FARM CREDIT ADMINISTRATION
Examination Manual

# EM-22.4

**Category:** **Loan Portfolio Management**
**Topic:** **Concentration Risk Management**
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## Overview

The *Concentration Risk Management* topic provides guidance on evaluating a Farm Credit System (System) institution's practice for identifying, analyzing, and managing concentration risk. A concentration is a pool of individual transactions that perform similarly because of common sensitivity to economic, financial, or business conditions. For example, portfolios may be concentrated in an industry or commodity, a geographical region, large borrower, a lending program, a credit delivery method, a counterparty, or affiliated and interdependent loans. Identifying, analyzing, and managing credit concentrations strengthens the institution's ability to withstand volatility and adverse conditions in increasingly complex and integrated agricultural markets. This is critical to the institution's and System's safety and soundness.

The board and management need to establish clear direction for managing risk concentrations and ensure sound processes and controls are in place. Risk concentration exposures should be commensurate with institution's risk-bearing and earnings capacity, the board and management's risk management skills and abilities, and the board's risk appetite. If concentration risk exceeds the institution's risk-bearing capacity, the board and management should develop strategies for reducing the concentration risk. Controls for limiting concentration exposures should be dynamic to ensure they remain effective as conditions change. It is important to note that loan level controls, as discussed in the *Internal Controls* procedure in the *Credit Administration* Examination Manual topic, need to be sound to allow for effective management of risk concentrations.

## Examination Procedures and Guidance

### General

***1. General Risk Concentrations Management:***

Evaluate the adequacy of overall policies, procedures, and processes to identify, monitor, report, and manage concentration risk exposures.

Guidance:

Risk concentrations can vary significantly by institution. Some concentration risk sources are more obvious, including borrowers relying on the same commodities or industry for loan repayment. Other concentration risk sources may be less obvious but just as impactful to the institution's performance. Examples include multiple borrowers relying on the same integrator or processor; loans dependent on the same scorecard or automated decision model; loans reliant on the same counterparty for critical credit and financial information, payments, and servicing; and any other

group of loans that will respond similarly to economic, financial, or business conditions. New loan product offerings and new target markets can be concentration risk sources depending on the risk characteristics. Additionally, funding banks are subject to direct loan concentration risks as a few large associations can comprise most of the district's direct loan volume. This procedure focuses on the institution's processes for identifying concentrations and utilizing controls for managing risk concentrations.

Evaluative questions and items to consider when examining overall policies, procedures, and processes to identify, monitor, report, and manage concentration risk exposures include:

- ***Policy Direction*****: Are board policies sufficient to support an effective concentration risk management program?** FCA Regulation [614.4362]() requires the board to adopt and ensure implementation of a written policy to effectively measure, limit, and monitor exposures to significant and reasonably foreseeable loan and lease concentration risks. Policy direction must include specific policy elements and quantitative methods to measure and limit risks from a single borrower, single industry sector, single counterparty, and other lending activities unique to the institution. In addition to the minimum requirements specified in the regulation, policy direction should also communicate the board's risk management philosophy and provide sufficient direction on managing concentration risks unique and relevant to the institution.
- ***Staff Direction and Guidance:*** **Are processes in place to provide adequate staff guidance?** Management should develop staff guidance appropriate for the institution's portfolio concentration risks. The guidance should be written but can be captured in many forms, including policies, procedures, memorandums, emails to staff, and training materials. Factors that determine the depth and extent of staff guidance may include the following:
  - Familiarity with the concentration.
  - Staff expertise in the lending area.
  - Stability of concentration levels.
  - Existing (or potential) risk exposure.
  - Inherent risk factors present in the concentration.
  - Loan origination processes used (e.g., scorecard, auto-decisioned, traditionally analyzed).
- ***Identifying Concentrations:*** **Are effective processes in place to identify key risk concentrations?** The board and management should first identify all key risk concentrations by total lending commitments and quantify the exposure from these concentrations in relation to Total Regulatory Capital (TRC) (or other relevant capital ratios) or earnings capacity. In some cases, comparing exposures to both capital and earnings would be beneficial. Management should determine which risk concentrations are impactful and warrant the use of risk parameters and other risk management strategies. Specific risk concentrations are unique to individual institutions depending on various factors, including their lending territory, portfolio quality and composition, credit delivery and internal control systems, and risk management capabilities. As such, there are no all-inclusive lists of exposures that pose significant concentration risks to the institution. The following list identifies common exposures that may warrant an evaluation by management to assess concentration risk:
  - Individual commodities
  - Distressed industries (when applicable)

  - Geographic
  - Large borrower
  - Interdependent and affiliated exposure
  - Counterparties
  - Scorecard or auto-decisioned loan
  - Unsecured loan
  - Project financing
  - Loan participations and capital markets loan
  - Out-of-territory loan
  - Other credit needs loan
  - Loans with specialized collateral
  - Loans in non-core industries
  - New lending program
  - Similar entity loan
  - Rural home loan
  - Processing and marketing loan
  - Loans considered leveraged and covenant lite (see Interagency Guidance on Leveraged Lending dated March 21, 2013)
  - Loans dependent on capital gains for repayment (e.g., land-in-transition, see FCA Examination Bulletin 2009-2)
  - Loans secured by land with limited or no income-producing capability (e.g., recreational land)

- ***Risk Management Tools and Strategies:* Are processes in place to effectively utilize risk management tools and strategies to manage concentration risks, when warranted?** To effectively manage a concentration, risk management tools and strategies can be used, such as selling loan participations, building additional capital, and obtaining credit enhancements (e.g., state and federal guarantees, Farmer Mac standby purchase commitments, private credit default insurance). Processes should be in place to consistently and effectively utilize these tools. Using these tools will limit the institution's loss exposure in the event of default. Management may use the presence of credit enhancements as a basis to exclude volume from concentration calculations or justify setting parameters at an increased level. This is appropriate when the credit enhancement effectively transfers credit risk from the originating institution. The board and management should use its concentration risk analysis to identify when using tools and strategies are warranted. Management should document and justify the approach taken.

