



EM-21.3

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Overview

The Investments topic provides guidance on evaluating investment quality, risk exposure, and management processes. 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. 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, credit, and 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), unincorporated business entities (UBEs), and entities as part of troubled debt workouts. In addition, 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, composition, and purposes.

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. The primary factors are portfolio size, investment purpose, and portfolio composition (including whether investments are government guaranteed). 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: What is the overall volume of investments and is the amount in compliance 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\(a\)](#)).
- **Portfolio Composition: What is the composition of the investment portfolio? Do the types of investments held affect overall credit 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-backed securities (MBS) have variable cash flows and complex structures that can expose the institution to extremely high risks. Associations are limited to purchasing securities that are fully and unconditionally guaranteed by the U.S. Government or its agencies; as such, investments have minimal credit risk but can still have significant interest rate risk (IRR) and other types of risks (e.g., 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. Although FCA Call Reports provide information on portfolio composition, the institution's internal reports and reports to shareholders should provide additional insight into the characteristics, composition, and trends in the investment portfolio.
- **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, surplus short-term funds, and 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.

2. Risk Exposure:

Evaluate risks in the investment portfolio with a focus on liquidity, market, credit, and 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, credit, and 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 risk 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, credit, and 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 Regulation [615.5133\(c\)](#) requires each institution's investment policies to establish concentration limits that ensure prudent diversification of risks. FCA Regulations [615.5133\(f\)](#) and [\(g\)](#) establish diversification requirements and obligor limits for banks.

While diversification can mitigate risks, 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 loss provisions and credit-related impairment.
 - Maturities, with longer maturities having higher credit risk.
 - Market and industry conditions, particularly in industries in which the institution has a concentration.
- **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 (AFS) 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 MBS and other asset-backed securities (ABS). 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 also 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.
- **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 considered a form of credit risk in FCA Regulation [615.5133\(h\)\(1\)\(iii\)](#), 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 living 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 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, credit, and 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 market and interest rate risk (IRR), credit risk, 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., a security or loan purchased at a premium would require immediate amortization if it 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 *Financial Impact* 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 controversial industries or 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 risk, 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\(h\)\(1\)\(iii\)](#))
 - Validation that secondary market loans purchased under the authorities in FCA Regulation [615.5140\(b\)\(2\)](#) are fully and unconditionally guaranteed or insured as to both principal and interest by the United States Department of Agriculture (USDA). In addition, the institution should ensure the originating lender filed the appropriate assignment of guarantee forms with the USDA and that the System institution is the recorded holder of the guarantee.
- **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; however, processes should ensure that, in the event of default, a claim is submitted in accordance with the guarantor’s program requirements (as applicable). The institution’s processes for evaluating credit risk should be coordinated with impairment assessments on debt securities and estimations of expected credit losses as discussed in the *Financial Impact* procedure.
 - *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\(f\)\(3\)\(ii\)](#))
 - 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 Investments Purchased at a Premium: Are due diligence processes sufficient to analyze profitability and risks in investments purchased at a premium price?***

A premium price is typically paid to purchase an investment when the stated yield or coupon rate is higher than the current market yield for similar assets with similar risks. Since the investment is paid off at par value, the premium lowers the yield-to-maturity or [internal rate of return](#) (IRoR) to a level that is generally consistent with market yields existing at the purchase date. If prepayment (or call) options exist, it creates a risk that the investment's profitability will decline. Prepayments shorten the maturity or weighted average life of the investment and cause the institution to amortize premiums more quickly, which reduces the IRoR and net income. Prepayment risk is generally higher on investments that have higher premiums, are comprised of only one or a few underlying loan(s), or have underlying loans that do not have prepayment penalties. In addition to other relevant factors described in this procedure, the pre-purchase and ongoing due diligence analyses should address the following items, commensurate with the materiality of the exposure (as further described in the note below):

