**Farm Credit Administration**

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Bookletter – BL-064

December 9, 2010

To: The Chairman of the Board
The Chief Executive Officer
All Farm Credit System Institutions

From: Leland A. Strom
Chairman and Chief Executive Officer

Subject: Farm Credit System Investment Asset Management

This bookletter has been approved by the Farm Credit Administration (FCA, we, our) Board. It applies to all Farm Credit System (System or FCS) banks or associations (institutions) that hold eligible investments for the purposes set forth in §§ 615.5132 and 615.5142 of FCA regulations.[1] It is intended to provide clarification and guidance regarding FCA's regulations and expectations with respect to the key elements of a robust investment asset management framework that each institution should establish to prudently manage its investments in changing markets.

Under § 615.5132, System banks may hold eligible investments for the purposes of maintaining a liquidity reserve, managing surplus short-term funds, and managing interest rate risk. Under § 615.5142, Farm Credit associations may hold eligible investments to reduce interest rate risk and to manage surplus short-term funds, subject to the approval of their funding banks. These purposes do not authorize System institutions to accumulate large investment portfolios for arbitrage or trading activities.

Section 615.5140(a) provides a list of eligible investments.[2] The regulation specifies appropriate asset classes, maturity limits, portfolio limits, obligor limits, and other requirements. Section 615.5140(c) requires that all eligible investments, except money market investments,

[1] This bookletter does not apply to System service corporations, as FCA regulations do not specify any permissible purposes for which service corporations can make investments, or to the Federal Agricultural Mortgage Corporation (Farmer Mac), which is governed by its own investment management regulations in part 652, subpart A of FCA regulations.

[2] Section 615.5140(e) authorizes System institutions to hold other investments (not on the eligibility list) with FCA prior approval. This bookletter applies to all investments held for the purposes authorized by the regulations cited above. Investment management requirements and guidelines covering investments held for other purposes, such as mission-related investments, are imposed in connection with FCA's approval on a case-by-case-basis. They are generally similar to the guidance set forth in this bookletter but are tailored as necessary for the particular investment.

must be marketable, stating that an eligible investment is marketable "if you can sell it quickly at a price that closely reflects its fair value in an active and universally recognized secondary market."

Section 615.5133 of our regulations establishes requirements for implementing an effective oversight and risk management process for investment activities and liquidity management.[3] Strong investment asset management begins with appropriate board and senior management oversight. The board of directors is responsible for establishing written investment policies that are appropriate for the size, types, and risk characteristics of its institution's investments. Investment policies are a critical aspect of effective risk management and should set appropriate limits on exposure to credit, market, concentration, and liquidity risks. Senior management is responsible for implementing board direction and ensuring that it is carried out.

During the prolonged period of financial stability that preceded the recent financial crisis, FCS institutions' investment management policies and allocation strategies were adjusted infrequently and investments were seldom subject to credit risk stress tests. Although the System has experienced considerably less investment stress during the crisis than many other financial institutions, both FCA and the System recognize that more frequent adjustments to investment management policies and allocation strategies and more frequent credit risk stress tests would have improved institutions' investment management processes and could have resulted in a higher quality, more liquid portfolio during the crisis. Accordingly, FCA expects, even during periods of stability, that each System institution will revisit its investment allocation strategies frequently (more than once a year), in order to manage asset concentrations that could increase its liquidity risk and impede its ability to convert investment positions to cash quickly, if needed. In addition, each institution should ensure it has the appropriate tools in place to evaluate credit risk during the purchasing process and on an ongoing basis.

Further, some System institutions invested in structured products, including private placements, in volumes representing high concentrations of capital. During the financial crisis, many of these securities became distressed and illiquid. As a result, these institutions experienced a significant deterioration in investment asset performance and quality which increased their liquidity risk profile during a period when market access was tenuous and stressed. In light of this experience, FCA expects an institution to use prudent investment asset management to ensure that the institution maintains a pool of highly liquid assets. In particular, the FCA expects the board and senior management of each institution to:

- Establish prudent policies, procedures, and internal controls to effectively oversee the institution's investment activities, including establishing appropriate delegations of authority, purchase and hold limits, segregation of duties, and reporting;
- Limit concentrations of risk in particular counterparties, asset classes, individual securities or tranches, sectors, and industries;
- Develop an appropriate independent credit analysis process that has reduced reliance on Nationally Recognized Statistical Rating Organization (NRSRO) credit ratings and that includes an evaluation of the underlying cash flows, price risk, and collateral under stressed conditions; and
- Ensure that all investments purchased meet FCA's regulatory definition of a "marketable" investment and that the institution establishes procedures and processes to evaluate the marketability and liquidity of the investment portfolio.

[3] FCA regulatory requirements discussed in this bookletter are found in § 615.5133 unless otherwise specified.

FCA examiners will use the guidance set forth in this bookletter in evaluating investment asset management practices and in discussing those practices with System asset liability management committees (ALCOs), audit committees, boards, and management teams.

The recent financial crisis and its lingering effects have re-emphasized the importance of sound investment and liquidity risk management practices by System institutions. Sufficient oversight by each System institution's board of directors and senior management is a critical control for prudent investment asset management. We recognize that the System banks have added high quality liquid assets to their investment portfolios to help ensure sufficient liquidity going forward. Institutions should expect FCA examiners to continue to closely evaluate risk management policies and procedures as well as investment portfolio composition, performance, and risks. In addition, the FCA Board plans to consider regulatory changes relating to eligible investment assets to ensure that prudent practices are in place for the safe and sound management of investment portfolios.[4]

If you have questions in regard to this guidance, please contact Laurie Rea, CFA, Associate Director, Office of Regulatory Policy, at (703) 883-4232, or at real@fca.gov, or Tim Nerdahl, Senior Financial Analyst, Office of Regulatory Policy, at (952) 854-7151, ext. 5035, or at nerdahlt@fca.gov.

Attachment

[4] *See* FCA's Fall 2010 Regulatory Performance Plan, available at www.fca.gov. The Regulatory Performance Plan may be found under Laws & Regulations (at the top), FCA Regulations (on the left), FCA Regulatory Performance Plan (on the left).

**Attachment**

# Investment Asset Management

The topics discussed in this attachment address critical components of investment asset management. System institutions should address these items in their investment policies and practices to ensure adequate controls and governance are in place to manage risk, while achieving liquidity objectives and maintaining safety and soundness.

Effective investment asset management is founded on three fundamental pillars: Board and senior management oversight, risk management and measurement, and risk evaluation. The basic tenets of these pillars and FCA expectations are outlined and discussed below.

**Pillar 1: Board and Senior Management Oversight**
- Investment policies
- Board involvement
- Investment plan implementation
- Reporting to the board

**Pillar 2: Risk Management and Measurement**
- Effective internal controls environment
- Independent audit program
- Due diligence and modeling cash flows and assumptions
- Credit risk evaluation
- Pricing and valuation practices
- Evaluation of liquidity and market risk
- Enterprise risk management

**Pillar 3: Risk Evaluation**
- Assessment of current economic and financial conditions
- Identification of emerging risks
- Sector risk evaluation
- Stress testing

This attachment concludes by discussing the regulatory requirements for associations that engage in investment activities.

## PILLAR 1 – BOARD AND SENIOR MANAGEMENT OVERSIGHT

Satisfactory investment asset management begins with board and senior management oversight of the investment activities of an institution. The board sets the direction for the institution through investment policies and the planning process. Senior management implements board direction and reports to the board in accordance with FCA regulations and board policy.

**Investment Policies:** Section 615.5133(a) of FCA regulations requires the board of each System institution to adopt written policies for managing its investment activities. The policies must address the purposes and objectives of investments, risk tolerance, delegations of authority, and reporting requirements.[5] In addressing risk tolerance, the policies must establish risk limits and diversification requirements for the various classes of eligible investments and for the entire investment portfolio.[6] Asset allocation and diversification strategies are important elements of prudent investment portfolio management. Investment policies should identify specific risk limits, as well as liquidity and diversification requirements that are consistent with the objectives, capital position, and risk tolerance of the institution.[7] The policies should specify the types and amount of investments in which the institution may invest, taking into account the eligible investments and regulatory maximums specified in § 615.5140.[8] The policy should also clearly identify the responsibilities and limits of committees that oversee investments.

In general, policies should incorporate the following principal elements:

- Purpose of the policy and objectives that are to be accomplished;
- Parameters within which management and staff are expected to operate;
- Authorities delegated to management and authorities retained for board approval or action;
- Process for addressing exceptions; and
- Reporting requirements.[9]

Furthermore, an institution's investment policies must be appropriate for the size, types, and risk characteristics of the institution's investments.[10] At a minimum, the board of directors must review these investment policies at least annually and make any changes that are needed.[11] The board must ensure that management complies with its investment policies and that appropriate internal controls are in place to prevent loss.[12]

**Board Involvement:** Board members are expected to take an active role in risk governance, including having an effective internal controls environment and ensuring that the institution complies with applicable laws and regulations. Among the effective ways for the board to exercise risk governance over the investment portfolio is through the annual planning process.[13] Through the planning process, the board should establish the institution's strategic investment direction and provide guidance to senior management on implementation of its approved investment policies and strategies. The board should approve business plan goals based on its objectives and the ongoing operational and liquidity needs of the institution. The board should also evaluate the institution's existing portfolio during the planning process, including the risk and returns generated by the portfolio. In addition, the planning process should provide direction as to the targeted composition of the portfolio, based on the institution's liquidity and operational needs, and risk tolerance.

**Investment Plan Implementation:** Once an institution's board provides investment direction through its planning process, management must develop approaches to implement this direction. FCA regulations do not prescribe specific implementation approaches. However,

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[5] Section 615.5133(b).
[6] Section 615.5133(c).
[7] *See id*.
[8] *See id*.
[9] *See* FCA Exam Manual EM-520.
[10] Section 615.5133(b).
[11] Section 615.5133(a).
[12] *Id*.
[13] Section 618.8440 requires each institution board annually to adopt an operational and strategic business plan.

sound business practices include the development of a dynamic investment plan and the establishment of a formal investment committee.

An institution's senior management should develop a sufficiently detailed investment plan to appropriately execute the board's approved investment strategies and achieve business plan goals of the institution. The plan should be approved by senior management, or at a high level of management such as the ALCO or other appropriate management committees. The investment plan should help provide for effective guidelines and control over the investment portfolio. The plan could take many different forms, but it should be a dynamic working document that can deal with changes in market conditions. The plan should identify the current implementation strategies necessary to deal with changes in the investment portfolio that might be needed to address ongoing liquidity requirements and asset liability management objectives. This would require the investment management staff to document the current focus of the investment portfolio, noting changes from the previous reporting period. In addition, the plan should identify, among other items, the projected sources of incremental returns, sectors or security types in which the institution expects to invest, investment class and security hold limits, and counterparty concentration limits.

Key elements of an investment plan include the following:

- An appropriate target portfolio composition given the investment policy parameters, current market conditions, and liquidity needs;
- Rebalancing tactics to achieve the target portfolio allocation from the current allocation; and
- Performance measures including target portfolio spread given the target portfolio composition and anticipated various spreads in relation to the institution's cost of funds.

To effectively implement the investment plan, each institution should consider establishing a formal investment committee to provide additional expertise and serve as an additional control over investment asset management. In the past, the ALCOs, which oversee the management of investment portfolios in most System institutions, have generally provided sufficient oversight of these portfolios. However, while not required by FCA regulation, the importance, volume, and growing complexity of System investments may warrant additional expertise in the form of an investment committee. The committee should be involved with tactical investment decisions and overseeing the risks in investments. Moreover, the committee should ensure that the institution's credit department oversees and analyzes complex credit assets that are structured as investments. In addition to providing additional expertise, the investment committee would also provide for separation of duties between allocation and risk strategies and the actual traders. This committee would also provide appropriate monitoring and governance as well as provide structure or formalization of many of the informal processes.

An effective investment plan and an engaged investment committee provides the ALCO and the board with a better understanding of the institution's approach to current and future investment activities.

