FARM CREDIT ADMINISTRATION
Examination Manual

EM-21.3

Category: **Assets**
Topic: **Investments**
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Overview

System institutions are authorized to invest in debt securities subject to certain limitations and requirements. Such investments can comprise a significant portion of an institution's assets, particularly at System banks, and impact capital and earnings. Therefore, an assessment of investment quality and related risk exposure is a key examination objective. Examining investment quality begins by gaining a general understanding of investment portfolio characteristics, including portfolio size, composition, purposes, and impact on financial performance. The examination process continues with an assessment of risk exposures. Investments are primarily exposed to credit, liquidity, market, 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.

Note: Guidance for the investment management procedures below is currently under development. In the interim, the following links provide related guidance that was contained in the old FCA Examination Manual:

- EM- 305 Introduction
- EM- 340 Investments

Examination Procedures and Guidance

Investment Quality

1. Portfolio Characteristics & Trends:

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

Guidance:

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

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

- ***Portfolio Size:*** **Are the current investment levels and trends and the percentage of investments to total loans and assets reasonable and in compliance with regulations?** 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. FCA Regulation 615.5132 limits investments to 35 percent of loans at banks. Regulations do not limit the amount of association investments, although the level should be limited as a percentage of assets and should not impede or take priority over the association's primary mission.

- ***Investment Purposes:* Are the types of investments held consistent with board objectives and purposes for the portfolio? Do investment purposes comply with FCA Regulations?** The purpose for holding investments affects the type of investments purchased and portfolio composition. In practice, System 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 institutions hold investments for another purpose, such as hedging interest rate risk, the type of investments and portfolio composition should be consistent with that purpose. In addition, the purposes for holding investments must comply with FCA Regulations 615.5132 (banks) and 615.5142 (associations). An FCA Informational Memorandum on Association Investments dated May 16, 2012, further clarifies regulatory authorized purposes for association investments. 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.

- ***Portfolio Composition:* What is the current composition of the investment portfolio and how have recent purchases or sales changed the portfolio's composition and risk characteristics? Do investments comply with regulatory requirements, board policies, and management guidelines for portfolio composition and eligibility? Is the portfolio comprised of investments with complex structures and risk characteristics?** Investment portfolio composition must comply with the eligibility requirements and concentration limits in FCA Regulation 615.5140, as well as any board policy direction and limits. These regulations limit investments to certain types of debt securities, although risk characteristics may still vary widely. For example, certain short-term investments can be considered cash equivalents because of their low risk exposures and the ease with which they can be converted to cash. In addition, certain types of high quality investments, such as U.S. Treasury securities, are generally much more liquid and resilient to systemic crises. Conversely, certain types of mortgage securities have variable cash flows and complex structures that can expose the institution to extremely high risks. In general, an analysis of portfolio composition should address asset class exposures, industry concentrations, maturities or weighted-average-life, embedded options, cash flow (i.e., principal and yield) structures, and other unique portfolio characteristics. FCA Call Reports provide information on portfolio composition, although the institution's internal reports and reports to shareholders should provide additional insight into the characteristics, composition, and trends in the investment portfolio.

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

2. Risk Exposure:

Evaluate risks in the investment portfolio with a focus on liquidity, credit, and market 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 credit, liquidity, market, 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 serve as a source of liquidity, then liquidity risk in investments as well as all other risks that could affect liquidity risk should remain very low. If investments serve as an interest rate hedge, then the market risk in these investments and related hedging ratios should be consistent with that purpose and liquidity may be a lower priority.

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

Risk concentrations and diversification should be considered when examining portfolio risks. Concentrations can amplify risks in the investment portfolio, while a sound diversification strategy can reduce portfolio risk to a level that is lower than some of the underlying investments. For example, each type of risk, such as credit, liquidity, market, and country, 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 institutions to establish concentration limits that ensure prudent diversification of risks.

While diversification is essential, it does not eliminate risks. Markets can become inefficient and correlations among investments can change depending on external events. These changes complicate portfolio risk measurement and decisions on optimal diversification. Therefore, regardless of overall portfolio risk estimates and the benefits provided by diversification, the risks in individual investments and asset classes should also be prudent and consistent with investment purposes. In particular, individual investments with high credit risk are almost 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.

