

EM-22.6

Category: Loan Portfolio Management

Topic: Collateral Risk Management

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Overview

Collateral risk management is a key loan portfolio management component as volatility in the agricultural economy and changing conditions in the general economy can cause collateral values to change rapidly. Collateral risk exists in different forms and emanates from many sources, but is essentially the risk that collateral securing a loan will decline in value after loan inception and be insufficient to liquidate the loan, if necessary. Inaccurate collateral appraisals/evaluations, illiquidity or obsolescence on highly improved and specialized property, weakening economic and industry conditions, inappropriate loan advance rates or repayment terms, and many other factors can contribute to collateral risk exposure. It is most commonly associated with real estate, where the risk is typically measured as the portion of the land's value that is not supported by the net income derived from the property. However, collateral risk also exists when chattel property is taken as security.

Managing collateral risk must occur at both the loan and portfolio levels. On individual loans, collateral risk is managed and controlled by actions such as adhering to reasonable collateral standards/advance rates, justifying exceptions to collateral standards through offsetting strengths, and by setting repayment terms and controls that are consistent with collateral risk levels and in balance with other credit factors. At the portfolio level, sufficient systems must be in place to identify, measure, report, and manage/control collateral risk. Finally, collateral risk management efforts at both the loan and portfolio levels depend on systems and processes that produce accurate, timely, and reliable collateral appraisals and valuations.

Examiners should be aware that collateral risk will vary based on the nature of the institution's territory and portfolio. As such, some of the concepts, strategies, and questions outlined below will be applicable to certain institutions but not others. Examiners should focus on assessing whether collateral risk is appropriately identified and managed and recognize that differences in institutions may result in a range of practices that can be used to satisfactorily identify and manage collateral risk.

Examination Objectives

The objectives for examining collateral risk management are to:

- Determine if sufficient direction, processes, and controls are in place to identify, report, and manage collateral risk at both the individual loan and portfolio levels.
- Determine if adequate processes and controls exist to produce timely, accurate, and reliable collateral evaluations.

Examination Subcomponents – Collateral Risk Management

The examination of collateral risk management is broken down into the following two subcomponents:

Subcomponent 1 – Identifying, Controlling, and Reporting Collateral Risk

Effective collateral risk management requires institutions to establish systems and processes that collectively work to identify, control, and report collateral risk. Processes and systems need to identify items that may contribute to collateral risk exposure, such as the amount of collateral with limited income producing potential, the type and amount of specialized collateral held by the institution, and the extent to which loan security consists of highly improved properties. Efforts to control collateral risk should vary according to collateral risk levels, but key components for controlling collateral risk may include:

- Sound collateral underwriting standards supported by a lending culture that appropriately controls exceptions to standards.
- Pricing premiums for loans with collateral risk.
- Loan structures designed to address/control collateral risk.
- Lending caps that limit the amount of financing provided (e.g., a limit on dollars per acre financed).
- Tightening underwriting practices and standards on loans with collateral risk.

Finally, sufficient data systems and reporting processes should exist to provide key institution stakeholders with information on the extent of collateral risk in the loan portfolio, what steps are being employed to manage that risk, and the results of collateral risk management efforts.

Subcomponent 2 – Collateral Evaluation Practices and Controls

An institution's collateral risk management efforts must be supported by effective collateral evaluation practices. To identify and manage collateral risk, institutions first need to establish systems and processes that produce accurate, timely, and reliable collateral appraisals and valuations. The collateral evaluation process should be directed by guidance that communicates how to perform and document key aspects of the appraisal/valuation process and clearly defines management expectations in areas such as collateral inspections, when to update appraisals/valuations, use of outside appraisers, etc.

Institutions must also have appropriate review systems in place to ensure the integrity of collateral evaluations. Each institution should conduct appraisal and collateral valuation reviews by a party independent of the person that completed the appraisal/valuation.

Refer to FCA's collateral evaluation regulations (Part 614, Subpart F) for specific criteria. In particular, examiners should be familiar with the differences between "evaluations," "appraisals," and "valuations," as defined in FCA Regulation [614.4240](#), and should refer to FCA's [Frequently Asked Questions About Collateral Evaluations](#) document for supplemental guidance. Also, examiners can refer to the [Interagency Appraisal and Evaluation Guidelines](#) published by several other federal financial regulatory agencies for additional background information when evaluating safety and soundness of collateral evaluation practices.

Criteria and Resources

In addition to the Agency's [LPM Publication](#) and this exam guide, the following additional criteria and resources exist:

- FCA Informational Memorandums:
 - June 17, 2010 - [Collateral Risk Management in Farm Credit System Institutions](#)
 - December 2, 2010 - [National Oversight Plan for Fiscal Year 2011](#)
 - April 21, 2008 - [Collateral Evaluation Requirements and Frequently Asked Questions](#)
- [Frequently Asked Questions about Collateral Evaluations](#)

- FCA Examination Bulletin [2009-2 Guidance for Evaluating the Safety and Soundness of FCS Real Estate Lending \(focusing on land in transition\)](#)

Examination Procedures and Guidance

Identifying, Controlling, & Reporting Collateral Risk

1. Identifying & Analyzing Collateral Risk:

Evaluate the adequacy of the institution's efforts to identify, quantify, and analyze collateral risk.

