaluate the ability to access funding under reasonable terms and conditions.

Guidance:

FOR ASSOCIATION EXAMINATIONS: Associations rely on direct notes from district banks as their primary source of funding. This lending relationship is governed by a General Financing Agreement (GFA). The GFA outlines specific conditions and covenants with which the association must comply. The association's compliance with the GFA and its borrowing base under the GFA are the most critical determinants of access to funding and overall liquidity risk. Trends in loanable funds also affect liquidity risk due to its impact on the borrowing base and GFA performance covenant measures.

Evaluative questions and items to consider when examining an association's access to funding include:

- ***GFA Compliance:*** **Is the association in compliance with each condition and performance covenant in the GFA?** To maintain unrestricted access to funding through the direct note, the association must comply with all conditions and covenants in its GFA. These would

typically include both quantitative and qualitative factors and criteria. Compliance with GFA conditions and covenants is typically summarized in board reports developed by management or district compliance reports developed by the bank. The accuracy and completeness of these reports may need to be tested or validated, depending on the association's internal controls. In addition, communications from the bank may address bank concerns with GFA compliance.

- ***Funding Terms:*** **Is funding available under reasonable costs, terms, and conditions?** Liquidity risk and access to funding are affected by the reasonableness of funding terms and conditions. For example, banks may impose on the association a penalty fee or interest rate, or special restrictive conditions and terms. Such penalties and conditions are typically imposed for noncompliance with a GFA covenant or requirement, and in lieu of calling the direct note into default. Risk-based interest rates and conditions may also be imposed by the bank even when the association remains in full compliance with the GFA.

- ***Collateral:*** **Is the quantity and quality of collateral sufficient to support continued access to funding?** The association's loan portfolio is pledged to the bank as collateral for the direct note. The borrowing base, which is addressed in the GFA, defines how much the association can borrow against its collateral. Higher risk loans have greater discounts and, as a result, fewer funds can be borrowed against these assets under the borrowing base. Therefore, asset quality deterioration causes a decline in the borrowing base margin and can potentially threaten access to funding. Declines in the borrowing base margin may also be caused by a reduction in loanable funds, which can result from increased nonaccrual loans, net losses, or other factors that cause capital dissipation. In addition, Farm Credit Administration (FCA) Financial Institution Rating System (FIRS) ratings for liquidity consider the quality of collateral. Specifically, the FIRS liquidity benchmarks compare accrual loans and loans classified Acceptable or Other Assets Especially Mentioned (OAEM) to the direct loan. These benchmarks measure the quality of collateral supporting the direct note and are affected by the same factors that cause changes in the borrowing base margin.

- ***Nonconforming Loans:*** **Are ineligible or nonconforming loans removed from the borrowing base, and do they materially affect the association's access to funding?** FCA Regulations require that certain nonconforming loans be removed from collateral and the borrowing base (see FCA Regulations 615.5090, 615.5060(a), 615.5050(c)(5), and Part 613). In addition, the bank may require the association to remove other types of loans from its borrowing base. If the association has a significant volume of loans that cannot be included as collateral, these loans could potentially have a material impact on the borrowing base and access to funding.

- ***Internal Funding Sources:*** **Are trends in internal sources of funding (i.e., loanable funds) significantly affecting access to external funding through the direct note (i.e., borrowing base)?** Loanable funds represent internally generated funding, thereby reducing the need for external debt funding. Loanable funds are an indicator of overall association strength and are directly affected by asset performance status, earnings performance, and capital accretion. Declines in loanable funds will also typically result in a reduced borrowing base margin and could also indirectly indicate a threat to compliance with GFA covenants regarding asset quality, capitalization, and earnings.

FOR BANK EXAMINATIONS: The primary source of funding for System banks is the issuance of debt securities in the capital markets. Banks issue debt securities through the Federal Farm Credit Banks Funding Corporation. The debt securities are System-wide obligations and each bank is jointly and severally liable for repayment of the debt. Because of this joint and several liability, each bank has a vested interest in ensuring other banks and districts operate in a safe and sound manner and do not

jeopardize the System's ability to issue debt. For that purpose, the banks voluntarily entered into two contractual agreements: Contractual Interbank Performance Agreement (CIPA), and Market Access Agreement (MAA). The general purposes of these agreements are to impose financial self-discipline, maintain System access to the capital markets at favorable rates, enhance investor confidence, and manage the banks' joint and several liability. Noncompliance with these agreements can result in penalties and restrictions on the bank's ability to participate in System-wide debt issuance. Therefore, compliance with these two agreements is a critical determinant of the bank's access to funding and overall liquidity risk. Other factors can also affect the bank's access to funding, including the general market environment, condition of the overall System, and condition of the agricultural industry.

