Examiners should evaluate the Core Analysis in this section to determine whether an Expanded Analysis is necessary. Click on the hyperlinks found within each of the Core Analysis Decision Factors to reference the applicable Core Analysis Procedures.

Note: This module should be used for reviewing the asset quality of the loan portfolio. Refer to the Loan Operations Review module for evaluating loan operations and credit administration.

Do Core Analysis and Decision Factors indicate that risks are appropriately identified, measured, monitored, and controlled?

| C.1. | Are the audit or independent review functions adequate? Refer to Core Analysis Procedures #2-3, Procedures #10-11, & Procedure #61. |
| C.2. | Are information and communication systems adequate and accurate? Refer to Core Analysis Procedure #6 & Procedures #12-18. |
| C.3. | Does management accurately identify, monitor, and reserve for credit risk? Refer to Core Analysis Procedures #19-34. |
| C.4. | Is portfolio quality satisfactory, considering trends in adverse classifications and the overall risk profile? Refer to Core Analysis Procedure #7 & Procedures #35-42. |
| C.5. | Is the volume of ORE and repossessed assets manageable and the ORE portfolio adequately administered and controlled? Refer to Core Analysis Procedures #8-9, Procedures #56-59, & Procedure #62. |
| C.6. | Do the board and senior management effectively supervise this area? Refer to Core Analysis Procedure #1, Procedures #3-6, & Procedures #43-55. |
## Preliminary Review

1. Review prior examination reports, prior examination work papers, pre-examination memorandum, audit reports, and file correspondence for an overview of any previously identified lending deficiencies. In addition, determine whether there were any prior concerns related to the Allowance for Loan and Lease Losses (ALLL) (or allowance for credit losses (ACL),\(^1\) when applicable), repossessed assets, or ORE.

2. Review internal and external audit reports, and assess the adequacy of the audit scope.

3. Review internal and/or external loan review reports as well as other reports provided by third parties.

4. Discuss with management any planned changes in lending philosophy, portfolio composition, new products, pricing strategies, etc. Determine whether current and planned lending strategies are consistent with the bank's overall strategic plan.

5. Review and assess the adequacy of loan committee and board minutes.

6. Obtain and analyze data used by management to supervise the loan portfolio. This data may include:
   - Organizational charts;
   - Written policy and procedures manual;
   - Problem loans and watch list reports;
   - Delinquency and nonperforming asset reports;
   - Concentration reports;
   - Allowance for Loan and Lease Losses (ALLL) (or ACL, when applicable) analysis;
   - Significant and/or concentrations of charge-offs (by industry or types of borrowers) since the prior

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1 ACL replaces the term ALLL for those banks that adopted ASU 2016-13.
7. Review the composition of the loan portfolio by type, dollar volume, and percentage of capital. Determine whether specialty-lending areas exist and assign responsibility for completing appropriate reviews. Refer to individual Loan Reference modules for additional procedures.

8. Determine the volume of other real estate and the change in volume since the prior examination.

9. Determine the volume of repossessed assets and the change in volume since the prior examination.

**Audit or Independent Review**

10. Determine whether the audit program is sufficient to obtain reasonable assurance that:
   - Loans exist and are owned by the institution as of the balance-sheet date;
   - The level of the ALLL (or ACL, when applicable) is appropriate and is determined in accordance with generally accepted accounting principles (i.e., the ALLL (or ACL, when applicable) covers estimated credit losses on individually evaluated impaired loans and estimated credit losses inherent in the remainder of the loan portfolio);
   - Loans are properly classified, described, and disclosed in the financial statements, including fair values of loans and concentrations of risk;
   - Recorded loans include all such assets of the institution and the financial statements include all related transactions during the period;
   - Loan transactions are recorded in the proper period;
   - Loans held for sale are properly classified and are stated at the lower of cost or fair value;
   - Interest income, fees, and costs and the related balance-sheet accounts (accrued interest receivable, unearned discount, unamortized purchase premiums and discounts, and unamortized net deferred loan fees and costs) have been properly measured and recorded;
   - Gains and losses on the sale of loans have been properly measured and properly recorded; and
   - Credit commitments, letters of credit, guarantees, recourse provisions, and loans that collateralize borrowings are properly disclosed in the financial statements.

  *(Note: Coordinate with the examiners reviewing the internal audit function.)*

11. Determine whether the audit or independent review program provides sufficient coverage relative to the institution's size, scope of lending activities, and risk profile. Appropriate programs generally include:
Core Analysis

- Recommend corrective action when warranted;
- Verify that corrective action commitments have been implemented;
- Assess separation of duties, internal controls, and supervision of lending activities;
- Determine compliance with policies, procedures, and regulatory requirements; and
- Assess the adequacy, accuracy, and timeliness of reports to senior management and the board.

(Note: Coordinate with the examiners reviewing the internal audit function.)

Information and Communication Systems

12. Determine whether managerial reports provide sufficient information relative to the size and risk profile of the organization and evaluate the accuracy and timeliness of reports produced for the board and executive management. Reports may include the following types of information:
   - Analysis of the appropriateness of ALLL (or ACL, when applicable);
   - Chargeoffs and recoveries;
   - Concentrations;
   - Insider borrowings;
   - Kiting suspects;
   - Legal lending limits;
   - Loan extensions and modifications;
   - Loan renewals and new loan approvals/denials (above certain dollar amounts);
   - Non-conforming loans;
   - Non-sufficient funds;
   - Out-of-territory lending;
   - Overdrafts;
   - Participations;
   - Policy exceptions;
   - Results of internal/external audits;
   - Results of loan review;
   - Suspense accounts (contents and reconciliations);
   - Technical exceptions; and
   - Unfunded commitments.

13. Review the effectiveness and accuracy of management's system for aggregating related credit exposures.

14. Analyze growth trends by total and loan type, and determine whether actual data satisfactorily mirrors budgeted growth or strategic plans.
15. Review the accuracy of accounting for loans sold and participations. Consider partial sales and recourse arrangements.

16. Determine whether the bank’s procedures and practices for placing loans on nonaccrual status are in agreement with Call Report Instructions.

17. Determine whether the bank’s procedures and practices regarding troubled debt restructurings (TDR) are in agreement with Call Report Instructions.

18. Validate the accuracy of Consolidated Reports of Condition and Income where necessary.

Identifying, Monitoring, and Reserving for Credit Risk

LOAN REVIEW

19. Consider whether loan review practices are appropriate for the size and complexity of the bank and whether loan reviews are conducted by individuals independent from loan origination and approval processes. Appropriate loan review practices generally meet the following objectives:
   • To promptly identify loans having potential credit weaknesses, and appropriately classify loans with well-defined credit weaknesses that jeopardize repayment so that timely actions can be taken and credit losses minimized;
   • To project relevant trends which affect the collectability of the portfolio and isolate potential problem areas;
   • To provide essential information to determine the appropriateness of the ALLL (or ACL, when applicable);
   • To assess the adequacy of and adherence to internal credit policies and loan administration procedures, and to monitor compliance with relevant laws and regulations;
   • To evaluate the activities of lending personnel; and
   • To provide senior management and the board with an objective and timely assessment of the overall quality of the loan portfolio.

20. Determine whether the watch list is regularly updated by management and reviewed by the board.

21. Assess the accuracy of the loan review system and internal risk ratings. Also, review any
documentation exception reports and written classification summaries, and evaluate the scope, frequency, and timeliness of reviews and updates to the board of directors.

## Allowance for Loan and Lease Losses

**METHODOLOGY** *(When appropriate, refer to the Subprime Lending, Credit Card Activities, and TDR Reference Modules for additional information on assessing whether the level of the ALLL (or ACL, when applicable) is appropriate.)*

### 22. Assess the methodology for determining the appropriate ALLL (or ACL, when applicable) level and consider whether it includes portfolio segmentation and impairment analysis for individually evaluated loans. *(Refer to ASC Topic 450 and ASC Topic 310.)* Determine whether the complexity and scope of the ALLL (or ACL, when applicable) evaluation process and loan review system are appropriate given the risk profile of the bank and the complexity of lending activities. Consider the following:

- The effectiveness of the bank’s loan review system and controls.
- The ability of internal data-capture and loan-reporting systems to provide robust and meaningful information regarding portfolio risks.
- Management’s ability to evaluate loss-estimation models before they are implemented (when applicable) and to modify model assumptions as needed.
- The bank’s methodology is based on a comprehensive, adequately documented, and consistently applied analysis of the bank's loan and lease portfolio.
- Management promptly charges off loans, or portions of loans, that are uncollectible.
- An independent third party periodically reviews and validates the ALLL (or ACL, when applicable) methodology.

### 23. Evaluate the criteria management uses to select loans for individual evaluation under ASC Topic 310. For example, assess:

- Loans or relationships that are above dollar thresholds. If management uses a dollar threshold, assess the threshold in relation to average loan balance, concentrations, or other factors that would cause the loans to be more significant to the institution;
- Loans or relationships that are on the bank’s Watch List or that are adversely classified Substandard or Doubtful. If selection criteria do not include loans rated Substandard or Doubtful, explain the rationale for the decision; and
- Loans or relationships that are past due or on nonaccrual status.

### 24. Determine the methodology used by the institution to measure impairment on loans (within the scope of ASC Topic 310) that are individually evaluated and determined to be impaired, and consider whether the institution maintains supporting documentation for the assumptions and estimates used. Consider whether the methodology used is based on:

- The present value of expected future cash flows for individually evaluated impaired loans that are not collateral dependent;
- Observable market price for individually evaluated impaired loans that are not collateral
dependent; or
  • The fair value of collateral method.  (Note: For purposes of the Consolidated Reports of Condition and Income, the impairment of an impaired collateral dependent loan must be measured using the fair value of collateral method.)

25. Evaluate the reasonableness of and support for management’s assumptions, valuations, and judgments used in the analysis of those loans individually evaluated for impairment under ASC Topic 310 and determined to be impaired.

26. Determine how the institution treats:
  • Loans that are individually evaluated for impairment under ASC Topic 310 and are determined not to be impaired; and (Note: These individual loans should be regrouped with loans having similar risk characteristics and assessed collectively for impairment under ASC Topic 450.)
  • Individually evaluated loans that are determined to be impaired, but there is zero impairment and no allowance is established when measured for impairment under ASC Topic 310.  (Note: Examiners should determine that the bank is appropriately defining impaired loans (i.e. where collection of the full principal and interest is not expected per original contractual terms).  If a loan is being evaluated under ASC Topic 310 but is not impaired by definition, it should instead be included in the ASC Topic 450 evaluation.  Once a loan is determined to be impaired and is measured for impairment under ASC Topic 310, it cannot be included in a group of loans collectively assessed for impairment under ASC Topic 450, even if no ASC Topic 310 allowance is established.)

27. Determine the basis for evaluating groups of loans under ASC Topic 450.
  • Ensure that assets are adequately stratified into groups based on one or more predominant risk characteristic.
  • Evaluate the calculation of historical loss rates for each segment.
    o Review the time period and the method of calculation (e.g., simple average, weighted average) for reasonableness and consistency.
    o Consider the effect of new loan products or newly expanded markets.  (Note: Historical loss rates for a general segment may not be accurate for new products, or loans in a new market, that are included within the general segment.)
  • Consider how segmentation methods and historical loss-rate calculations reflect qualitative or environmental factors necessary to reflect current conditions and expectations.