Guidance:

The first step an institution should take when addressing collateral risk is to define what constitutes collateral risk for that institution. Collateral risk will vary based on the nature of the institution's territory and portfolio. For example, one institution may consider certain types of collateral specialized in nature, but for other institutions the same collateral may be common to its territory and portfolio. After collateral risk is defined, systems and processes should be established to identify, quantify, and analyze the risk. Depending on the characteristics of the institution's portfolio, this could require periodic analyses or more significant special studies to evaluate collateral risk exposure.

Evaluative questions and items to consider when examining an institution's efforts to identify, quantify, and analyze collateral risk include:

- **Has the institution defined/identified what constitutes collateral risk for their portfolio?** Items such as specialized collateral, highly improved properties, properties with a high value per acre, properties where the income producing capacity is limited or is low relative to debt service demand, and collateral securing loans in distressed industries represent typical situations that may present collateral risk exposure.
- **Has the institution identified how much loan volume is secured by specialized collateral and highly improved properties?** Collateral would typically be considered specialized if it is not common to the institution's territory or portfolio. At times, an institution may not consider highly improved properties such as livestock facilities, greenhouses, processing plants, expensive homes, etc., specialized because these properties are common in the territory/portfolio. While this may be a reasonable assertion, highly improved properties still pose substantial collateral risk as they are highly depreciable and susceptible to functional obsolescence. As such, these properties should bear heightened scrutiny in an institution's collateral risk management efforts.
- **Has the institution identified how much volume exists where the value of the underlying collateral is highly susceptible to economic conditions in the housing industry?** Examples could include nurseries, greenhouses, land in transition, timber/lumber operations, etc.
- **Has the institution considered any unique characteristics or factors that may influence the value or marketability of the collateral, such as permitting, water availability, water rights, etc.? As applicable, has the institution identified how much loan volume exists where the collateral value is highly susceptible to such factors?**
- **Does the institution complete loan penetration studies/analyses that stratify loan-to-value (LTV) ratios by age to gain additional insight into collateral risk?** By stratifying LTV ratios by age of the loan, a more realistic collateral risk picture emerges versus simply reporting an LTV ratio for the entire portfolio since well-secured, older mortgage loans will lower overall

loan penetration levels. Examiners should also be cognizant of whether loan penetration levels are based on values from the original collateral evaluation, a recent evaluation, or some other automated means, such as the institution's benchmark systems. The source and age of the values will influence conclusions drawn from the reports.

- **On loan volume identified as having elevated collateral risk levels (i.e., from the various examples identified above or other areas of risk identified by the institution), has the institution further segmented and analyzed risk by factors such as:**
 - Probability of default (PD) and loss given default (LGD) ratings?
 - LTV ratios?
 - Age of collateral evaluations?
 - Age/seasoning of loans?
 - Length of loan amortization (at inception and years remaining at present)?
 - Historic repayment performance?
 - Borrower credit factors?
 - Utilization of USDA, SBA, or FSA guarantees?
 - Presence of Farmer Mac standby commitments?
 - Use of long-term fixed interest rates to lessen threats to repayment capacity?
 - Interest rate spreads (i.e., if elevated collateral risk is present is the institution receiving a higher return as compensation)?
- **Are potential shocks to collateral values and their effect on the institution adequately assessed as part of the institution's stress testing process or through other analysis? Are shocks to collateral values generic in nature or tailored to address unique risks in select portfolio segments, specific industries, and collateral types? Does analysis/stress testing include a shock to land values caused by a rise in interest rates/rise in capitalization rates?**
- **Does the institution have adequate processes and controls in place to assess, monitor, and analyze the extent of collateral risk exposure in loans with less favorable LGD ratings (i.e., LGD ratings of E and F)?**

The following are additional questions to consider when evaluating collateral risk on loans secured by real estate:

- **Has the institution identified how much volume exists where the loan has a relatively long amortization (e.g., more than 20 years amortization from the current date)?** If an institution utilizes balloon structures, it is still considered appropriate to identify this volume as having a relatively long amortization. Institutions could choose to segment loan volume with long amortizations in two categories – those with earlier balloon features and those with a maturity that matches the amortization.
- **Has the institution identified how much volume exists where revolving line of credit features are in place?** If a real estate loan has a revolving feature, collateral risk is increased as potentially no principal repayment will occur while the revolving commitment is available.
- **Has the institution identified how much volume is secured by property with very limited, ongoing income producing potential?** Land in transition would be the most prominent example followed by recreational property. In some cases, pasture/grazing land could also fall into this category. Refer to FCA Examination Bulletin [2009-2](#) for additional information and criteria.
- **Has the institution taken steps to identify and measure collateral risk relating to situations where the income producing potential of the property does not fully support the value of**

the property or level of financing provided? Possible methods to do this include:

- Identifying properties (and the amount of volume secured by those properties) where the capitalization rates used to calculate the income approach to value were extremely low. What constitutes a low capitalization rate is best defined by the institution, but generally capitalization rates below 3 percent or the 10-year Treasury bill rate are considered low.
 - Utilizing a debt coverage approach to identify properties (and the loan volume secured by those properties) where net returns to the land/land owner do not support the required debt service on the property. For example, traditional debt coverage ratio concepts involve comparing the annual rental payments on the property (net of taxes) to required debt service. Debt coverage ratios less than one indicate the expected income from the land cannot service the debt, thereby evidencing elevated collateral risk. Similar analysis of debt coverage could be performed by comparing the annual net returns to an owner/operator of the land (typically higher than net rental income) to debt service requirements. Under either method, examiners should assess if realistic long-term rental rates or returns to the owner/operator are used and if debt service calculations utilize realistic interest rate assumptions. Additionally, analysis based on returns to an owner/operator should be recognized as a more volatile measure and only appropriate when farmers purchase and operate the property.
 - In some institutions' territories, the nature of the real estate market is such that property is oftentimes not purchased for its income producing potential. As a result, the debt coverage and income capitalization concepts discussed above may not be widely utilized or particularly helpful in differentiating collateral risk levels between transactions. Even though these types of real estate markets may be common, the properties' lack of income producing capacity creates elevated collateral risk levels.
- **Does the institution track, monitor, and analyze "high dollar" property transactions in their portfolio?** By identifying a value per acre that represents a comparatively high-priced real estate value for its territory, an institution could track the number/amount of these transactions in the portfolio and the collateral risk exposure this may create.
 - **Does the institution monitor land values and perform land value studies to identify trends in real estate values throughout the lending territory?** Oftentimes these studies or analyses would coincide with semi-annual/annual appraisal updates to properties in the institution's benchmark appraisal system.

The following are additional questions to consider when evaluating collateral risk on loans secured by chattels:

- **Has the institution adequately assessed collateral risk in its commercial/short-term loan portfolio?** Collateral risk management efforts are most often associated with real estate and mortgage loans, but collateral risk is also present in commercial loan portfolios. Collateral risk can be more difficult to assess on short-term loans because database systems may not capture as much collateral evaluation information. Nonetheless, institutions should identify/quantify items such as:
 - Loan volume where the borrower is not meeting borrowing base requirements.
 - The amount of unsecured loan commitments.
 - Volume secured by specialized crops or specialized chattel equipment.
 - Amount of crop operating loans where the borrower does not carry crop insurance.

- Amount of fully advanced lines of credits where the borrower has not revolved the debt for an extended period of time.
- Amount of loans secured by chattel property where the industry is currently distressed.
- **Does the institution have adequate systems in place to identify and monitor chattel values, sales activity, and trends in value in its territory?** A variety of systems can be utilized such as tracking results from machinery and livestock auctions, using blue book/machinery guide values, and monitoring bid prices from local packing plants and grain terminals.

2. Collateral Data:

Determine if the institution's data systems have sufficient capabilities to facilitate collateral risk analysis and management efforts.

Guidance:

Effective collateral risk identification, analysis, and reporting depend on adequate collateral-related database information. Loan databases should include items such as:

- The date of the most recent collateral evaluation.
- The type and contributory value of improvements and contributory value of bare land.
- Information on the income producing capacity of the property (e.g., debt coverage ratios, annual net income producing capacity of the property on a total or per acre basis, etc.).

Many institutions use appraisal benchmarking systems to identify changes in collateral values/loan penetration levels when bare land real estate collateral is involved. When appropriate, real estate collateral is mapped/linked to benchmark farms in the institution's territory. Based on changes in the value of the benchmark properties, updated/estimated collateral values are provided for a large number of loans in the portfolio. This process can assist in recognizing risk caused by changing real estate values.

Evaluative questions and items to consider when examining an institution's collateral-related data systems include:

- **Are the institution's collateral evaluation and loan database systems equipped to readily identify properties with limited income producing capacity?** For example, does the institution calculate debt coverage ratios, the annual net income producing capacity of the property, etc., and enter that information into their database as part of the collateral evaluation/loan origination process? Also, are capitalization rates on properties held as collateral available via data systems or is that information only available by individual file review?
- **Are the institution's loan database systems equipped to readily identify and quantify when additional security exists in the form of a second lien position on another property or cross collateralization with another loan?**
- **Do the institution's database systems capture key information such as the date of the most recent collateral evaluation and contributory value of improvements?**
- **Do the institution's database systems have any features/data fields that allow the institution to easily identify when specialized collateral is securing the loan?**
- **Does the institution have adequate processes and controls in place to ensure that collateral-related data is accurate?** Utilize internal credit review reports, appraisal and

valuation reviews, management reviews/discussions, and loan review results as appropriate to evaluate this.

- **Does the institution use a benchmarking process in its collateral evaluation systems to provide updated collateral values for applicable loans?** If the institution has a benchmarking process:
 - Are there a sufficient number of benchmark properties to capture the variety in land/property within the territory?
 - What percentage of the portfolio/loan volume is linked to a benchmark?
 - Are benchmark properties appraised with sufficient frequency (typically semi-annually, although annual may be sufficient in times of stable values) to facilitate timely identification of trends in property values?
- **If an institution does not have a benchmark system in place, are adequate alternate systems in place to track land value trends in the territory?** Assess these systems as appropriate.
- **Does the institution have sufficient capabilities within its database systems to identify and assess collateral risk on commercial/short-term loans?**

3. Collateral Underwriting Standards & Practices:

Determine if collateral-related underwriting standards and other related practices are used effectively to identify and manage collateral risk.

Guidance:

Sound underwriting standards for the collateral credit factor combined with the discipline to seldom deviate from the standards provide institutions a key foundation for controlling collateral risk. In order to be effective, LTV standards/advance rates must be at levels where significant downward pressure on values can occur before the loan balance would exceed the underlying value of the collateral. As shown in the home lending industry, borrower behavior and commitment to repay the debt changes when a loan is “underwater” and the borrower has no equity in the underlying collateral. **Thus, LTV standards should be at levels where borrowers continue to have “skin in the game” in the event collateral values decline markedly. Additionally, collateral underwriting standards should be increasingly conservative when loans are secured by items such as highly improved properties, specialized collateral, and properties with limited income producing potential.** On loans where collateral risk is evident, an institution can use other underwriting practices and standards to partially mitigate the risk by requiring higher levels of working capital, net worth, and repayment capacity. Finally, when concluding on the adequacy of specific collateral underwriting standards, consider the relative soundness of accompanying standards for the other credit factors and the adequacy of the institution’s overall underwriting process.

Evaluative questions and items to consider when examining an institution’s collateral-related underwriting standards include:

- **Do the institution’s collateral underwriting standards provide a reasonable margin of protection against declining values?** For example:
 - Is the LTV standard 65 percent or lower on bare land?
 - Do any collateral standards approach the regulatory maximum of 85 percent LTV on mortgage loans? Standards that are equal to or approach the regulatory maximum warrant extensive scrutiny.

- Do underwriting standards for commercial/short-term loans establish reasonable collateral standards?
- Are standards reevaluated and adjusted, as appropriate, in response to changing market conditions?
- **Do the underwriting standards for specific industries, loan programs, and portfolio segments consistently provide an appropriate collateral standard?**
- **Does the institution have collateral standards that vary by the type and characteristics of the collateral and are collateral underwriting standards increasingly conservative as collateral risk increases?** For example, do collateral underwriting standards address unique risk factors such as specialized collateral, timber tracts, property with limited or no income producing capabilities, etc.? Also, are LTV requirements in underwriting standards lower when security consists of property with limited current income producing capacity compared to property that provides a reasonable income stream? As noted in FCA Examination Bulletin [2009-2](#), other financial regulatory agencies have set 65 percent as the **maximum** LTV standard on “raw land,” which would include land in transition, recreational property, and other property with limited or no current income producing capacity. On this type of property, any System institution standards that are less restrictive than the regulatory maximum applicable to other commercial lenders should be carefully scrutinized.
- **Do collateral underwriting standards and related underwriting guidance for livestock facilities address the need for ensuring operations have an adequate amount of land under their control to meet regulatory requirements for manure disposal? Does the institution’s collateral perfection process ensure that easements on land utilized by livestock borrowers for manure disposal are transferrable to the institution in the event of legal collection?**
- **Does underwriting guidance address whether and under what circumstances the institution will allow borrowers to finance down payments on land purchases with short term loans or via borrowing against other real estate?** Determine the extent to which this practice occurs and evaluate if the institution is taking undue risk with these practices. The appropriateness of this approach depends heavily on the borrower’s overall financial position and capacity. Situations where the borrower finances the down payment with short term loans warrant particular scrutiny, especially if short term funding was utilized because the borrower was unable to provide/borrow against additional real estate collateral.
- **What is the institution’s lending culture in terms of exceptions to collateral underwriting standards?** For example:
 - Are exceptions infrequent and seldom approved or are collateral underwriting exceptions fairly commonplace?
 - Do collateral exceptions require loan committee approval or can they be approved within delegated authority levels?
 - Are collateral underwriting exceptions adequately tracked, analyzed, and justified by offsetting strengths? Review loans with collateral exceptions as necessary to determine if borrowers have adequate offsetting strengths in other financial factors to justify the exceptions.
 - Are any trends evident in collateral exception reporting information? If so, follow

up on risk illustrated by exception trends as appropriate. Exception levels must be viewed in context with the appropriateness of established collateral standards. If there are concerns with the underlying collateral standard, exception information may be of little value. For example, an institution with a 5 percent exception rate and a LTV standard of 65 percent is likely taking significantly less risk than an institution that has no collateral exceptions but has a LTV standard of 75 percent.