- IRoR – the calculated yield or discount rate that makes the net present value of all cash flows equal to zero in a discounted cash flow analysis. All cash flows on the investment should be incorporated into this measure, including the payment for the investment, premium paid, expected prepayments, prepayment penalty fees that pass through to the investor, and principal amortization. If yield-to-maturity is used to measure returns, the calculation should be adjusted to incorporate these same cash flows, thereby producing the same result as an IRoR measure.
- Spread between IRoR and funding cost.
- Support for prepayment assumptions used in IRoR measures.
- Comparisons of realized to assumed prepayments and the impact of variances on IRoR and net income.
- Impact of defaults on prepayments for investments that are fully guaranteed. While the investment may be guaranteed, the premiums paid above par are not guaranteed. Defaults result in prepayments on guaranteed investments even when prepayment lockout provisions exist. This analysis should also consider the impact that any concentrations (e.g., by industry, underlying loan size, etc.) could have on defaults and prepayments for guaranteed investments.
- Stress tests addressing the impact of higher than expected prepayments on IRoR and spread. Quarterly stress tests (required by FCA Regulation [615.5133\(h\)\(4\)](#)) should address these factors for the overall portfolio of investments purchased at premium prices, including the potential impact on earnings. The impact of any concentrations should be incorporated into stress tests.
- Note: Due diligence analysis should consider the impact of prepayments on profitability and risks in the investment regardless of the accounting method (refer to the *Financial Impact* procedure for examining the accounting for premiums). In addition, due diligence should be commensurate with the materiality of the exposure. For example, if premiums paid are relatively low and the volume of investments purchased at premium prices is low, due diligence expectations are

generally less. If premium prices are high, stronger due diligence should typically be completed regardless of volume. Certain aspects of due diligence analyses may be addressed at the asset class level, provided these analyses are periodically updated and identify the specific due diligence to complete on each individual purchase.

- **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. These assets have structural features that allow investors to achieve desired levels of risk exposure and return depending on the portion or tranche acquired. The institution must demonstrate a comprehensive understanding of the structural features impacting 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. 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 (as discussed above). If the portfolio is held for liquidity or designated AFS, 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 to be adjusted 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 monitoring, reporting, and other internal controls in investment operations.

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 would 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 be tasked with approving 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 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 have 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 risk, 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 safeguarded through appropriate access controls and disaster recovery plans.
- **Models: Are the models used for investments managed in accordance with the institution's model risk management (MRM) framework and the guidance outlined in FCA's Model Risk Management procedure in the Direction & Control of Operations Examination Manual topic?** 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. These models should be included in the institution's model inventory, which should accurately represent each model's risk, materiality, and validation status. Model validation, change controls, staffing, separation of duties, and new model development should be consistent with the guidance in the institution's MRM framework

and FCA's *Model Risk Management* procedure, recognizing that application of this guidance varies based on model risk and materiality. *Note: Examiners completing this procedure should focus on the specific model(s) being used; the overall MRM framework is examined using the Model Risk Management procedure referenced above.*

- **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. Refer to the *Third-Party Risk Management* procedure in the *Direction & Control of Operations* Examination Manual topic for information on examining an institution's outsourcing processes. Following are additional 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. *Financial Impact:*

Evaluate the financial impact of investments and support for accounting treatment, including impairment, assessments of expected credit losses, and processes for updating reported market valuations.

Guidance:

Accounting for investments, and the related impacts on reported financial condition and performance, are important considerations in 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, measuring impairment, and assessing expected credit losses.

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

- ***Financial Impact: Have investments significantly impacted the institution's financial condition and performance?*** Determining the impacts of the institution's investment activities involves considering the net investment returns and other financial statement impacts. 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 (like investment quality) that impact the institution's portfolio returns and risk exposures. Beyond net returns, investments may impact reported financial condition and performance in numerous ways, including the following:
 - Holding gains and losses on investments can be realized in current period earnings on the income statement or unrealized and reflected in accumulated other comprehensive income on the balance sheet. Because System institutions do not hold assets for trading, holding gains and losses are generally unrealized and do not impact current period earnings.
 - Gains or losses may be recognized in current period earnings upon the sale of an investment asset.
 - Provisions or reversals for credit losses on investment securities can impact the institution's earnings. Under certain conditions, the value of assets must be written down with a corresponding adjustment to any related allowance for credit losses (ACL), similar to the chargeoff of a loan.
 - Net interest income can be impacted by the amortization of premiums, the accretion of discounts, coupon payments, prepayment of investment principal (i.e., due to forgone interest caused by premature return of principal or accelerated amortization of premium or accretion of discount), and the cost of funding used to acquire the asset.
 - Net income may be impacted by the cost of investment operations, including personnel and technological infrastructure.