(Note: Adjustments for qualitative or environmental factors, which may be positive or negative, should be made to reflect current conditions and expectations if not otherwise captured in historical loss analysis.  The granularity of segmentation and the method used to calculate loss rates would affect the amount of adjustment, if any, necessary to appropriately estimate credit losses in a segment as of the evaluation date.  For example, a loss rate calculated using a simple five-year average may require a larger adjustment in response to changes in the credit cycle than would a loss rate calculated using a recently weighted quarterly average.)
28. Determine whether management considers all relevant qualitative and environmental factors and
maintains documentation sufficient to support all material adjustments. Appropriate documentation
generally addresses all material factors that are likely to cause estimated losses to differ from historical
losses. Qualitative or environmental factors include, but are not limited to:
- Changes in lending policies and procedures, such as underwriting standards and collection, charge-
  off, and recovery practices;
- Changes in national and local economic business conditions and developments, including the
  condition of various market segments; (Note: Credit-loss and recovery experience may vary
  significantly depending upon the business cycle.)
- Changes in the nature and volume of the portfolio and in the terms of loans;
- Changes in the experience, ability, and depth of lending management and staff;
- Changes in the volume and severity of past due and adversely classified loans and in the volume of
  nonaccrual loans;
- Changes in the quality of the loan review system;
- Changes in the value of underlying collateral for collateral-dependent loans;
- The existence, level, and effect of any concentrations of credit; and
- The effect of external factors such as competition or legal and regulatory requirements.

29. Determine how the institution estimates credit losses on a group of loans with similar risk
characteristics when the institution does not have any loss experience of its own for such a loan group.
(Note: An institution may not have a loss history if the product is new or the institution is a de novo
organization).

30. Confirm that the bank does not include loans that were determined to be impaired and measured for
impairment under ASC 310 in the estimated credit losses under ASC 450, even if the ASC 310
impairment measurement was zero.

31. Determine whether the bank has an unallocated allowance for loan and lease losses. If so, determine
whether it was calculated in accordance with GAAP and is properly documented and supported.

32. Where appropriate, ensure that the assessment of an appropriate level for the ALLL (or ACL, when
applicable) includes an estimate of losses from transfer risk associated with the institution’s cross-
border lending activities.
33. Determine whether the ALLL (or ACL, when applicable) evaluation process is completed at least quarterly and ensure that appropriate documentation is maintained to support management’s assumptions, valuations, and judgments. (Refer to the 2001 Final Interagency Policy Statement on ALLL Methodologies and Documentation for Banks and Savings Institutions; and the 2006 Interagency Policy Statement on ALLL.)

### LEVEL OF THE ALLL (or ACL, when applicable)

34. Evaluate the overall level of the ALLL (or ACL, when applicable) for appropriateness and reasonableness.

- Determine whether the ALLL (or ACL, when applicable) is at an appropriate level based on a review of the bank’s methodology coupled with examination findings as they relate to:
  - Loan classifications;
  - Effectiveness and reliability of the bank’s loan review system including differences in level and severity of examiner classifications and that of Watch List Loans (internally classified loans);
  - Level and trend of past due and nonaccrual loans (reserve levels should normally be proportionately and directionally consistent with the level and trend of problem loans as reflected in examination classifications), internal watch list ratings;
  - Historical recovery of loan charge-offs; and
  - Changes in the business cycle that necessitate qualitative or environmental factor adjustments to the institution’s historical loss rates.

- Consider reviewing applicable ratios as a preliminary check on the reasonableness of the ALLL (or ACL, when applicable). *(Note: Ratio analysis, when used prudently, can be a supplemental check on the reasonableness of management’s assumptions and analysis. It is not a sufficient basis for determining an appropriate level for the ALLL (or ACL, when applicable).)*
  - Evaluate trends as compared to an institution’s peer group and its own historical experience. For example, the relationship of the ALLL (or ACL, when applicable) to adversely classified or graded loans, past due and nonaccrual loans, as well as historical gross and net charge-offs.
  - Analyze changes in key ratios from prior periods, assess the directional consistency of the ALLL (or ACL, when applicable) in relation to these changes, and assess the appropriateness and reasonableness of the ALLL (or ACL, when applicable) based on the collectability of the institution’s loan portfolio in the current environment.

- If the bank’s loan review system is effective and its method for determining an appropriate ALLL (or ACL, when applicable) level is acceptable, compare the result of the bank’s methodology to the actual ALLL (or ACL, when applicable) balance. Ensure that the ALLL (or ACL, when applicable) amount reported in the institution’s regulatory reports and financial statements reconciles to the ALLL (or ACL, when applicable) analysis. Assess the reasons for any material differences.

- Assess management’s estimated credit losses, and if necessary, consider the need for additional provision expenses based on examination findings. Consider the following:
  - The bank’s loan review system is substantially inaccurate, or
  - The bank is lending in stressed market conditions,
  - Credit administration weaknesses have not been timely identified or addressed, or
  - Examination results reflect significant loan quality deterioration.
## Core Analysis

### Portfolio Quality

35. Evaluate loan commitments, letters of credit, and other contingent liabilities for creditworthiness.

36. Review overdraft protection, large items, uncollected funds, and check kiting reports for irregular activity. Pay particular attention to overdrafts of bank insiders and insiders of other banks.

37. Evaluate the current level and trend of past due ratios for each type of credit and determine which loan categories pose elevated risk.

38. Review and analyze purchased loan participations for appropriate accounting* treatment, due diligence, creditworthiness, underwriting quality, and recourse provisions. Consider:
   - Whether these credits are internally classified at the originating bank or other participation holders (when the information is available); and
   - Whether these credits are adversely classified in regulatory examination reports at the originating bank and other participation holders. *(Note: This information cannot be shared with management.)*

   *Refer to the definition of Transfers of Financial Assets in the Call Report Glossary for additional information.*

39. If the bank has acquired other institutions or loan portfolios, analyze the effect these purchases have had on the bank's portfolio composition and risk profile.

40. Determine whether it appears any loans were sold prior to the examination to another bank or to the holding company to avoid criticism by examiners.

41. Determine whether the bank has any borrowing relationships that qualify as Shared National Credits and assign classifications accordingly.

42. Evaluate the level and trend of classified loans and its effect on the bank’s credit risk profile.
### Managerial Effectiveness

**PROCEDURES AND PRACTICES**

43. Determine whether loan and executive officers consistently follow the bank’s lending policies and practices.

44. Review the bank's loan approval process and determine whether loan presentations include an adequate analysis of the following items:
   - Loan purpose;
   - Repayment sources and cash flows;
   - Collateral;
   - Background of borrower;
   - Principals and management;
   - Financial information including balance sheet and income statement;
   - Financial projections;
   - Industry and economic outlooks, including real estate trends;
   - Borrowing and deposit histories;
   - Loan structure, terms, and covenants; and
   - Justification for policy exceptions.

45. Determine whether the bank's financial analysis of borrowers is adequate in relation to the size and complexity of the debt.
   - Review financial analysis for appropriate financial ratios, trends, cash flow history, and projections sufficient to determine the financing needs and repayment capacity of the borrower.
   - Assess whether the bank's credit assessment includes a review of a credit reports to identify other outstanding debts or contingent liabilities.
   - Assess whether the bank's review evaluates important items such as salaries, fees, dividends, notes and accounts receivable, and notes and accounts payable, including those to insiders.
   - Determine whether significant balance sheet and income statement changes are properly explained and whether the bank identifies and reviews contingent liabilities.
   - Evaluate the bank's comparison of actual results to projected performance.
   - Consider the prospects for support from any financially responsible guarantors, with emphasis on excess liquidity, cash flow, and demonstrated willingness to honor guaranty agreements.

46. Determine whether management utilizes financial and reporting covenants. If so, evaluate how covenants are tracked and enforced.
APPLICABLE LAWS AND REGULATIONS

47. Determine the bank’s regulatory and internal lending limits, and ascertain the bank's compliance with the limits.

48. Review transactions with affiliates for compliance with Section 23A of the Federal Reserve Act. (Note: 12 U.S.C. 371 (c) defines covered transactions; sets quality, terms, and collateral requirements; and places aggregate limits on such activities.)