- **Beyond the use of collateral underwriting standards and its approach towards collateral exceptions, does the institution use other underwriting practices to help mitigate collateral risk?** For example:
 - Do underwriting standards for loans/industries that typically have elevated collateral risk (see *Exam Step 1* for examples) require greater levels of working capital, net worth, and repayment capacity compared to loans/industries with lower collateral risk? Collateral risk levels can vary greatly on loans within the same industry. As a result, it may not always be practical within underwriting standards to address expectations for borrowers to have greater financial strength when collateral risk is present. In such cases, other credit direction to staff would be necessary.
 - Does a review of credit factors and PD ratings on more recently originated loans with elevated levels of collateral risk support that the institution is requiring borrowers to have offsetting financial strengths when underwriting loans with elevated collateral risk levels?

4. Other Collateral Risk Management Tools:

Determine if the institution is effectively using other tools, such as loan pricing, loan structure, and lending caps, to manage collateral risk.

Guidance:

Other tools also exist to aid in collateral risk management efforts. Loan pricing premiums are a viable option to compensate for increased collateral risk. Pricing premiums can influence a borrower's willingness to pledge additional collateral, provide greater down payments, and choose shorter amortization periods, all of which reduce collateral risk. Collateral risk can also be managed in part through loan structure and terms. For example, shorter loan amortizations and payment schedules that require a set amount of principal each year reduce collateral risk over shorter periods of time. Additionally, lending caps can be utilized to set limits on the amount of financing that will be provided on real estate transactions.

Evaluative questions and items to consider when examining an institution's use of collateral risk management tools include:

- **Does the institution address and manage collateral risk through loan pricing practices?** Examples could include charging a premium for loans with exceptions to collateral standards, longer amortizations, specialized collateral, or property that has limited income producing potential. Also, an institution may use a scoring system to determine the interest rate that a borrower qualifies for, and LTV levels or other collateral factors may be contributors to the pricing score. On loans where elevated collateral risk is identified (as discussed in *Exam Step 1*), determine if interest rate spreads evidence that the institution is being compensated for higher collateral risk levels.
- **Does the institution manage collateral risk through loan amortizations, loan repayment structures, and other terms and conditions?** Consider the following:

- Review credit guidance to determine if it includes direction to staff on using loan structure, loan amortizations, and terms/conditions to manage collateral risk.
- Review loan actions, underwriting reports, and other information from management to assess if loans with elevated collateral risk levels have more conservative terms and conditions. Determine the extent to which the institution uses/allows loan amortizations greater than 20 years (on newer loans) as a gauge for assessing if loan repayment terms are used to control collateral risk. In general, as collateral risk increases, more conservative repayment structures should be utilized. For example, amortizations on loans secured by specialized collateral and highly improved/rapidly depreciating properties should be relatively short. Also, on typical real estate loans (i.e., secured by bare land) amortizations of 20 years or less can help manage collateral risk. A large amount of more recently underwritten real estate volume with amortizations more than 20 years would warrant additional examiner review, particularly when other risk factors are present, such as collateral underwriting exceptions, relatively high LTV ratios (e.g., above 65 percent), or the secured property has limited current income producing potential.
- Determine if the institution uses loan penetration levels to guide the length of loan amortizations that are offered to the customer (i.e., as loan penetration levels increase are shorter loan amortizations utilized?)
- Determine the extent that the institution utilizes non-amortizing loan structures (e.g., multiple years of interest only payments, payment reserves funded by the lender, etc.) and evaluate whether these types of loan structures are used when elevated collateral risk is present. Absent mitigating factors, the presence of non-amortizing loan structures on loans with elevated collateral risk should be viewed as a significant red flag. Mitigating factors would include items such as the non-amortizing loan is controlled via a well-structured borrowing base arrangement involving appropriate collateral or is part of a construction financing package, where the debt will begin amortizing once construction is completed.
- Determine if the institution uses level principal payment loan structures to any extent to mitigate collateral risk. These payment structures result in more rapid principal repayment in the initial years of the loan compared to level payments.
- Determine if the institution has issued any guidance to staff on utilizing more restrictive working capital, cash flow, or net worth covenants when increased collateral risk is present.
- **Does the institution utilize lending caps to manage/control collateral risk levels?** Typically, under a cap system the institution would set a limit on the dollars per acre the lender would finance. Oftentimes, in particularly “hot” real estate markets, the resulting LTV ratios under a lending cap are lower than what would be allowed by an LTV standard. If the institution utilizes lending caps:
 - Is the methodology employed to calculate and set the caps reasonable and well supported? Are different caps in place to account for geographic/regional differences in the institution’s territory?
 - Are the caps at levels that constructively influence lending decisions? Or are the caps set at relatively high levels and, as a result, the caps have little influence on lending activity? Consider the reasonableness of the lending caps used and their

relationship to current land sales/land values in the territory. Also, consider the relationship of the caps to lending levels that would be allowable if just the institution's LTV collateral standards were in place.

- Does the credit culture of the institution promote limited or no exceptions to the lending caps? Review exceptions as applicable to determine the frequency of exceptions and the support and justification for the exceptions.

5. Board Reporting:

Determine if reporting processes are sufficient to facilitate effective collateral risk management efforts.