**Reporting to the Board:** Each quarter, management must report to its board (or committee thereof) on the performance and risk of each class of investments and the entire investment portfolio.[14] Furthermore, reporting must reflect significant events affecting the institution's

[14] Section 615.5133(g).

investment environment.[15] In addition, reporting must address whether investments are achieving their objectives.[16] For example, if a class of investments was purchased for the objective of maintaining a liquidity reserve, then reporting must address liquidity characteristics of the investment class and the extent to which the investments contribute to meeting the liquidity objective. The board should also require periodic review and reporting through the internal audit program. Timely and quality reporting on investment activities is an important component of board and senior management oversight. Institutions that conduct investment activity should ensure that the nature and frequency of the reporting is appropriate for risk in the portfolio and the current environment.

## PILLAR 2 – RISK MANAGEMENT AND MEASUREMENT

This section clarifies our expectations for how a System institution can strengthen its risk management and measurement practices. Managing and measuring the risk in investments are critical parts of effective investment asset management. Strengthening these practices should improve the institution's overall management with respect to its investment portfolio. This section discusses an effective internal controls environment and the role of audit. In addition, this section discusses due diligence and the modeling of cash flows and assumptions, credit risk evaluation, pricing and valuation practices, and the evaluation of liquidity and market risk. Furthermore, this section discusses effective enterprise risk management practices that institutions need to recognize if they follow the prudent practice of managing risk from a global perspective.

**Effective Internal Controls Environment:** The board must ensure sound systems and controls are in place to manage investment risks.[17] Senior management is responsible for implementing an effective controls environment to manage risk in an institution's investment portfolio, as well as to ensure compliance with applicable laws and regulations. Diversification and providing for appropriate hold limits to ensure regulatory and board policy compliance are key controls. In addition, controls must be in place to ensure that only permissible investment activities take place.

Concentration in certain asset classes and securities highlighted control failures in many financial institutions during the height of the financial crisis. Careful investment selection and appropriate diversification are key ways to manage and control concentration risk. System institutions should effectively manage concentrations in any one investment issue or investment asset class, especially more complex, potentially illiquid, and higher-risk investments such as structured credit products. FCS institutions should limit their portfolio allocation in the following types of securities and, consistent with § 615.5140(c), must be able to demonstrate their marketability:

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[15] *Id.*
[16] *Id.*
[17] Section 618.8430 requires each institution's board to adopt an internal control policy that provides direction to the institution in establishing effective control over, and accountability for, operations, programs, and resources.

- Investments with historically volatile market values or cash flows;
- Structured investments with underlying collateral comprised of higher-risk assets or those likely to have limited liquidity in a stress environment;
- Investments that do not have readily determinable market values (that is, where price estimates rely on models instead of actual trades, such as investments classified as level 3 under Statement of Financial Accounting Standards 157/Accounting Standards Codification 820); and
- Investments that rely on a common risk mitigant, such as bond insurance.[18]

Each institution should review its risk profile on a routine basis and establish portfolio limits that are not only within the regulatory framework but are also within its risk tolerance limits and investment objectives. FCS institutions should limit their exposure to subordinated or complex structure investments that are otherwise eligible within a particular asset class and establish hold limits (or sub-portfolio limits) well below the regulatory maximums. For example, asset- and mortgage-backed securities often have multiple tranches of senior and subordinated securities that are all highly rated. FCS institutions should ensure the securities that they are purchasing meet their cash flow and risk and return objectives. Furthermore, while a class of investments may be eligible, buying entire tranches of a security generally does not provide System institutions with the necessary portfolio diversification and may also hinder future liquidity needs.

FCA expects FCS institutions to have sufficient controls to monitor investment trades to ensure their appropriateness and compliance with FCA regulations. Each institution must ensure it establishes the necessary controls to limit investment activity to permissible regulatory purposes. Specifically, FCS banks and associations are not authorized to engage in trading for speculative or primarily capital gains purposes. Realizing gains on sales before investments mature is not a regulatory violation as long as the profits are incidental to the permissible investment purposes outlined in § 615.5132.