- **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 its holdings of investments that are difficult to value to a minimum. 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) Topic 820 defines fair value and shareholder reporting of fair value. ASC Topic 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 Topic 320 provides accounting classifications 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 documented support for the accounting classification, especially 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 generally be reported as AFS to evidence 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 as they 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 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 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.
- **ACL Processes: Are assessments of expected credit losses for HTM debt securities and analysis of impaired AFS debt securities for credit losses performed as required by GAAP?**

Expected credit losses on HTM securities are determined as prescribed in ASC Subtopic 326-20. Credit losses on AFS debt securities are determined in accordance with ASC Subtopic 326-30. The determination of credit losses is further described below:

 - *Held-to-Maturity* – HTM debt securities are financial assets carried at amortized cost. Accordingly, the institution’s processes for estimating credit losses on HTM securities should follow the guidance for estimating credit losses on loans and leases in the *Allowance for Losses* Examination Manual topic, which is consistent with GAAP for all assets held at amortized cost. The assessment of expected credit losses for HTM securities must be performed on a collective basis when similar risk characteristics exist and expected losses must be recognized at the reporting date. Credit losses should be considered even when the risk of loss is remote, though a zero-loss assumption may be appropriate for some security types as discussed below. The ACL for HTM securities can be determined using any reasonable method management deems appropriate.
 - *Available-For-Sale* – AFS securities must be individually evaluated for credit losses any time they are impaired (i.e., the asset’s fair value is less than amortized cost). Impairment of AFS securities may result from credit or non-credit related factors. Only credit-related impairment will result in provisions for credit losses and the recognition of an ACL. Factors that would suggest credit impairment could include

adverse conditions specifically related to the security (e.g., the issuer, industry, geographic area, or underlying collateral) or an issuer's failure to make scheduled payments. Some factors, such as those discussed below for zero-loss considerations on HTM securities, may support a determination that impairment is not credit related. Impairment due to non-credit related factors, such as changes in the level of market interest rates or spreads, is recognized through other comprehensive income (net of applicable taxes). Credit losses on AFS securities must be estimated at each reporting date for each impaired security using a discounted cash flow approach. Any credit loss recognized is limited to the amount by which the fair value of the security is below its amortized cost basis. The recognition and recording of credit losses on AFS securities depends on an institution's intent or ability to hold the security until the amortized cost basis is recovered as described below:

- Any credit loss on individual AFS securities the institution does not intend to sell and is **not more likely than not** going to be required to sell should be recognized through a provision to the ACL.
 - If an institution intends to sell an AFS debt security or will *more likely than not* be required to sell the security before recovery of the amortized cost basis, the security's amortized cost basis should be written down to its fair value with a corresponding charge to any existing ACL and any incremental losses (not previously recorded through the ACL) reported in income.
- **ACL Zero-Loss Assumption: Is the ACL assumption of a zero credit loss on selected HTM debt securities supported?** Certain high-quality HTM investments may qualify for an assumption of zero credit loss, which eliminates the need to estimate expected credit losses. Processes for assigning a zero-loss assumption should follow ASC Subtopic 326-20 guidance in the *Allowance for Losses* Examination Manual topic. Various approaches exist for determining which investments are appropriate for zero credit loss assumptions. Management should document its analysis on a recurring basis as reasonable judgments regarding the same or similar assets might result in different conclusions on zero-loss expectations. Examples of HTM debt securities that may be suitable for zero credit losses include U.S. Treasury Securities, the debt securities of other U.S. government agencies, Government National Mortgage Association (Ginnie Mae) Mortgage-Backed Securities, and Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac) Mortgage-Backed Securities. Indicators that would support a zero-loss assumption may include the following:
 - High credit rating by rating agencies when coupled with other indicators.
 - Long history with no credit losses.
 - Explicitly and fully guaranteed by a sovereign entity of high credit quality.
 - The instrument's interest rate is widely recognized as a risk-free rate.
 - The issuer or guarantor can print its own currency, which is routinely held by central banks, used in international commerce, and commonly viewed as a reserve currency.