- ***Risk Parameters*: Are processes in place to effectively set parameters to manage risk, where appropriate?** Risk parameters are controls that limit exposure to material portfolio concentrations and communicate the board and management's risk appetite and tolerance. They are not always meant to be restrictive but serve as a trigger point for the board and management to reassess risk and review underlying controls as parameters are approached. Therefore, parameters should be periodically reviewed to ensure they remain effective. This process should support the board and management's decision to reaffirm or adjust the parameter, approve a temporary non-regulatory exception, or revise supporting risk management practices. Processes should also address actions and reporting expectations when parameters are approached or exceeded. Assessing the concentration exposure relative to risk-bearing or earnings capacity and evaluating the level of inherent risk exposure are important processes when setting parameters and deciding if a parameter is warranted. Concentrations with higher levels of inherent risk typically warrant a parameter

or control. As inherent risk and the exposure to risk-bearing capacity increases, more conservative parameters may be warranted. Risk parameters should be tailored to the institution's unique characteristics and concentrations and may vary significantly between institutions. Risk parameters are most effective when expressed relative to risk-bearing capacity (e.g., as a percentage of TRC) or earnings stream (e.g., as a percentage of 3-year average net income). This provides for a dynamic control that adjusts over time. While it is a sound practice to express parameters in dynamic terms, the board and management may choose to set parameters as a dollar amount or percentage of the portfolio. When evaluating the effectiveness of these static parameters, it is best to compare them to capital or earnings levels. The following list identifies concentration types that, if present, result in more inherent risk and the potential need for parameters:

- The concentration consists primarily of a small number of borrowers with large loans.
- The industries or commodities are uncommon or relatively new to the chartered territory or highly volatile.
- The concentration contains a significant number of customers and volume from outside the chartered territory.
- The concentration has significant volume where the institution is not the lead lender or in control of loan servicing.
- Borrowers in the concentration represent a significant degree of interdependence and affiliation, evidenced by factors like a high degree of contracting and integration amongst borrowers.
- The concentration contains non-traditional loan structures or is underwritten via new, unproven, or non-traditional lending programs.
- Elevated collateral risk is evident with volume being either unsecured, under-secured, secured primarily by highly improved facilities or other specialty collateral, or collateral uncommon to the institution's chartered territory.
- The weighted average probability of default (PD) rating of loans in the concentration is unfavorable (average PD of 8 or worse) or there is significant risk exposure based on loss given default (LGD) designations.

Note: Refer to the *Commodity Concentrations*, *Large Borrower Concentrations*, *Counterparty Risk*, and *Interdependence & Affiliation Risk* procedures when evaluating the adequacy of parameters for commodities, large borrowers, counterparties, and affiliations.

- ***Regulatory Limits:*** **Do portfolio limits comply with FCA regulatory requirements?** Concentrations must comply with regulatory lending and portfolio limits. The board and management should thoroughly support decisions to establish parameters at or near regulatory maximums. Parameters at these levels warrant additional scrutiny as oftentimes the risk profile, risk management capabilities, and customer composition and needs in the chartered territory may support the need for a lower parameter. While certain credit enhancements may be used to support higher parameter levels, credit enhancements cannot be used to exceed regulatory portfolio limits. FCA regulations establish portfolio limits in the following lending areas:

    - Rural Home Loans – FCA Regulation [613.3030(d)] and FCA Bookletter [BL-061]
    - Processing and Marketing Loans – FCA Regulation [613.3010(b)]
    - Loans to Similar Entities – FCA Regulation [613.3300(c)(3)] and FCA Bookletter [BL-067]
    - Export Transactions – FCA Regulation [613.3200(c)]

- ***Monitoring and Reporting Risk Parameters*: Are processes in place to adequately monitor and report compliance with risk parameters, and do processes address appropriate actions to take when a risk parameter is exceeded?** Management should have processes for monitoring and reporting compliance with parameters, managing exceptions, and periodically reviewing the adequacy of parameters. If applicable, management should include off-balance sheet credit risk exposures in concentration reporting and identify the extent that credit enhancements are used to manage concentration risk. Periodic board reporting on compliance with major parameters is needed for effective risk management and board oversight. Quarterly reporting is a sound practice, but less-frequent reporting may be appropriate if it provides effective board oversight over the concentration risk. As part of the reporting process, management should identify if established parameters remain adequate or if new parameters are warranted. If a risk concentration is nearing or has exceeded a parameter, the board and management should review the underlying risk and implement strategies to reduce the exposure or evaluate whether increasing the parameter is reasonable. The board should also review and approve actions to revise or exceed parameters. If the board approves a parameter exception, the board and management should outline expectations and plans for returning the exposure to within acceptable limits.

- ***Off-Balance Sheet Risk*: Does the board and management consider the impact of off-balance sheet transactions when measuring concentration risk exposure?** Selling traditional loan participations transfers credit risk to other lenders. As a result, it is typically appropriate to include only on-balance sheet volume and related commitments when evaluating risk exposure to most concentrations. However, in some cases, the institution may face credit risk from loans not held on its balance sheet. Examples of programs offered by System banks that expose associations to credit risk include capitalized participation pools, net collateral ratio pools, and vertical asset pools. With these programs, a percentage of an association's loan assets are held at the bank, and the association purchases bank stock in proportion to the amount of volume sold. Although the assets are legally sold for accounting and capital management purposes, credit risk remains with the association and should be factored into managing concentration risk exposure. Losses from these pool loans are typically incurred by the participating association via reduced pool patronage or bank application of the association's pool stock investment. In certain cases, it may be appropriate to aggregate off-balance sheet credit risk exposure with other similar on-balance sheet concentrations. In other situations, it may be appropriate to analyze the off-balance sheet exposure as a separate concentration, such as if the association does not hold similar-type loan assets on its balance sheet. When aggregating off-balance sheet credit risk with similar credit risk exposures included on the institution's balance sheet, it is reasonable to add the required bank stock investment to TRC to get a more complete assessment of risk-bearing capacity.

***2. Commodity Concentrations:***

Evaluate the adequacy and effectiveness of commodity concentration risk identification, analysis, reporting, and management.

Guidance:

All institutions have unique commodity concentrations. Commodity concentrations are driven primarily by the institution's geographic location but also influenced by the extent and type of out-of-territory lending. The institution must fulfill its mission of serving producers within its chartered territory. As a result, it is reasonable for the institution's commodity concentrations to closely align with commodities most common in its chartered territory. Nevertheless, when the institution's territory, and hence its loan portfolio, are particularly concentrated in a single or few commodities, the board and management should consider strategies to actively manage commodity concentrations. Furthermore, the loan underwriting process plays a key role in managing risk from commodity concentrations. Larger, more-complex institutions typically have more options for commodity diversification as their chartered territories cover larger and potentially more-diverse geographic areas, and they are often active in buying and selling loan participations. As a result, examiners should consider the institution's complexity and risk profile when evaluating commodity concentration risk management, as it is reasonable to expect that less-complex, low-risk institutions will have more pronounced commodity concentration risk.

Evaluative questions and items to consider when examining the adequacy and effectiveness of commodity concentration risk identification, analysis, reporting, and management include:

- ***Identification, Analysis, and Reporting:*** **Have the board and management adequately identified, analyzed, and reported on commodity concentrations?** Management must identify all significant commodity concentrations and periodically analyze economic conditions and trends in key industries financed by the institution. Management should routinely compare commodity concentrations to TRC or earnings capacity and identify concentrations that pose elevated risk. Management's analysis should also identify commodity concentrations related to out-of-territory lending activities to determine if elevated risk conditions are present. Out-of-territory concentrations can present greater risk than concentrations common to the chartered territory if there are geographic differences or less institution lending expertise. Management should provide periodic board reporting on commodity concentrations, including compliance with applicable risk parameters. As appropriate, management's reporting and analysis processes should address strategies used to manage commodity concentrations, the success of those strategies, and whether additional efforts are needed.

- ***Concentration Management:*** **Have the board and management effectively managed its commodity concentrations?** Depending on the institution's portfolio, commodity concentrations may be significant enough to warrant active management. Strategies to manage commodity concentrations include establishing sound loan underwriting, setting parameters, targeting new markets for diversification, and using other risk management tools as discussed in the *General Risk Concentrations Management* procedure. Extensive judgment is needed to determine which commodity concentrations require active management. Exposure levels relative to TRC or earnings will typically be the primary decision factor. However, other items that warrant consideration include inherent risk in the concentration, expertise in that commodity, and customer quality. For example, if an institution begins lending to an industry uncommon to its territory in which it lacks lending

expertise, parameters for that industry are likely warranted even though commodities common to the territory with higher loan volumes may not warrant parameters. If the board and management decide not to extensively use risk management tools and strategies when heavily concentrated in a single commodity common to its territory, commodity concentrations should, at a minimum, be managed via loan underwriting. Refer to the *Loan Underwriting Direction* Examination Manual topic for additional guidance on examining loan underwriting. However, when relying on loan underwriting alone to manage commodity concentration, the board and management should fully support, through stress testing and portfolio analysis, that capital levels are sufficient to withstand adversity.

- ***Commodity Parameters:*** **Have the board and management effectively utilized parameters to manage commodity concentration risk, where appropriate?** Commodity concentration parameters are common in the System. FCA Regulation 614.4362 requires the board to include quantitative methods in policy to measure and limit identified exposures to significant and reasonably foreseeable concentration risk emanating from a single-industry sector. When the institution's loan portfolio is concentrated in a single or few commodities, commodity concentration parameters can help manage concentration risk within the institution's risk-bearing capacity. Parameters exceeding 250 percent of TRC typically require further consideration of risk management strategies to mitigate the concentration risk. To evaluate commodity concentration parameter reasonableness, the volume allowed by the parameter should be compared against TRC or earnings. Furthermore, risk parameters and supporting systems to measure compliance should express parameters in terms of total commitments versus outstanding balances. Since undisbursed commitments can be significant and are typically readily available to borrowers, total loan commitments provide a more realistic view of total risk exposure.

### *3. Large Borrower Concentrations:*

Evaluate the adequacy and effectiveness of large borrower concentration risk identification, analysis, reporting, and management, including hold limits.

Guidance:

An effective process for managing large borrower concentrations should serve as the foundation of the board and management's loan portfolio management practices. Absent effective large borrower risk management, credit stress in just a few accounts can significantly impact the institution. Weaknesses in managing large borrower concentrations, such as excessive single borrower hold positions, can be very damaging to financial institutions.

Large borrower concentration risk represents the collective risk exposure from a group of large borrowers. Individual borrower hold limits serve as an effective control for concentrations in individual borrowers; although, a group of loans each at the individual borrower hold limit could pose a significant large borrower concentration risk. The board and management may set their own criteria for defining and measuring large borrower concentration risk; however, the institution must report its 10 largest loan commitments in quarterly call reports. Comparing the top 10 commitments to TRC or 3-year average net income ratios provide a look at the institution's large borrower risk exposure and risk management. As these ratios rise, the depth of analysis, reporting, and risk management should increase accordingly.

The Agency has not established formal benchmark ratios on the top 10 loan commitments. However, the criteria below assist in gauging the reasonableness of risk exposure from large borrower concentrations.

- Top 10 commitments as a percentage of TRC:
  - Low ≤ 45 percent
  - Moderate ≤ 75 percent
  - High > 75 percent

- Top 10 commitments as a percentage of 3-year average net income:
  - Low ≤ 400 percent
  - Moderate ≤ 650 percent
  - High > 650 percent

Effective large borrower concentration management requires various supporting processes and controls. Borrower hold positions that limit exposure to a single obligor and consider both loan quality and the institution's risk-bearing capacity are critical for managing these concentrations. Reasonable, well-thought-out hold positions should be supplemented with appropriate large borrower analysis and reporting. Lastly, risk management processes should be supported by controls to ensure compliance with regulatory requirements for loan attribution.

Evaluative questions and items to consider when examining the adequacy and effectiveness of large borrower concentration risk identification, analysis, reporting, and management (including hold limits) include:

- ***Borrower Hold Limits*: Have the board and management established an adequate hold limit process for individual borrowers, and are hold limits appropriate and comply with FCA regulations?** FCA Regulation 614.4362 requires the board to include quantitative methods in policy to measure and limit identified exposures to significant and reasonably foreseeable concentration risk emanating from a single borrower. Therefore, the board and management must establish reasonable single borrower hold limits. In determining borrower hold positions, the board and management need to decide how much of the institution's capital and earnings stream they are comfortable placing at risk with one customer. FCA Regulations 614.4352 (banks), 614.4353 (associations), 614.4355 (banks for cooperatives), 614.4356 (leasing corporation), and 613.3300 (similar entity) address regulatory lending limits. While regulatory lending limits for banks and associations is 15 percent of the lending and leasing limit base for eligible borrowers and 10 percent of total capital for similar entities, maximum borrower hold positions more than 7.5 percent of TRC or 65 percent of 3-year average net income warrant additional scrutiny. (See additional guidance below for less-complex and low-risk institutions.) Institutions operating in this range should have additional risk management controls in place to offset the large borrower exposure. Controls may include industry and geographic diversification, more conservative borrower hold limits as loan risk increases, and strategies pursuing government guarantees or selling participations as maximum hold limits are approached. FCA Regulation 614.4360 outlines expectations regarding lending and leasing limit violations. Refer to the *General Risk Concentrations Management* procedure for evaluating compliance with regulatory portfolio limitations. To maintain appropriate internal borrower hold limits and supporting controls, the board and management should adopt the following sound practices:

- Stratify hold limits by credit quality, PD and LGD ratings, or other differentiating factors, such as industry or collateral type.
- Ensure hold limits are expressed in terms of loan commitments rather than outstanding principal.
- Differentiate hold limits by eligible and similar entity exposures.
- Document how much the maximum allowable loan exposure to a single borrower represents as a percentage of TRC or 3-year average net income and note any related quality requirements. Note: For determining maximum hold limits, the board and management may factor out loan amounts that are held on-balance sheet but are federally guaranteed or supported by viable credit enhancements that unconditionally transfer credit risk. However, if large loans are part of certain off-balance sheet asset pools where losses revert to the seller through reduced patronage or capital investment (as discussed in the *General Risk Concentrations Management* procedure), the exposure should be added back for hold limit and lending limit compliance purposes.
- Compare the maximum internal hold position with single borrower limits prescribed by the institution's General Financing Agreement or promissory note with the funding bank.
- Evaluate how internal lending limits and hold positions are supported and the appropriateness of supporting factors used to establish those thresholds (e.g., institution capital and earnings, stress testing, portfolio conditions, borrower quality, industry, board and management risk appetite, portfolio management capabilities).
- Implement controls or triggers for revisiting designated hold limits.
- Develop an appropriate approval process for handling exceptions to hold limits and define exception authorities (e.g., management versus board, prior- or post-approval by the board). The hold limit process should also address differences in handling exceptions that are caused by deterioration in borrower quality versus those resulting from decisions under the board or management's control and define expectations for future compliance. The hold limit process should typically not allow temporary exceptions (e.g., after the loan is booked and funded, the institution seeks additional buyers for the volume). Temporary exceptions should be based on extraordinary conditions and not a regular practice. Temporary exceptions must also comply with regulatory lending limits.
- Justify any unique characteristics of the hold limit process (e.g., scoring the borrower or loan based on subjective factors and the resulting score permits upward or downward adjustments to established hold limits).
- Compare the institution's aggregate top 10 loan commitments to TRC or earnings. While top 10 commitments versus TRC is the primary method to assess large borrower exposure, a sound practice is to also compare the concentrations to earnings as credit stress impacts earnings prior to capital. In addition, stable earnings performance is critical to maintaining the confidence of borrowers and

investors. As such, care should be taken to ensure losses from a limited number of borrowers cannot unduly disrupt the earnings stream.

- ***Identification, Analysis, and Reporting*: Have the board and management adequately identified, analyzed, and reported large borrower concentrations?** The board and management must identify large borrower concentrations to determine if they present undue risk exposure. Management should regularly analyze and report its large borrower risk exposures to keep apprised of changes, trends, and threats. Reporting frequency and depth of analysis will vary based on risk exposure. Reporting and analysis processes should identify both the individual and collective risk exposure of large borrowers. The board should receive routine reporting on risk in large borrower concentrations and compliance with hold limits, including exceptions. Reports on hold limit exceptions should include plans and timeframes for how and when the exception will be resolved. Analysis practices should go beyond assessing large borrower commitments compared to TRC or earnings. Large borrower risk analysis should also address inherent risk factors, which could include the following:

  - *Risk Rating Profile and Trends* – Higher risk loan classifications, PD ratings, and LGD ratings, including migrations.

  - *Loan Origination* – Large loans primarily comprised of purchased assets versus originated and serviced by the institution.

  - *Underwriting Standards Adherence* – Loans not meeting all respective underwriting standards.

  - *Location* – Loan volume primarily from outside the chartered territory.

  - *Under-Secured or Specialized Collateral* – Loans with specialized collateral, under secured, or unsecured.

  - *Industry Concentration* – Large loan volume not diversified and primarily to borrowers in the same industry.

  - *Common Stressors* – Borrowers subject to the same stressors (e.g., customers and industries impacted by rising grain prices, high fertilizer/input prices, reductions in packing plant capacity).

  - *Interdependence/Affiliation* – Borrowers interdependent or affiliated with one another (e.g., top 10 includes a loan to a dairy processor and loans to independent producers selling milk to that processor). See the *Interdependence & Affiliation Risk* procedure for additional details.

  - *Business Model* – Large borrowers that do not have integrated business models (i.e., own both production and processing assets) or favorable processor contracts. This would typically involve independent producers selling in the open market.

  - *Individual Customer Concentration* – Single borrower exposures near lending limits without compensating controls.

- ***Loan Attribution*: Are guidance, processes, and controls over loan attribution appropriate to ensure compliance with FCA Regulation 614.4359?** To identify single borrower credit

risks, the board and management must have effective processes and controls to identify and attribute loans to all related borrowers. To help evaluate the effectiveness of attribution processes and controls, examiners should periodically review the accuracy of loan attribution practices as part of credit administration transaction testing. At a minimum, guidance to staff and loan attribution practices must consider, apply, and be consistent with all criteria in FCA Regulation 614.4359. At a high level, the regulation requires all loans to the same borrower to be considered one loan unless an independent credit risk is supported. For purposes of applying the lending and leasing limit to a borrower, loans outstanding to the borrower shall be combined with loans to a related borrower when any of the three following rules are met:

  - *Liability* – The borrower has primary or secondary liability on a loan made to a related borrower.
  - *Financial Interdependence* – The borrower is the primary source of repayment for a related borrower's loan, or the operations of the borrower and related borrower are comingled.
  - *Control* – The borrower directly or indirectly controls a related borrower.

- ***Regulatory Compliance Reporting:*** **Does the board and management have processes in place to accurately calculate and report the institution's top 10 borrower concentrations?** Management needs to ensure aggregate largest borrower commitments reported in FCA Call Reports are accurate. Processes and controls should be in place to accurately calculate the top 10 commitments per Call Report Instructions Schedule RC.1 4(f). Top 10 loan commitments that are part of certain off-balance sheet asset pools described in the *General Risk Concentrations Management* procedure where risk of loss is not shared proportionally, should be included in commitments reported on call reports.

- ***Smaller, Less-Complex Institutions:*** **Where applicable, have the board and management of smaller, less-complex institutions fully justified and supported having elevated large borrower concentrations?** FCA recognizes smaller, less-complex institutions may find it particularly challenging to lower their large borrower concentrations. The board and management of these institutions may be able to justify somewhat higher concentrations (e.g., above 75 but less than 100 percent of TRC) in certain instances. If this is the case, effective controls, as discussed in the *Internal Controls* procedure in the *Credit Administration* Examination Manual topic, must be in place to manage elevated large borrower concentrations. The following factors may justify slightly elevated large borrower concentrations for smaller, less-complex institutions:

  - The top 10 commitments include little, if any, out-of-territory volume.
  - Historical trends show the top 10 commitments as a percentage of TRC have not materially increased over time and are not trending towards 100 percent.
  - Large borrower concentrations are supported by sound risk analysis, reporting, and hold limit processes.
  - The top 10 commitments contain lower levels of inherent risk. Specifically, the top 10 commitments should include the following characteristics:

- From mature industries common to the chartered territory.
- Diversified by commodity.
- No significant affiliation and interdependence risk.
- Comprised of loans with favorable quality as measured by Uniform Classification System and risk ratings.
- Comprised of loans originated by the institution, and the institution controls the lending relationship (i.e., not purchased participations).
- Adequately secured by collateral common to the chartered territory (i.e., not secured by specialty collateral), and the loans are not under-secured or unsecured.

***4. Counterparty Risk:***

Evaluate the adequacy and effectiveness of counterparty risk identification, analysis, reporting, and management.

Guidance:

Counterparty risk occurs when System institutions engage in financial, operational, and credit transactions with System and non-System counterparties. Counterparty risk comes from many sources, including loan participations (selling and buying), investments and financial derivatives, and credit enhancements (e.g., standby commitments, credit guarantees). Counterparty risk includes the potential for parties to not meet contractual obligations in a financial transaction. See the *Risk Management* procedure in the *Investments* and *Derivatives* Examination Manual topics for guidance on managing counterparty risk in investments and derivatives.

While all significant business relationships pose counterparty risk, the focus in this procedure is on counterparty risk emanating from lending. This risk includes inadequate loan servicing, failing to remit payments, not sharing information, misrepresenting essential credit and financial information, or engaging in any other practices that could expose the institution reliant on the counterparty to loss. As such, the board and management need to perform sufficient due diligence on counterparties for loan purchases and sales to conclude on the counterparties' competency, reliability, and financial stability. Exposure to loss from a single counterparty is similar to loss from a single credit risk. As such, FCA Regulation 614.4362 requires the board to measure and limit exposures to a single counterparty. It is important that all counterparties to a transaction be subject to the due diligence process, including parties that may be acting as an intermediary. These counterparties may include funding banks and brokers or other entities that are relied upon for critical credit and financial information and are the purchasing institution's voice in negotiating loan terms. Guarantors, such as private finance and insurance companies, also pose counterparty risk. The degree of due diligence on guarantors should be commensurate with the risk they present to the institution. See the *Loan Purchases & Sales* and *Capital Markets* procedures in the *Credit Administration* Examination Manual topic for guidance on due diligence for loan purchases and sales regulations and administering capital markets programs.

Evaluative questions and items to consider when examining the adequacy and effectiveness of counterparty risk identification, analysis, reporting, and management include:

- ***Policies and Procedures: Does the board have adequate counterparty risk policy direction, and are management procedures effective?*** The board must establish sufficient policy direction to effectively measure, limit, and monitor exposures to concentration risks, which include counterparties, as required by FCA Regulation 614.4362. Policy direction should also

include key items from FCA's Informational Memorandum on Counterparty Risk dated October 21, 2003. Guidance should address whether exceptions to established guidelines or limits will be allowed. If allowed, guidance should document the exception approval process, including reporting requirements. For example, appropriate guidance could include a policy outlining who can approve exceptions, how exceptions will be reported to the board, and under what circumstances (if any) post-approval of exceptions is permitted. Supporting procedures should provide further guidance for implementing policy direction and address items such as the counterparty due diligence process, monitoring, analysis, and reporting. Processes and guidance should ensure originator counterparties are evaluated on sub-participation purchases.

- *Identification:* **Have the board and management defined what constitutes counterparty concentration risk and identified and quantified key counterparties**? The board should determine what constitutes counterparty concentration risk and its risk appetite regarding counterparties. Management should identify and document the specific types and dollar amount of counterparty activity in which the institution is involved (e.g., System and non-System participation loan sellers, buyers, and guarantors) to assist the board in determining what constitutes counterparty concentration risk in the portfolio. Processes should include criteria for measuring and managing counterparty risk and selecting and maintaining relationships with counterparties, which may include credit ratings.

- *Analysis and Reporting:* **Are effective processes in place to analyze and report counterparty risk?** Management should regularly analyze counterparty concentration risk and report to the board periodically. For significant exposures and distressed counterparties, management should analyze the financial implications if a counterparty is unable to perform its ongoing duties. Reporting on counterparties should include summary financials and ratios, credit and bank ratings, exposure trends, and conclusions on the counterparty's ability to perform on agreements and contracts. The reports should include compliance with established limits and plans for addressing related exceptions or new counterparties.

- *Exposure Limits*: **Have the board and management established appropriate limits on counterparty exposures?** FCA Regulation 614.4362 requires the board to include quantitative methods in policy to measure and limit identified exposures to significant and reasonably foreseeable concentration risk emanating from a single counterparty. The board should identify the maximum allowable exposure to a single counterparty, which may vary based on whether it's a System or non-System institution and whether the counterparty is acting as a loan seller, buyer, or guarantor. Single counterparties include lead lenders, originators, owners of loans contracting for servicing, loan purchasers and sellers, and guarantors. FCA's Informational Memorandum on Counterparty Risk dated October 21, 2003, encourages the board to carefully consider the amount of the institution's capital that could be exposed to another institution in a financial transaction. To adequately control counterparty risk, the board and management should adopt the following sound practices:

    - Express limits as a percentage of TRC or earnings.

    - Consider the impact on the institution's earnings stream if a counterparty is unable to perform.

    - Evaluate the appropriateness of single counterparty exposures exceeding 50 percent of TRC or 350 percent of 3-year average net income considering the adequacy of corresponding risk management controls.

- Create limits that are increasingly conservative as the counterparty's financial condition, credit ratings, or dependability become less favorable and for when the counterparty has limited financial resources or retains a limited amount of originated volume (e.g., brokers, finance companies, smaller commercial banks).
- Periodically review counterparty limits for continued adequacy and appropriateness.

- ***Loan Purchase and Sales Concentrations:*** **Are adequate controls in place to manage counterparty risk exposure from buying and selling participations?** Institutions that buy a significant amount of loan volume face counterparty risk, especially when large volumes of loans are purchased from the same counterparty. Additionally, institutions that sell a substantial amount of originated loan volume face risks from counterparties purchasing their loan volume. These institutions should have diversified purchase and sales channels and not be overly dependent on a limited number of sellers and buyers. Management should assess its level of dependency on specific loan sellers and buyers and analyze the risks faced in the event a counterparty significantly reduces or discontinues loan sales or purchases. Limits on volume purchased or sold to a single counterparty may be necessary for the institution to avoid becoming too reliant on a single seller or buyer. Additionally, management should have analysis and reporting practices in place to assess the institution's risk exposure from loan purchases and sales. See the *Loan Purchases & Sales* and *Capital Markets* procedures in the *Credit Administration* Examination Manual topic for guidance on compliance with loan purchases and sales regulations and administering capital markets programs.