**Independent Audit Program:** As discussed above, § 618.8430 requires each institution's board to adopt an internal control policy. System institutions should establish internal controls to ensure that an independent review over investment practices and controls is conducted. An institution's audit plan should include a risk assessment of the investment function by the internal audit department or by an outside vendor if the expertise in-house does not exist. The frequency and scope of review should be based on the complexity and size of the investment portfolio. For example, banks and associations with significant investment activities should typically ensure the investment function is audited at least annually. In addition, auditors should be rotated to obtain alternate views of investment operations. Outside audits of the portfolio should be conducted periodically as necessary to ensure an objective evaluation of practices and controls by qualified auditors.

Examples of areas that should be addressed by an institution's internal audit include, but are not limited to:

- Investment selection process;
- Process used by management to monitor investments;
- Incentives for traders and other treasury staff members/management;

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[18] The Federal Deposit Insurance Corporation (FDIC) issued similar guidance for institutions it supervises. *See* Financial Institution Letter (FIL)-20-2009, at 3-4 (April 30, 2009).

- Risk management and measurement;
- Effectiveness of management oversight committees;
- Liquidity objectives;
- Portfolio composition;
- Reporting;
- Operational risk, including separation of duties, delegated authorities, and internal controls;
- Compliance with regulations, board policy, and procedures; and
- Implementation of FCA guidance (such as bookletters).

**Due Diligence and Modeling Cash Flows and Assumptions:** System institutions must conduct due diligence prior to purchasing a security. The degree of due diligence that an institution conducts must be commensurate with the complexity of the security. The need to evaluate and make a decision on a transaction quickly does not obviate the due diligence requirement. However, an institution may be able to conduct its analysis more efficiently by using a template or standardized form to document the risk and rewards of purchasing a particular security. Risk factors that must be considered in a due diligence analysis include, but are not limited to, price risk due to changing interest rates or prepayment speeds, and potential for credit risk deterioration and reduced liquidity and marketability under stressed conditions.

FCA expects that institutions thoroughly understand the risks and cash flow characteristics of their investments, particularly for products that have unusual, leveraged, or highly variable cash flows. System institutions must identify and measure risks prior to acquisition and periodically after purchase. It may be necessary to use third-party analyses that are independent of the seller or counterparty. In general, institutions should conduct and document due diligence analyses separately for each structured investment security. Modeling cash flows and assumptions at the time of purchase and periodically after purchase provides insight to the changing risks certain investments present.

**Credit Risk Evaluation:** Overreliance on NRSRO credit ratings in the credit evaluation of suitable investments was a significant problem for many financial institutions leading into the financial crisis. One reason that credit ratings may not necessarily reflect credit risk accurately is that the NRSROs and others may underestimate difficult-to-measure risk factors such as correlation. Correlation risk is the likelihood of an event that causes default of one credit increasing the likelihood of default in another credit.[19] In section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Reform Act), enacted on July 21, 2010, Congress recognized that credit ratings may not be the most appropriate means of determining creditworthiness.[20] Accordingly, institutions that continue to consider credit ratings as a factor in their pre-purchase and periodic investment credit evaluation should understand the processes and methodologies the NRSROs use as well as the limitations associated with these metrics.[21]

Moreover, we expect FCS institutions to reduce their reliance on credit ratings and to consider other factors in evaluating the risk present in credit products. A variety of robust pricing and valuation models include a credit assessment component. In particular, we encourage System

[19] FIL-20-2009, at 6.
[20] Section 939A of the Reform Act requires each Federal agency (with no exclusion for FCA) to modify its regulations to remove any reference to, or requirements of reliance on, credit ratings and to substitute in their place other appropriate standards of creditworthiness. We are considering the application of this requirement to FCA and the System's investments, and institutions should expect that we will address this issue in a future rulemaking.
[21] *See* FIL-20-2009, at 6.

institutions to use methodologies that incorporate the stress testing of cash flows, collateral default, and prepayment assumptions. Credit risk stress testing is a means to better understand the overall risk in the portfolio. Conducting such analysis would allow for better understanding of how certain investments fit in the overall risk framework of the institution.