- Note: Changes in these indicators (e.g., credit rating downgrade or a default of payment by a sovereign entity) could necessitate reconsideration of the zero-loss assumption.
- **ACL at Acquisition: Does the ACL appropriately reflect expected credit losses for HTM and AFS debt securities purchased with credit deterioration?** Day 1 accounting for the acquisition of debt securities depends on the accounting classification and the presence or absence of credit deterioration at the time of purchase. At each reporting date after initial measurement, institutions adjust the ACL as needed with corresponding recognition of provision expense or reversal should credit-related impairment exist. The following includes additional guidance for HTM and AFS ACL at acquisition:
 - *Held-to-Maturity* – Refer to the *Allowance for Losses Examination Manual* topic for guidance on how to record HTM debt securities designated as purchase credit deteriorated (PCD) at the acquisition date. This includes guidance for the Day 1 ACL using the expected credit loss model for PCD HTM securities and creating a Day 1 provision expense for non-PCD HTM debt securities.
 - *Available-For-Sale* – ASC Subtopic 326-30 requires institutions to establish an ACL for AFS debt securities acquired with credit deterioration. The ACL for PCD AFS debt securities is measured at the individual security level and based on the institution’s best estimate of the present value of cash flows expected to be collected from the issuer. Credit losses should be discounted using a rate that equates the present value of the expected cash flows with the securities purchase price. The amortized cost basis of the security is its purchase price plus the amount of the ACL. There is no effect on earnings for the initial (Day 1) ACL estimates for PCD assets. An ACL is required when there are indicators of a credit loss, which could include the following:
 - The likelihood the issuer will not be able to make future payments.
 - The issuer did not make a scheduled payment on the security.
 - Rating agency downgrades the security rating.
 - Adverse conditions specifically related to the security, its industry, or its geographic area, such as changes in technology, discontinuance of a business segment that may affect future earnings potential, or changes in the quality of credit enhancement or underlying collateral.
- **ACL Level: Are ACL balances on HTM and AFS securities consistent with the nature of assets held, and factors impacting their credit quality? If not, does management’s analysis support the cause for any notable difference?** ACL balances on both HTM and AFS investment portfolios should be generally consistent with the credit risk exposure present in the institution’s investment holdings as discussed in the *Risk Exposure* procedure. For example, FCA Regulation [615.5140\(b\)](#) requires investments held by System associations for risk management purposes to be issued or unconditionally guaranteed by the U.S. Government and most associations account for these investments as HTM securities. A zero-loss assumption and no related ACL balance may be appropriate for such investment assets. Conversely, System banks may hold assets with varying degrees of credit risk given the range of assets eligible under FCA Regulation [615.5140\(a\)](#), and the vast majority of System bank investment assets are accounted for as AFS securities. For investment types that have credit risk profiles similar to loans (e.g., non-agency bonds or commercial paper)

ACL analysis should consider certain factors similar to those discussed in the *Allowance Level* procedure in the *Allowance for Losses* Examination Manual topic. The institution's processes for ongoing due diligence on investment securities should identify factors relevant to assessing credit risk and the adequacy of ACLs on both HTM and AFS securities. For AFS securities, examiners should keep in mind that ACLs and related provisions are only booked when the specific criteria are met as discussed above. As with loans, weaknesses identified in ACL processes for investment securities may indicate inadequate ACL amounts. Similarly, examiners should consider whether weaknesses identified in the institution's ongoing due diligence processes suggest inadequate ACL amounts.

- **Premium (Discount) Amortization (Accretion): Are premiums (discounts) appropriately amortized (accreted) over the life of the investment, consistent with GAAP?** ASC Subtopic 310-20 generally requires institutions to follow the interest method when amortizing (accreting) a premium or discount over the remaining life of a debt security or purchased loan. Under this method, the objective is to recognize interest revenue at a constant effective yield that incorporates the amortization of premiums and accretion of discounts. Interest revenue is calculated by multiplying the constant effective yield by the net investment amount. The amount of premium or discount amortization (accretion) equals the difference between interest revenue and actual cash interest received (which is based on the stated coupon or stated interest rate). Over the life of the investment, the unamortized premium or unaccreted discount is reduced to zero and interest revenue is recognized at a constant rate of interest. The following exceptions exist as further described in the August 2022 [OCC Bank Accounting Advisory Series](#) (section 1A, questions 18-20) and [Accounting Standards Update 2017-08](#):
 - Prepayment estimates may be considered in determining the amortization (accretion) period if the prepayments are probable and the timing and amount can be reasonably estimated. If subsequent realized prepayments significantly differ from the estimate at acquisition, the institution should calculate a new constant effective yield to reflect the revised estimate of future prepayments, and the net investment carrying value should be adjusted to the amount that would have existed had the new amortization rate (constant effective yield) been applied at acquisition.
 - Premiums on debt securities that are callable at fixed prices and at preset dates and have explicit, noncontingent call features must be amortized to the earliest call date, unless the above prepayment exception is applied. If the security is not called, the remaining premium must be amortized to the remaining contractual maturity date. This exception does not apply to securities purchased at a discount, loans that do not meet the definition of a debt security, or securities in which the call date or call price is not known in advance.
 - Alternatives to the interest method of accounting may be used (e.g., straight-line amortization) if the results are not materially different from the interest method.

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 or review 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.

Note: This procedure focuses on evaluating the reliability and effectiveness of internal audits and reviews in this topical area. Refer to the *Audit & Review Programs* topic in the Examination Manual for guidance on examining the overall internal audit and review program.

