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Overview

Farm Credit System (System) institutions are authorized to invest in debt securities subject to certain limitations and requirements. Such investments can comprise a significant portion of an institution's assets, particularly at System banks, and impact capital and earnings. Therefore, an assessment of investment quality and related risk exposure is a key examination objective. Examining investment quality begins by gaining a general understanding of investment portfolio characteristics, including portfolio size, composition, purposes, and impact on financial performance. The examination process continues with an assessment of risk exposures. Investments are primarily exposed to liquidity, market, and credit (including country) risks. These risks, which can vary widely among investments and asset classes, should be identified along with the impact of any risk concentrations.

Institutions with investment activities must implement processes for effectively managing investments and related risks. The examination of investment management should include an assessment of board and management oversight, particularly investment policies, procedures, objectives, plans, and reporting processes. The examination should also assess risk measurement and management systems. Sufficient processes should exist to measure and manage the various risks in individual investments as well as the investment portfolio. Finally, the examination should determine if internal controls are sufficient to manage operational risk and ensure compliance with board and management direction as well as Farm Credit Administration (FCA) Regulations.

Note: This section of the Examination Manual does not address equity investments such as investments in other System institutions, rural business investment companies (RBICs), and unincorporated business entities (UBEs). Also, while service corporations chartered under section [4.25](#) of the Farm Credit Act of 1971, as amended, may hold investments for their own risk management purposes, this Examination Manual section focuses on examining investments at banks and associations. Service corporations that engage in investment activities would need to meet the same regulatory requirements that apply to their owner-institution(s).

Examination Procedures and Guidance

Investment Quality

1. Portfolio Characteristics & Trends:

Evaluate investment portfolio characteristics and trends, including size, purposes, composition, and impact on financial performance.

Guidance:

A general understanding of investment portfolio characteristics is necessary to evaluate investment quality and the impact of investments on the institution's overall risk profile. Numerous factors may be considered when evaluating overall portfolio characteristics, although the primary factors are portfolio size, investment purpose, portfolio composition (including whether they are government guaranteed), and the impact on financial performance. Also consider trends in these areas and the reasons for the trends, particularly if investments pose a risk to the institution.

Evaluative questions and items to consider when examining investment portfolio characteristics and trends include:

- **Portfolio Size: Do investments comprise a significant business activity and comply with regulatory limits?** Small portfolios as a percentage of loans or assets may not materially affect the institution's overall risk profile or financial performance. However, larger portfolios expose the institution to greater risks and require stronger risk controls and management systems. Investments are limited to 10 percent of loans at associations (FCA Regulation [615.5140\(b\)\(4\)](#)) and to 35 percent of loans at banks (FCA Regulation [615.5132](#)). Investments by System banks and associations in Federal Agricultural Mortgage Corporation (Farmer Mac) securities are limited to 100 percent of loans as they can further the mission to finance agriculture as well as help manage risks (FCA Regulation [615.5174\(a\)](#)).
- **Investment Purposes: Are the types of investments held consistent with board objectives for the portfolio as well as the purposes authorized under FCA Regulations?** The purposes for holding investments affect and frame the types of investments purchased and portfolio composition. Banks are authorized by FCA Regulation [615.5132\(a\)](#) to hold investments for the purposes of managing liquidity, managing surplus short-term funds, and managing interest rate risk (IRR). In practice, banks hold investments primarily for liquidity. As a result, banks should generally focus on highly liquid securities that can be used to raise short-term cash in the event of a liquidity crisis. If banks hold investments for hedging IRR, then the type of investments and portfolio composition should be consistent with that purpose. Associations are authorized by FCA Regulation [615.5140\(b\)](#) to hold investments for risk management and must document how investments contribute to managing risks facing the association. At banks and associations, holding investments for active trading or speculation is inconsistent with the regulatory authorized purposes of investments. Institutions may generate earnings and accumulate capital from investments as long as it is incidental and secondary to an authorized purpose. Examiners can identify the purposes of investments through discussions with management and reviews of policies, procedures, business plans, and board and management reports.
- **Portfolio Composition: How do the types of investments held affect risk and investment portfolio quality?** Developing an understanding of portfolio composition is an essential step

in examining investment portfolio quality. While FCA Regulations limit the types of investments that institutions can purchase, risk characteristics can still vary widely. For example, certain short-term investments can be considered cash equivalents because of their low risk exposures and the ease with which they can be converted to cash. In addition, certain types of high-quality investments, such as U.S. Treasury securities, are generally much more liquid and resilient to systemic crises. Conversely, certain types of mortgage securities have variable cash flows and complex structures that can expose the institution to extremely high risks. Associations are limited to purchasing only securities that are fully and unconditionally guaranteed by the U.S. Government or its agencies; such investments have minimal credit risk but can still have significant IRR and other types of risks (such as premium risk). In general, an analysis of portfolio composition should address asset class exposures, industry concentrations, maturities or weighted-average-life, embedded options, complexity of cash flow (i.e., principal and interest rate) structures, general types of risk exposures, and other unique portfolio characteristics. The analysis should also address the impact of recent investment purchases and sales on overall portfolio composition and risks. FCA Call Reports provide information on portfolio composition, although the institution's internal reports and reports to shareholders should provide additional insight into the characteristics, composition, and trends in the investment portfolio.

- **Financial Impact: How have investments impacted financial condition and performance?**
Investments can impact the financial statements through gains and losses realized on investment sales, other-than-temporary impairment (OTTI), unrealized gains and losses on current investment holdings, amortization (accretion) of any premiums (discounts), and ongoing investment returns. More specifically, if an investment is sold before maturity, any gain or loss is reported in the income statement. If credit-related OTTI is realized on an investment, the impairment is reported in the income statement at the time of recognition. Unrealized gains and losses on current investment holdings do not affect the income statement because System institutions must not engage in active trading, but can affect the balance sheet and amount of capital depending on the underlying accounting treatment. If investments are purchased at a premium (or discounted) price, the premium must be amortized (or accreted) through the income statement over the life of the investment. Finally, the ongoing return on investments impacts the income statement and is affected by yield-to-maturity, funding costs, transaction costs, and the cost of operations supporting the investment infrastructure. An evaluation of investment returns should consider management's performance targets and benchmarks. A comparison of investment returns with peer groups is also useful and can help to identify unique portfolio characteristics that impact investment quality. The *Accounting* procedure further addresses the accounting for investments and how it can impact financial condition and performance.

2. Risk Exposure:

Evaluate risks in the investment portfolio with a focus on liquidity, market, and credit (including country) risks.

Guidance:

Institutions should manage investment risks well within their risk-bearing capacity. Excessive risks can cause losses that adversely affect financial condition and earnings performance. Investments are primarily exposed to liquidity, market, and credit (including country) risks, although other risks may also emerge. These risks vary by type of investment and are frequently interrelated. For example, a significant increase in credit risk can cause a decline in the investment's liquidity as investors shy

away from the increased risk.

The institution's purpose for holding investments should be a key driver in determining the reasonableness of risk exposures. For example, if investments at a bank serve as a source of liquidity, then liquidity risk in investments as well as all other risks that could affect liquidity risk should remain very low. If investments serve as an interest rate hedge, then the market risk in these investments and related hedging ratios should be consistent with that purpose and liquidity may be a lower priority.

Risks vary over time due to changes in investment purchases, portfolio strategies and composition, market conditions, and the global economic and political environment. Therefore, the ongoing assessment of risks should consider these changes. The returns and spreads on investments can be a significant indicator of overall risks because assets with higher expected returns are generally riskier. If the institution's investment returns are unusually high compared to peers, it could indicate that risks are also higher.