**Pricing and Valuation Practices:** Section 615.5133(f) requires that before a System institution purchases a security, the institution must evaluate the security's credit quality and its price sensitivity to changes in market interest rates. The institution must also verify the value of a security that it plans to purchase, other than a new issue, with a source that is independent of the broker, dealer, counterparty, or other intermediary to the transaction. Furthermore, the institution must determine the fair market value of each security in its portfolio and the fair market value of its entire investment portfolio at least monthly. The institution must also evaluate the credit quality and price sensitivity to change in market interest rates of all investments that it holds on an ongoing basis. Finally, before an institution sells a security, the institution must verify its value with a source that is independent of the broker, dealer, counterparty, or other intermediary to the transaction.[22]

To satisfy these requirements, System institutions should have rigorous pricing and valuation practices in place to value investments. This includes using more than just dealer quotes but also using pricing services or other means of obtaining values. Achieving more than one price for each security provides for the ability to compare valuations.

Models may be used for securities that are more difficult to value. These models should have their assumptions calibrated regularly to ensure they are providing realistic valuations based on current market conditions. Model validation should be conducted regularly to ensure results are as accurate as possible. In addition, System institutions with securities that require models to assess their valuation should also ensure that these securities are marketable, which is a requirement for eligibility of all securities except money market instruments.[23]

**Evaluation of Liquidity and Market Risk:** Section 615.5132 of FCA regulations permits System banks to hold investments for liquidity reserve purposes. Investment policies must describe the liquidity characteristics of eligible investments that institutions will hold to meet ongoing liquidity needs, institutional objectives, and minimum regulatory liquidity requirements as described in §§ 615.5133 and 615.5134. As a result of the market turmoil, the quality and available liquidity of the investments of many System institutions have been adversely impacted, and the System, as well as FCA, recognize that liquidity, and liquidity policies, need to be strengthened. System institutions have already implemented action steps to improve liquidity, including holding larger quantities of higher quality liquid investments such as United States Treasury securities and other obligations that are fully guaranteed by the full faith and credit of the United States. We are currently reviewing our regulations and plan to propose enhancements in the future to help strengthen System liquidity.

A key component of liquidity, as well as a key component of investment eligibility under our regulations, is marketability.[24] Investments purchased for the purpose of meeting liquidity reserve objectives must be suitable for a liquidity portfolio, with broad market acceptance and limited risks. Even if investments are highly marketable when purchased, they may become less marketable or unmarketable in the future. In particular, even if private placements are

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[22] Section 615.5133(f).
[23] Section 615.5140(c).
[24] *See* § 615.5140(c).

eligible from a credit risk perspective at the time of purchase, experience has shown that they may not comply with FCA marketability requirements as discussed in § 615.5140(c). Liquidity for these investments may evaporate quickly in changing markets. Therefore, FCA expects FCS institutions to assess and test the marketability of their portfolio frequently, especially in areas where they have concentrations of asset classes. This assessment should include studies to determine the depth, breadth, and liquidity of the market for similar class and structure of securities.

**Enterprise Risk Management:** Some institutions have begun to move to a global, enterprise approach to assessing and managing risk. Enterprise risk management (ERM) identifies the broad spectrum of risks facing the institution, assesses the likelihood and magnitude of each risk along with risk correlations, and develops strategies for managing risks. ERM functions are a prudent business practice and provide a more disciplined approach to risk identification and management. Institutions that implement ERM functions should ensure risks from investment operations are considered and that those responsible for ERM have the tools and expertise to fully understand risks in investments and how it impacts the overall risk profile of the institution.

## PILLAR 3 – RISK EVALUATION

An evaluation of risk is a crucial and ongoing component of investment asset management. Assessing current economic and financial conditions, emerging risks, and sector risk is critical to understanding the risk present in, and the impact various sectors have on, an institution's investments. Each System institution should continually monitor and assess risk so that the institution is aware of the external circumstances that can impact its investments and consequently its liquidity. This section also clarifies our expectations for stress testing mortgage-backed securities.

**Assessment of Current Economic and Financial Conditions:** Effective risk evaluation begins with an assessment of the current economic and financial conditions present in the marketplace. For instance, as we noted earlier, the financial crisis that began in 2007 did not deter institutions from purchasing higher risk mortgage-backed securities. At times, market conditions may change quickly and System institutions should have the ability, on an ongoing basis, to assess economic and financial conditions as part of their risk evaluation efforts and to adjust their portfolio strategies accordingly.

**Identification of Emerging Risks:** Emerging risks present additional challenges that System institutions should identify in their overall investment portfolio monitoring practices. Emerging risks, if identified early, can allow System institutions to exit certain segments of the portfolio or at least mitigate future risk of loss. Conditions may change very quickly and System institutions should have robust and dynamic monitoring systems and tools in place to ensure that emerging risks are identified and the effects of such risk on the institution are analyzed and understood. In doing so, System institutions can control and/or mitigate portfolio losses.

In evaluating emerging risks, institutions should ensure they consider:

- Correlation risk, changes in probability of loss, and loss given default;
- Ratings volatility risk (the potential for downgrade);
- Market liquidity and price discovery; and

- Credit spreads and volatility.[25]

In addition, System institutions with investments in private label structured credit products should take further steps to effectively monitor these types of investments. Specifically, institutions should track credit risk at the underlying collateral level, across securitization exposures, and within and across business lines. Also, they should obtain reliable measures of aggregate risk. This would include monitoring loan level risk limits where appropriate and restricting investment in securities backed by collateral with certain higher-risk characteristics. Higher risk characteristics would include higher loan-to-value ratios, low FICO scores, high delinquency rates, or securities that contain high levels of loans that were previously delinquent. Management should also consider other risks in such indirect investments, such as liquidity risk, especially in volatile markets.[26] Institutions lacking the expertise to fully understand the risks in these and other types of securities should not purchase them.

**Sector Risk Evaluation:** Being capable of understanding and evaluating the various sectors in which a System institution invests is critical to the institution's risk management and its overall management of its investment portfolio. Specific sectors include, but are not limited to, housing, automobiles, credit cards, and home equity type securities, as well as government guarantees. Having the appropriate tools and expertise to evaluate various sectors enables institutions to better understand the changing risks and complexities the investments pose. It is also critical that System institutions fully understand the impact that one sector may have on another.

Government-guaranteed investments are an important segment in the investment portfolio of many System institutions. As such, those institutions must have sufficient expertise to fully understand the nature and extent of the government guarantees supporting their investments. For example, government-guaranteed investments, such as Government National Mortgage Association-guaranteed mortgage-backed securities, are normally highly liquid, because the timely payment of both principal and interest is fully backed by the full faith and credit of the United States government. In contrast, some securities, even if they are labeled as government-guaranteed, are less liquid, because they are only partially guaranteed by the United States government. Consequently, as support for senior tranches erodes, institutions may begin to experience a loss and the securities may become less liquid. Management should perform the appropriate due diligence to understand the extent of the guarantees in its investment portfolio and the amount of risk involved in such securities. Institutions should ensure that they have sufficient expertise in place to fully understand the extent and nature of the guarantee on investments labeled as government-guaranteed.

**Stress Testing:** Under § 615.5141, mortgage securities are not eligible investments unless they pass a stress test as described in the regulation. An institution must perform stress tests to determine how interest rate changes will affect the cash flow and price of each mortgage security that it purchases and holds, except for adjustable rate securities that reprice at intervals of 12 months or less and are tied to an index. An institution must also use stress tests to gauge how interest rate fluctuations on mortgage securities affect its capital and earnings. An institution must perform stress testing at the time it purchases a mortgage security and quarterly thereafter.