Guidance:

Reporting should "bring it all together" in terms of communicating the level of collateral risk that exists, strategies used to manage the risk, and measuring the success of risk management efforts. Reporting should address the impact collateral risk exposure has on the institution's overall risk profile and facilitate development of risk management strategies. Evaluative questions and items to consider when examining an institution's board reporting on collateral risk include:

- **Do collateral risk-related reports that are provided to the board adequately address significant sources of collateral risk?** Management should report to the board or designated committee of the board on collateral risk levels and related management actions at least annually, and more often as warranted by conditions.
- **Do reporting processes identify and quantify the institution's collateral risk exposures, as discussed above in *Exam Step 1*?**
- **Do reporting processes produce adequate information to determine if collateral risk management practices, such as those discussed in *Exam Steps 3 and 4*, are being utilized as intended and achieving desired results?**

Examination Procedures and Guidance

Collateral Evaluation Practices & Controls

1. Guidance & Standards:

Determine if collateral-related guidance effectively communicates to staff the necessary direction and standards to administer the collateral evaluation, verification, and monitoring functions in a safe and sound manner and in compliance with regulations.

Guidance:

FCA Regulation [614.4245](#) requires the board of each institution that engages in lending or leasing secured by collateral to adopt well defined and effective collateral evaluation policies and standards. When evaluating the adequacy of the institution's collateral policies and standards, refer to the regulation for specific content requirements. In addition to ensuring that required guidance and direction exists, examiners should conclude on the adequacy and reasonableness of collateral guidance in terms of content, criteria, parameters, expectations, etc. The goal is to ensure that guidance and direction will result in accurate and reliable collateral values to support loan decisions and risk identification/management.

In addition to regulatory requirements, the following are items to consider when evaluating the institution's collateral policies, procedures, standards, and other guidance. **Does the institution**

provide adequate and reasonable direction on:

- **Ensuring appraisals and collateral valuations identify and support the critical factors of market value including, at a minimum:**
 - The contributory value of all improvements?
 - Adequate legal and physical access to the property?
 - Area and neighborhood characteristics that impact marketability of the property?
 - Descriptions of any easements or legal restrictions that could affect marketability of the property?
 - The highest and best use of the property?
- **When an environmental assessment is needed?**
- **Ensuring the income producing capacity of real estate is sufficiently documented and addressed in collateral evaluation reports (FCA Regulation [614.4250\(a\)\(6\)\(i\)](#)) or in the credit analysis (FCA Regulation [614.4265\(c\) and \(d\)](#))?**
- **Considering the income capitalization approach, the sales comparison approach, and/or the cost approach, as appropriate, to determine market value when completing real estate evaluations; explaining and documenting the elimination of any approach not used; and reconciling the market values of the applicable approaches (FCA Regulation [614.4265\(b\)](#))?**
- **What is the acceptable age for appraisals or valuations used for credit decisions and servicing actions and what events will drive actions to obtain new appraisals or valuations?** Criteria may be differentiated by the nature of the credit action, current loan-to-value ratio, property characteristics (e.g., bare land versus improved property), and borrower risk profile.
- **When farm visits/onsite inspections should be conducted to determine collateral values, verify condition and existence, etc.?**
- **Processes that will be used to verify the value, existence, and ownership of collateral in complex accounts with liquid collateral held at multiple locations (e.g., cattle feeding operations, other large livestock operations, multi-location agribusinesses, etc.)?**
- **When borrowing bases should be used in loan structures, the frequency of borrowing base reporting, verification/monitoring expectations, and how to structure and administer borrowing bases?** For example, does guidance address and is guidance reasonable on:
 - Processes used to value assets in a borrowing base? Methods can vary from current market prices, cost basis, long-term averages, values negotiated with the borrower, or a combination thereof.
 - How valuation processes are influenced by market volatility/market conditions? For example, are borrowing base livestock values based strictly on current market conditions or when industry conditions are favorable are efforts taken to keep borrowing base values consistent with longer-term average prices?
 - Whether a party independent from the loan officer determines the values used in borrowing bases?
 - How advance rates/discounts on the assets are determined?
 - Treatment of accounts payable? For example, are available borrowing base assets

reduced by the amount of related open accounts?

- If there are any circumstances where it would be allowable to have improved or unimproved real estate collateral as part of a borrowing base? Any situations where real estate is included in borrowing base arrangements should be very closely scrutinized.
 - Whether breeding stock (e.g., dairy cattle and sows/gilts) are included in borrowing bases? Situations where breeding stock is included in borrowing bases should be analyzed to ensure advance rates and valuations are reasonable and give consideration to the speed at which these assets depreciate and are replenished or replaced.
 - Whether borrowing bases include non-typical assets such as gestational pigs? Situations where gestational pigs are given value in borrowing bases are normally rare, often short-term in nature, and have typically coincided with periods of industry stress.
- **Valuing specialty collateral, discounting chattels, and assigning collateral values in distressed loan situations?**
 - **Valuing growing crops, crop inventory, market livestock, and other current assets held as collateral?**
 - **Expectations for documenting the description of farm equipment and its condition?**
 - **Sources to be used for determining chattel values (e.g., blue book values, auction results, local grain elevator prices, amount of crop insurance coverage, local livestock auction markets, etc.)?**
 - **Expectations for analysis and review of individual appraisals by lending/credit staff and how appraisal information should be utilized in loan underwriting and loan servicing activities?** Lending/credit staff should receive adequate training and direction on how to interpret appraisal information and analyze appraisals. (A potential concern is that, at times, appraisals may be used by lending/credit staff for little more than to provide “the number” that supports underwriting the loan.)

2. Collateral Evaluation Reviews:

Determine if the institution has an adequate collateral evaluation review process in place.

Guidance:

FCA Regulation [618.8430](#) requires institutions to have an internal control policy that addresses standards for assessing appraisals/collateral evaluations as part of the institution’s program to review and assess its assets. Evaluative questions and items to consider when examining an institution’s collateral evaluation review processes include:

- **Does the internal control policy contain adequate direction for the institution’s appraisal/collateral evaluation review program?** (At a minimum, the internal control policy should denote that an institution will have an appraisal/collateral evaluation review program.)
- **Are appraisal and collateral valuation reviews conducted and documented as part of the institution’s internal control program?**

- Are results reported to the board or audit committee, is reporting and discussion of results adequately documented in meeting minutes, and are review exceptions and recommendations addressed in a timely manner?
- Are the reviews completed by a party that is functionally independent from the individuals completing the appraisals and collateral valuations?
- Does the party completing the reviews have the necessary qualifications (i.e., appraisal certifications, extensive appraisal/collateral valuation background, etc.)?
- Is the frequency of reviews adequate in light of changes and trends in the real estate market (i.e., when real estate markets are changing rapidly, be it increasing or declining, are reviews more frequent)?
- Are a reasonable number of appraisals and collateral valuations reviewed annually in light of the overall number of appraisals and valuations performed by the institution?
- Does the review sample include work performed by all appraisers and evaluators, including outside fee appraisers?
- If not included in the formal appraisal and collateral valuation review process, are valuations on chattels reviewed as part of the internal credit review process?
- Does the collateral evaluation review process assess and conclude on the adequacy of the institution's ongoing oversight and internal controls for administering the work of qualified evaluators?
- Does the review process include an assessment of who qualifies as an evaluator based on the institution's policies and procedures and the requirements in FCA Regulations (Part 614, Subpart F)?
- Does the review process address the adequacy of appraisals/collateral evaluations completed via computer based/automated valuation models? See additional details in *Exam Step 5*.

3. Business Loan Exemptions:

Determine if the institution has adequate controls and processes to ensure business loan appraisal exemptions are handled appropriately.

Guidance:

FCA Regulation [614.4260\(c\)\(2\)](#) allows for an exemption to appraisal requirements for business loans under \$1 million that meet certain criteria. Refer to the regulation and FCA's Informational Memorandum on [Collateral Evaluation Requirements and Frequently Asked Questions](#) dated April 21, 2008, for an overview of specific regulatory requirements. Attachment 1 of the Informational Memorandum provides a flow chart for determining when the business loan exemption applies, while Attachment 2 provides representative examples of exemption criteria being applied.

Evaluative questions and items to consider when examining an institution's use of the business loan exemption include:

- **In its appraisal/collateral valuation process, does the institution utilize the business loan appraisal exemption, which allows certain collateral evaluations to be completed by qualified evaluators (e.g., lending staff potentially) rather than certified appraisers? If so,**

review the adequacy of guidance and direction to staff on use of the exemption. Determine if guidance is consistent with regulatory requirements.

- **Is use of the business loan exemption subject to prior approval or post review by management?** This is particularly important when a person making the credit decision is also completing the collateral evaluation (refer to FCA Regulation [614.4255\(b\)](#), which says the person making the credit decision is allowed to complete the collateral evaluation if the institution has internal control procedures required by FCA Regulation [618.8430](#) in place that include requirements for either a prior approval or post-review of credit decisions; note that such procedures do not need to require an approval or review of every evaluation).
- **Is use of the business loan exemption monitored/centrally tracked so management can perform spot checks to determine if the exemption is being used appropriately?**
- **When the business loan exemption is used, are valuations completed by a qualified evaluator as defined in FCA Regulation [614.4240\(n\)](#) and are controls in place to ensure the resulting valuations meet the requirements of FCA Regulations [614.4250](#) and [614.4265](#)?**
- **Are a sample of the valuations completed under the business loan exemption prior approved or post-reviewed by qualified individuals to determine if the valuations meet regulatory requirements?** This should include coverage of valuations completed by each evaluator.
- **As judged necessary, review instances where the business loan exemption was utilized and determine if use of the exemption was warranted and if the resulting valuation was sufficient to meet regulatory requirements.**

4. Outside Appraisers/Evaluators:

Conclude on the adequacy of the institution's controls for using outside fee appraisers/evaluators and other non-institution staff in completing collateral evaluations.