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? Do concentrations magnify credit risk?** Credit risk refers to the risk that the issuer, obligor, or other counterparty 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) are not explicitly backed by the U.S. Government, but carry an implied guarantee that also significantly mitigates credit risk. 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 and the Federal Home Loan Mortgage Corporation. All other types of investment securities, referred to as non-Agency or private-label securities, have credit risks that run the spectrum from low- to high-risk. The amount of credit risk in private-label securities depends on the strength of the obligor(s), investment structure, underlying collateral, and other factors. Private-label securities are assigned credit ratings by nationally recognized statistical rating organizations (NRSROs). FCA Regulation 615.5140 requires that at least one obligor of the investment have the highest or second highest credit rating. While NRSRO ratings provide an indication of credit risk, over-reliance on these ratings is an unsafe and unsound banking practice. Institutions should develop their own credit risk measurement systems and perform their own pre-purchase and ongoing credit analyses. The institution's analyses should assess credit risk in individual securities, portfolio segments, and the overall portfolio (including concentration risks). Considerations and examples of credit risk indicators include:

    - Results of the institution's credit analyses and the reliability of these analyses.
    - Percentage of the investment portfolio guaranteed by the U.S. Government or GSEs versus private-label securities.
    - Credit ratings from an NRSRO.
    - Credit enhancements such as guarantees, collateral, and tranche priority.
    - Concentrations in obligors, guarantors, asset classes, industries, credit enhancement, geographic regions, collateral underlying securities, and unsecured exposures.
    - Concentrations in relation to regulatory requirements, policy limits, and any other internal limits.
    - Materiality of any credit-related OTTI recognized.
    - Maturities, with longer maturities having higher credit risk.
    - Market and industry conditions, particularly in industries in which the institution has a concentration.

- ***Liquidity Risk:*** **What is the amount of liquidity risk in individual investments, each portfolio segment, and the overall portfolio? Do risks in other areas (e.g., credit, market, or country risks) magnify liquidity risk? Is liquidity risk consistent with investment purposes?** Liquidity risk refers to the risk that an institution will be unable to easily and quickly sell an investment at its fair value, or to quickly convert the investment into cash at little or no loss to book value (FCA Regulation 615.5134(d)). Liquidity risk primarily impacts an investment's price, bid-ask spread, fees, and the time it takes to sell. Liquidity risk may not be a significant consideration if the investment is accounted for as held-to-maturity and is not intended to be sold or used as a source of liquidity. However, if the investment is available-for-sale and held as a source of institution liquidity, then liquidity risk is a key consideration. Liquidity risk is primarily a function of market depth and conditions. Specifically, investments with thin secondary markets 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 lack of trading activity in that specific issue). Considerations and examples of liquidity risk indicators include:

  - Results of the institution's analyses of liquidity risk and the reliability of these analyses.
  - Compliance with the liquidity reserve requirements in FCA Regulation 615.5134 (banks).
  - Depth of 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 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? Is market risk consistent with investment purposes?** Market risk is the sensitivity in the value of an investment or the investment portfolio to changes in market interest rates or other market factors (such as exchange rates). Market risk exists in all types of investments. 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. Market risk can be magnified in investments with embedded structures and options, such as asset-backed and mortgage-backed securities. 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 market risks. Market risk 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, market risk 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. 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 market risk indicators include:

  - Results of the institution's analyses of market risk 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 market risk.
  - Embedded options and structures in investments.
  - Duration of investments.
  - Investment maturities. Longer-term securities typically have greater market risk, particularly if they have fixed coupons and embedded options.
  - Premium prices paid on securities with embedded options. Prepayment and call options can cause immediate amortization of premiums. Relatively higher premium prices typically result in higher market risk. In particular, certain types of investments with embedded prepayment options that are purchased at prices greater than 10 percent of par must be accounted for using the fair value option under Accounting Standards Codification 825, which requires that ongoing adjustments in fair value be recognized in earnings. See guidance in the *Accounting* procedure for additional details. Such accounting treatment reflects the speculative nature of these investments and indicates these types of investments may be inconsistent with regulatory authorized purposes.
  - Unrealized gains and losses on investments. Large or volatile unrealized gains or losses indicate high market risk.
  - Reliability of market price estimates. Investments that are difficult to price and value generally have higher market risk.
  - Effectiveness of any strategies used to hedge market risk in investments. For example, interest rate cap contracts may be purchased to offset caps embedded in investment coupons.
  - Extent to which market risk in investments is used to hedge other risks. If market risk 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.

- ***Country Risk:* Does the institution hold any investments issued or guaranteed by a foreign company or government? What is the amount of country and sovereign risk in individual investments, each portfolio segment, and the overall portfolio?** Country risk refers to the risks associated with investing in foreign countries. It is the risk that changes in the country's business environment or actions taken by its government will not be in the best interests 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 that provide an estimate of country risk. Investments in foreign companies and governments should be limited to those countries that have either the highest or second highest OECD classification (0 or 1). Considerations and examples of country risk indicators include:

- Results of the institution's 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:

2. Plans & Strategies:

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

Guidance:

3. Risk Management:

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

Guidance:

4. Monitoring & Controls:

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

Guidance:

5. Accounting:

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

Guidance:

6. Audit:

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

Guidance:

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:

8. Association Oversight (banks only):

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

Guidance: