The following comprehensive examination procedures address the examination and supervisory concerns discussed in the February 25, 2003, Interagency Advisory on Mortgage Banking and in SR-03-4. The procedures incorporate and consolidate that supervisory and examination guidance, examination modules, and the Federal Reserve's mortgage banking inspection procedures found in section 3070.0 of the *Bank Holding Company Supervision Manual*. See SR-97-21, "Risk Management and Capital Adequacy of Exposures Arising from Secondary Market Credit Activities." See this manual's section 2070.1 on the "Allowance for Loan and Lease Losses," with particular reference to the subsections on "Estimated Credit Losses in Credit Related Accounts" and the "Interagency Policy Statement on the Allowance for Loan and Lease Losses." In addition, see SR-05-10, "Accounting and Reporting for Commitments to Originate and Sell Mortgage Loans," and this manual's sections 2040.1, 2040.2, and 2040.3. Collectively, this guidance focuses on determining the level of risk associated with banks that originate and sell loans, and the appropriate risk-management practices that may be used to mitigate those risks. The following comprehensive procedures are organized according to the typical structure of a banking organization and its primary activities.

PRELIMINARY REVIEW AND ASSESSMENT

1. Perform the following preliminary examination review procedures.
   a. Review the following reports and documentation:
      - internal auditors' reports
      - the most recent external audit report and management letter, and management's response to criticisms and recommendations
      - government-sponsored agencies' reports and significant private investors' reports, if available
      - internal memoranda and management reports on the mortgage banking unit prepared since the previous examination

   b. Briefly review information about the mortgage banking entity's financial performance to gain a basic understanding of its assets, liabilities, and profitability.
2. Review the types of products offered and markets targeted by the bank's mortgage banking entity.
   a. Ascertain whether the entity has an overreliance on one product type or if it relies on a few large geographic concentrations.
   b. Determine if the entity has made any material changes in its types of products, underwriting criteria, production and servicing volumes, and market focus.
3. Review the findings of the external and internal auditors, the quality-control unit, and any other reviews, including any reviews conducted by independent investors, other governmental agencies, and quasi-governmental investor or guarantor agencies (all those audits and reviews conducted since the previous examination). Note the level of compliance with various internal controls and quality controls as well as compliance with established limits and controls on lending, securitization, and hedging activities.
   a. On the basis of this examination review, make a preliminary determination about the current volume and level of risk (that is, credit risk (borrower and counterparty risk), market risk (pipeline, interest-rate, trading, price, prepayment, hedging, and foreign-exchange risks), liquidity—funding, operational, and legal risk (compliance, strategic, and contingency risks), and reputational risk.
   b. Assess the adequacy of risk management and the level and direction of composite risk for significant activities.
   c. Determine the scope and focus of the examination of mortgage banking operations, transactions, and activities.
4. Develop a preliminary assessment of the financial impact of the mortgage banking entity's operations, transactions, activities, and most significant risks on the bank's current financial condition, liquidity, earnings, and capital.

BOARD AND SENIOR MANAGEMENT OVERSIGHT

Board of Directors

1. Review the biographies of the members of the board of directors and review the board's and board committees' meeting minutes. Determine whether the directors have the necessary education and experience to fulfill their fiduciary responsibilities.
2. Assemble and review several of the most recent informational packages that were provided to the directors before their scheduled meetings. Find out if the directors receive sufficient detailed information to make informed judgments about the financial condition, internal controls, and risk-management controls and procedures of the mortgage banking entity.
3. Ascertain whether the board of directors is fulfilling its fiduciary responsibilities in business planning, approving operating policies, hiring competent management, and overseeing business performance.

Management

4. With respect to senior management, determine—
   a. if detailed policies and procedures are in place to monitor and control mortgage banking activities involving loan production (including origination, underwriting, closing, and wholesale and correspondent lending activities), pipeline (unclosed loans) and warehouse (closed loans) administration, secondary-market (selling, recourse, and servicing) transactions, servicing operations, and management (including hedging) of mortgage-servicing assets; and
   b. if the reports and limits focus on key risks, profitability, and proper accounting practices.
5. Review the biographies of executive management.
   a. Determine if the level of experience, education, technical knowledge, leadership skills, expertise, and administrative capabilities of management is sufficient for overseeing the mortgage banking operations.
   b. Determine whether senior management's salaries are commensurate with the biographical information provided.
   c. Determine if management's depth and succession plans are adequate.
6. Determine if a separate board committee for mortgage banking activities exists. If so, review the committee's minutes for significant approvals for transactions, activities, and other authorized actions.
7. Determine if the directors, management, and auditors are adequately evaluating, monitoring, and maintaining internal controls over the valuation and modeling processes, the most significant risks and their respective hedging activities, management information systems, and the internal audit function.
8. Review the mortgage banking strategic plan and planning process. Determine if the goals are reasonable, attainable, and complement the bank's overall business plan.
9. Evaluate the documentation of the planning process, including the most recent operating budget, the business plan, and the related performance measurement system reports. Determine whether the objectives, goals, and growth targets are reasonable and properly aligned with achievable performance levels.
10. Determine if adequate disaster-recovery and contingency plans exist to address the mortgage banking entity's primary risks.

Policies and Procedures

11. Review and evaluate the quality and effectiveness of the bank's mortgage banking policies and procedures within each of the functional internal control areas. Also evaluate the extent to which compliance is achieved, monitored, and reported in the following areas, among others:
    a. defined permissible mortgage banking activities
    b. the responsibilities designated to individual officers and employees
    c. lending limits
    d. segregation of duties
12. Determine if the bank's policies, procedures, and strategies within other functional areas consider mortgage banking activities. Consult with those examiners reviewing the other functional areas and coordinate your findings with them.

13. Investigate why any identified policy and procedure deficiencies exist. Discuss with management any recommendations for correcting deficiencies. Ascertain whether—
    a. management overlooked the needed policies and procedures,
    b. management is unfamiliar with prudent mortgage banking guidelines and procedures, or
    c. management is unwilling to create or enhance policies and procedures.
14. If there is lack of compliance with policies and procedures, determine whether the reasons are the result of a—
    a. lack of awareness of the existence of the policies,
    b. disregard for the established policies,

c. misunderstanding of the intent of policy guidelines, or
d. a poor internal process for communicating any revisions to the policies and procedures.

15. Determine if management commits to and supports proper controls and monitoring to ensure that policy guidelines will be adhered to in the future.

INTERNAL AUDIT OR INDEPENDENT REVIEW, EXTERNAL AUDIT, INTERNAL CONTROLS, AND QUALITY CONTROL

1. Review the findings of the internal and external audits, quality-control reports, and investor audits to find out if the internal controls are functioning effectively.

Internal Audit or Independent Review

2. Determine whether a separate and independent internal audit function exists and if each internal auditor is independent.
3. Review and assess the qualifications of the internal audit manager and the internal audit staff for mortgage banking, including their accounting and auditing expertise. When making the assessment, consider the department's size; the complexity of its operations and activities; the quality of ongoing staff-training programs; and the staff's experience, education, and certification levels in relation to the volume of existing risk exposures.
4. Determine if, since the previous examination—
   a. the scope and frequency of the most recent audits and independent reviews were adequate to identify policy, reporting, and internal control deficiencies and all areas of high or significant risk; and
   b. the audit schedule or plan and coverage included a review of the underwriting practices and other high-risk areas of the mortgage unit or entity.
5. Review all internal audits, internal audit follow-up reports, and management responses to the auditors' findings that were issued since the previous examination.
   a. Select a significant sample of the workpapers from the audits for the bank's high-risk mortgage banking operations and activities. Conduct an intensive review of those phases of the internal audits.
   b. Ascertain whether all significant issues and exceptions were brought forward to the final audit report, that the report was promptly presented to the board of directors or its designated audit committee, and whether the cited significant problems or control weaknesses received appropriate and prompt management attention and correction.
   c. Evaluate the system internal audit uses to follow up on unresolved issues or problems.
6. Assess the adequacy of the reviews of mortgage-servicing assets that were conducted by internal audit or quality control or by independent reviews.
7. Determine if the internal audit or quality-control programs cover compliance with state and federal laws, generally accepted accounting principles, and investor requirements (including minimum capital requirements).
   a. Interview those responsible for monitoring compliance and find out the nature of outstanding problems and issues.
   b. Assess the adequacy and extent of the correction of the problems and issues.
8. Review any high-risk transactions or activities conducted since the previous examination that were not adequately addressed during the internal audit or independent review.
9. Investigate any remaining identified internal audit or independent-review deficiencies that have occurred since the previous examination.

External Audit

10. Review, follow, and apply the examination guidance on the review of external auditing programs that is found in the Interagency Policy Statement on External Auditing Programs of Banks and Savings Associations. In addition, follow the examination guidance in part IV of the Policy Statement on the External Audit Function, adopted May 17, 2003. (For both policies, see section 1010.1.)

11. Review the engagement letters for the external audits performed since the previous examination.
    a. Determine the extent of the external auditor's scope and responsibilities and the extent to which the external auditors relied on the findings of the internal auditors.
    b. Verify that the external auditor's report included an unqualified opinion on the bank's (and also the mortgage banking entity's) financial condition and on the results of the bank's (or mortgage banking entity's) operations. If a qualified opinion was issued, review and investigate any cited internal control or other significant weaknesses or risks.
    c. Review the notes to the financial statements and determine if all required disclosures were made.
12. Review and determine the adequacy of the workpapers supporting the external audits performed since the previous examination.
    a. On the basis of the nature and extent of the audit work performed, management's representations and responses to management letters, and the results of the audit, determine if there were any audit weaknesses or any cited unusual items, practices, or weaknesses in internal control and other areas of concern.
    b. Investigate the nature and status of any of the uncorrected items (and the respective management responses) with the external auditor and the audit committee. In particular, review and discuss any items that were considered to be material or high risk in relation to the mortgage banking entity's size and complexity of operations.
    c. Determine whether the scope of any phase of the external audits conducted since the previous examination needs additional examination scrutiny or needs to be expanded to address unresolved significant concerns, problems, or risks (in particular, for the examination and other concerns listed in section 2040.1).
13. Find out and investigate the reasons for any recent or frequent changes in the external auditors who perform audits of the bank, including the mortgage banking entity. If significant, discuss those reasons with the audit committee and the lead or managing external auditor.

Internal Controls

14. Determine if management establishes and implements an effective, high-quality internal control program that identifies, controls, and minimizes significant risks. Verify that the internal control program includes internal and external audits, accounting controls, loan-quality controls, and internal control procedures for all activities of the mortgage banking entity's operations; insurance coverage; and fraud detection. Determine if the program is reviewed annually.
15. Determine and evaluate the nature of the internal control environment and how risk parameters (limits) are communicated to employees within the mortgage banking entity.
16. Evaluate the internal control process for granting exceptions to the bank's policies and procedures.
17. Find out if internal control procedures exist to—
    a. control legal risk (guarding against material insurance claims, class-action lawsuits, etc.);
    b. detect fraud, investigate suspected fraudulent activity, and ensure the filing of criminal referrals; and
    c. ensure the issuance of appropriate management reports.

Quality Control

Quality control implements a system of internal controls that provides management with an opportunity to examine and, if necessary, adjust its policies and procedures. It comprises a system of internal controls that sets standards, measures performance, and determines compliance with applicable legal, federal-agency, and investor requirements. Quality control also provides for the timely correction of deficiencies when they are identified.

18. Ascertain whether the bank's mortgage banking entity has a quality-control unit that is independent of the production function.
    a. Determine if the quality-control unit is organized to (1) promote efficiency, (2) prevent costly errors that could drain profits, (3) ensure that standardized policies and procedures are known and

adhered to, (4) verify that policies and procedures are revised on a timely basis, (5) ensure that employees are held accountable for failures, and (6) ensure that procedures exist to facilitate the expansion of the internal audit function when needed.

b. Ascertain whether quality control evaluates the quality of loans originated or purchased (this evaluation is usually required by investors). Verify that the quality-control program ensures that all loans are originated, processed, underwritten, closed, and serviced according to the bank's internal lending policy and investors' standards and criteria.

19. Determine if the quality-control program meets varying investor guidelines.
    a. Verify that the quality-control program covers both retail and wholesale loan production.
    b. If certain investors require 10 percent of closed loans to be reviewed, find out if the reviews are conducted within 90 days of closing.
20. Find out if any of the quality-control-review activities are outsourced and if they are outsourced in compliance with the bank's quality-control standards.
21. Review a sample of reports the quality-control unit has issued since the previous examination. Determine if the review coverage was adequate and if the unit's findings were correct and appropriate.
22. Determine if the quality-control findings are clearly documented and promptly presented to the board of directors and senior management. Determine whether the directors and senior management follow up on the findings and oversee their timely resolution.
23. If any of the quality-control loan reviews disclosed significant risk, deficiencies, and areas of concern that have arisen since the previous examination, determine (1) if management's responses were reasonable and appropriate and (2) if the problems cited were promptly corrected or resolved.
24. Determine if any of the quality-control findings or areas of concern were addressed by the internal or external auditors. Review the auditors' workpapers pertaining to any reported significant and persistent problems or areas of concern.

ACCOUNTING

Held for Sale

1. Determine if, at the time a loan is transferred to the held-for-sale account, there was (1) any reduction recorded for the loan's cost in excess of its fair value, resulting in a new cost basis, and (2) a corresponding reduction in the allowance for loan and lease losses (ALLL). If a reduction was not recorded for a loan's cost in excess of its fair value in the ALLL, determine whether there was an additional loan-loss provision recorded to maintain the ALLL at an adequate level.
2. Determine if assets held for sale are segregated from portfolio loans, revalued at each subsequent reporting date until sold, and then reported at the lower of cost or fair value, as required by Statement of Financial Accounting Standards No. 115 (FAS 115), as amended by Statement of Financial Accounting Standards No. 140 (FAS 140).
3. Determine if loans and other assets that are transferred to the held-for-sale account are being revalued at each subsequent reporting date until sold and whether they are reported at the lower of cost or fair value.
4. Determine if warehoused assets held for sale are segregated from portfolio mortgages. Determine if assets held for sale are recorded on the books at the lower of cost or fair value in accordance with FAS 115 (as amended by FAS 140). If the cost of the assets exceeds fair value, determine if the excess is accounted for as a valuation allowance and that there is no ALLL for assets held for sale.
   a. Verify that assets transferred from the warehouse to the permanent portfolio are being revalued at each subsequent reporting date until sold. Verify that the asset transfers are reported at the lower of cost or fair value.
   b. Determine if warehouse loans are accurately recorded in the general ledger and in the bank's financial statements and reports of condition.
5. Determine if any declines in loan value (including those attributable to changes in credit quality) and loan recoveries on such declines in value occur after the loans are transferred to the held-for-sale account. Find

out if declines or recoveries are accounted for as increases or decreases in a valuation allowance for loans held for sale and not as adjustments to the ALLL.
   a. Confirm that changes in the valuation allowance are being reported in current earnings and that the valuation allowance for held-for-sale loans is not being reduced below zero (that is, the allowance cannot have a debit balance).
   b. Verify that valuation allowances are not being reported as part of the ALLL and that the valuation allowances are not included in tier 2 capital for risk-based capital purposes.
6. When the income or expense amounts relating to increases or decreases in the valuation allowance are material, ascertain, for financial reporting purposes, that the income and expense amounts are separately disclosed and appropriately described either on the face of the income statement or in the notes to financial statements.

Held to Maturity

7. Determine if held-to-maturity debt securities are reported at amortized cost (paragraph 7 of FAS 115, as amended by FAS 140) in the statement of financial position only when the bank ensures its positive intent and ability to hold those securities to maturity.
8. Ascertain that the carrying value of assets held to maturity is adjusted to reflect the use of futures or forwards as bona fide hedges according to Statement of Financial Accounting Standards No. 133 (FAS 133), "Accounting for Derivative Instruments and Hedging Activities," as amended by Statement of Financial Accounting Standards No. 138 (FAS 138), "Accounting for Certain Derivative Instruments and Certain Hedging Activities." Determine if there is similar accounting treatment for firm commitments.
9. Determine if transfers from the warehouse to the permanent portfolio are accounted for at fair value.

Mortgage-Servicing Assets

10. Determine whether purchased or assumed mortgage-servicing assets and liabilities are initially measured at fair value (presumptively, the price paid).
11. Find out if mortgage-servicing assets or liabilities are amortized in proportion to and over the period of estimated net servicing income (servicing revenue in excess of servicing costs) or net servicing loss (servicing costs in excess of servicing revenue).
12. Determine if the notes to the financial statements disclose the following information on mortgage-servicing assets and liabilities:
    a. the amounts of servicing assets and liabilities recognized during the period (including the amount of mortgage-servicing assets (MSAs) purchased)
    b. the lower of the amortized cost or fair value of the recognized servicing assets and liabilities and the method and significant assumptions used
    c. the method and amount of amortization for the reporting period
    d. reasons for not estimating the fair value of MSAs and mortgage loans without MSAs
    e. the risk characteristics of the underlying financial assets used to stratify recognized servicing assets for the purposes of measuring impairment
    f. the activity in any valuation allowance for impairment of recognized servicing assets—including beginning and ending balances, aggregate additions charged and reductions credited to operations, and aggregate write-downs charged against the allowances—for each period for which results of operations are present

Loan-Origination, Loan-Commitment, and Other Fees

13. Determine if management defers loan-origination fees (also points, placement fees, commitment fees, application fees, management fees, restructuring fees, and syndication fees), net of their costs over the remaining lives of their related loans or group of loans, as an adjustment of yield in accordance with Statement of Financial Accounting Standards No. 91 (FAS 91), generally using the interest method, which is based on the loans' contractual terms.

14. If a commitment expires unexercised, determine if the commitment fees are recognized as income upon the expiration of the commitment.

MANAGEMENT INFORMATION AND COMMUNICATION SYSTEMS

1. Assess whether the management information system (MIS) has the capacity to handle existing volume and activities as well as projected strategies and objectives.
2. Determine if the MIS is capable of producing all necessary reports. Ascertain whether the reports—
   a. identify closed loans as either held-to-maturity or held-for-sale;
   b. segregate loans by product type and identify the dollar amount and percentage of total loans for each type;
   c. monitor the volume of loan applications throughout the origination process;
   d. identify the applications accepted, outstanding commitments and their delivery status, the effectiveness of hedges, and the historical fallout rates for specific loan categories;
   e. monitor the status of the delivery of commitments to investors and the effectiveness of hedges; and
   f. reflect the mortgage banking entity's daily position, including pipeline commitments, warehouse inventory, and forward sales contracts.
3. Assess the quality of reports that are presented to the board of directors. Determine whether the reports include or convey the following information in sufficient detail, given the size and complexity of the department:
   a. liquidity and capital needs
   b. various rate-shock scenarios and risk exposures
   c. hedging activities, including products, results, and strategies
   d. analyses of fair (mark-to-market) values, including the assumptions and documentation supporting those values
   e. operating results, including profitability, efficiency, and cost information
   f. asset-quality trends, including delinquencies, charge-offs, foreclosures, and collection accounts
   g. production volume
   h. inventory or warehouse aging (how long loans are in the warehouse or their turnover rate)
   i. industry and peer-group performance statistics
   j. policy, operating-procedure, and credit-quality exception reports
   k. quality-control reports that discuss the analytical review of credit quality, loan characteristics and demographics, trends, and sources of problems (such as a deterioration in production quality and salability or weaknesses in internal controls that may not detect fraudulent activities)
   l. processing backlogs
   m. internal and external audit assessments of the effectiveness of the control procedures
4. Determine why management and board reports are deficient. Obtain management's responses to and the corrective actions taken for the deficiencies. Determine the causes for the deficient reports and whether any of the deficiencies stem from the following circumstances:
   a. The reports contain inaccurate information, and the input and output of information has not been tested.
   b. The necessary reports cannot be or are not generated.
   c. Management is unfamiliar with the information system's capabilities.
   d. Management is unfamiliar with the necessary monitoring of the reports.
5. Review investor-reporting requirements and determine the quality and extent of compliance with those reporting requirements. Investor reporting may vary depending on the servicing contracts in place, but typically the servicing bank is responsible for the following information:
   a. detailed account reconciliations
   b. information on the mortgagor's name, principal balance outstanding, and escrow balance
   c. payment status and any foreclosure activity or transfers to the servicer's other real estate owned (OREO) account

PRODUCTION

1. Review the guidelines for the loan-production area and determine if the guidelines address the following areas:

a. types of loans that will be originated or purchased
b. sources from which the loans will be acquired, including sources from the Internet
c. underwriting standards, concentrations of credit, production channels, and production strategies
d. documentation requirements

2. Review organization charts to determine the structure of the production function. Verify that the functional units such as pipeline entry, processing, underwriting, closing, and funding are independent from one another.
3. Find out the types of mortgage products offered, the actual product mix, and the nature of the bank's targeted markets. Evaluate portfolio trends with respect to any product, geographical income, or demographic or other higher-risk concentration.
4. Ascertain whether operations risk has increased because of high management and staff turnover, an inability to meet investor-documentation requirements, an increase in the number of pools that have not received final certification, an unusually high cost structure, workloads that exceed capacity, and an increased loan delinquency.
5. Find out whether the board has approved and management uses predetermined risk-tolerance levels. Evaluate whether credit risk (recourse and nonrecourse), interest-rate risk, or liquidity risk has increased because of operational inefficiencies and an inability to sell loans in the secondary market.
6. Ascertain the nature of the mortgage banking entity's credit culture, compensation methods, and growth targets. Determine whether credit quality is weakened by an emphasis on income compensation versus loan volumes, aggressive or inappropriate lending strategies, relaxed credit standards, low documentation requirements, limited production channels, or geographic concentrations.
7. Determine the level of and the reasons for nonconforming or unsalable loans and whether they present an undue level of risk. Determine whether the delinquency trends of such loans are being adequately monitored.
   a. Ascertain how prices are determined.
   b. Determine if the pricing strategy is typically at, above, or below fair (market) value.
   c. Assess the impact that pricing strategies have on current and future profitability.
8. Determine the frequency of price changes for retail, wholesale, and broker channels by reviewing historical price sheets. Evaluate the timing of changes relative to significant market interest-rate movements.
9. Find out if the secondary marketing manager determines any new product's marketability and pricing strategy. Determine if the marketing manager overly influences the bank's ability to price, deliver, and service the product.

Origination and Underwriting

10. Review the policies and procedures for loan originations.
    a. Determine if the originators' compensation is highly dependent on loan volume and if that sacrifices loan quality.
    b. Find out if originators can alter established pricing parameters set by the secondary marketing unit.
    c. To ensure objectivity, verify that the underwriting unit does not report to production-function management.
11. Review the qualification levels of underwriters (their education, experience, training, and certification credentials).
12. Determine the methods used to evaluate loan originations.
    a. Review the compensation programs of the bank's mortgage banking entity. Determine if the compensation program is based on normal loan-origination volumes and on qualitative factors such as loan quality and fully completed applications (including the documentation on liens, adequate values of collateral, and thorough documentation of the applicant's financial information that supports the originator's determination that the potential borrower has the financial capacity to repay the loan).
    b. Find out if management holds originators accountable for weak loan quality and credit risk.
13. Determine if adequate control processes are in place for front-end and post-closing loan documents. Find out if the processing activities are controlled through the use

of standardized procedures, checklists, and systems.

14. Review a representative sample (that is, a statistical sample) of current loans to test the underwriting policies and procedures. Determine the validity and adequacy of documentation supporting loans held for sale or investment.
15. Determine whether notifications to management on withdrawn mortgage applications are sufficient to allow for proper hedging strategies.
16. Determine how management monitors originators' adherence to underwriting and investor guidelines.
17. If underwriting is performed in-house, determine if management establishes, reviews, and monitors approval limits, exception standards, and documentation procedures for loans that are rejected or suspended. Find out if management receives and reviews adequate current reports tracking the quality of loans for each underwriter.
18. If a scoring underwriting system is used, review the credit scoring methodology and determine if the system can be overridden and by whom.

Overages

An overage exists when a lender permits an originator or a broker to impose a higher number of points (or a higher interest rate) on a loan to certain borrowers than is imposed for the same product offered to other borrowers at a given point in time. The amount of overage that is received is usually shared between the mortgage banking entity (the originator) and the broker. Overages are often referred to as *yield-spread premiums* (YSPs).

19. If the bank's mortgage banking entity is involved in overage activities, determine if management has developed comprehensive policies and procedures, detailed documentation and tracking reports, accurate financial reporting systems and controls, and comprehensive customer complaint tracking systems to adequately monitor and supervise overage activities.
20. Since the previous examination, determine if overage activities are an essential component of the mortgage banking entity's earnings. Find out the percentage of originations that resulted in overages and the average overage per loan.
21. Ascertain whether overages are a major component of loan officer or broker compensation.
22. Determine whether overages were reviewed during the last consumer compliance fair lending examination and whether any recommendations were made regarding overage activities.

Closing

23. Evaluate procedures for closing loans. Ascertain whether adequate analyses are prepared and if any allowances are established for estimated probable losses arising from documentation deficiencies on closed loans.
24. Determine if management requires that necessary and required documents be obtained and properly signed before funds are released.
25. Evaluate management's controls over the loan-funding process.
26. Assess management's plans for funding originations during peak volume periods.
27. Determine if a post-closing documentation-review process exists to differentiate, track, and obtain both trailing and missing documents.

Wholesale and Correspondent Loan Production

28. Determine if the bank has adequate control processes in place to monitor and manage the risks associated with purchasing third-party-originated loans and approvals (controls include management's close supervision of underwriting that is delegated to brokers or correspondents).
    a. Find out if the bank's reporting systems monitor and manage—
        - the quality of mortgages purchased from wholesale and other third-party sources and
        - the methods used to evaluate the loans on an ongoing basis.
    b. Determine if controls over the independent appraisal and underwriting process are adequate and if due diligence over

third-party relationships is adequate to prevent poor-credit-quality loan originations, including fraudulent originations.

29. Review the policies and procedures for wholesale and hybrid purchases.
    a. Find out the production channels that are used and how they perform. (The channels may include whole loan purchases (production flow) or hybrid purchases such as table funding, assignment of trade, or co-issuances (bulk purchases of servicing assets).)
    b. Determine the nature and extent of the compensation of brokers and correspondents for each production channel.
30. Review the bank's approved list of wholesale sources of loans. Determine the types and dollar volume of loans purchased from each wholesale source. Investigate any purchases from sources not on the approved list.
31. Determine management's process for evaluating and monitoring the quality of loans purchased from wholesalers. Ascertain whether the process considers the following:
    a. historical default and foreclosure levels
    b. nondelivery history
    c. HUD, Fannie Mae, FHLMC (Freddie Mac), or GNMA investor status (when applicable)
    d. documentation deficiencies
    e. financial statements
32. Determine if the bank underwrites mortgages purchased from wholesale sources.
    a. If the bank delegates underwriting responsibilities to a correspondent or a third party, determine and evaluate the adequacy of the process for reviewing and monitoring the quality of mortgages purchased.
    b. Find out if—
       - post-purchase reviews adequately assess the loan quality and completeness of the documents;
       - the bank maintains records of post-loan-purchase reviews, including the volume of loan rejections from each source; and
       - the bank frequently returns to the seller noncompliant loans (loans not meeting contractual requirements) purchased from wholesale sources.
33. Ascertain what methods are used for reviewing and approving brokers and correspondents and what the specific programs are. Determine which loans are purchased.
    a. Determine if there is an approved list of correspondents and how the list is updated.
    b. If there are deviations from the list, determine who authorized them and if there are controls to prevent unauthorized purchases.
34. Find out if financial reviews of the correspondents are conducted, who conducts the analysis, and how frequently analyses are conducted. Determine whether adequate controls are in place to detect changes in the financial condition of a correspondent, test and monitor the quality of loans purchased, and evaluate the correspondent's financial capacity to perform under contractual repurchase agreements.
35. Ascertain how the bank manages funding and liquidity risk for wholesaling mortgages.
    a. Determine if the collateral is received before payment.
    b. Determine what controls are in place to prevent unnecessary loss exposures.

PIPELINE, WAREHOUSE, AND HEDGING ACTIVITIES

1. Review the written policies and procedures for pipeline, warehouse, and hedging activities.
   a. Determine the process for granting exceptions (including the prior-approval requirements and whether the policy exceptions are reported to the asset/liability committee) that are contrary to the established lending policies and limits.
   b. Find out if the policies define the following criteria:
      - position and earnings-at-risk limits
      - permissible hedging activities
      - individuals authorized to engage in hedging activities
      - fair (market) values
2. Evaluate the effectiveness of the lending limits, approval requirements, MIS reports, and pipeline or warehouse hedging strategies to identify, monitor, measure, and control risks.
3. Determine if an appropriate separation of duties exists for the pipeline, warehouse,

and hedging process. Ascertain whether there are proper controls in place for the various phases of each process.

4. Ascertain whether the control systems exist to ensure that the fair (market) value determinations are performed by a person who is not directly responsible for pipeline and warehouse hedging activities.

Pipeline Management

The pipeline consists of applications approved but not yet funded. Typically, two types of loans are in the pipeline: rate-locked and floating-rate. The key to effective hedging of pipeline loans is predicting the fallout rates of rate-locked loans (the rate at which approved, rate-locked loans will *not* be funded).

5. Review the methodology used and the adequacy of its documentation to predict the volume of loan applications that are expected to "fall out" of the mortgage pipeline.
6. Find out how management tracks the bank's loan-fallout activity and how the tracking process and information are used to control and lessen the risks associated with its hedging activities.
7. Review the reports on pipeline management that provide the pipeline-fallout ratios for each type of loan product. Assess the effect of unanticipated fallouts on the results of hedging activities.
8. Review the frequency and accuracy of pipeline-commitment reporting. Find out how pipeline commitments are identified (including by their product type and interest rate, and the separate identification of the locked-rate and floating-rate commitments) and reported on MIS reports.
9. Review the signed pipeline-commitment reconcilements and verify that they are prepared monthly. Compare them against the pipeline position reports.
   a. Determine if commitments are specifically identified by product type and interest rate.
   b. Determine if rate-locked commitments and floating-rate commitments are separately identified and tracked.
   c. Determine what management's process is for handling expired rate-lock commitments.
10. Determine if pipeline commitments are accurately disclosed in the notes to the financial statements and in reports of condition.
11. Review management's procedures for monitoring and projecting the volume of applications that are expected to fall out of the mortgage pipeline.
    a. Determine how the fallout rates correspond to hedging practices.
    b. Determine whether management assumptions relative to loans that will not close equate to the hedging practices in place.
    c. Ascertain if the bank uses simulation models to predict fallout percentages and to determine hedging strategies, which are dependent on the interest-rate environment.
12. If the bank has been unable to meet mandatory commitments, determine if management purchased loans from other sources or paid investors a pair-off fee.
    a. Determine if the situation was reported to the board of directors or a board committee.
    b. Ascertain the reasons why the bank was unable to meet mandatory commitments.

Warehouse Management

Warehouse loans are funded loans waiting to be delivered to the secondary market.

13. Review internal warehouse-reconciliation reports, which should be prepared at least monthly.
    a. Assess the adequacy of controls over the warehouse account.
    b. Determine if errors are promptly corrected (errors such as mortgages that are funded more than once or mortgages that are funded but not closed).
14. Review warehouse-turnover and -aging reports, which should be prepared at least monthly.
    a. Determine if mortgage loans are removed from the warehouse within a reasonable period of time (usually 90 days or less).
    b. Find out why loans are remaining in the warehouse for a longer period.
15. Ascertain whether any warehouse loans are being held beyond the bank's normal time frames in anticipation of improved market conditions. If the bank is taking specula-

tive positions with warehouse inventory, determine if the positions are within the approved dollar limits. (Loans held for sale are typically newly originated credits and are normally held in the warehouse only for a short period of time; therefore, delinquencies and protracted holding periods are not normal.)

16. Review management's methods for handling warehouse loans that are ineligible for sale. Find out if a significant volume of ineligible loans is being placed in the bank's held-for-investment loan portfolio because they are delinquent, have documentation problems, or have other weaknesses. If the volume of ineligible loans is significant, determine the methods used for handling the resolution of such loans.

Hedging Management and Practices

17. Assess management's strategies for hedging pipeline or warehouse loans, the characteristics of these loans (such as adjustable-rate-mortgages (ARMs) or loans with interest-rate caps and floors), and the types of hedging instruments used.
    a. Review actual hedging practices and ascertain if they conform with established policy limitations and guidelines.
    b. Obtain and review the hedging information provided to executive management and the board of directors.
        - Evaluate whether hedging practices are properly approved and adequately supervised.
        - Determine if the board of directors approves all hedging strategies and the individuals who perform them.
18. Review the effectiveness and financial results of hedging strategies, such as the use of forward sales or options, to hedge risks associated with rate-locked commitments in the pipeline. (Some banks may not hedge interest-rate risk associated with rate-locked loans.)
    a. Determine management's strategies for hedging loans with special risks (such as ARMs or loans with interest-rate caps or floors).
    b. Find out if the bank is assuming excessive basis risk for any hedging product.
    c. Determine if correlation is used to analyze the bank's hedging strategies (to measure the degree of correlation between the hedge product and the underlying position being hedged, and the degree of risk each strategy or position entails).
19. Find out if call options are written to enhance inventory levels. If so, verify that they are written against covered positions. Ascertain whether management is speculating in any way and whether this activity subjects the bank and its mortgage banking entity to undue risk.
20. Review recent profit or loss reports for mortgage banking hedging activities. Assess the effectiveness of the hedging strategies on mortgage banking operations, including the use of such strategies to offset the risk inherent in funded but unsold loans.
21. Review management reports relating to pipeline and closed-loan hedging operations.
    a. Determine whether the reports are complete, accurate, and timely.
    b. Analyze whether the reports are effective in adequately limiting excesses, recording exception approvals, and detailing the risk exposures.
22. Find out if the bank uses any simulation models to establish risk limits and hedging strategies.
    a. Determine if the simulation assumptions are reasonable and if the volatility assumptions are consistent with the market.
    b. Find out how frequently the assumptions and other model inputs are reviewed, tested, and updated.
    c. Ascertain if budget and management decisions are included in the model's assumptions and the extent to which they are incorporated.
23. Determine if management adequately assesses counterparty risk and establishes appropriate limits.
24. Determine if hedging instruments are accurately and properly disclosed in the notes to the bank's financial statements and in its reports of condition.
25. Find out from discussions with management what systems the board of directors has authorized for use in—
    a. measuring, controlling, and hedging interest-rate risk;
    b. defining the level of interest-rate risk the bank's board is willing to accept; and
    c. specifying the hedging and other current or future strategies for achieving and

maintaining the bank's desired goals. (Depending on the current and forecasted interest-rate environment and projected fallout rates, management may be either over- or underhedging pipeline and warehouse loans.)

26. Determine and evaluate the adequacy of the internal controls in place to oversee hedging activities (controls include monitoring the effectiveness of the authorized hedging strategies and reviewing hedged-instrument concentrations and counterparties).
27. Review MIS reports relating to hedging strategies. Verify that the reports are accurate, adequate, current, and complete and are prepared regularly.
    a. Verify that the reports sufficiently detail risk exposures.
    b. Review reconcilements of outstanding trades to the daily position report.
28. If hedging strategies are ineffective, determine if the following situations are the cause:
    a. poor correlation of data
    b. unreliable data
    c. speculation
29. Determine if the following controls over forward sales activities exist:
    a. Traders are prohibited from entering forward sales data into the system, and individual trade tickets are required to be prepared and submitted to an independent unit for processing.
    b. Third-party trade confirmations are received and reviewed by a separate, independent unit.
    c. The bank has established prudent follow-up procedures for unconfirmed trades and confirmation discrepancies. Management uses the follow-up procedures to resolve or correct any unconfirmed trades or discrepancies.

SECONDARY MARKETING

Mortgage Pricing

1. Review the mortgage-pricing methods and procedures to find out how the prices for mortgages are established.
    a. Determine if the secondary-market unit is responsible for setting mortgage prices and if the mortgage originators are prevented from overly influencing or dominating pricing decisions.
    b. Review the current list of mortgage-product offerings and the daily price sheet. Find out if the prices are determined centrally and are uniform.
    c. Ascertain whether the pricing methods and procedures used are consistent with the bank's strategic plans.
    d. Find out from management what pricing strategies it uses; whether mortgages are priced using comparative security-price screens; and if the mortgages are priced neutrally or above, below, or at their fair (market) values.
    e. Using management's pricing analysis, ascertain whether management makes its pricing decisions on the basis of the bank's competitors, the overall costs of loan production and secondary marketing, and the value of servicing assets that are generated. Evaluate the current and future profitability impact of the bank's pricing decisions.
2. Find out the change in pricing frequencies for retail, wholesale, and broker channels. Evaluate the timing of pricing changes relative to significant market interest-rate movements.
3. Determine what procedures are in place to ensure that deviations from the approved pricing policies receive the proper degree of scrutiny and approval by senior management.
    a. If deviations are common, determine why they are occurring. (For example, are they occurring because of competition, compensation schemes, or departmental profitability considerations or targeted goals?)
    b. Ascertain what impact the deviations have had on the mortgage banking entity's production volumes and profitability.
4. Find out what policies are in effect for governing customer rate locks.
    a. Determine if rate locks expire, automatically renew, or are renegotiated at current interest rates.
    b. Ascertain whether the number and dollar volume of loans with expired rate locks are adequately monitored, tracked, and controlled.

Selling Mortgages

5. Find out what marketing programs are used to sell mortgages to investors. Review and assess the financial impact of these programs on sales volume.
6. Sample and review the larger-investor master sales commitments:
   a. Review investors' requirements for underwriting, delivery, documentation, and servicing.
   b. Determine the amount, maturity, and terms of the commitments.
   c. Determine whether the bank has been able to meet investors' requirements and the mandatory sales commitments. If not, determine the potential financial exposure to the bank.
7. Determine the number of sold loan pools that lack final pool certification, the reasons why, and if the mortgage banking group was required to post a letter of credit.
8. Determine if the bank participates in a mortgage-backed security swap program. Review the terms of the swap agreements and determine if any of the terms are financially detrimental to the bank.

Recourse Transactions and Obligations

9. Review a sample of sales contracts and servicing agreements to determine if the bank has any continuing recourse obligations to the purchaser beyond normal representations and warranties.
10. When loans are sold with recourse, determine if—
    a. the bank has adequate MIS to track all recourse obligations;
    b. management is adequately identifying and managing the risk associated with recourse obligations;
    c. the bank is negotiating the assumption of excess risk in exchange for lower guarantee fees;
    d. reserve levels are adequate for loans sold with recourse (see FAS 140); and
    e. management properly accounts for all loans sold with recourse in the bank's reports of condition.

MORTGAGE SERVICING

Portfolio Supervision

1. Review the written policies and procedures for mortgage loan servicing and determine if they adequately cover all facets or functional areas of the servicing operations.
   a. Determine whether reports to management adequately monitor compliance with the established policies and procedures.
   b. Determine how exceptions to the policies and procedures are identified and addressed.
2. Review a sample of investor-account reconcilements and determine if—
   a. each investor account is reconciled at least monthly,
   b. outstanding items are resolved in a timely manner,
   c. management regularly charges off stale, unreconciled items, and
   d. a supervisor reviews and approves the reconcilements.
3. Review and determine the accuracy and adequacy of the most recent management reports that state operating results for the servicing unit. Determine if the details provided are adequate to supervise the servicing function.
4. Review the most recent analysis of servicing revenues and costs for the primary product types. Ascertain whether costs are estimated and prepared on an average or incremental basis.
   a. Determine if management's analysis of revenue considers all sources of revenue, including contractual servicing fees, ancillary fees, and the benefits derived from compensating balances from custodial funds.
   b. Assess the adequacy of the servicing unit's current and projected profitability. Determine if management analyzes profitability on a product-by-product basis and how this analysis is factored into strategic decisions.
   c. Determine if management's cost analysis includes all direct and indirect servicing expenses.
5. Review the list of outside vendors and subservicers the bank employs to perform servicing functions.

a. Determine how management assesses (at least annually) the quality of work performed by outsiders.
b. Find out if management regularly reviews and evaluates the financial condition of each vendor or subservicer.
c. Ascertain whether the bank has a contingency plan to ensure it fulfills servicing responsibilities if a vendor or subservicer fails to perform.

6. Evaluate the asset quality of the servicing portfolio.
   a. Review the reports on the volume of delinquencies, foreclosures, bankruptcies, losses, and other real estate owned that have been prepared since the previous examination. Assess the extent and impact of those reported results on profitability and financial performance.
   b. Determine the extent and impact any geographical credit concentrations have had on profitability and financial performance.
7. Determine if complaints are appropriately resolved. Review significant complaints to ascertain if there are any possible internal control deficiencies or substantial legal risks.
8. Determine if the bank has purchased loans from the servicing portfolio.
   a. Determine if appropriate policies and procedures governing the purchases are in place.
   b. Determine the reasons for the purchases.
   c. Analyze the volume and trend of purchases.
9. Review the procedures for receiving payments from borrowers, depositing funds into segregated custodial accounts, and remitting funds to investors.
   a. Assess the bank's system for ensuring borrowers' payments are accurately applied and ensuring investors receive payments on schedule.
   b. Determine if adequate controls exist over custodial accounts (controls include daily balancing, monthly reconcilements, authority for disbursements, and segregation of administrative duties).
10. Review written servicing agreements to determine investor-servicing requirements, funds remittance schedules, contractual servicing fees, guarantee fees, and servicer representations and warranties.
    a. Determine if loan delinquencies have prompted the use of bank funds to meet remittance requirements.
    b. Track the timeliness of the flow of funds at the investors' cutoff dates, the dates of remittance of funds to investors and security holders, and the recognition dates of servicing revenue.
11. Assess the adequacy of the system for ensuring the timely payment of taxes, insurance, and other obligations of the borrower.
12. Find out what methods are used for correcting shortages and surpluses in escrow accounts.
13. Review the procedures for ensuring that tax and insurance payments are made on delinquent loans.
14. Assess the methods used to evaluate the financial condition of subservicers.
15. Evaluate the servicer's and subservicer's agreements as to their responsibilities, reporting requirements, performance, and fees. Verify that management confirms that no additional liabilities, real or contingent, are being (or can be) imposed on the bank's mortgage banking entity beyond its responsibilities as a servicing agent.

Mortgage-Servicing Assets

16. Determine if and the extent to which mortgage-servicing assets (MSAs) are reviewed by the external auditors.
17. Review management's procedures for initially recording, amortizing, and periodically re-evaluating MSAs. Verify that reports of condition and income reflect quarterly revaluations of MSAs. Determine if the procedures require MSA documentation of—
    a. the methods employed for assigning a relative fair value to each MSA asset, specifically, the assumptions and procedures used (which should incorporate assumptions that market participants would use) to derive fair value;
    b. the recording of the fair value of MSAs and their amortization in proportion to and over the period of their estimated net servicing income or loss (a valuation allowance must be established if costs exceed the fair value);
    c. the systems for recordkeeping and impairment testing;
    d. the policies, procedures, and operating

requirements for the ongoing supervision of MSAs;
e. at least quarterly reviews of the book values of MSAs to determine if they are recorded at their fair values;
f. the procedures to ensure compliance with other accounting and regulatory requirements, investor criteria, and internal policies;
g. the stratification of MSAs into groups based on one or more of the predominant risk characteristics of the underlying financial assets to determine the fair value of the MSAs;
h. the recognition of an impairment when the book value of a stratum of a servicing asset exceeds the asset's fair value, and the adherence to the accounting requirement that the book value be reduced to fair value through a valuation allowance for that stratum;
i. the validation process to ensure that the actual performance of MSAs is compared with their predicted performance;
j. the procedures to ensure that the fair (market) value or valuation assumptions used for the impairment analysis are current and reasonable and that they reflect the expected levels of mortgage prepayments and market discount rates (When checking impairment, ensure that the bank's test uses the current (not the original) level of servicing fees (prepayments on the underlying loans cause the weighted average coupon (WAC) to change, which changes the level of servicing over time.);
k. management's review and approval of the results and assumptions employed; and
l. the process to determine when and how adjustments should be made to the respective valuation allowance on the basis of the results of impairment analyses.

18. Evaluate the due-diligence process for bulk acquisitions of purchased MSAs, if applicable.
    a. Determine if the bank performs a comprehensive due-diligence review before purchasing a servicing portfolio.
    b. Determine if management applies and documents reasonable valuation assumptions (documentation includes data on the underlying mortgages, servicing revenues and costs, prepayment speeds, and discount rates as well as explanations of how the particular valuation assumptions used were determined).
    c. Verify that management is properly reporting MSAs in Schedule RC-M of the bank's report of condition and is reporting the results of the MSA transactions in its report of income.
19. Determine if management separately identifies servicing assets and any related interestonly strips receivables.
20. Review MSAs recorded as a result of retail production (originated) or purchased activities.
    a. Determine if the bank obtains commitments to resell the mortgages before or within 30 days of their purchase.
    b. Confirm that the purchase or origination cost of the loans and their MSAs are based on quoted market prices or the best available information, considering the prices for similar assets and asset-valuation techniques (such as estimating the future cash flows using a discount rate that is commensurate with the risks involved). Other valuation techniques include option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analyses.
    c. If other valuation techniques are used, determine if they are consistent with the objective of measuring fair value and if they incorporate assumptions that market participants would use when estimating future servicing income, including assumptions about prepayment, default, and interest rates.
    d. Find out if the mortgage banking entity is allocating costs to mortgage-servicing rights when it is practicable to estimate the fair value of those rights and the related mortgage loans. If not, determine that the MSAs are recorded at zero and if they are disclosed in the bank's financial statements. (The reasons why it was not practicable to estimate their fair values should also be disclosed.)
21. Complete an in-depth review of the valuations that are based on the fair (market) values for MSAs.
    a. Determine if management identifies the characteristics of the servicing portfolio, specifically the following items:
        • investors

- types of products
- transactions made with or without recourse
- geographic dispersion of borrowers
- average loan size
- range of interest rates
- projected life and average age of loans
- delinquency, foreclosure, OREO, and bankruptcy levels
- loss experience

b. Review prepayment-speed assumptions to determine if they are realistic and conform to acceptable industry standards.

c. Determine if the discount-rate valuation assumptions used to estimate future cash flows are realistic and in line with industry practices.

22. Request that management recalculate the fair value of any MSAs if the assumptions used are unrealistic and examiners believe the reported MSA values are materially overstated (if the bank's internal model is considered reliable, it may be used to recalculate the MSA's value, after substituting more realistic assumptions). Following the recalculation of these fair values, review the assumptions used. Evaluate and verify the results.

Collections

23. Review policies and procedures for collecting delinquent loans.
    a. Determine if collection efforts follow investor guidelines.
    b. Determine if the bank documents all attempts to collect past-due payments.
    c. Determine if the bank charges off uncollectible balances in a timely manner.
24. Review loan-delinquency reports. Select and review a sample of files for severely delinquent borrowers (particularly those borrowers over 120 days delinquent).
    a. Determine if the bank initiates foreclosure proceedings in a timely manner and properly notifies borrowers and investors.
    b. Review a sample of loans in which the foreclosure action is delayed due to forbearance agreements. Determine if the agreements are within investors' guidelines.
25. Review a sample of investor-owned OREO properties to determine if administrative and marketing practices comply with investor guidelines.
26. Determine if there are any contingencies resulting from the improper administration of foreclosed properties.

FINANCIAL ANALYSIS

Financial-Statement Level and Trends

1. If separate-unit or subsidiary financial statements are prepared for the mortgage banking entity, perform a volume and trend analysis of the entity's financial condition and performance for the current and previous two-year period. Pay particular attention to any comparative disparities that fall within the current examination period.
2. Review any of the mortgage banking entity's primary or large balance-sheet and income-statement categories or items that may represent or pose significant financial or other risk concentrations. Investigate any items or categories that pose undue financial or other risks. Discuss these categories or items with management and the internal and external auditors.
3. Determine whether the analyzed financial trends are consistent with the economic environment, interest-rate movements, the bank's business orientation, and management's intended growth strategy.
4. Determine whether reports filed with the Federal Reserve (or other federal regulatory departments, agencies, or government-sponsored agencies that are directly involved with mortgage banking or asset securitizations involving real estate) are prepared accurately and submitted in a timely manner. Pay particular attention to the reporting for mortgage-servicing assets and recourse obligations retained by the mortgage banking entity.

Earnings Performance and Profitability

5. Using ratios and industry comparisons, analyze and evaluate the mortgage banking entity's earnings performance in terms of the level, composition, and trend of net income. Consider internal factors such as

the entity's business orientation and management's growth plans. Also consider external factors such as interest rates, the economic environment, and industry performance trends. (Ratios that compare earnings to total assets or equity are of limited use unless the examiner also considers the transitory nature of the balance sheet and the impact of off-balance-sheet servicing activities on the company's use of financial leverage.)

6. Review and discuss with management and internal or external auditors any unusual aspects of origination and servicing-fee income, marketing gains and losses, the net interest margin, reserves, write-downs or adjustments in MSA amortization, salaries and overhead items, or income taxes.
7. Evaluate officer-compensation arrangements that are tied to the department's or bank's profitability. Ascertain whether any of the compensation or incentive programs pose significant financial burdens or risks to the extent that they materially affect the institution's profitability or that they promote unsafe or unsound practices.
8. Investigate the causes for operating losses in the mortgage banking entity's operations and evaluate the prospects for profitability.
   a. Determine if elevated operating costs or other inefficiencies are impairing profitability.
   b. Establish whether excessive borrowing activities have led to adverse changes in the cost of funds. Ascertain what impact a change in the cost of funds would have on the net interest margin.
   c. Determine why hedging strategies have not appropriately controlled interest-rate risk.