49. Review extensions of credit to insiders for compliance with FRB Regulation O.

50. Review the bank's compliance with the anti-tying provisions of Section 106(b) of the Bank Holding Company Act Amendments of 1970 (12 U.S.C.1972),which prohibits extensions of credit that are conditioned upon the borrower obtaining or providing any additional credit, property or service to or from the bank or its holding company.

51. Determine whether the bank complies with applicable laws and regulations for loans secured by stock. Items to consider include:
- Loans secured by the bank's own stock; (Note: 12 U.S.C.83, Section 5201 of the Revised Statutes and Section 9 of the Federal Reserve Act prohibit a bank from making a loan secured by its own stock.)
- Loans for the purpose of purchasing or carrying margin stock; and (Note: If secured directly or indirectly by margin stock, Federal Reserve Board’s Regulation U is applicable.)
- Determine that the institution is familiar with the Lost and Stolen Securities program (SEC Rule 240.17f1) and has taken the appropriate measures to minimize exposure on loans secured by stock. Refer to the securities information center webpage for further guidance.

52. Review and assess the bank's compliance with applicable real estate lending and appraisal regulations.

CREDIT ADMINISTRATION

53. Assess the adequacy of management's actions to correct criticisms noted in the previous examination report, most recent loan review reports, as well as in recent internal and external audits.
54. Evaluate management's effectiveness at reacting to changing economic, industry, and regulatory environments.

55. Evaluate the membership composition of the loan committee. Determine whether members are independent and qualified to function effectively.

Other Loan Related Items

OTHER REAL ESTATE (ORE)

56. Determine whether ORE files are adequately documented. Consider the following:

- Evidence of ownership;
- Book value (current and at the time of acquisition);
- Appropriateness of capitalized costs, if any;
- Current outside appraisal or internal valuation;
- Analysis of cost to carry (break-even analysis);
- Formal purchase offers (if applicable);
- Sales efforts or listing agreements;
- Current hazard and liability insurance;
- Receipt evidencing payment of RE taxes; and
- Disposal of the parcel (who, when, how), if applicable.

57. Determine the appropriateness of ORE accounting procedures, carrying values, and dispositions. Consider the following:

- Appropriateness of initial recording of ORE at fair value less cost to sell, which becomes the cost basis of the ORE;
- Prior liens, including recording such liens as liabilities;
- Appropriateness of accounting for ORE after acquisition at lower of cost or fair value less cost to sell, including the use of a property-specific valuation allowance for any decline in fair value less cost to sell below cost;
- Appropriateness of rental income and expense entries;
- Appropriate review of expenses;
- Adequacy of appraisal or evaluation;
- Environmental concerns; and
- Holding period in compliance with state laws.
58. Evaluate the quality of the portfolio and classify parcels accordingly.

REPOSSESSED ASSETS

59. Determine the appropriateness of repossessed asset accounting policies, carrying values, holding periods, and dispositions. Classify as necessary.

NON-LEDGER ASSETS

60. Determine whether appropriate approval authorities and levels of review are in place given the volume and magnitude of chargeoffs.

61. Ascertain whether the audit practices are sufficient given the volume and magnitude of charge-offs.
   - The audit program should determine the validity/existence of charged-off assets by physical inspection of items held at the bank or by direct confirmation with persons who have possession of them outside of the bank (e.g., attorneys or collection agents).
   - The validity of charged-off items should also be tested, with particular attention given to possibly fictitious loans that were charged-off. Methods of authenticating the validity of charged-off items include:
     - Direct confirmation with borrowers,
     - Evidence of personal contact with the borrower by persons other than the loan officer regarding borrowing relationship,
     - Verification through bank records that the borrower received the loan proceeds, and
     - Verification through non-bank records such as telephone and city directories that the borrower may exist.
   - The auditor may choose to confirm all charge-offs of more than a certain size or may prefer to confirm a statistical sample of all charges over a certain amount.

   *(Note: Coordinate with the examiners reviewing the internal audit function.)*

62. Determine that appropriate efforts are being made to collect charged off assets.

End of Core Analysis. If needed, Continue to the Expanded and Impact Analyses.