Risk concentrations and diversification should be considered when examining portfolio risks. Concentrations can amplify risks in the investment portfolio, while a sound diversification strategy can reduce portfolio risk to a level that is lower than some of the underlying investments. For example, each type of risk, such as liquidity, market, and credit (including country) risks, can be minimized by diversifying the portfolio among different asset classes, industries, obligors, maturities, durations, amortization schedules, coupon structures, and other characteristics. FCA Regulations [615.5133\(c\), \(f\), and \(g\)](#) require institutions to establish concentration limits and other requirements that ensure prudent diversification of risks.

While diversification is essential, it does not eliminate risks. Markets can become inefficient and correlations among investments can change depending on external events. These changes complicate portfolio risk measurement and decisions on optimal diversification. Therefore, regardless of overall portfolio risk estimates and the benefits provided by diversification, the risks in individual investments and asset classes should also be prudent and consistent with investment purposes. In particular, individual investments with high credit risk are always unsuitable regardless of other portfolio diversification mitigants. Individual investments with unusually high or speculative market risks are also unsuitable unless used explicitly for hedging activities that effectively lower the institution's overall risk profile.

Note: This procedure focuses on evaluating and identifying risks in investments. The examination of processes for managing risks in investments is addressed in the *Risk Management* procedure. Also, for banks, investments could be exposed to all risks described in the guidance below. For associations, potential risks are more limited given they can hold only investments guaranteed by the U.S. Government or its agencies. As such, association investment portfolios generally have no credit or country risk unless it is introduced through other types of investments prior approved by FCA on a case-by-case basis under FCA Regulation [615.5140\(e\)](#).

Evaluative questions and items to consider when examining risks in the investment portfolio include:

- **Credit Risk: What is the amount of credit risk in individual investments, each portfolio segment, and the overall portfolio, and is the risk consistent with the institution's investment purposes and FCA regulatory requirements?** Credit risk refers to the risk that the obligor will default on its obligation to pay the investor. Securities issued or guaranteed by the U.S. Government or its agencies have minimal credit risk because a default by the U.S. Government is unlikely. Examples of U.S. Government agencies that provide full and explicit

guarantees include the Government National Mortgage Association, Small Business Administration, and United States Department of Agriculture. Government-sponsored enterprises (GSEs) generally are not explicitly backed by the U.S. Government, but carry an implied guarantee that also significantly mitigates credit risk in most cases. The extent to which this implicit guarantee mitigates risk may vary over time and can be affected by Congressional actions. Examples of GSEs include the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). All other types of investment securities, referred to as non-agency securities, have credit risks that run the spectrum from low- to high-risk. The amount of credit risk in non-agency securities depends on the strength of the obligor(s), investment structure, underlying collateral, and other factors. For banks, FCA Regulation [615.5140\(a\)\(1\)\(iii\)](#) requires that at least one obligor of the investment have very strong capacity to meet its financial commitment (i.e., a very low probability of default) for the expected life of the investment. Considerations and examples of credit risk indicators include:

- Results of the institution’s internal credit analyses (and ratings if applicable) and the reliability of these analyses.
 - Percentage of the investment portfolio guaranteed by the U.S. Government or GSEs versus non-agency securities.
 - Internal assessment of repayment capacity, including compliance with the requirement for banks in FCA Regulation [615.5140\(a\)\(1\)\(iii\)](#) that at least one obligor have very strong capacity to meet its financial commitment.
 - External credit risk assessments and ratings, including credit ratings from nationally recognized statistical rating organizations (NRSRO).
 - Default statistics.
 - Credit enhancements such as guarantees, collateral, and tranche priority.
 - Credit spreads (i.e., spread to U.S. Treasuries) in relation to bonds of similar credit quality.
 - Concentrations in obligors, guarantors, asset classes, industries, credit enhancement, geographic regions, collateral underlying securities, and unsecured exposures. This includes concentrations in relation to requirements in FCA Regulations [615.5133\(c\)](#), [\(f\)](#), and [\(g\)](#), policy limits, and any other internal limits.
 - Materiality of any credit-related OTTI recognized.
 - Maturities, with longer maturities having higher credit risk.
 - Market and industry conditions, particularly in industries in which the institution has a concentration.
 - *Note:* Country risk, which is a form of credit risk, is discussed separately below.
- **Liquidity Risk: What is the amount of liquidity risk in individual investments, each portfolio segment, and the overall portfolio, and is the risk consistent with investment purposes?** Liquidity risk refers to the risk that an institution will be unable to easily and quickly sell an investment at its fair value, or to quickly convert the investment into cash at little or no loss to book value (FCA Regulation [615.5134\(d\)](#)). Liquidity risk primarily impacts an investment’s price, bid-ask spread, fees, and the time it takes to sell. Liquidity risk may not be a significant consideration if the investment is accounted for as held-to-maturity and is not intended to be sold or used as a source of liquidity. However, if the investment is available-for-sale and held as a source of institution liquidity, then liquidity risk is a key consideration. Liquidity risk is primarily a function of market depth and conditions. Specifically, investments with thin secondary markets or limited trading volume at a given time have higher liquidity risk. In addition, each investment class reacts differently to systemic market crises. For example,

during systemic market crises the secondary market can disappear for certain types of investments, such as investments with complex structures or high credit and market risks. Liquidity risk is also typically higher on small transactions, unusually small or obscure issuers, and situations where one investor purchases essentially the whole issuance (resulting in a lack of trading activity in that specific issue). Considerations and examples of liquidity risk indicators include:

- Results of the institution's internal analyses of liquidity risk and the reliability of these analyses.
 - Compliance with the liquidity reserve requirements in FCA Regulation [615.5134](#) (banks).
 - Depth of the secondary market for each type and class of investment.
 - Market and industry conditions for each type and class of investment.
 - Large price swings due to changing market activity.
 - Investment complexity. Complex investments have higher liquidity risk.
 - Maturity. Investments with shorter maturities generally have stronger liquidity. Money market investments generally have no secondary market, so liquidity is primarily a function of their short maturities.
 - Impact of credit and market risks on the investment's liquidity.
 - Traded over-the-counter versus formal exchange. Investments traded on formal exchanges typically have lower liquidity risk.
 - Bid/ask spread. Wider spreads indicate increased uncertainty and weaker liquidity.
 - Time it takes to sell the investment at a fair price.
 - Ability to pledge the investment as collateral on a repurchase agreement or other source of funding. Inability to pledge the investment, or relatively higher discount rates applied to collateral, indicate weaker liquidity.
 - Unrealized losses. While the market may be liquid, the institution may be unable or unwilling to sell the investment if it will result in recognition of large losses.
 - Over-reliance on or excessive concentrations in individual classes of investments for liquidity.
- **Market Risk: What is the amount of market risk in individual investments, each portfolio segment, and the overall portfolio, and is the risk consistent with investment purposes?**

Market risk primarily refers to the sensitivity in the value of an investment or the investment portfolio to changes in market interest rates (i.e., interest rate risk or IRR). Other types of market risk, such as sensitivity to changes in exchange rates, are generally not applicable to System institutions. IRR exists in all types of investments, including government-guaranteed obligations. In general, the value of longer-term fixed-rate investments is more sensitive to interest rate changes than the value of shorter-term or floating-rate investments. IRR can be magnified in investments with embedded structures and options, such as asset-backed securities (ABS) and mortgage-backed securities (MBS). Embedded options can take several forms, including caps, floors, calls, and prepayments. The presence of these options affects market prices of securities as well as the measurement and management of IRR. IRR is mitigated, but not eliminated, when investments are held until maturity. For example, if a fixed-income bond is held to maturity, principal is recovered in full regardless of fluctuations in interest rates during the life of the bond. The value of the bond will always be par when the bond is redeemed, assuming no credit losses occur. Nonetheless, even if securities are held to maturity, IRR is not completely eliminated. Prepayment and call options can cause the institution to immediately amortize any premiums paid for securities if these options are exercised prior to maturity. Similarly, issuer default can cause immediate amortization of

premiums. In addition, securities with coupon payments, principal amortization, prepayments, or call options are all exposed to reinvestment risk. That is, if interest rates decline, payments and receipts must be reinvested at lower rates, thereby reducing the effective rate of return as well as creating challenges with asset/liability management. Considerations and examples of IRR indicators include:

- Results of the institution's internal analyses of IRR and the reliability of these analyses, including results of stress tests on individual investments and on the overall portfolio.
 - Floating versus fixed coupons. Investments with fixed coupons have greater IRR.
 - Embedded options and structures in investments.
 - Duration of investments.
 - Investment maturities. Longer-term securities typically have greater IRR, particularly if they have fixed coupons and embedded options.
 - Unrealized gains and losses on investments. Large or volatile unrealized gains or losses indicate high IRR.
 - Reliability of market price estimates. Investments that are difficult to price and value generally have higher IRR.
 - Effectiveness of any strategies used to hedge IRR in investments. For example, interest rate cap contracts may be purchased to offset caps embedded in investment coupons.
 - Extent to which investments are used to hedge other risks. If IRR in investments is high for the purpose of reducing or hedging other risks in the balance sheet, then the high risk may be justified.
 - Excessive concentrations in investments that react similarly to market conditions. For example, concentrations in long-term fixed-rate investments could result in excessive exposure to increasing market interest rates.
 - Premium prices paid on securities with embedded options. Prepayments, call options, and issuer defaults can cause immediate amortization of premiums. Relatively higher premium prices typically result in higher IRR. Certain types of investments purchased at significant price premiums may need to be accounted for using the fair value option under Accounting Standards Codification (ASC) 825, which requires that ongoing adjustments in fair value be recognized in earnings. If such accounting treatment is required, it would indicate these investments are speculative and inconsistent with regulatory authorized purposes.
- **Country Risk (banks): What is the amount of country and sovereign risk in individual investments, each portfolio segment, and the overall portfolio, and is the risk consistent with the institution's investment purposes and FCA regulatory requirements?** Banks that hold investments issued or guaranteed by a foreign company or government are exposed to country risk. Country risk, which is a form of credit risk, refers to the risk that changes in the country's business environment or actions taken by its government will not be in the best interest of investors. Sovereign risk is a type of country risk and refers to the risk of a central government (or central bank of a central government) becoming unwilling or unable to service its existing loan obligations. Country risk exists on debt instruments issued by both foreign companies and foreign governments. It may also exist on domestic investments if credit enhancements or guarantees are provided by a foreign company or government. Concentrations in individual countries can exacerbate country risk. Causes of country risk can include political unrest, poor economic performance, unsophisticated markets, and unstable monetary or fiscal policies. The Organization for Economic Cooperation and

Development (OECD) establishes [country risk classifications](#) (CRC) that provide an estimate of country risk. Investments in foreign companies and governments must be limited to those countries that have either the highest or second highest CRC classification (0 or 1) or are an OECD member that is unrated, or be guaranteed by a U.S. Government agency, as required by FCA Regulation [615.5140\(a\)\(1\)\(iii\)](#). Considerations and examples of country risk indicators include:

- Results of the institution's internal analyses of country risk and the reliability of these analyses.
- Concentrations in foreign investments, particularly in any country experiencing adversity.
- Concentrations in domestic investments that have credit enhancements from foreign companies.
- OECD country risk classification.
- Country credit default swap premiums.
- The country's political, economic, monetary, and fiscal conditions.

Examination Procedures and Guidance

Investment Management

1. Policy & Procedures:

Determine if policies and procedures addressing investment management provide adequate guidance and risk parameters.

Guidance:

Policies and procedures establish the framework for investment operations. Policies and procedures must comply with regulatory requirements and should be consistent with the institution's strategic business objectives, liquidity strategies, risk tolerance, specialized expertise, and risk management systems. FCA Regulations identify several minimum requirements that must be addressed in the investment policy at institutions with investment activities. In addition to these regulatory requirements, all significant investment functions should be addressed in policies or procedures to create structure, enforce uniform and consistent standards, and ensure continuity of processes.

Evaluative questions and items to consider when examining investment policy and procedures include:

- **Regulatory Compliance: Does the investment policy comply with regulatory requirements?** FCA Regulation [615.5133](#) requires the board to adopt an investment policy and to review the policy at least annually to ensure it continues to accomplish intended objectives. The regulation identifies several items that must be addressed in the policy, such as the purpose and objectives of investments, risk tolerance, delegations of authority, internal controls, due diligence, and reporting requirements. The policy must be sufficiently detailed and commensurate with the amounts, types, and risk characteristics of investments. The types of investments authorized by policy must comply with the eligibility requirements in FCA Regulation [615.5140](#). FCA Bookletter [BL-064](#) further discusses regulatory requirements and expectations for investment policies. In addition, for any institution that holds or intends to purchase Farmer Mac securities, FCA Regulations [615.5174\(b\) and \(c\)](#) require the board to adopt (and review annually) a policy for these investments. Institutions may incorporate policy guidance for Farmer Mac securities into the investment policy required by FCA

Regulation [615.5133\(a\)](#) or have a stand-alone policy.

- **General Direction: Do policies or procedures sufficiently address all significant investment functions and operations?** In addition to the regulatory requirements discussed above, policies or procedures should address other significant aspects of governance, risk management, and internal controls in investment operations (commensurate with the amounts, types, and risks in investment operations). For example, effective policies or procedures should typically address:
 - The processes for measuring and managing each type of risk.
 - Limits on unique risks.
 - Due diligence before expanding into new investment types.
 - Impairment measurement.
 - Valuations.
 - Bank approval of association investment activities.
 - FCA approval of any investments purchased under FCA Regulation [615.5140\(e\)](#) (including processes for ensuring compliance with any conditions of approval).
 - Any other key processes.

Refer to FCA's *Investment Policies and Procedures* workpaper (see Part 3 of the Examination Manual) for more detailed guidance on policy and procedure expectations.

2. Plans & Strategies:

Evaluate investment plans and determine if strategies are appropriate and consistent with portfolio objectives.

Guidance:

Investment plans and strategies should be sufficient to ensure the investment portfolio achieves business objectives and is consistent with board-approved investment purposes. Institutions with investment activities should establish a plan to guide investment decisions and balance risk appetite with investment objectives. In addition, institutions that hold ineligible investments must develop a plan to either divest or reduce the risk in these securities.

Evaluative questions and items to consider when examining investment plans and strategies include:

- **Investment Plan: Does the institution maintain an adequate investment plan?** Institutions with investment activities should develop and maintain an investment plan as discussed in FCA Bookletter [BL-064](#). The plan can take different forms, such as a stand-alone plan, a section of the business plan, or an asset/liability management committee or board report. Regardless of form, it should be a dynamic, working document that is periodically updated to reflect changing conditions. The plan should be commensurate with the size, complexity, and risks in the investment portfolio. The general purpose of the plan should be to assess changing risks and market conditions and identify investment strategies. The plan should be sufficiently detailed to direct security selection and the types and classes of securities that will be targeted. Key elements of the plan should include the following:
 - The targeted portfolio composition and rebalancing tactics to achieve that target or benchmark.
 - Changes in general investment philosophy and purposes.

