Cash accounts include U.S. and foreign coin and currency on hand and in transit, clearings, and cash items.

CASH

Every bank maintains a certain amount of U.S. currency and some may have foreign currency on hand. To avoid having excess nonearning assets and to minimize exposure to misappropriation and robbery, each bank should establish a policy to maintain cash balances at the minimum levels necessary to serve its customers. The amount will vary from bank to bank depending on anticipated needs of customers and the availability of replenishment monies, with a reasonable allowance made for unusual demands.

Foreign currency may not be included in cash positions for management purposes when the amounts are not significant. However, the coin and currency of other countries are foreign-currency assets, as are loans or nostro accounts, and should be included in the foreign-currency positions.

CLEARINGS

Clearings are checks, drafts, notes, and other items that a bank has cashed or received for deposit that are drawn on other local banks and cleared directly with them. These items can usually be exchanged more efficiently among local banks than through correspondent banks or the Federal Reserve System. Many communities with two or more banks have formally organized clearinghouse associations, which have adopted rules governing members in the exchange of checks. Clearinghouse associations often extend their check-exchange arrangements to other nearby cities and towns. In most banks, clearings will be found in the department responsible for processing checks.

Proof and transit were once two separate functions in a bank: the proving of work (proof) and the sending of out-of-town cash items (transit) for collection. Most banks have now combined these two functions. Proof and transit may be performed by any combination of tellers or proof clerks, a separate proof and transit department, a check-processing department, an out-clearing department, or some other department that is characteristic of the area of the country where the bank operates. The functions may be centralized or decentralized, manual or automated, depending on the size of the bank and the volume of transactions. The volume of clearings may be so great that the bank's proof operations are conducted after time deadlines for transaction posting or courier delivery. In these cases, daily clearings customarily are determined as of a specific cutoff time. Checks processed to that time are carried in one day's totals, and checks processed after that time are carried in the following day's totals. However, no matter who performs the function or how large the bank, the objectives of a proof and transit system are the same:

- to forward items for collection so that funds are available as soon as possible
- to distribute all incoming checks and deposits to their destinations
- to establish whether deposit totals balance with the totals shown on deposit tickets
- to prove the totals of general ledger entries and other transactions
- to collect data for computing the individual customer's service charges and determining the availability of the customer's funds
- to accomplish the assigned functions at the lowest possible cost

CASH ITEMS

Cash items are checks or other items in the process of collection that are payable in cash upon presentation. A separate control of all cash items is usually maintained on the bank's general ledger and, if applicable, on the international division general ledger. The ledger is supported by a subsidiary record of individual amounts and other pertinent data. Cash items and the related records are usually in the custody of one employee at each banking office.

In their normal daily operations, banks have an internal charge, on the general ledger, to total demand deposits not charged to individual accounts because of insufficient funds, computer misreads, or other problems. Commonly known as return items or rejected or unposted debits,

these items may consist of checks received in the ordinary course of business, loan-payment debits, and other debit memos. In some banks, return items are separated by the bookkeepers and an entry is made reclassifying them to a separate asset account entitled "bookkeepers' return items." Other banks do not use a separate asset account; instead, the bookkeepers include the items in a subsidiary control account in the individual demand deposit ledgers. In that case, the account would have a debit balance and would be credited when the bank processes items for posting or returns the checks to their source.

Since bookkeepers' return items are usually processed and posted to an individual account or returned to their source on the next business day, the balance of the bookkeepers' return items account should represent the total of only one day's returned items.

When data processing systems are used, the common practice is to post all properly encoded debit items, regardless of whether an overdraft is created. The resulting preliminary overdraft list, together with the items charged, is subsequently reviewed by bank employees, and unapproved items are reversed and separated as bookkeepers' return items. The total of the resulting final overdraft list becomes the final overdraft figure shown on the general ledger. The examination of overdrafts is discussed in "Deposit Accounts," section 3000.1. The examination of international overdrafts is discussed in "Due from Banks," "Borrowed Funds," and "International—Foreign Exchange," sections 2010.1, 3010.1, and 7100.1, respectively.

Several types of cash items should be considered "cash items not in the process of collection" and shown in an appropriate "other assets" account. Some examples are (1) items that are payable upon presentation but which the bank has elected to accumulate and periodically forward to the payor, such as Series EE bonds or food stamps; (2) items that are not immediately payable in cash upon presentation; and (3) items that were not paid when presented and require further collection effort.

In addition to those items carried in the separate "cash items" account on the general ledger, most banks will have several sources of internal float in which irregular cash items can be concealed. Such items include any memoranda slips; checks drawn on the bank; checks returned by other banks; checks of directors, officers, employees, and their interests; checks of affiliates; debits purporting to represent currency or coin shipments; notes, usually past due; and all aged and unusual items of any nature that might involve fictitious entries, manipulations, or uncollectible accounts.

CURRENCY TRANSACTIONS

The reporting of currency and foreign transactions as covered in 31 CFR 1010 requires financial institutions to maintain records that might be useful in criminal, tax, or regulatory investigations. The regulation also seeks to identify persons who attempt to avoid payment of taxes through transfers of cash to or from foreign accounts. The examination procedures for determining compliance with the regulation require the examiner to ascertain the quality of the bank's auditing procedures and operating standards relating to financial recordkeeping.[1] Examiners also determine the adequacy of written policies and bank training programs. The *Bank Secrecy Act/Anti-Money Laundering Examination Manual* is to be used in checking compliance and for reporting apparent violations in the reporting of currency and foreign transactions. Any violations noted should be listed with appropriate comments in the report of examination. Inadequate compliance could result in a cease-and-desist order to effect prompt compliance with the statute.

1. Section 208.63 of Regulation H establishes procedures to ensure that state member banks establish and maintain procedures reasonably designed to ensure and monitor compliance with the regulation.

1. To determine if the policies, practices, procedures, and internal controls regarding ‘‘cash accounts’’ are adequate.
2. To determine if bank officers and employees are operating in conformance with the established guidelines.
3. To determine the scope and adequacy of the audit function.
4. To determine compliance with laws and regulations.
5. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the cash accounts section of the internal control questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal or external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures. Also obtain a listing of any deficiencies noted in the latest review done by internal or external auditors from the examiner assigned to that area of examination, and determine if appropriate corrections have been made.
4. Scan the general ledger cash accounts for any unusual items or abnormal fluctuations. Investigate any such items and document any apparent noncompliance with policies, practices and procedures for later review with appropriate management personnel.
5. Obtain teller settlement sheet recap or similar document as of the examination date and agree to the general ledger. Scan for reasonableness and conformity to bank policy.
6. Obtain detailed listings of cash items, including any bank items which are carried in the general ledger under "other assets," agree listings to general ledger balances and scan for propriety and conformity to bank policy.
7. Test compliance with Regulation H (12 CFR 208) by—
   a. selecting teller and banking office cash-balance sheets and determining that balances are within currency limits established;
   b. selecting bait money and agreeing serial numbers to applicable records;
   c. reviewing documentation showing training sessions held since the preceding examination;
   d. performing any visual inspections deemed appropriate;
   e. analyzing the bank's system of security and protection against external crimes (Guidance for this analysis is provided in the internal control questionnaire in this section of the manual.); and
   f. determining, through discreet corroborative inquiry of responsible bank officials and review of documentation, whether a security program that equals or exceeds the standards prescribed by Regulation H (12 CFR 208.61(c)) is in effect and that the annual compliance report and any other reports requested by the Federal Reserve System have been filed.
8. Review compliance with recordkeeping requirements and currency and foreign transaction reports. (See 31 CFR 1010.)
9. Review tellers' over and short accounts for recurring patterns and any large or unusual items and follow up as considered necessary. Investigate differences centered in any one teller or banking office. Determine whether corrective action has been taken, if required.
10. Determine, by discreet corroborative inquiry of responsible bank officials and review of documentation, whether defalcations and/or mysterious disappearances of cash since the preceding examination have been properly reported pursuant to current requirements of the Board of Governors.
11. Review foreign-currency control ledgers and dollar book value equivalents for the following:
    a. accuracy of calculations and booking procedures
    b. unusual fluctuations
    c. concentrations
    d. unusual items
12. Review international division revaluation calculations and procedures.
13. Review the following items with appropriate management personnel (or prepare a memo to other examining personnel for their use in reviewing with management):
    a. internal-control exceptions and deficiencies in, or noncompliance with, written policies, practices and procedures
    b. uncorrected audit deficiencies
    c. violations of law
    d. inaccurate booking of U.S. dollar book value equivalents for foreign currencies
    e. inaccurate revaluation calculations and procedures performed by cash-account operations staff
14. Prepare comments on deficiencies or

violations of law noted above for inclusion in the examination report.

15. Update the workpapers with any information that will facilitate future examinations.

Cash Accounts

Internal Control Questionnaire

Effective date March 2011

Section 2000.4

Review the bank's internal-control policies, practices, and procedures for cash accounts. The bank's system should be documented completely and concisely and should include, where appropriate, narrative descriptions, flow charts, copies of forms used, and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

CASH ON HAND

*1. Do all tellers, including relief tellers, have sole access to their own cash supply, and are all spare keys kept under dual control?
*2. Do tellers have their own vault cubicle or controlled cash drawer in which to store their cash supply?
3. When a teller is leaving for vacation or for any other extended period of time, is that teller's total cash supply counted?
4. Is each teller's cash verified periodically on a surprise basis by an officer or other designated official (if so, is a record of such count retained)?
*5. Are cash drawers or teller cages provided with locking devices to protect the cash during periods of the teller's absence?
6. Is a specified limit in effect for each teller's cash?
*7. Is each teller's cash checked daily to an independent control from the proof or accounting control department?
8. Are teller differences cleared daily?
9. Is an individual, cumulative over and short record maintained for all persons handling cash, and is the record reviewed by management?
10. Does the teller prepare and sign a daily proof sheet detailing currency, coin, and cash items?
*11. Are large teller differences required to be reported to a responsible official for clearance?
12. Is there a policy against allowing teller "kitties"?
*13. Are teller transactions identified through use of a teller stamp?
*14. Are teller transfers made by tickets or blotter entries which are verified and initialed by both tellers?
15. Are maximum amounts established for tellers' cashing checks or allowing withdrawal from time deposit accounts without officer approval?
16. Does the currency at each location include a supply of bait money?
17. Are tellers provided with operational guidelines on check-cashing procedures and dollar limits?
18. Is a record maintained showing amounts and denominations of reserve cash?
*19. Is reserve cash under dual custody?
*20. Are currency shipments—
    a. prepared and sent under dual control and
    b. received and counted under dual control?
*21. If the bank uses teller machines—
    a. is the master key controlled by someone independent of the teller function,
    b. is the daily proof performed by someone other than the teller, and
    c. are keys removed by the teller during any absence?
*22. Is dual control maintained over mail deposits?
23. Is the night depository box under a dual lock system?
24. Is the withdrawal of night deposits made under dual control?
25. Regarding night depository transactions—
    a. are written contracts in effect;
    b. are customers provided with lockable bags; and
    c. are the following procedures completed with two employees present:
        - opening of the bags
        - initial recording of bag numbers, envelope numbers, and depositors' names in the register
        - counting and verification of the contents
*26. Regarding vault control—
    a. is a register maintained which is signed by the individuals opening and closing the vault;
    b. are time-clock settings checked by a second officer;
    c. is the vault under dual control; and
    d. are combinations changed periodically and every time there is a change in custodianship?

27. Are tellers prohibited from processing their own checks?
*28. Are tellers required to clear all checks from their funds daily?
*29. Are tellers prevented from having access to accounting department records?
*30. Are teller duties restricted to teller operations?