- ***Owned and Originated Loans Serviced by Third Parties:*** **Have the board and management employed effective risk concentration management practices over contract loan servicers?** The institution may engage a third party to service loans the institution originated and continues to own. These contract arrangements are most prevalent on housing and rural home loans. Consistent with guidance in the *Third-Party Risk Management* procedure in the *Direction & Control of Operations* Examination Manual topic, the board and management should perform due diligence on contract servicers to determine if these third parties have the capability to perform according to expectations. Additionally, servicing agreements should clearly define the servicer's responsibilities. Management should periodically review the contract servicer's performance. Also, the internal credit review function should conduct servicer performance reviews, where warranted, to assess if the servicer is meeting the institution's servicing expectations and fulfilling obligations defined by the servicing agreement.

***5. Interdependence & Affiliation Risk:***

Evaluate the adequacy and effectiveness of interdependence and affiliation exposure identification, analysis, reporting, and management.

<u>Guidance</u>:

Interdependence and affiliation risk occurs when otherwise unrelated loans are linked by a common relationship and dependency. While attribution is not required for regulatory lending limit purposes, a common link creates interdependence and affiliation risk in these loans.

To fully understand interdependence and affiliation risk, the board and management should evaluate the borrower from the perspective of an interdependence continuum. For example, begin

with a grain farmer operating independently who has numerous options for selling production, ranging from commercial grain terminals to local livestock producers. In contrast, a hog farmer, while independent, may have limited choices on where to sell production, or a sugar beet grower must own shares in one of a limited number of cooperatives to market their production. Other examples include an ethanol plant that is structured as an independent business entity but operates under the corporate umbrella of a parent company, or rural utility and telecommunication projects with a common equity sponsor or energy off-taker. While perhaps not technically attributed to the parent company for lending limit and attribution purposes, actions of the parent company can affect the subsidiary's financial condition and performance. Even further up the interdependence continuum is the borrower who is dependent on the financial health and stability of others. Examples include contract growers for integrated poultry and swine operators, where the borrowers and growers have limited financial ability to stand on their own. At the end of the interdependence continuum are borrowers who are so interdependent that attribution is required for lending limit purposes. This procedure focuses on recognizing and managing risks where attribution is not required per regulatory attribution criteria within FCA Regulation 614.4359.

The risk caused by interdependence and affiliation varies, in part, because of unique underlying circumstances. When assessing interdependency risk, the institution and examiners may find it useful to segment risk by tiers, using the following examples:

- *Tier 1* – Borrowers exhibit a high degree of interdependence and rely heavily on the affiliate for financial stability. Common examples include integrator and downline contract grower arrangements in the poultry and swine industries.
- *Tier 2* – Borrowers are somewhat less dependent on the affiliate, but the affiliate's performance and decisions can significantly affect the related borrower's performance. Examples include borrowers contracting with the same company for management services and business entities with the same corporate parent or common members.
- *Tier 3* – Borrowers operate independently by raising their own production, but the number of buyers for the production is limited and the ability to sell production may be dependent on membership in a select cooperative or organization. Examples include sugar beet growers, cranberry and egg producers, some fruits, and certain livestock and milk producers.

Interdependence and affiliation risk should be considered when underwriting individual loans and on a portfolio basis. Depending on the level of interdependence and affiliation, the board and management should determine whether credit controls need to be established to adequately manage resulting risk exposure. Controls could include tailored underwriting standards, maximum hold limits and risk parameters tied to an affiliation, and government guarantees or other credit enhancements. Risk management strategies, such as hold limits and tailored underwriting standards, are likely necessary for Tier 1 and, at times, Tier 2 exposures. In other cases, where volume and inherent risk from the affiliation is lower, concentration management strategies may be unnecessary. However, systems to identify and track affiliated risks are warranted to ensure risk exposures are known and understood by the board and management.

Evaluative questions and items to consider when examining the adequacy and effectiveness of interdependency and affiliation identification, analysis, reporting, and management include:

- ***Identification:* Have the board and management defined what constitutes affiliation risk and identified and quantified key affiliation risks**? The board and management should define the types of loan relationships constituting affiliation risk for the institution. Due to

the unique nature of each institution's lending territory and loan portfolio, the level, nature, and types of affiliation risk will vary significantly by institution. The board and management should have the capability to identify, quantify, and track key interdependent and affiliated exposures and determine the dollar volume of risk exposure. While less-advanced systems may suffice for tracking lower-level affiliation risk exposures, as the risk exposure magnitude increases, identification and tracking processes should become more sophisticated (e.g., move toward more automation within information systems as risk exposure increases).