- Changes in market conditions, risks, and performance measures for each significant investment portfolio class or sector and its impact on portfolio strategy.
 - Investment strategies that are consistent with strategic business objectives, board-approved investment purposes, liquidity strategies, risk tolerance, risk diversification objectives, specialized expertise, risk management systems, and risk-bearing capacity.
 - If risk exceeds policy or regulatory limits, a strategy to achieve compliance.
- **Risk Appetite: Are investment strategies based on an appropriate appetite and tolerance for risk?** Risk appetite is the amount of risk the institution is willing to accept in pursuit of its investment objectives. Risk appetite has a significant impact on investment strategy, portfolio composition, and security selection as well as risk management needs. Therefore, risk appetite for portfolio segments and the entire portfolio should be evident in policy, procedures, and plans. In addition, risk appetite should be consistent with the authorized purposes of investments. For example, if the primary purpose of investments is to provide a contingent liquidity reserve, risk appetite should be conservative and emphasize safety and stability of liquidation value. Concentrations in portfolio segments that have relatively higher risks and spreads to U.S. Treasuries may be evidence that investment strategies and risk appetite are unrelated to the risk management purposes identified in FCA Regulations [615.5132](#) and [615.5140\(b\)](#). *Note: System institutions may earn a profit on investments, but the focus on profitability must be incidental or secondary to the primary purpose(s) of holding investments. Investment plans and practices that disproportionately focus on profits or spreads may indicate that investment strategies and risk appetite are becoming blurred or disconnected from the primary investment purposes.*
 - **Ineligible Investments: Are plans and strategies to manage and reduce risks in ineligible investments effective and in compliance with regulations?** Plans must contain strategies to effectively manage and minimize risks in any ineligible investments. The plans must comply with FCA Regulation [615.5143](#), which requires the following:
 - The institution must notify FCA within 15 days after determining an investment is ineligible.
 - For investments that were ineligible when purchased, the institution must either divest of the investment within 60 days of discovery or develop a plan approved by FCA, in writing, that allows divestiture over a longer period. Such a divestiture plan should provide for disposing of the investment as quickly as possible without substantial financial loss.
 - For investments that become ineligible after purchase, the institution must develop a plan that is effective in reducing its risk exposure in the investment.
 - The terms and status of these divestiture and risk reduction plans must be updated and reported to the board at least quarterly while the ineligible investment remains in the institution's portfolio, and must include the effect of ineligible investments on capital, earnings, liquidity, and collateral position as required by FCA Regulations [615.5133\(i\)\(8\) and \(9\)](#).

3. Risk Management:

Evaluate processes for measuring and managing risks in the investment portfolio.

Guidance:

Institutions must have sound processes to accurately identify, measure, and manage all significant risks, including liquidity, market, and credit (including country) risks, at both the individual investment and investment portfolio levels. These processes should be commensurate with the complexity, risk, and size of the exposure, although even small exposures require some minimum level of due diligence. Avoiding excessive risk concentrations should be a fundamental and critical risk management goal.

Risk management processes may differ between banks and associations. FCA Regulations authorize banks to hold investments that can be exposed to significant market and interest rate risk (IRR), credit (including country) risk, and liquidity risk; thus, processes are needed to manage all these risks. Associations are authorized by FCA Regulation [615.5140\(b\)\(1\)](#) to hold only investments that are fully and unconditionally guaranteed by the U.S. Government and its agencies. Such investments generally have no credit or country risks, so processes for managing these two risks may be limited or unnecessary. Exceptions could exist, such as when an association acquires a non-guaranteed investment through the provisions in FCA Regulation [615.5140\(e\)](#) or when credit risk could affect other risks (e.g., securities purchased at a premium would require immediate amortization if the security defaults and is recovered at par from the guarantor).

Note: Determining fair market value is part of the due diligence process addressed in FCA Regulation [613.5133\(h\)](#). For examination purposes, valuation is addressed in the *Accounting* procedure.

Evaluative questions and items to consider when examining investment risk measurement and management processes include:

- **Pre-Purchase Due Diligence: Are pre-purchase due diligence analysis processes for individual investments sufficient to assess risks and make informed purchase decisions?**
FCA Regulation [615.5133\(h\)\(1\)](#) requires institutions to complete and document a pre-purchase analysis commensurate with the complexity and risks in the investment. The pre-purchase analysis cannot be eliminated due to the need for a quick decision, although processes can be implemented to improve efficiency. For example, efficiency might be improved by (1) completing a broad analysis of the investment class that identifies the unique risks that should be addressed when selecting securities, or (2) using a standardized risk analysis template tailored to the specific investment type and unique risks. The institution should not purchase investments where it is unable to understand, analyze, and account for risks. The pre-purchase analysis should address the investment's suitability and consistency with the institution's investment purposes and investment plan. Reputation risk should also be considered, such as the risk of investing in companies involved in marijuana, tobacco, or other companies whose ethical or socially responsible values may not be well-accepted. In addition, the analysis must address the following:
 - Compliance with policy requirements as well as regulatory eligibility requirements and authorized purposes. (FCA Regulation [615.5133\(h\)\(1\)\(i\)](#))
 - Market and interest rate risk, credit (including country) risk, liquidity risk, and underlying collateral, as applicable (FCA Regulation [615.5133\(h\)\(1\)\(iii\)](#)). The *Risk*

Exposure procedure lists examples of risk indicators that could be considered in pre-purchase analyses.

- Stress testing results on any investment that is structured or has uncertain cash flows. (FCA Regulation [615.5133\(h\)\(1\)\(iii\)](#))
- **Ongoing Due Diligence: Are analysis processes sufficient to adequately measure and manage risks on an ongoing basis?** Analyses of relevant risks need to be completed and documented on an ongoing basis. Identifying emerging risks early provides the institution with the opportunity to take actions that will mitigate future risk of loss. The type of due diligence may be based on a risk assessment and should be commensurate with the amounts, types, and risk characteristics of investments. The analyses should be sufficient to determine if risks are emerging in individual investments, portfolio segments, or the entire portfolio. The *Risk Exposure* procedure lists examples of risk indicators that could be considered in ongoing analyses. Ongoing due diligence analysis processes should also address the following:
 - *Credit Risk* – FCA Regulation [615.5133\(h\)\(3\)](#) requires institutions to establish processes for monitoring and evaluating changes in the credit quality of each investment and in the whole investment portfolio on an ongoing basis. While institutions should monitor and consider NRSRO credit ratings, this needs to be supplemented by the institution’s own ongoing credit analyses. Methodologies for measuring credit risk on complex securities such as non-agency MBS and ABS should include analyses of underlying collateral, particularly collateral performance and trends, and results of stress tests on collateral performance. Analyses of credit risk should also address trends in credit enhancements and the credit support provided by subordinate tranches. The analysis of credit risk on U.S. Government fully guaranteed investments may be limited.
 - *Market Risk* – FCA Regulation [615.5133\(h\)\(4\)](#) requires institutions to monitor market risk, which is primarily IRR, by stress testing investments at the end of each quarter. Refer to the *Stress Testing* section below for a further description of requirements and expectations.
 - *Liquidity Risk* – For banks, FCA Regulation [615.5134\(d\)](#) establishes marketability requirements for investments held in the liquidity reserve. Investments in the liquidity reserve must exhibit low risk, be easily convertible into cash with little or no loss in value, and easily bought and sold in active and sizeable markets without affecting prices (except for money market investments). FCA Bookletter [BL-064](#) states that banks are expected to periodically assess the marketability and liquidity of investments to ensure ongoing compliance with these regulatory marketability requirements. This assessment should address the depth, breadth, and liquidity of the market as well as other liquidity risk indicators. At banks and associations, even if some or all investments are not held for liquidity needs, the institution should understand and monitor the liquidity characteristics of its investments.
 - *Country Risk* – If the institution (typically just banks) has investments that are issued or guaranteed by a foreign company or government, the institution should have processes to monitor country risk and OECD country risk ratings on an ongoing basis. FCA Regulation [615.5140\(a\)\(1\)\(iii\)](#) identifies requirements for OECD country risk ratings.