CASH-DISPENSING MACHINES

*31. Is daily access to the automated teller machine (ATM) made under dual control?
*32. When maintenance is being performed on a machine, with or without cash in it, is a representative of the bank required to be in attendance?
*33. Are combinations and keys to the machines controlled (if so, indicate controls)?
34. Do the machines and the related system have built-in controls that—
    a. limit the amount of cash and number of times dispensed during a specified period (if so, indicate detail) and
    b. capture the card if the wrong PIN (personal identification number) is consecutively used?
35. Does the machine automatically shut down after it experiences recurring errors?
36. Is lighting around the machine provided?
37. Does the machine capture cards of other banks or invalid cards?
38. If the machine is operated "off line," does it have negative-file capability for present and future needs, which includes lists of lost, stolen, or other undesirable cards which should be captured?
39. Is use of an ATM by an individual customer in excess of that customer's past history indicated on MIS reports reviewed for suspicious activity by bank management (for example, three uses during past three days as compared with a history of one use per month)?
40. Have safeguards been implemented at the ATM to prevent, during use, the disclosure of a customer's PIN by others observing the PIN pad?
41. Are "fish-proof" receptacles provided for customers to dispose of printed receipts, rather than insecure trash cans, etc.?
42. Does a communication interruption between an ATM and the central processing unit trigger the alarm system?
43. Are alarm devices connected to all automated teller machines?
44. For on-line operations, are all messages to and from the central processing unit and the ATM protected from tapping, message insertion, modification of message or surveillance by message encryption (scrambling techniques)? (One recognized encryption formula is the National Bureau of Standards Algorithm.)
*45. Are PINs mailed separately from cards?
*46. Are bank personnel who have custody of cards prohibited from also having custody of PINs at any stage (issuance, verification, or reissuance)?
47. Are magnetic stripe cards encrypted (scrambled) using an adequate algorithm (formula) including a total message control?
48. Are encryption keys, i.e., scramble plugs, under dual control of personnel not associated with operations or card issuance?
*49. Are captured cards under dual control of persons not associated with bank operation card issuance or PIN issuance?
*50. Are blank plastics and magnetic stripe readers under dual control?
51. Are all cards issued with set expiration dates?
52. Are transaction journals provided that enable management to determine every transaction or attempted transaction at the ATM?

CASH ITEMS

*53. Are returned items handled by someone other than the teller who originated the transaction?
54. Does an officer or other designated individual review the disposition of all cash items over a specified dollar limit?
55. Is a daily report made of all cash items, and is it reviewed and initialed by the bank's operations officer or other designated individual?
56. Is there a policy requiring that all cash items uncollected for a period of 30 days be charged off?

57. Do the bank's present procedures forbid the holding of overdraft checks in the cash-item account?
58. Are all cash items reviewed at least monthly at an appropriate level of management?
*59. Are cash items recommended for charge-off reviewed and approved by the board of directors, a designated committee thereof, or an officer with no operational responsibilities?

PROOF AND TRANSIT

60. Are individuals working in the proof and transit department precluded from working in other departments of the bank?
61. Is the handling of cash letters such that—
    a. they are prepared and sent on a daily basis;
    b. they are photographed before they leave the bank;
    c. copy of proof or hand-run tape is properly identified and retained;
    d. records of cash letters sent to correspondent banks are maintained with identification of the subject bank, date, and amount; and
    e. remittances for cash letters are received by employees independent of those who send out the cash letters?
62. Are all entries to the general ledger either originated or approved by the proof department?
63. Are all entries prepared by the general ledger and/or customer accounts department reviewed by responsible supervisory personnel other than the person preparing the entry?
64. Are errors detected by the proof operator in proving deposits corrected by another employee or designated officer?
65. Are all postings to the general ledger and subsidiary ledgers supported by source documents?
66. Are returned items—
    *a. handled by an independent section of the department or delivered unopened to personnel not responsible for preparing cash letters or handling cash,
    b. reviewed periodically by responsible supervisory personnel to determine that items are being handled correctly by this section and are clearing on a timely basis,
    *c. scrutinized for employee items, and
    d. reviewed for large or repeat items?
67. Are holdover items—
    a. appropriately identified in the general ledger,
    *b. handled by an independent section of the department, and
    c. reviewed periodically by responsible supervisory personnel to determine that items are clearing on a timely basis?
68. Does the proof and transit department maintain a procedures manual describing the key operating procedures and functions within the department?
*69. Are items reported missing from cash letter promptly traced and a copy sent for credit?
*70. Is there a formal system to ensure that work distributed to proof machine operators is formally rotated?
71. Are proof machine operators prohibited from—
    a. filing checks or deposit slips or
    b. preparing deposit account statements?
72. Are proof machine operators instructed to report unusually large deposits or withdrawals to a responsible officer (if so, over what dollar amount $_____)?