Guidance:

When evaluating controls over the use of outside fee appraisers (as defined in FCA Regulation [614.4240\(h\)](#)), examiners should consider the following evaluative questions as applicable:

- **When an institution uses outside fee appraisers/evaluators to complete collateral evaluations on loans originated by the institution:**
 - Do controls ensure that fee appraisers are engaged directly by the Farm Credit System institution or its agent, and that they have no direct or indirect interest, financial or otherwise, in the property or transaction (refer to FCA Regulation [614.4255\(d\)](#))?
 - Do sufficient standards exist for periodic inspections of the collateral by the institution's account officer or other designee (refer to FCA Regulations [614.4265\(g\)](#) and [614.4266\(d\)](#))?
 - Does the institution have an approval process for outside appraisers/evaluators, whereby a certain number of appraisals/evaluations are reviewed and if review results are satisfactory the person is added to the approved list of outside appraisers/evaluators? After the person is added to the approved list of outside appraisers/evaluators are periodic reviews performed to determine if work products remain acceptable?

- Has the institution defined its minimum/desired qualifications for outside fee appraisers/evaluators?
- **When an institution is involved in buying loan participations:**
 - Has the institution defined expectations for reviewing appraisals/valuations?
 - Are appraisals routinely obtained as part of the due diligence process?
 - Do loan officers review the appraisals/evaluations or is there involvement by appraisal staff above certain size thresholds?
 - Is assessing the quality/adequacy of the appraisal or valuation part of the credit analysis process? For example, do credit analysis templates include a section on assessing the quality/adequacy of the appraisal and qualifications of the appraiser/evaluator?

5. Automated Collateral Evaluation Systems:

Conclude on the adequacy of any automated collateral evaluation systems used by the institution.

Guidance:

Some institutions have developed automated collateral evaluation systems to utilize on certain properties. Use of such systems was addressed in FCA's Informational Memorandum on [Collateral Evaluation Requirements and Frequently Asked Questions](#) dated April 21, 2008. If the institution utilizes an automated collateral evaluation system, examiners should document a general description of the model and the underlying methodology for how values are determined. In addition, assess the relationship of how much loan volume is secured by property where appraisals were completed by automated systems versus traditional evaluation methods. Other evaluative questions and items to consider include:

- **Is the use of automated systems limited to properties that are homogenous, common to the territory, and with limited or no improvements?**
- **Is there enough underlying sales/valuation data to statistically determine accurate collateral values?**
- **Do resulting appraisals/valuations comply with applicable professional and regulatory standards?** Appraisals completed under automated systems must still meet Uniform Standards of Professional Appraisal Practices (USPAP) standards and be signed by a state licensed or certified appraiser. Also, if automated systems are used to complete valuations under the business loan exemption, those valuations must meet applicable regulatory requirements as discussed in *Exam Step 3*.
- **Has the institution appropriately validated its automated model (i.e., tested the accuracy of results produced by the automated model versus results generated by traditional appraisals)?** Refer to FCA's Informational Memorandum on [Computer-Based Model Validation Expectations](#) dated June 17, 2002, for additional guidance on model validation expectations.

6. Transaction Testing:

Examine individual loans to assess compliance with collateral evaluation regulatory requirements and the institution's guidance/standards, and the reliability of collateral-related internal controls.

Guidance:

As part of periodic loan review activities, review a sample of loans with recent collateral appraisals or valuations (i.e., within 12 months). The sample should include loans secured by real estate and by chattels (as applicable), and include a sufficient number of accounts where the institution completed a collateral evaluation review. Within the real estate loan sample, include some loans where the income producing potential of the secured property is limited (if the institution performs this type of lending – e.g., land in transition, recreational property, etc.).

When examining individual collateral appraisals and valuations, specifically evaluate the following items:

- Reasonableness of and support for the value assigned.
- Compliance with FCA regulations and the institution’s collateral evaluation guidance, including appropriate use of the business loan exemption.
- Reliability of the institution’s independent collateral evaluation review to ensure effectiveness of this key control process.

For real estate appraisals and valuations, specifically consider the following questions:

- **Do appraisals and collateral valuations identify and support the critical factors of market value including, at a minimum:**
 - The contributory value of all improvements?
 - Adequate legal and physical access to the property?
 - Area and neighborhood characteristics that impact marketability of the property?
 - Descriptions of any easements or legal restrictions that could affect marketability of the property?
 - The highest and best use of the property?
- **Were the income capitalization, sales comparison, and/or the cost approaches considered, as appropriate, to determine market value? Did the institution explain and document the elimination of any approach not used and reconcile the market value of the applicable approaches used, in accordance with FCA Regulation [614.4265\(b\)](#)?** Note that an approach is adequately considered if the institution satisfactorily documents and explains why the approach was not used.
- **Has the income producing capacity of the property been properly determined and documented in the collateral evaluation report or the loan file, in accordance with FCA Regulation [614.4250\(a\)\(6\)\(i\)](#), and FCA Regulation [614.4265\(c\) and \(d\)](#)?** Note that the preceding regulation states the institution should develop and document the income and debt-servicing capacity of the property and the operation. Documenting the repayment capacity of the operation only is not considered sufficient to comply with regulatory requirements.