- *Concentration Risk* – The institution should monitor counterparty and portfolio concentrations and ensure risks are adequately diversified (e.g., across different obligors, guarantors, asset classes with similar characteristics, collateral types, servicers, originators, industries, unsecured exposures, maturities, and geographic areas). In addition, due diligence should ensure ongoing compliance with diversification requirements in policies and FCA Regulations, including the following:
 - For banks, no more than 15 percent of the investment portfolio may be invested in any one asset class. Money market instruments and investments guaranteed by the U.S. Government or a GSE are exempt from this limit. (FCA Regulation [615.5133\(f\)\(2\)](#))
 - For banks, no more than 50 percent of the investment portfolio may be comprised of mortgage-backed securities fully guaranteed by GSEs. (FCA Regulation [615.5133\(f\)\(3\)\(iii\)](#))
 - For banks, no more than 10 percent of total regulatory capital may be invested in any one obligor. (FCA Regulation [615.5133\(g\)](#))
 - For banks, the investment portfolio cannot exceed 35 percent of total outstanding loans. (FCA Regulation [615.5132\(a\)](#))
 - For associations, the investment portfolio cannot exceed 10 percent of total outstanding loans. (FCA Regulation [615.5140\(b\)\(4\)](#))
- *Economic and Market Conditions* – The institution should monitor changes in economic and market conditions and their impact on investment performance and risks, especially in areas where concentrations exist. At times, economic and market conditions can change quickly. The institution should assess these conditions as part of its ongoing risk evaluation efforts and determine if adjustments to portfolio strategies are warranted.
- ***Due Diligence on Securitizations that Tranche Credit Risk (banks only): Are due diligence analysis processes on securitizations sufficient to support the assigned capital risk weighting?*** FCA Regulation [628.41](#) establishes additional due diligence requirements on securitizations (e.g., MBS and ABS) that tranche credit risk to demonstrate the bank has a comprehensive understanding of its exposures. If these requirements are not met to the satisfaction of FCA, the security must be assigned a 1,250 percent risk weight under FCA’s risk-based capital regulations. Since this applies only to securitizations that tranche credit risk, it does not apply to pass-through securitizations or to agency-guaranteed securitizations that do not tranche credit risk (other expectations and regulatory requirements noted in this section would still apply). Processes for conducting pre-purchase and ongoing due diligence on securitizations that tranche credit risk need to be commensurate with the complexity of the exposure and materiality in relation to capital, and must meet the following regulatory requirements:
 - A pre-purchase analysis of risk characteristics of the securitization exposure must be completed prior to purchase and documented within 3 business days after acquisition. This analysis must address structural features of the securitization that would materially impact performance, performance of the underlying credit exposures, and market data on the securitization. Examples of the specific factors

that should be analyzed are addressed in FCA Regulation [628.41\(c\)\(2\)\(i\)](#).

- At least quarterly, the bank must evaluate, review, and update as appropriate its analysis for each securitization exposure as required by FCA Regulation [628.41\(c\)\(2\)\(ii\)](#).
- **Stress Testing: Do pre-purchase and ongoing risk analysis processes include appropriate stress testing?** FCA Regulation [615.5133\(h\)\(4\)](#) requires that institutions stress test investments at least quarterly, and that stress tests at minimum measure the price sensitivity of investments over a range of possible interest rate scenarios. FCA Regulation [615.5133\(h\)\(1\)\(iii\)](#) requires that structured investments with uncertain cash flows (including all MBS and ABS securities) be stress tested before they are purchased. FCA Regulation [615.5174\(d\)](#) requires that pre-purchase and quarterly stress tests be performed on mortgage securities issued or guaranteed by Farmer Mac and backed by loans the institution did not originate (stress testing is not required if these securities are backed by loans the institution originated). Stress testing should also be commensurate with the unique risks, complexity, structure, cash flows, purpose for holding investments, and size of the portfolio. For example, if the portfolio is exposed to significant premium risk from prepayments, stress tests should be expanded to address that risk. If the portfolio is held for liquidity or designated available-for-sale, the quarterly stress tests must address price sensitivity of each investment as well as the overall portfolio. If the portfolio is held for the purpose of diversifying various balance sheet risks and is designated held-to-maturity, price sensitivity of the overall portfolio must still be measured each quarter, but stress testing each individual investment could be less frequent or not needed depending on unique characteristics and risks. Therefore, an understanding of the unique risks in investments and the objectives for holding investments must be considered in determining the types of stress tests that are needed. The types of stress tests may need adjusting over time as conditions change. Additional considerations include the following:
 - Other significant risk factors that may need stress testing include the impact of interest rate changes on the cash flows and average life of investments.
 - Stress testing should also be used to measure credit risk. Stress tests could measure the impact of a change in credit spreads on market price. In addition, stress testing methodologies on non-agency MBS and ABS securities should assess underlying collateral and the potential impact of increasing defaults and losses on credit enhancements.
 - Stress tests must rely on verifiable, documented information to support assumptions, particularly assumptions on prepayments, interest rate volatility, and credit factors.
- **New Investment Types and Classes: Is sufficient due diligence completed before expanding into new types and classes of investments?** Before expanding into new types and classes of investments or investments with different risk characteristics, the institution should analyze and develop a thorough understanding of the new investments. This due diligence process should be commensurate with the complexity and risks in the new investments. As a sound business practice, it should address risk characteristics and consistency with risk appetite; ability to understand, measure, and monitor all risk sources; and compliance with investment policy and purposes. The due diligence process should also address any changes needed in policy and procedures, such as guidance on security and tranche selection; unique

risks to be addressed in pre-purchase analyses; concentration limits; and reporting required for monitoring ongoing changes in risk.

FCA Bookletter [BL-064](#) provides additional explanation of risk measurement and management expectations.

4. Monitoring & Controls:

Evaluate internal controls in investment operations, with a focus on reporting, oversight and approval processes, separation of duties, and staffing.

Guidance:

Effective internal controls are critical to safe and sound investment operations. An effective system of internal controls in investment operations should include reliable reporting, effective committee oversight, reasonable separation of duties, appropriate delegated authorities, adequate staffing, and reliable investment models and information systems. In addition, internal controls must be sufficient to detect and prevent loss, fraud, embezzlement, conflicts of interest, and unauthorized investments as required by FCA Regulation [615.5133\(e\)\(1\)](#).

Evaluative questions and items to consider when examining investment monitoring and control processes include:

- **Reporting: Is reporting timely, accurate, and sufficient for the board and management to monitor investments and make informed decisions?** Reporting is the board and management's primary method of monitoring investment portfolio characteristics, risks, and performance. It also helps them to ensure investment activities are consistent with policy, procedures, plans, and risk appetite. Reporting should be differentiated and tailored to the needs of each audience (e.g., board, asset/liability management committee, investment committee), and be commensurate with the portfolio's complexity and risks. Important considerations include the following:
 - FCA Regulation [615.5133\(i\)](#) requires at least quarterly reporting on investments to the board or a designated board committee. Refer to the regulation for a listing of specific items that must be addressed in the reports.
 - In addition to meeting regulatory reporting requirements, effective reporting should typically include a description of how the investment portfolio has changed from prior reporting periods; significant events and changing market conditions that affect investments; a security watch list of investments with emerging areas of concern; and results of due diligence completed before expanding into new types or classes of investments.
 - When aggregating investments into classes or pools for reporting purposes, such pools should be sufficiently granular to differentiate the unique risk characteristics among investments.
- **Committee Oversight: Does management effectively use committees to monitor and direct investment activities?** Institutions with significant investment activities should use committees to oversee the management of investments. These committees should be assigned responsibility for fully understanding the risks involved in investment activities and ensuring investments are consistent with regulations, policies, procedures, plans, risk

appetite, and authorized purposes for holding investments. The committees should have a charter or other guidance in place that defines composition, meeting frequency, responsibilities, and, as required by FCA Regulation [615.5133\(d\)](#), the extent of management's responsibilities and authorities. Key types of committees include the following:

- *Asset/Liability Management Committee (ALCO)* – Institutions typically have ALCOs comprised of senior officers and decision-makers representing the various functions and divisions. The ALCO is responsible for the overall management of assets and liabilities, which typically includes oversight of IRR, pricing, liquidity, funding, capitalization, and risk management. The ALCO should also oversee investment management, including approval of investment plans, ensuring strategies are consistent with board policy and risk tolerance, and monitoring investment portfolio performance and risks.
- *Investment Committee* – Institutions that have a significant investment portfolio should have a formal investment committee to closely monitor and direct investment activities, as discussed in FCA Bookletter [BL-064](#). Unlike the ALCO, the investment committee (or other committee that performs the same functions) should focus on investment operations and participate in decisions that are more tactical in nature. Examples of activities this type of committee could be responsible for include (1) being heavily involved in portfolio allocation decisions and types of securities that will be purchased, (2) closely monitoring risks in each portfolio segment, (3) ensuring all risks are analyzed and understood, (4) initiating portfolio rebalancing recommendations and other tactical decisions in response to emerging risks or changing market conditions, (5) ensuring concentration risks remain manageable, and (6) ensuring investments comply with regulatory eligibility requirements and purposes for holding investments. While the investment committee should not be overly transactional in nature, it may serve as an approver of securities that exceed the investment manager's delegated authorities. An effective investment committee will ensure the investment manager does not operate with excessive autonomy, particularly with new investment strategies and portfolio allocation decisions. Committee members should have the skills, training, and ability to understand the characteristics and complex risks in investments.
- **Separation of Duties: Are investment duties and functions reasonably separated to prevent error, fraud, unauthorized investments, and excessive concentration of powers?**
The primary objective of separation of duties is to ensure no single employee or function is in a position to perpetrate and conceal errors, irregularities, or fraud in the normal course of business. FCA Regulation [615.5133\(e\)\(2\)](#) requires institutions to establish and maintain a separation of duties between personnel who supervise or execute investment transactions and personnel who supervise or engage in all other investment-related functions. The most critical duties that should be separated from the personnel that execute investment transactions are those that involve posting accounting entries, reconciling trades with dealer confirmations and safekeeping reports, transferring cash, and determining market values. Other duties that should be separated include monitoring and reporting compliance with policy, developing investment reports, analyzing credit risk, and measuring impairment. Separation of the less critical duties may not always be practical from a cost-benefit perspective for small institutions with limited staffing, small investment portfolios, and low investment risks. To the extent that separation of all duties is not practical, alternative

internal controls should be implemented, such as periodic verification and validation by independent, qualified personnel. Separation of duties and alternative internal controls should be commensurate with the complexity and risks in investment operations. Separation of duties is frequently accomplished by segregating functions into front-office and back-office operations as follows:

- *Front-Office* – Refers to functions that are responsible for trading and executing investment transactions, and monitoring and managing positions. Upon executing a transaction, the front-office documents vital trade information on a trade ticket.
 - *Back-Office* – Refers to all administrative functions that support trading and executing investment transactions. Once trade tickets are completed by the front-office, the back-office is responsible for processing the trade, including the recording, verifying, and reporting functions. For example, back-office employees ensure confirmations are received in a timely manner, reconcile confirmations against trade tickets, process all payments and delivery or receipt of securities, post the accounting entries, complete legal documentation, and monitor compliance with risk limits and policy requirements. The back-office functions may encompass several departments, such as accounting, credit, information technology, risk management, and legal.
- ***Delegated Authorities: Are delegated investment authorities clearly defined and sufficient to control risk?*** As required by FCA Regulation [615.5133\(d\)](#), delegations of authority must be established for personnel and committees that oversee investments. The extent and limits of authority and responsibilities must be clearly defined. Effective delegated authorities should clearly identify prior- and post-approval requirements. The authorities should be consistent with the expertise of the specific personnel and the institution’s risk-bearing capacity, and should typically be differentiated by transaction amount, security type, and risk characteristics. Once established, processes should exist to monitor and ensure compliance with the authorities.
 - ***Staffing: Do front- and back-office personnel have sufficient expertise, training, and backup?*** Management should ensure investment personnel has the requisite technical skills to understand the unique complexities and manage the risks in the institution’s investments. Highly qualified and well-trained personnel should staff not only front-office positions, but also back-office functions. For example, specialized expertise may be needed to fully understand and evaluate credit risk in complex investments. When needed, the institution should seek the advice and guidance of external consultants, particularly when expanding into new, unfamiliar investment types. In addition, if risk appetite is increased, management should consider additional staff training. The institution should also have sufficient backup strategies and staffing depth (e.g., through cross-training) to provide for the continuity of all significant investment functions. Overreliance on one employee for a critical investment function is potentially unsafe and unsound.
 - ***Incentive Programs: Are incentive programs consistent with investment objectives?*** If the incentive program includes criteria related to investments, the program should be consistent with investment-related strategic business objectives. These programs should not offer monetary incentives for speculative activity and excessive risks, or conflict with the objectives and purposes of investments. For example, if the primary purpose of investments is to provide a liquidity reserve, then incentive programs should not be based primarily on investment profitability and returns.

- **Management Information System (MIS): Is the MIS sufficient to support investment operations?** FCA Regulation [615.5133\(e\)\(3\)](#) requires institutions to maintain an MIS that is appropriate for the level and complexity of their investment activities. MIS refers to the systems that generate the information required to make informed decisions and to support the various front- and back-office investment functions and internal control processes. An effective MIS should be capable of: (1) monitoring risks inherent in investment activities, (2) providing readily-available regular and special reporting, (3) processing and monitoring transactions, and (4) providing operational data such as profitability of investments, unsettled items, and payments. Investment information in the MIS should be easily accessible to management and should be current, meaningful, and accurate. In addition, the MIS should be adequately safeguarded through appropriate access controls and disaster recovery plans.
- **Model Validation: Are controls sufficient to validate investment models, including underlying assumptions and data input?** Various models may be used to manage investments and measure risks. For example, models may be used to validate fair values and measure market and credit risks. Institutions employing internal models should have adequate policies and procedures to periodically validate the models and review all elements of the modeling process, including the assumptions and risk measurement techniques. If the institution relies on third party models, sufficient processes should exist to validate assumptions and inputs. The validation of investment models should be consistent with the institution's policy and the guidance in FCA's Informational Memorandum on [Computer-Based Model Validation Expectations](#) dated June 17, 2002. *Note: This review should focus on validation of the specific model being used; refer to the Enterprise Risk Management procedure in the Corporate Governance topic for examining model validation policies and programs in general.*
- **Outsourcing: Does the institution adequately monitor and control outsourcing relationships?** An institution may decide to outsource some or all investment functions to an outside management firm. Purposes of outsourcing may include reducing costs, adopting a variable and more flexible operating cost structure, eliminating the need to update information technology to support investment operations, or other reasons. Outsourcing all significant investment operations would generally be inappropriate and could be unsafe and unsound in certain situations, especially if the investment operation is outsourced to a party external to the System. For example, outsourcing may be inappropriate for a System bank where investments are a core business activity essential to daily liquidity and balance sheet management. At associations where investments may not be a significant or core business activity, outsourcing significant investment functions could be a viable alternative. Outsourcing, however, does not absolve the institution from its responsibility to supervise, monitor, and control investment activities and risks. Following are important considerations when an institution outsources significant investment functions (as applicable):

 - The institution should perform sufficient due diligence and analyze the background of the investment management firm before executing any agreements.
 - Compensation and fees typically should not be on a per-transaction basis or based on capital gains, capital appreciation, net income, performance relative to an index, or any other incentive basis.
 - The institution should obtain detailed reporting on what is being purchased and

sold, and those reports should be reconciled regularly. Reports should be sufficient to understand investment risks and performance.