Evaluative questions and items to consider when examining a bank's access to funding include:

- ***MAA and CIPA Compliance:*** **Is the bank currently in compliance with each condition in the MAA and CIPA agreements? Is the bank's ability to participate in System-wide debt issuances restricted due to its lack of compliance with these agreements?** To maintain unrestricted access to System-wide debt issuances, the bank must comply with MAA conditions. If the bank does not comply with these conditions, restrictions may be imposed that become progressively more severe as they fall below defined thresholds. These restrictions could vary from a requirement to develop a corrective action plan (and shareholder disclosure) to full market restriction. Performance criteria in MAA include, in part, the CIPA score requirements. Since CIPA scores are primarily a measure of consolidated district conditions, trends in association conditions directly affect the bank's compliance with MAA and access to funding.

- ***Funding Terms:*** **Is the bank able to issue debt securities at favorable costs, credit spreads, and terms? Does the bank have flexibility to issue the types and structure of debt desired?** Liquidity risk and access to funding are affected by the reasonableness of funding terms and conditions. For example, if investors become concerned with risk in System-wide debt securities, it could result in a decline in demand for debt securities, increased credit spreads, reduced flexibility in issuance timing, and inability to issue securities with desired maturities and pricing structures.

- ***Credit Ratings:*** **Does the System's and bank's NRSRO credit ratings assure readily available access to capital markets?** Credit ratings by Nationally Recognized Statistical Rating Organizations (NRSRO) directly affect the ability to issue System-wide debt securities at reasonable costs and terms. If credit ratings decline, costs of debt increase and investors may reduce demand for certain types of debt securities. Credit ratings are also a key driver of the cost of and ability to issue subordinated debt and preferred stock, which are secondary sources of funding and capitalization. Various types of credit ratings are obtained. Specifically, the System obtains a credit rating that includes the government support implied by Government-Sponsored Enterprise (GSE) status, and a separate standalone rating that excludes the value of GSE status. In addition, each bank obtains its own standalone rating. All ratings must be considered with regard to their potential impact on market access, especially since the value of GSE status, as perceived by investors, varies over time.

- ***Collateral:*** **Is the quantity and quality of collateral sufficient to support the ability to continue issuing debt?** The bank's assets serve as collateral to support the issuance of System-wide debt securities. Collateral is defined in Section 4.3(c) of the Farm Credit Act of 1971, as amended (the Act), and FCA Regulation 615.5050, and is generally comprised of loan and loan-related assets, investments, and cash and equivalents. This section of the Act requires collateral to equal or exceed the amount of the bank's notes, bonds, and other

obligations before the bank can issue additional debt. Also, FCA Regulation 615.5335 requires the net collateral ratio to equal at least 103 percent. Asset quality deterioration can affect these collateral ratios through loan chargeoffs, allowance for loan losses, and other-than-temporary impairment on investments.

- ***Nonconforming Assets:*** **Are ineligible or nonconforming loans and investments removed from collateral, and do they materially affect the bank's collateral position and ability to issue debt?** FCA Regulations require that certain nonconforming loans and ineligible investments be removed from collateral (see FCA Regulations 615.5090, 615.5060(a), 615.5050, 615.5143, and Part 613). If the bank has a significant amount of loans and investments that cannot be included as collateral, it could potentially have a material impact on the bank's collateral ratios and ability to participate in System-wide debt issuances.

- ***Internal Funding Sources:*** **Are trends in internal sources of funding (i.e., loanable funds) significantly affecting collateral position and the ability to issue debt?** Loanable funds represent internally generated funding, thereby reducing the need for external debt funding. Loanable funds are an indicator of overall bank strength and are directly affected by asset performance status, earnings performance, and capital accretion. Declines in loanable funds may also result in reduced collateral ratios, which could impact the bank's ability to participate in System-wide debt issuances.

2. Risks to Liquidity:

Evaluate threats and risks to liquidity.

Guidance:

FOR ASSOCIATION EXAMINATIONS: A general understanding of the association's overall performance and risk profile is necessary to determine if liquidity is threatened. Risks in any area of operations (e.g., credit, interest rate, operations, strategic, reputation, and compliance risks) could pose a threat to liquidity. Credit risk is particularly important because asset quality deterioration is the most common precursor to liquidity problems.

Evaluative questions and items to consider when examining an association's risks to liquidity include:

- ***Trends & Projections:*** **Do financial and asset quality trends and projections indicate compliance with GFA covenants in the future?** Liquidity risk is high if financial projections indicate the association will fall below a GFA covenant or will be operating at a thin buffer above a covenant. When reviewing financial projections, consideration should also be given to the reliability of and past success in meeting projections.

- ***Risk Profile:*** **Do the association's various business risks pose a significant threat to GFA compliance or the borrowing base? Does the district bank's internal assessment of risk in the direct loan indicate potential risks to the association's liquidity?** An association's GFA compliance and borrowing base may be significantly threatened by increasing credit, interest rate, operations, strategic, and other risks. While various risks exist, the most common precursor to liquidity problems is increasing credit risk. Loan growth may also pose a threat to the borrowing base margin if the association is not adequately capitalizing the growth. The bank's internal assessment of credit risk in the direct loan and its direct note classification address the bank's view of the association's risk profile and risk in the direct loan. Therefore, this assessment is a significant indicator of the association's ability to continue accessing funds under reasonable terms and conditions. However, such bank information is typically confidential and cannot be disclosed in the association Report of Examination.

- ***Off-Balance Sheet Risks:*** **Do off-balance sheet risks and contingent liabilities pose a significant threat to liquidity?** Examples of off-balance sheet risks and contingent liabilities include: litigation; unfunded commitments; letters of credit; guarantees by the association; requirements to repurchase loans previously sold (triggered by violations of representations and warranties); capital expenditures; cash patronage distributions; and retirements of capital stock. Each of these may require funding that could strain the borrowing base margin and GFA compliance. In particular, if draws on unfunded commitments or letters of credit and loan repurchases would result in increased adverse or nonaccrual assets, the impact on the borrowing base margin and compliance with GFA covenants can be significant. Contingent liabilities should be summarized in annual reports to shareholders; however, a deeper examination may be necessary to develop a full understanding of the liquidity risks posed by off-balance sheet liabilities. Regarding risks from litigation, examiners should obtain a legal liability letter from the association's general counsel that summarizes existing litigation and its potential materiality.

- ***VACP Runoff:*** **What impact would Voluntary Advance Conditional Payment (VACP) runoff have on liquidity risk and the cost of funding? Do controls exist that would limit VACP runoff?** While VACP programs are typically provided to members as a service, they can also serve as an alternative source of external funding. If the association has a large VACP program, the potential for runoff could pose a risk to liquidity. Runoff is likely if members believe the association's financial condition is deteriorating or at risk since VACPs are not guaranteed or insured. VACP runoff must typically be funded through increases in the direct loan, which affects the borrowing base margin. VACP runoff threatens liquidity to the extent that it could cause violations of the borrowing base. In addition, runoff could affect the cost of funding depending on how VACP rates compare with direct note rates. The risk of runoff varies based on program type and controls over withdrawals. For example, if VACP funds must be applied to the member's loans, risk of runoff would be very low. However, if withdrawals are mostly unrestricted, risk of runoff would be high.

- ***Third Party Capital:*** **If utilized, what impact will third party capital have on liquidity risk?** Subordinated debt and non-perpetual preferred stock create demands on liquidity when they mature. They likely need to be refinanced through either increases in the direct loan or another third party capital issuance. Such maturities could cause violations of the borrowing base or a decline in capital ratios that threatens GFA performance covenants. In addition, the issuance of preferred stock heightens the need for financial discipline to ensure the ongoing payment of dividends. While these dividends are at the discretion of the board, failure to pay can affect the association and bank's reputation risk.

- ***Condition of Funding Bank:*** **Is the district bank that provides the primary source of funding to the association financially stable with strong liquidity and access to markets?** Since the association is reliant on the bank for essentially all of its funding needs, the bank's liquidity position becomes a relevant consideration. Threats to the district bank can trickle down and affect the association's access to funding. For example, if the bank's ability to issue debt is restricted, it could affect the bank's ability to fund direct notes or match-fund the association's retail loans.

FOR BANK EXAMINATIONS: A general understanding of the bank's overall condition and risk profile is necessary to evaluate liquidity risk and determine if liquidity is threatened. Risks in any area of operations (e.g., credit, interest rate, operations, strategic, reputation, and compliance risks) could pose a threat to liquidity and access to funding. Credit risk is particularly important because asset quality deterioration is the most common precursor to liquidity problems. For example, asset quality deterioration can result in increased reputation risk, restricted access to capital markets,

higher credit spreads on debt issuances, and lower debt marketability. Access to funding is also affected by the overall district and System's condition and risk profile, as well as macroeconomic conditions and the general market environment.

Liquidity risk is a function of the potential and actual demands on liquidity (i.e., funding requirements). Examples of liquidity demands include debt retirement, interest expense, funding loans and investments, draws on unfunded commitments, runoff of VACP accounts and member investment bonds (MIBs), collateral posted with derivative counterparties, cash dividend and patronage distributions, maturing third party capital, and capital expenditures. If demands are unusually high or "lumpy," the bank could be especially vulnerable to market disruptions and aberrations when it issues debt. The predominant liquidity demand is typically the retirement or refinancing of debt, although other demands can also be significant.

Evaluative questions and items to consider when examining a bank's liquidity risk include:

- ***Trends & Projections:*** **Do financial and asset quality trends and projections indicate compliance with MAA covenants and collateral requirements in the future? Do trends and projections indicate any potential threats to NRSRO credit ratings?** Risks to liquidity are significant if projections indicate the bank will fall below an MAA or collateral requirement, or will be operating at a thin buffer above a requirement (see FCA Regulations 615.5050 and 615.5335 for specific collateral requirements). Liquidity risks could also be significant if deterioration in asset quality or financial strength is expected that could cause a downgrade in the bank or System's credit rating. When reviewing financial projections, consideration should be given to the reliability of projections and past success in meeting projections.

- ***Bank Risk Profile:*** **Do the bank's various business risks pose a significant threat to MAA compliance or the bank's collateral position?** A bank's MAA compliance and its collateral position may be significantly threatened by increasing credit, interest rate, operations, strategic, and other risks. While various risks exist, the most common precursor to liquidity problems is increasing credit risk (in loans or investments). Loan growth may also pose a threat to the bank's collateral position if growth is not adequately capitalized.

- ***Debt Structure:*** **Does the structure of debt promote the bank's liquidity risk profile over longer term horizons? Is debt structured in a manner to smooth and extend out maturities and eliminate large lumps of maturing debt? How well do debt and asset maturities match?** Debt should be structured in a manner that promotes longer-term structural funding of the balance sheet. For example, if the bank funds its balance sheet wholly with short-term debt, the resulting large amounts of debt maturing each week would cause the bank to be overly vulnerable to market disruptions and liquidity risk. Therefore, debt maturities should be structured in a manner that they are extended and smoothed out over time. In addition, debt maturities should assure longer-term stable funding. Indicators of debt structure include: net stable funding ratio; maturity-based gap report; weighted-average maturity of debt; percent debt maturing in the next month, quarter, and year; and debt (and capital) with maturities greater than 1 year in relation to assets with maturities greater than 1 year. While debt structure is a key consideration in the management of liquidity risk, it must also be balanced with the effect it has on interest rate risk, earnings objectives, and counterparty risks related to synthetic funding.

- ***District and System Risk Profile:*** **Does the System's overall risk profile, including reputational risk, pose a significant threat to issuing debt at favorable costs, credit spreads, and terms? Does the district's overall risk profile pose a threat to CIPA scores and the bank's compliance with MAA?** The System and District's overall risk profiles can directly threaten the bank's ability to access funding through System-wide debt issuances, regardless

of the bank's individual risk profile. Specifically, district conditions affect CIPA scores and MAA compliance, and the System's overall conditions are the primary investor consideration when purchasing System-wide debt securities. In addition, reputational risk can exacerbate liquidity risks. Reputational risk relates to trust in the System by investors, customers, and shareholders. For example, if investors lose trust in the System or believe it is experiencing a financial or liquidity crisis, it could have a profound impact on the ability to issue debt at favorable costs and terms, or the ability to roll over and refinance maturing debt.

- ***Off-Balance Sheet Risks:*** **Do off-balance sheet risks and contingent liabilities pose a significant threat to liquidity?** Examples of off-balance sheet risks and contingent liabilities include: unfunded commitments; letters of credit; bank guarantees; litigation; joint and several liability; requirements to pledge collateral with counterparties; and requirements to repurchase loans previously sold (triggered by violations of representations and warranties). Each of these may require funding. So long as the bank's access to capital markets remains readily available, they should be able to fund these off-balance sheet requirements. However, these off-balance sheet liabilities could place significant additional demands on liquidity during periods of market disruption. In addition, most of these contingent liabilities could result in losses if the bank is required to fund them and bring them onto the balance sheet, which could affect financial health and amplify liquidity risk. If significant, such losses could affect MAA compliance, collateral position, and credit ratings. Contingent liabilities should be summarized in annual reports to shareholders; however, a deeper examination may be necessary to develop a full understanding of the liquidity risks posed by off-balance sheet liabilities. Regarding risks from litigation, examiners should obtain a legal liability letter from the bank's general counsel that summarizes existing litigation and its potential materiality.

- ***VACP and MIB Runoff:*** **Do VACP and MIBs comprise a significant portion of district funding and would runoff have a significant impact on bank liquidity risk? Do controls exist that would limit runoff?**

    - Under an MIB program, the bank sells bonds directly to district members and employees (FCA Regulation 615 Subpart D). MIBs can take many different forms. For example, MIBs may have overnight maturities and roll over each day, or they may have longer term maturities. In addition, members may have an option to put the MIB back to the bank before maturity. Since MIBs are not guaranteed or insured, it must be assumed that during a bank liquidity crisis essentially all MIBs will run off at either the maturity date or put date, whichever is earlier. To mitigate reputational risk, banks must typically honor any member demand to redeem the MIBs at the maturity or put date. The risk that MIBs will run off depends on the volume and unique characteristics of the program. Significant MIB runoff during a liquidity crisis increases the bank's liquidity demands and can intensify the liquidity crisis.

    - VACP runoff at associations affects bank liquidity risk in the same manner as MIB runoff. While VACP programs are provided by associations to members, runoff must typically be funded by the bank through the direct loan. The risk of runoff varies by type of program and association controls over withdrawals. For example, if VACP funds must be applied to the member's loans, risk of runoff would be low. However, if VACP withdrawals are largely unrestricted, risk of runoff would be high.

- ***Market Environment, Macro Trends, and Industry Conditions:*** **Do current market conditions and macroeconomic trends (e.g., Gross National Product growth, interest rates, health of the credit markets, market environment, etc.) pose a threat to the System's**

ability to issue debt at favorable costs, credit spreads, and terms? Are trends and conditions within the agricultural or banking industry affecting access to capital markets? The general market environment and macroeconomic trends have a significant impact on the System's issuance of debt securities. If the market environment is excellent, it can result in strong demand for the System's debt securities, tight credit spreads, and substantial flexibility in terms of issuance timing, amount, pricing structure, and maturity. However, if the market environment is poor, debt issuances could potentially be restricted to short-term notes with high credit spreads (credit spreads represent risk premiums demanded by investors). Market access is affected by investor perception of the health of the overall System, agricultural industry, banking industry, and general business environment.

- ***Third Party Capital:*** **Does preferred stock affect the bank's liquidity risk?** The issuance of preferred stock heightens the need for financial discipline to ensure the ongoing payment of dividends. While these dividends are at the discretion of the board, failure to pay can affect the bank and System's reputation risk and credit ratings.

- ***GSE Status:*** **Does the System's GSE status continue to promote efficient market access?** The System's GSE status is an important factor that has historically ensured efficient market access, funding flexibility, and reliable and consistent investor support even during market adversity. While any deterioration in the general market environment should be a concern, a declining market environment can actually result in increased demand for System-wide debt as investors "race to quality" into government and GSE debt. However, the value of GSE status from the investor's perspective varies over time and can be affected by many factors, including congressional actions. Any change in the value of GSE status, either real or perceived, can affect the System's cost and ability to issue debt. In addition, the value of GSE status would almost certainly be insufficient to assure continued market access under reasonable costs and terms if investors perceive seriously weak System financial results, risk management, or credibility.

3. Secondary Sources:

Determine if the institution has adequate secondary sources of liquidity.

Guidance:

FOR ASSOCIATION EXAMINATIONS: Associations are not typically required to obtain secondary sources of liquidity. Under the System's federated cooperative structure, associations obtain funding from the banks. The banks, in turn, are responsible for accessing capital markets and ensuring secondary sources of liquidity exist to fund direct loans. Nonetheless, if an association has secondary sources of liquidity, these sources should be considered in the overall analysis of liquidity risk. The most common secondary sources of liquidity at associations are lines of credit, loan sales, and VACP programs (associations may hold investments for reducing interest rate risk or managing surplus funds, but are not authorized to hold investments for liquidity purposes). Although associations are not required to obtain secondary sources of liquidity, they are expected to maintain a loan portfolio that could, at least in part, be readily sold or securitized in the event of a bank or System-wide liquidity crisis.

Evaluative questions and items to consider when examining an association's secondary liquidity sources include:

- ***Supplemental Lines of Credit (LOCs):*** **How do supplemental or contingent LOCs affect liquidity risk? Do terms and conditions on these LOCs assure they will remain available and can be drawn upon during a systemic liquidity crisis?** Associations may have supplemental LOCs with non-System financial institutions. These LOCs may be intended for

daily cash management purposes as opposed to serving as a significant secondary source of liquidity. If LOCs are intended to serve as a secondary source of liquidity, they should be committed and periodically tested to assure they are available (uncommitted LOCs have minimal value as a secondary source of liquidity but may have value in daily cash management). In addition, the association must comply with the terms and conditions underlying the LOCs, and the financial institutions committing to the lines should be financially sound and able to meet the commitments. LOCs must also comply with the GFA, which contain specific conditions and restrictions on the association's ability to obtain funding from secondary sources. Associations may also execute LOCs with a secondary System bank for various reasons, although the liquidity value of such LOCs is limited because all System banks obtain their primary funding from the same source.

- ***Loan Sales:*** **Are loan sales used as a material source of liquidity? Does the association maintain a loan portfolio that could, at least in part, be salable at close to par value?**

    - System institutions may sell loans to the Federal Agricultural Mortgage Corporation (Farmer Mac). System institutions may also securitize pools of loans into an agricultural mortgage backed security (AMBS) that is guaranteed by Farmer Mac, and sell the AMBS. To securitize loans, the institution must be a Certified Agricultural Mortgage Marketing Facility under Section 8.5 of the Act. Outside Section 8.5, System institutions generally do not have the authority to securitize assets, but can sell participations in individual loans or sell participations into a trust that securitizes the participations. Such sales are a source of liquidity by eliminating the need to fund these loans and freeing up the borrowing base to fund other assets. Risks can emerge if the sales do not represent a true transfer of credit risk, or the association becomes overly reliant on loan sales to fund and capitalize ongoing growth. Overreliance on loan sales can adversely affect liquidity (i.e., GFA and borrowing base margin) if market conditions change and outlets for sales disappear. Considerations should include counterparty capacity and commitment to continue purchasing loans, price of loans sold, quality of loans sold, formal counterparty commitments to purchase future loans, and the reliability of contingency plans for funding growth. System institutions may also synthetically securitize assets to reduce credit risk. However, unlike cash securitizations, synthetic securitizations do not provide a source of liquidity because assets remain on the balance sheet and must continue to be funded.

    - Regardless of whether loan sales are relied on as a source of liquidity, all associations should maintain a loan portfolio that could, at least in part, be salable in the financial marketplace at close to par value. As outlined in FCA Bookletter BL-062, associations are encouraged to have studies that evaluate marketability of the loan portfolio. Loans are by far the largest asset on the association's balance sheet and should be salable if a System-wide liquidity crisis affects their primary source of funding (i.e., the direct note). Examples of factors that could affect loan marketability and sales price include: spreads in relation to competition; fixed vs. floating rates; unique vs. standard loan structures; administered vs. indexed pricing; portfolio quality; and embedded customer options.

    - Besides providing an outlet for loan sales in the System, Farmer Mac may also be used to improve the marketability of the loan portfolio. For example, loans can be securitized into an AMBS, guaranteed by Farmer Mac, and then sold back to associations. AMBS have much higher marketability than individual loans, although this would be adversely affected if the System experiences a credit crisis or concerns arise with Farmer Mac's ability to honor its guarantees.

- ***VACP Programs:*** **Are VACP programs used as a material secondary source of liquidity?** While VACP programs are typically provided to members as a service, they can also provide an alternative source of external funding for an association. This can help reduce utilization of the GFA borrowing base, thereby increasing the capacity to fund operations.

FOR BANK EXAMINATIONS: Banks must maintain secondary sources of liquidity to withstand disruptions in their issuance of debt securities in the capital markets. The predominant secondary source of liquidity is a reserve of cash and high-quality investments that can be sold or used as collateral to secure alternative funding. FCA Regulations contain minimum requirements on the quantity and quality of investments purchased for liquidity purposes. In addition, while not required by FCA Regulations, banks may have other secondary sources of liquidity to manage liquidity risk, such as supplemental LOCs, loan sales, and MIBs.

Evaluative questions and items to consider when examining a bank's secondary sources of liquidity include:

- ***Quantity of Liquidity Reserve and Supplemental Liquidity Buffer (buffer):*** **How many days of liquidity are provided by cash and eligible investments? Do cash and investments provide a sufficient secondary source of liquidity, giving consideration to the bank's unique business model and risk profile?** Banks must maintain cash and high quality investments that can be used as a secondary source of liquidity. FCA Regulation 615.5134(b) requires that, at a minimum, the amount of cash and eligible investments held in the liquidity reserve must be sufficient to fund 90 days of the principal portion of maturing debt obligations at all times. A buffer above that amount must also be maintained based on the bank's unique business model and risk profile. Risks to liquidity, such as off-balance sheet risks and potential liquidity demands, should be considered in determining the level of the buffer. The buffer must also be sufficient to fund normal operations under various stress events. In particular, the liquidity reserve and buffer must be sufficient to meet total liquidity needs (based on estimated cash inflows and outflows) for at least 30 days under acute stress scenarios (FCA Regulation 615.5134(f)).

- ***Quality of Liquidity Reserve and Buffer:*** **Is the liquidity reserve and buffer comprised mostly of investments that can be easily and quickly converted to cash at minimal loss in book value? Do investments exhibit sound liquidity characteristics and meet the liquidity requirements in FCA Regulations? Can investments be used as collateral in repurchase (repo) transactions even during times of market stress?**

    - System banks do not have access to the Federal Reserve's Discount Window and, therefore, can convert investments to cash only through selling securities or using the investments as collateral to secure alternative funding. Such secured funding is typically obtained through the repo market. Therefore, the quality of the bank's liquidity reserve and buffer depends primarily on the bank's ability to sell the investments at minimal loss or to use the investments as collateral on a repo even during times of market stress. While the global repo market is large, it has a tendency to pull back sharply during times of systemic market stress as market participants grow wary of investments pledged as collateral. Discounts on investments pledged to repo transactions can become steep during times of market stress, and market participants may limit collateral to only the highest quality investments.

    - FCA Regulation 615.5134(b) identifies the types of cash and investments that may be held in the liquidity reserve. Investments in the liquidity reserve must be unencumbered, readily marketable, and convertible to cash at minimal loss in book

value as required by FCA Regulations 615.5134(c) and (d). The liquidity reserve is stratified into three levels (1, 2, and 3) based on the liquidity characteristics of the investments. Investments held in level 1 are the most liquid and can typically be converted to cash immediately, even during systemic market stress. Level 1 must be sufficient to fund 15 days of the principal portion of maturing debt obligations. The sum of levels 1 and 2 must be sufficient to fund 30 days. The sum of levels 1, 2, and 3 must be sufficient to fund 90 days.