REGULATION H (12 CFR 208)—COMPLIANCE QUESTIONNAIRE

73. Has a security officer been designated by the board of directors in accordance with Regulation H (12 CFR 208.61(b))?
74. Has a security program been developed and implemented in accordance with Regulation H (12 CFR 208.61(c))?
75. Does the bank have security devices that give a general level of protection and that are at least equivalent to the minimum requirements of Regulation H?
76. Has the installation, maintenance, and operation of security devices considered the operating environment of each office and the requirements of Regulation H (12 CFR 206.61(c))?
77. Does the security officer report at least annually to the bank's board of directors on the administration and effectiveness of

the security program in accordance with Regulation H (12 CFR 206.61(d))?

31 CFR 1010—COMPLIANCE QUESTIONNAIRE

78. Is the bank in compliance with the financial recordkeeping and reporting regulations?

INTERNATIONAL DIVISION

*79. Are foreign-currency control ledgers and dollar-book-value equivalents posted accurately?
*80. Is each foreign currency revalued at least monthly, and are profit and loss entries passed on to the appropriate income accounts?
*81. Are revaluation calculations, including the rates used, periodically reviewed for accuracy by someone other than the foreign-currency tellers?
*82. Does the internal auditor periodically review for accuracy revaluation calculations, including the verification of rates used and the resulting general ledger entries?

CONCLUSION

83. Is the foregoing information considered an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
84. Based on a composite evaluation as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate). A separate evaluation should be made for each area, i.e., cash on hand, cash items, etc.

Banks maintain deposits in other banks to facilitate the transfer of funds. Those bank assets, known as "due from bank deposits" or "correspondent bank balances"[1] are a part of the primary, uninvested funds of every bank. A transfer of funds between banks may result from the collection of cash items and cash letters, the transfer and settlement of securities transactions, the transfer of participating loan funds, the purchase or sale of federal funds, and many other causes.

In addition to deposits kept at the Federal Reserve Bank and with correspondent banks, a bank may maintain interest-bearing time deposits with international banks. Those deposits are a form of investment, and relevant examination considerations are included in "Investment Securities and End-User Activities," section 2020.1, and "International—Due from Banks—Time," section 7070.1.

Banks also use other banks to provide certain services that can be performed more economically or efficiently by another facility because of its size or geographic location. These services include processing of cash letters, packaging loan agreements, performing EDP services, collecting out-of-area items, providing safekeeping for bank and customer securities, exchanging foreign currency, and providing financial advice in specialized loan areas. When the service is one way, the receiving bank usually maintains a minimum balance at the providing bank to compensate in full or in part for the services received.

DEPOSITS WITH OTHER DEPOSITORY INSTITUTIONS

Section 206.3 of Regulation F (12 CFR 206) requires FDIC-insured depository institutions to adopt written policies and procedures to address the risk arising from exposure to a correspondent, and to prevent excessive exposure to any individual correspondent. These policies and procedures should take into account the financial condition of a correspondent and the size, form, and maturity of the exposure. Section 206.4(a) of Regulation F stipulates that any FDIC-insured depository institution must limit its interday credit exposure to an individual correspondent that is not "adequately capitalized"[2] to 25 percent of the institution's total capital.[3] For a more detailed discussion of Regulation F, refer to sections 2015.1–.4 and SR-93-36 ("Examiner Guidelines for Regulation F—Interbank Liabilities").