- In-house expertise should be maintained to fully understand characteristics and analyze risks in investments and provide assurance that purchases are consistent with investment purposes. Depending on the functions outsourced, separation of duties may need to exist.
- Audits of the investment firm should be performed regularly by a qualified expert that is independent of the investment firm.
- The institution should establish a detailed contractual agreement with the outside investment firm. Legal counsel should review the agreement before it is executed. The agreement should detail the amounts and types of each investment that can be purchased. It should address the specific services to be provided, compensation, approved brokers, dealers, and custodians, investment goals, approved activities and investments, risk limits, risk and performance measures, reporting requirements, settlement practices, and independent audit requirements. The agreement should also require that all trade invoices, custodial receipts, and investment analyses be readily available for review by the institution.

5. Accounting:

Evaluate support for accounting treatment of investments, including estimates of other-than-temporary impairment and processes for updating reported market valuations.

Guidance:

The accounting for investments is an important consideration in financial reporting as well as the evaluation of investment performance, risks, and management. The accounting should be consistent with generally accepted accounting principles (GAAP) and the purposes for holding investments (as discussed below in the guidance on Accounting Classifications). In addition, the institution should have processes for accurately valuing investments and measuring impairment.

Evaluative questions and items to consider when examining investment accounting processes include:

- **Accounting System: Is the accounting system sufficiently capable of handling investment transactions?** The accounting system should be able to account for the unique investments purchased and held by the institution. For example, the accounting system should be able to accurately report earnings; amortize or accrete any investment premiums or discounts; and account for dividends, interest, and gains or losses.
- **Market Valuations: Do sufficient processes exist to determine market values of investments?** Accurate and frequent valuation is essential for monitoring and reporting investment performance, risk, and compliance with the board's objectives and risk parameters. FCA Regulations [615.5133\(h\)\(1\)\(ii\)](#) and [\(h\)\(5\)](#) require institutions to verify fair market values of investments with an independent source prior to purchase (unless it is a new issue) and prior to sale. FCA Regulation [615.5133\(h\)\(2\)](#) requires institutions to determine the fair market value of each investment and the whole portfolio monthly. Independent verification of values can be obtained from a broker or dealer that was not involved in the transaction or an industry-recognized information provider. While

information providers do not provide actual market prices, they confirm whether the broker's prices are reasonable. Independent pricing may be difficult to obtain for thinly traded, unique, or complex instruments. In cases where the pricing is available from only the originating broker or dealer, the institution's internal model may be used to verify the price so long as management has adequate systems and ensures valid assumptions are used to estimate value. Models should use a valuation methodology that considers all risks in the security. Management should keep to a minimum its holdings of investments that are difficult to value. Institutions must not acquire an instrument (unless it is a new issue) if its market value cannot be determined through a means that is independent of the originating broker or dealer as required by FCA Regulation [615.5133\(h\)\(1\)\(ii\)](#). Accounting Standards Codification ([ASC](#)) [820](#) (*link requires login to FASB website*) defines fair value and shareholder reporting of fair value. ASC 820 also requires that, for each asset and liability that is reported at fair value on the balance sheet, shareholder reports must disclose whether the fair value was determined using a Level 1, Level 2, or Level 3 framework. Valuations of investments using a Level 3 approach should receive increased examination focus as they are generally based on pricing models using the institution's own assumptions rather than on observable market quotes.

- **Accounting Classifications: Do sufficient processes exist to assign accounting classifications consistent with GAAP and investment purposes?** [ASC 320](#) (*link requires login to FASB website*) is the major driver of basic accounting for investments. Under this ASC, investments must be classified in one of three categories: available-for-sale (AFS), held-to-maturity (HTM), or trading. The accounting classification is an important decision because it drives how investment values and unrealized gains and losses are reported on the balance sheet and income statement. In addition, the classification should be consistent with the regulatory and board-approved purposes of investments. Examiners should evaluate and expect documented support for the accounting classification if it is inconsistent with investment purposes. These accounting classifications are described below:
 - *Available-for-Sale* – Debt securities that are not reported as HTM or trading are reported as AFS. AFS securities are reported on the balance sheet at fair market value. Unrealized gains and losses are not included in net income but are included in Other Comprehensive Income and Accumulated Other Comprehensive Income. Investments held as a source of liquidity should be reported as AFS to evidence that they are available to meet liquidity needs.
 - *Held-to-Maturity* – Debt securities the institution has the intent and ability to hold to maturity may be classified as HTM. Such securities are reported on the balance sheet at amortized cost, and unrealized gains and losses are not included in net income or the balance sheet. Designating investments as HTM can significantly limit an institution's flexibility. Such securities must meet certain strict criteria if they are sold prior to maturity or moved to another accounting classification. Failure to meet these criteria can call into question the institution's accounting classification on *all* HTM securities. This may result in a requirement to immediately recognize all previously unrecognized holding gains or losses on the balance sheet and use fair value accounting going forward. Thus, investments held for liquidity should not be classified as HTM because of the complications that can result from selling these securities. Similarly, HTM investments may be inappropriate for managing IRR if management needs to maintain flexibility for selling these securities to make tactical IRR adjustments.

- *Trading* – Debt securities that are frequently bought and sold with the objective of speculation and generating profits on short-term differences in price must be reported as trading. Securities classified as trading must be reported on the balance sheet at market value with changes in unrealized gains and losses included in net income. System banks are authorized by regulations to hold investments only for the purposes of complying with the liquidity reserve requirement, managing surplus short-term funds, and for managing IRR. Associations are authorized to hold investments only for managing risks. Thus, investments classified as trading would generally be inconsistent with the authorized purposes for holding investments.
- ***Other-Than-Temporary Impairment (OTTI): Do sufficient processes exist to identify and accurately measure OTTI?*** OTTI is an estimate of the losses that will be realized in an investment even if it is held to maturity. OTTI attributable to credit loss is reflected as a loss on the income statement. Any non-credit losses on investments with credit-related impairment (e.g., securities with market price discounts that exceed estimated credit-related losses) may also need to be recognized on the income statement if the institution does not have the intent or ability to hold the investments until maturity. OTTI results from deterioration in credit quality and increased risk of default. Institutions may need sophisticated processes or models to measure OTTI, particularly on the more complex investments. For example, OTTI on mortgage-backed and asset-backed securities requires an in-depth analysis of underlying collateral, including assumptions for default rates, loss severity rates, loan-to-value ratios, prepayments, and other factors impacting cash flows. OTTI measurement on unsecured investments (i.e., debentures) is also complex as the institution must assess the value, if any, of its claim on the counterparty’s residual assets. The institution should have procedures documenting its processes for (1) monitoring and identifying investments that may be experiencing impairment, and (2) accurately measuring OTTI on investments tested for impairment.

6. Audit:

Determine if the institution conducts an effective audit (scope, reporting, and followup) of investment operations.

Guidance:

In institutions with significant investment activities, the internal audit program is a key mechanism for ensuring investment management is functioning effectively and in compliance with regulations and policies. The internal auditor or other qualified, independent party should review the adequacy of investment management to ensure compliance with applicable criteria. The audit risk assessment and scope should address investment management, and audit frequency should be commensurate with the complexity of the institution’s operations and risk profile. A reliable audit program provides the board reasonable assurance that investment management is sound and that investment reporting is complete and accurate.

Evaluative questions and items to consider when examining investment management audits include:

- ***Audit Coverage: Is there periodic audit or review coverage of investment management?*** FCA Regulation [615.5133\(e\)\(4\)](#) requires that System institutions implement an effective internal audit program to review investments at least annually. The review scope must be appropriate for the size, risk, and complexity of the investment portfolio. Coverage should also be consistent with the institution’s risk assessment results and annual audit plan.