An institution may choose to conduct either a specific three-pronged stress test prescribed in § 615.5141(a) or an alternative stress test as prescribed in § 615.5141(b). Whichever stress

[25] *See* FIL-20-2009, at 5-6.
[26] *See id.* at 4.

test an institution chooses to perform, it must rely on verifiable information to support all its assumptions, including prepayment and interest rate volatility assumptions. The institution must document the basis for all assumptions that it uses to evaluate the security and its underlying mortgages, and it must also document all subsequent changes in its assumptions. If at any time after purchase the mortgage security no longer complies with the stress testing requirements, the institution must divest of it in accordance with § 615.5143.[27]

Section 615.5141(b) requires that an alternative stress test must be able to measure the price sensitivity of mortgage instruments over different interest rate/yield curve scenarios. The methodology used to analyze mortgage securities must be appropriate for the complexity of the instrument’s structure and cash flows. An institution must use the stress test to determine that the risk in the mortgage security is within the risk limits of its board’s investment policies and does not expose the institution’s capital or earnings to excessive risks. Our preamble adopting the alternative stress test emphasized that a comprehensive analysis may take into consideration a wide range of relevant factors.[28]

The FCA encourages each System institution’s board to review its policies concerning the use of an alternative stress test. Board policies should identify which factors are relevant for management to consider when conducting an alternative stress test. These factors may change from time to time as conditions change. From the FCA’s perspective, this flexibility is necessary because mortgage markets are often volatile. For this reason, board policies may direct management to consider factors such as credit quality, impact on the institution’s market value of equity and asset-liability management, potential for the mortgage market to stabilize, and any other matter the board deems relevant. By considering appropriate factors, System institutions can refine their stress test to fit the desired risk profile of their organization.

In addition, an institution’s board policy on investments may specify the factors that are appropriate to determine whether a security passes or fails an alternative stress test. If a security passes some individual tests within the overall alternative stress test but fails other individual tests, the institution’s board policy may dictate that the security passes the overall test. An institution’s board policy must document, in advance, what factors determine whether a security passes or fails an alternative stress test.

If a mortgage security no longer satisfies the stress testing requirements, it must be divested of in accordance with § 615.5143.[29] Section 615.5143 requires an institution to divest of an ineligible investment within six months unless FCA approves a longer divestiture period. It is not unusual for mortgage securities to fail, then pass, and then fail again stress tests in certain market environments. If a mortgage security fails a stress test but then passes a subsequent stress test before the 6-month regulatory divestiture period has elapsed, the divestiture period terminates. Only if the security fails every stress test within the divestiture period must it be divested of in accordance with § 615.5143, either by divestiture within the 6 months or by seeking FCA approval for a longer divestiture timeframe.

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[27] *See* § 615.5141(c).
[28] 64 FR 28893 (May 28, 1999).
[29] Section 615.5141(c).

## ASSOCIATION INVESTMENTS

Section 615.5142 of FCA regulations implements sections 2.2(10) and 2.12(18) of the Farm Credit Act, which require each funding bank to supervise and approve the investment activities of its affiliated associations. The funding bank may authorize associations to acquire eligible investments listed in § 615.5140, for the purposes of reducing interest rate risk and managing surplus short-term funds.

Funding banks are required to supervise and approve the investment activities of an association. However, as we stated in the preamble when adopting § 615.5142 in 1999:

> Bank oversight does not absolve an association's board and managers of their fiduciary duties to manage investments in a safe and sound manner. The fiduciary responsibilities of association boards of directors obligate them to develop appropriate investment management policies and practices to manage the credit, market, liquidity, and operation risk associated with investment activities. It is incumbent upon each association's investment managers to fully understand the risks of its investments and make independent and objective evaluations of investments prior to purchase.
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> An association's investment policies should be appropriate for the size, risk characteristics, and complexity of the association's investment portfolio and should be based on an association's unique circumstances, risk tolerances, and objectives. Associations must comply with all the requirements in § 615.5133 if the level or type of their investments could expose their capital to material loss. However, an association's board does not need to develop an investment policy if it elects not to hold nonagricultural investments authorized under § 615.5140.[30]

This guidance is still valid today. Because the interest rate risk of most associations is managed by their respective funding banks, interest rate risk at the association level is minimized although not completely eliminated. Consequently, the use of investments for interest rate risk purposes should be limited. Some associations may, however, have surplus short-term funds that they wish to invest. System associations that choose to invest surplus short-term funds should consider the risks involved in purchasing various types of investments. In addition, the duration of the investments should match the availability and duration of the surplus short-term funds.

[30] 64 FR 28885-28886 (May 28, 1999).