- ***Analysis and Reporting:*** **Have the board and management established effective analysis and reporting processes to assess and communicate resulting affiliation risk exposure?** The board and management should ensure processes are in place to perform periodic analyses of key affiliates and report on the aggregate risk exposure. Additionally, stress-testing interdependent and affiliated loans to evaluate potential portfolio risk is a sound practice. Management should routinely report to the board on affiliation risk to aid the board in oversight and allow for changes in risk management strategies, if needed. Management should consider the following risk factors in its analyses:
    - The amount and nature of the affiliation risk and magnitude of underlying interdependence (i.e., Tier 1, 2, or 3).
    - Loan quality (classifications, PD and LGD ratings).
    - Stability and financial strength of affiliates.
    - Compliance with hold limits and risk parameters (if applicable).
    - Inherent risk posed by various factors, including loan size, unique commodity or industry, specialized collateral, industry maturity and volatility, and limited alternatives for producers to replace contracts or operating agreements if the affiliate is unable to perform.
    - The underlying threat to earnings and capital in the event the industry involved in the affiliate relationship undergoes severe stress, the affiliate relationship is lost and cannot be replaced, and the impacted borrowers do not have the financial resources to perform.
- ***Risk Management:*** **Have the board and management established sound processes and risk management strategies to manage key affiliation risks?** The board and management should use risk management practices, such as hold limits and risk parameters, underwriting standards, and credit enhancement and guarantees, as warranted. Underwriting standards should be established where appropriate (e.g., contract grower programs). Standards should be tailored to specific lending programs and consider items such as the nature of collateral (i.e., specialized or not), strength of underlying contracts, and presence of contract replacement alternatives. Risk parameters may be warranted to address certain affiliated risks such as specific integrators. Risk parameters should be reasonable and based on percentages of TRC or 3-year average net income. Factors that will determine risk management techniques include significant volume for individual affiliations relative to TRC, loan quality, and inherent risk factors as listed above. Staff should have expertise in areas that pose affiliation risk and there should be appropriate audit coverage over interdependence and affiliation risk.

***6. Other Risk Concentrations:***

Evaluate the adequacy and effectiveness of identification, analysis, reporting, and management of other material risk concentrations.

Guidance:

This procedure addresses the adequacy of identifying, analyzing, reporting, and managing other material risk concentrations outside of commodity, large, counterparty, interdependent, and affiliated concentrations. Depending on the institution's portfolio, there may be unique concentrations that need to be actively managed and considered in completing this procedure (e.g., scorecard, similar entities, rural home, purchased participations, processing and marketing).

Evaluative questions and items to consider when examining the adequacy and effectiveness of identification, analysis, reporting, and management for other material risk concentrations include:

- ***Identification, Analysis, Monitoring, and Reporting:*** **Have the board and management adequately identified, analyzed, monitored, and reported on other material concentrations?** Management should identify all material concentrations and periodically analyze the portfolio to determine when concentrations become material. The *General Risk Concentrations Management* procedure includes a list of possible concentrations that may need to be actively managed at the institution. Management should routinely compare concentrations to TRC and identify concentrations that pose elevated risk due to capital exposure or other factors such as weak industry conditions. Management should also identify concentrations that are uncommon to the chartered territory and result from out-of-territory or capital markets lending activities. Reporting practices should be consistent with the risk exposure posed by the concentration. However, management should provide some level of periodic board reporting on material risk concentrations. Reporting on compliance with established parameters may suffice for lower-risk concentrations but, depending on the significance and risk profile of the concentration, more-comprehensive and frequent reporting may be warranted. As appropriate, management should identify in its reporting and analysis processes strategies used to manage other material risk concentrations, the success of those strategies, and whether additional efforts are needed.

- ***Concentration Management:*** **Have the board and management effectively managed its other material concentrations?** To effectively manage a concentration risk, risk management strategies may be needed. Strategies to manage other material concentrations include establishing sound loan underwriting, setting parameters (see guidance below), providing adequate guidance to staff through policy and procedure direction, lending delegations, targeting new markets, and using risk management tools as discussed in the *General Risk Concentrations Management* procedure. Extensive judgment is needed to determine which concentrations require active management and what strategies are needed. Exposure levels relative to TRC or earnings will typically be the primary deciding factor. However, other items that warrant consideration include inherent risk in the concentration, whether the concentration is common to the chartered territory, expertise in that concentration, and customer quality.

- ***Concentration Parameters:*** **Have the board and management effectively utilized parameters to manage other material concentration risk, where appropriate?** The board and management should fully analyze the risk exposure from the concentration, including inherent risk factors that are present, and set parameters. See the *General Risk*

*Concentrations Management* procedure for guidance on inherent risk factors in setting parameters. To evaluate concentration parameter reasonableness, the volume allowed by the parameter should be compared against TRC or the institution's earnings stream. Furthermore, risk parameters and supporting systems to measure compliance should express parameters in terms of total commitments versus outstanding balances.

***7. Audit:***

Determine if the institution conducts an effective audit (scope, reporting, and followup) of concentration risk management functions.

Guidance:

The internal audit and review program is a key mechanism for ensuring concentration risk management processes are functioning effectively. The internal auditor or other qualified, independent party should review the adequacy of concentration risk management processes to ensure compliance with applicable criteria. The audit risk assessment and scope should address concentration risk management topics, 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 concentration risk management is sound and that related 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 concentration risk management include:

- ***Audit Coverage:*** **Is there periodic audit or review coverage of concentration risk management processes, reporting processes, and related data integrity?** Audit or review coverage and frequency should be appropriate relative to risks, changes in the operating environment, regulatory requirements, and periodic testing needs. 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 concentration risk management?** 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 the following:

- Concentration risk management (including hold limits) policies and procedures.
- Compliance with concentration risk management policies, procedures, FCA regulations, and other FCA guidance.
- Monitoring and control processes (e.g., reporting, management oversight, delegated authorities, separation of duties, management information systems and data).
- Concentration risk management strategies and analyses.
- Credit-related data integrity, including sufficient transaction testing to ensure established criteria are followed and data is accurate.
- 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 loans or loan applications, 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. 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 concentration risk 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.