- FCA Regulation 615.5134(e) requires a supplemental buffer of cash and investments in excess of the 90-day liquidity reserve requirement. Investments included in the buffer are not subject to the regulatory marketability requirement, but must be unencumbered, meet eligibility requirements in FCA Regulation 615.5140, and be convertible to cash at no less than 80 percent of book value.

- Investments that do not meet the criteria for the liquidity reserve or buffer cannot be used to meet regulatory liquidity requirements. In addition, even if investments meet the minimum criteria for inclusion in the regulatory liquidity reserve or buffer, the quality of investments from a liquidity perspective can change over time depending on the market environment. Investments may also become ineligible and need to be removed from the regulatory liquidity reserve or buffer as required by FCA Regulation 615.5143.

- ***Master Repo Agreements:*** **Has the bank established master repo agreements with several major counterparties? Are repo transactions periodically executed to test the agreements?** During a liquidity crisis, the bank may need to rely heavily on the repo market to obtain secured financing and convert investments into cash. Therefore, master repo agreements should be executed and maintained with several different counterparties. While these master agreements do not commit the counterparty to a repo transaction or define transaction prices and collateral discounts, executing these agreements ahead of time streamlines the repo of investments during a liquidity crisis. In addition, the bank should periodically enter into repo transactions with each counterparty to test and ensure funding is available under the repo agreements.

- ***Supplemental Lines of Credit (LOCs):*** **How do supplemental or contingent LOCs affect liquidity risk? Do terms and conditions on these LOCs assure they will remain available and can be drawn on during a systemic liquidity crisis?** Banks may have LOCs with non-System financial institutions. These supplemental LOCs may be intended for daily cash management purposes as opposed to serving as a significant secondary source of liquidity. If LOCs are intended to serve as a secondary source of liquidity, they should be committed and periodically tested to assure they are available (uncommitted LOCs have minimal value as a secondary source of liquidity but may have value in daily cash management). In addition, the bank must comply with the terms and conditions underlying the LOC, and the financial institution committing to the line should be financially sound and able to meet this commitment. While committed LOCs can be used to enhance the bank's liquidity profile, the bank should not become overly reliant on LOCs to manage liquidity risk. Basel III assumes even committed LOC facilities will not be available during a systemic liquidity crisis because counterparties are likely to assume the legal and reputational risk as opposed to honoring their LOC commitment. Banks may also execute LOCs with other System banks, although the liquidity value of such LOCs is limited because all System banks obtain their primary funding from the same source.

- ***Member Investment Bonds (MIBs):*** **Are MIBs used as a material secondary source of liquidity?** MIBs can provide a secondary source of external funding for banks. MIBs reduce

the bank's reliance on issuance of System-wide debt securities to fund operations. While MIBs can serve as a secondary source of funding, MIB instability and runoff can also pose a threat to liquidity as discussed under the Risks to Liquidity procedure.

- ***Loan Sales:*** **Are loan sales used as a material source of liquidity?** System institutions may securitize and sell assets to Farmer Mac (i.e., cash securitizations). System institutions do not generally have the authority to securitize assets outside of Farmer Mac, but can either sell participations in individual loans or sell loan participations into a trust that securitizes the assets. Such loan sales are a source of liquidity by eliminating the need to fund these loans through debt issuances. Banks can sell participations in direct loans or retail loans. Risks can emerge if the sales do not represent a true transfer of credit risk, or the bank becomes overly reliant on loan sales to fund and capitalize ongoing growth. Over reliance on loan sales can adversely affect the bank's liquidity position (i.e., collateral position or MAA compliance) if market conditions change and loan sale outlets disappear. Considerations should include counterparty capacity and commitment to continue purchasing loans, price of loans sold, quality of loans sold, formal counterparty commitments to purchase future loans, and the reliability of contingency plans for funding growth. System institutions may also synthetically securitize assets for the purpose of reducing credit risk. However, unlike cash securitizations, synthetic securitizations do not provide a source of liquidity because assets remain on the balance sheet and must continue to be funded.