Evaluative questions and items to consider when examining the audit or review of investment management include:

- **Audit Coverage: Is there periodic audit or review coverage of investment management?** Audit or review coverage and frequency should be appropriate relative to risks, changes in the operating environment, regulatory requirements, and periodic testing needs. 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 and depth of work, including transaction testing, should cover the primary processes and controls within the area being audited or reviewed and be sufficient to determine if internal controls are functioning as intended and regulatory requirements are met. The scope and depth of coverage should be documented and consistent with the approved audit or review plan and engagement contract (if applicable). Audit or review workpapers should be examined to verify the actual scope and depth of work performed. The workpapers may indicate the scope and depth deviated from what was identified (or implied) in the audit plan. For example, workpapers may indicate the work performed was limited to evaluating the existence of policies and procedures and didn't include reviewing other controls, such as training or reporting, or testing compliance with regulations or institution guidance. If the work deviated materially from the original planned scope, internal audit should notify the board (or Audit Committee, if so delegated) of the reasons for the change. Specific items that should be considered in the audit or review scope include:
 - Investment policies and procedures.
 - Compliance with policies, procedures, FCA Regulations, and other FCA guidance.
 - Investment planning and strategies, including consistency of purchased securities and portfolio composition with the investment plan and the board's risk appetite, risk tolerance level, and approved investment purposes.

- Investment risk management and measurement systems, including pre-purchase and ongoing due diligence processes and management of risks in investments that become ineligible or unsuitable.
 - Monitoring and control processes (e.g., reporting, management oversight, delegated authorities, separation of duties, staffing, incentive programs, management information systems, front- and back-office functions).
 - Accounting treatment for investments, including fair market valuations, impairment measurement, and estimation of credit losses.
 - Management of all significant investment models (e.g., stress testing, risk measurement, valuation), including consistency with the institution's overall model risk management framework.
 - Sufficient transaction testing to ensure established criteria are followed.
 - Fraud-related threats and vulnerabilities, as well as anti-fraud controls.
- **Reliability of Results: Did FCA identify any concerns with audit or review reliability?** It is important to understand the scope and depth of the audit or review being examined, as discussed above, when evaluating audit or review reliability. With this understanding, the following are key considerations when evaluating the reliability of audit or review results:
 - *FCA Testing* – 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 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. This can be especially important if the audit or review report is not sufficiently detailed or FCA's examination work and testing identifies potential concerns. Auditors and reviewers complete line sheets, flowcharts, control matrices, standard work programs, workpaper forms, or other relevant audit evidence when conducting and supporting their work. (IIA Standards 2240, 2300, 2310, and 2320) Workpapers should adequately document the work performed and support the final report. If FCA identifies weaknesses that were not identified in the audit or review, the cause for any discrepancy should be determined.
 - *Audit/Review Staffing* – Whether internal or outsourced, auditors and reviewers conducting the work need to be qualified, independent, and objective to ensure reliable results. They should have the right mix of knowledge, skills, and other competencies needed to perform the work. (IIA Standard 2230) Additionally, auditors and reviewers need to be independent of the activities they audit so they can carry out their work freely and objectively. (IIA Standards 1100, 1112, 1120, and 1130) For example, audit and review staff should not be involved in developing and installing procedures, preparing records, operating a system of internal controls, or engaging in any other activity that they would normally review. Outside

audits of the portfolio should be conducted periodically when necessary to ensure an objective evaluation of practices and controls by qualified auditors (FCA Bookletter [BL-064](#)). Examiners should evaluate the staffing on the individual audit or review being examined as part of determining the reliability of results.

- *Institution Review of Work Performed* – The institution should complete an independent review of the workpapers to ensure audit or review objectives and scope were met and the results and conclusions were reliable and supported. (IIA Standard 2340) Examples could include a supervisory review of in-house audit work by the Chief Audit Executive (CAE) or other audit staff, or a review of outsourced work by the CAE or audit coordinator. Examiners should consider whether the institution completed these reviews, and if any concerns were identified, when concluding on audit or review reliability.
- **Reports: Does the internal audit or review report 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 and communicated 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? (IIA Standards 2330, 2400, 2410, 2420, 2440, and 2450)
 - 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)?
 - Do results in the workpapers align with report conclusions?
 - 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 or review 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. Management commitments and agreements or any areas of disagreement should be documented in the report or in a separate memo or tracking system. (IIA Standards 2500 and 2600) If corrective actions are not resolving the issues or concerns in a timely manner, 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, credit risk, and 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.