Analysis of Risk, Liquidity, and Funding

9. Determine which risks associated with mortgage banking, such as credit risk, interest-rate risk, price risk, transaction risk, liquidity risk, compliance risk, and strategic risk, pose the most material threat to earnings, capital, and liquidity. Determine whether the bank complies with SR-96-13 and the June 26, 1996, Joint Agency Policy Statement on Interest Rate Risk.
10. Evaluate management's process for meeting the liquidity needs of the mortgage banking department, considering the size of loans in the pipeline and the warehouse as well as the nature and extent of other longer-term assets.
11. Determine whether liquidity sources are adequate for current conditions and projected funding needs.
    a. Evaluate the methods used to fund mortgage operations. Funding methods may include repurchase agreements, commercial paper, revolving warehouse lines of credit, and long-term debt.
    b. Review asset and liability management practices to determine if funding maturities approximate the maturities of underlying assets.
12. Determine whether sources of liquidity are adequate under both current conditions and economic duress. Consider earnings performance, capital adequacy, the degree of market contact with underwriters and credit rating agencies, the maintenance of debt covenants, and contingent liquidity-planning capabilities.
13. Evaluate the financial instruments used to fund mortgage operations. Financial instruments may include repurchase agreements, commercial paper, revolving warehouse lines of credit, or long-term debt (or a combination of these instruments). Review related credit agreements and the systems used to monitor compliance with debt covenants.
14. Evaluate whether excessive borrowing activities have led to a highly leveraged financial position that exposes the company to money market changes in the cost of funds. Assess what the impact would be if there were a change in the bank's and the mortgage banking entity's cost of funds.
15. Determine the degree of financial flexibility the bank and mortgage banking entity maintain.[1] Ascertain whether the bank and mortgage banking entity possess adequate financial strength and whether they have sufficient access to lines of credit or assets (or both) that can be easily collateralized to readily obtain borrowed funds.
16. Review the net current items on the cash-flow statement pertaining to cash flow from

1. Financial flexibility is the ability to obtain the cash required to make payments as needed.

operations, cash flows from investing activities, and cash flows from financing activities on a year-by-year trend basis. From the level of current transactions, determine whether sufficient positive cash flow exists. (The summary analysis of the cash-flow statement should convey how the underlying transactions collectively contribute to a positive cash flow and liquidity.)

17. Review asset and liability management practices to determine whether funding maturities closely approximate the maturities of underlying assets or whether any funding mismatches exist. Determine if the bank and its mortgage banking entity are exposed to short-term interest-rate fluctuations that may result in significant earnings volatility if interest rates change rapidly.

INTERCOMPANY TRANSACTIONS

Follow the examination guidance, instructions, and procedures in sections 4050.1, 4050.2, 4050.3, and 4050.4 that apply to Federal Reserve Act sections 23A and 23B and Regulation W.

1. Review the following transactions between the bank and its affiliates. Determine if there is compliance with the applicable determinants of control, quantitative and other limitations, and collateral and valuation requirements of Federal Reserve Act section 23A and Regulation W.
   a. loans or extensions of credit
   b. purchases of securities or assets
   c. the bank's issuance of a guarantee (credit enhancements, cross guarantees, and keepwell agreements), an acceptance, or a letter of credit on behalf of the mortgage banking entity or its affiliate
   d. the acceptance from a third party of securities issued by an affiliate (including mortgage-backed securities) as collateral for a loan
   e. purchases of low-quality assets by the bank
   f. merger and acquisition transactions
   g. transactions with third parties when the proceeds are transferred to or used for the benefit of an affiliate
2. Review the following intercompany and affiliate transactions. Ascertain whether there are any underlying reasons (for example, non-independent credit reviews, transfers being classified as purchases, blanket advance-purchase commitments, no evidence of providing consideration, absence of safe and sound banking practices, etc.) why the following mortgage bank and intercompany or affiliate transactions do not qualify for the applicable exemptions found in section 23A or Regulation W:
   a. transactions involving sister bank
   b. transactions giving immediate credit for uncollected items in the ordinary course of business
   c. loans, guarantees, acceptances, or lines of credit secured by segregated, earmarked deposits or U.S. or U.S-guaranteed obligations
   d. asset purchases that have a readily identifiable and publicly available market quotation
   e. transfers of subsidiaries to the bank
   f. asset purchases on a nonrecourse basis if—
      - the extension of credit was originated by the affiliate;
      - the member bank makes an independent evaluation of the creditworthiness of the borrower before the affiliate makes or commits to make the extension of credit;
      - the member bank commits to purchase an extension of credit before the affiliate makes or commits to make the extension of credit;
      - the member bank does not make a blanket advance commitment to purchase extensions of credit from the affiliate; and
      - the dollar amount of the extension of credit, when aggregated with the dollar amount of all other extensions of credit purchased from the affiliate during the preceding 12 calendar months by the member bank and its depository institution affiliates, does not represent more than 50 percent (or such lower percent as imposed by the member bank's appropriate federal banking agency) of the dollar amount of extensions of credit originated by the affiliate during the preceding 12 calendar months.
3. Review the following intercompany, affiliate, or covered transactions for compliance with section 23B of the Federal Reserve Act, including its competitive terms and conditions requirement.

a. all transactions subject to section 23A
b. any transaction in which the proceeds are used to benefit the mortgage banking nonbank subsidiary or entity
c. sales of securities or assets to another affiliate, including those sales subject to an agreement to repurchase
d. payments of money or the furnishing of services to an affiliate under contract, lease, or otherwise
e. transactions in which the mortgage banking nonbank subsidiary or entity acts as agent or broker or receives a fee for providing services to the bank
f. transactions with a third party if the mortgage banking subsidiary or entity has a financial interest in the third party or participates in the transaction
g. purchases of assets as a fiduciary
h. purchases of securities underwritten by the bank as the principal underwriter
i. transactions or advertisements whereby the bank assumes responsibility for an affiliate's obligations

CAPITAL ADEQUACY

1. Ascertain whether management has periodically verified that the mortgage banking entity meets the nominal capital levels required by investors (Fannie Mae, Freddie Mac, etc.) and meets any additional required capital for loans serviced for investors, on the basis of the bank's financial reporting under generally accepted accounting principles.
2. Review the bank's computation and analysis of its capital adequacy. Ascertain how the bank's analysis relates to the determination of its risk-weighted assets and the levels of risk attributable to the mortgage banking entity, compared with the entity's accumulated earnings and other contributions to the bank's capital. Determine if the mortgage banking entity is providing sufficient capital resources to support the overall level of risk arising from its operations, without having a negative impact on the bank's level of capital attributable to its other operations.
3. Determine if the mortgage banking entity's assets (including MSAs) and risks (on- and off-balance-sheet) are correctly computed and quantified as part of the bank's overall determination of compliance with the risk-based capital adequacy guidelines (12 CFR 208, appendix A) and the tier 1 leverage capital adequacy guidelines (12 CFR 208, appendix B). Follow and apply the applicable examination guidance and procedures in sections 3020.1, "Assessment of Capital Adequacy," and 4030.1, "Asset Securitization."
4. Determine whether a written capital-generation plan or policy has been developed, approved, and reviewed at least annually by the board of directors. The plan should specify what capital-generation levels are needed to support the mortgage banking entity's current operations and projected future growth, given the prescribed risk-tolerance levels that arise from the bank's mortgage banking transactions and activities.