- **Scope and Depth: Are audit or review scope and depth sufficient to conclude on the adequacy, completeness, and timeliness of investment management processes?** The scope should cover key processes and controls within the area being audited or reviewed. The depth of work should be sufficient to determine if internal controls are functioning as intended and regulatory requirements are met. The scope and depth of coverage should be consistent with the approved audit or review plan and engagement contract (if applicable). If audit or review work deviated materially from the original planned scope, the board (or Audit Committee, if so delegated) should be notified of the reasons for the change. Specific items that should be considered in the audit or review scope include:

 - Investment policy, procedures, and planning process.
 - Compliance with policy, procedures, FCA Regulations, and other FCA guidance (e.g., FCA Bookletter [BL-064](#)).
 - Investment plan and strategies.
 - Consistency of security selection and portfolio composition with the board’s risk appetite and tolerance, investment purposes, and investment plan.
 - Risk management and measurement systems, including pre-purchase and ongoing due diligence processes.
 - Monitoring and control processes (e.g., reporting, management oversight committees, delegated authorities, separation of duties, staffing, incentive programs, management information systems, front- and back-office functions).
 - Accounting treatment for investments, including fair market valuations and impairment measurement.
 - Processes for managing risks in investments that become ineligible or unsuitable.
 - Fraud-related threats and vulnerabilities, as well as anti-fraud controls.
 - Model validation and compliance with the model validation policy for all significant investment models (e.g., stress testing, risk measurement, valuation), consistent with guidance in FCA’s Informational Memorandum on [Computer-Based Model Validation Expectations](#) dated June 17, 2002. Audits are especially important when models are revised or replaced.

- **Reliability of Results: Did FCA identify any concerns with audit and review reliability?** Evaluate the reliability of internal audit or review work by comparing the results to FCA’s examination results in this area. This comparison often includes FCA testing of transactions that were covered in the internal audit or review (transactions are often investment purchases, but may include other types of transactional activity, as well). In addition to the audit or review report, examiners should request and review the workpapers and hold discussions with the auditor to obtain a more thorough understanding of work completed. Often, auditors and reviewers will complete line sheets, flowcharts, control matrices, standard work programs, workpaper forms, or other relevant documents when conducting work. Workpapers should adequately document the work performed and support the final report. In addition, any proforma work programs, workpapers, or other tools should be

accurate and sufficiently thorough. Audits should be conducted by professionals that have the specialized skills and experience required to evaluate the institution's unique investments. Audits typically need to be outsourced or periodically rotated with an external firm to obtain the depth of skills required, obtain alternative views, and ensure independent and objective coverage. If there are material weaknesses identified by examiners that are not identified by internal audits or reviews, examiners should assess the underlying reasons.

- **Reports: Do internal audit reports sufficiently communicate investment management review results and recommendations, if applicable?** Examiners should consider the following when evaluating the audit or review report:
 - Is the report prepared in accordance with the institution's guidelines?
 - Is an executive summary or overview included to provide the board with a general conclusion on audit or review results?
 - Is the report accurate, concise, supported, and timely in communicating the audit or review objectives, scope, results, conclusions, and recommendations?
 - Are conclusions and recommendations realistic and reasonable, with material and higher risk issues clearly identified and prioritized?
 - Are conclusions and recommendations supported by convincing evidence and persuasive arguments (condition, criteria, cause, and effect)?
 - Does the report conclude whether the institution adheres to policies, procedures, and applicable laws or regulations, and whether operating processes and internal controls are effective?
 - Does the report address potential vulnerabilities to fraud, if applicable?
- **Corrective Action: Are management responses to audit findings in this area reasonable, complete, and timely? Have corrective actions been effective?** Audits and reviews are only effective if corrective action is taken to remedy the weaknesses identified. As such, there should be a reasonable, complete, and timely management response to the audit or review report. In some cases, management commitments and agreements or any areas of disagreement are documented in the report or in a separate memo or tracking system. If corrective actions are not resolving the issues or concerns (based on repetitive audit findings, FCA findings, etc.), examiners should further investigate the reasons. For example, this could indicate the audit or review did not sufficiently identify the underlying causes or materiality of weaknesses, sufficient resources are not being directed toward corrective actions, or weaknesses exist in the institution's corrective action process, including board oversight of the process.

7. Transaction Testing:

Examine a sample of investments, with a focus on risk identification, compliance with regulations and board policy, suitability, and documentation of due diligence.

Guidance:

The examination of investments should be supplemented, as needed, with an evaluation of individual investment transactions. The primary objectives of transaction testing are to evaluate one

or more of the following:

- Compliance with regulations, policies, procedures, delegated authorities, and other internal control requirements
- Suitability in relation to investment purposes
- Risk exposure, including market and interest rate risk, liquidity risk, and credit (including country) risk
- Pre-purchase and ongoing due diligence
- Valuation and accounting treatment
- Compliance with any FCA conditions of approval (on investments purchased under FCA Regulation [615.5140\(e\)](#))
- Reliability of internal audit findings
- Validation of examination conclusions on other investment procedures

The size and types of investments included in the sample should depend on the specific objectives of transaction testing. The sample could include a selection of securities across all major investment categories, or it can be more targeted. For example, if the institution expands into a new investment class, the sample may include investments from this class and focus on compliance, risk, suitability, due diligence, and accounting treatment. The following should be considered when selecting the sample:

- The primary objective(s) of transaction testing
- Previous examination findings
- Changes in portfolio size, composition, risks, or performance
- Investment strategies
- Investment complexity
- Economic and market conditions, particularly stressed conditions for certain investment classes
- The adequacy of policies, procedures, and risk management practices
- Internal audit coverage

The specific examination objectives should be clearly defined to ensure examiners understand what they should be focusing on for each investment in the sample. If the examination objective is to evaluate risk exposure or due diligence, the *Risk Exposure* procedure identifies specific factors that should be considered for each type of risk.

8. Association Oversight (banks only):

Evaluate the bank's oversight and controls over affiliated associations' investment purchases.

Guidance:

Banks play an important role in the supervision and oversight of association investments. Banks are required to review, approve, and oversee the investment activities of affiliated associations. While banks are not required to review and approve each association investment, approval is required before the association enters investment activities or significantly changes investment strategies, such as expanding into new types or classes of investments. Banks must also annually review association investment activities.

Evaluative questions and items to consider when examining bank oversight of association investment activities include:

- **Review and Approval: Does the bank prior approve and review association investments?** The Farm Credit Act of 1971, as amended (the Act), and FCA Regulations require banks to approve association investments. Specifically, sections [2.2\(10\)](#) and [2.12\(18\)](#) of the Act require each association to obtain bank approval of its investment activities in accordance with FCA Regulations. FCA Regulation [615.5140\(b\)\(5\)](#) requires that banks prior approve each association's investment activities before the association engages in investment activities and with any significant changes in investment strategies. This regulation also requires banks to review annually the investment portfolio of every association it funds.
- **Adequacy of Reviews: Do the bank's reviews adequately address association investment risks and risk management processes?** The bank's annual reviews, as addressed in FCA Regulation [615.5140\(b\)\(5\)\(iii\)](#), must evaluate the continued adequacy of association risk management practices and whether the association's investments remain suitable and meet the purpose of managing risks over time. The bank's prior-approval reviews, as addressed in FCA Regulations [615.5140\(b\)\(5\)\(i\)](#) and [\(ii\)](#), must address at minimum the areas listed below:
 - Policies and procedures (including compliance with regulatory eligibility requirements and regulatory authorized purposes for holding investments).
 - Internal controls (including delegations of authority, separation of duties, audit coverage, accounting and information systems, and processes for preventing and detecting fraud and conflicts of interest).
 - Due diligence processes (including pre-purchase analysis, ongoing monitoring and analysis, security selection process, market valuations, and stress testing).
 - Reporting systems.
 - Staff expertise and capability to understand and effectively manage risks in investments.
- **Actions Taken: Were the bank's approvals and other actions taken consistent with the results of its reviews?** If the bank's reviews of association investment activities identified any concern areas, they should have resulted in disapproval of investment requests or other actions that are commensurate with the level of concern.