BALANCES WITH FEDERAL RESERVE BANKS

All state member banks are required by Regulation D (12 CFR 204) to keep reserves equal to specified percentages of the deposits on their books. These reserves are maintained in the form of vault cash or deposits with the Federal Reserve Bank. The Federal Reserve Bank monitors the deposits of each bank to determine that reserves are kept at required levels. The reserves provide the Federal Reserve System with a means of controlling the nation's money supply. Changes in the level of required reserves affect the availability and cost of credit in the economy. The examiner must determine that the information supplied to the Federal Reserve Bank for computing reserves is accurate.

The Monetary Control Act of 1980 enables a nonmember financial institution to borrow from the Reserve Bank's discount window on the same terms and conditions as member banks. For member banks, loan transactions are usually effected through their reserve account. For nonmember banks, the Reserve Bank typically requires the institution to open a special account called a clearing account. The loan transactions are then processed through the clearing account. However, in some instances, the Reserve Bank may allow a nonmember institution to process discount loan transactions through the account of a member bank. In most of these isolated

1. Balances due from such institutions include all interest-bearing and non-interest-bearing balances, whether in the form of demand, savings, or time balances, including certificates of deposit, but excluding certificates of deposit held in trading accounts.

2. See section 206.5(a) of Regulation F for the capital ratios necessary for a correspondent bank to be considered adequately capitalized.

3. The Board may waive this requirement if the primary federal supervisor of the insured institution advises the Board that the institution is not reasonably able to obtain necessary services, including payment-related services and placement of funds, without incurring exposure to a correspondent in excess of the otherwise applicable limit.

cases, a transaction of a nonmember institution is being processed through the account of the bank with which the nonmember institution has a correspondent relationship.

Under the reserve account charge agreements used by most Federal Reserve Banks, the member bank's reserve account may be charged if the nonmember bank defaults on the loan processed through the member bank's account. Since member banks may not act as the guarantor of the debts of another, member banks may only legally enter into revocable reserve account charge agreements. Revocable agreements allow the member bank, at its option, to revoke the charge and thus avoid liability for the debt of the nonmember correspondent. In contrast, irrevocable charge agreements constitute a binding guarantee of the nonmember correspondent's debt and generally cannot be entered into by a member bank. Banks that enter into revocable charge agreements should establish written procedures to ensure their ability to make prudent, timely decisions.

DEPOSIT BROKERS

On the asset side of the balance sheet, examiners should review the activities of banks that place deposits through money brokers. These banks should have sufficient documentation to, among other things, verify the amounts and terms of individual deposits and the names of depository institutions in which the deposits are placed. Banks should also be able to demonstrate that they have exercised appropriate credit judgment with respect to each depository institution in which they have placed funds. Deficiencies in this area could constitute an unsafe or unsound banking practice. A more detailed discussion of brokered deposits is included in "Deposit Accounts," sections 3000.1–3000.3 of this manual.

DUE FROM FOREIGN BANKS

Due from foreign banks demand or nostro accounts are handled in the same manner as due from domestic bank accounts, except that the balances due are generally denominated in foreign currency.

A bank must be prepared to make and receive payments in foreign currencies to meet the needs of its international customers. This can be accomplished by maintaining accounts (nostro balances) with banks in foreign countries in whose currencies receipts and payments are made.

Nostro balances may be compared with an inventory of goods and must be supervised in the same manner. For example, payment to import goods manufactured in Switzerland to the United States can be made through a U.S. bank's Swiss franc account with another bank in Switzerland. Upon payment in Switzerland, the U.S. bank will credit its nostro account with the Swiss bank and charge its U.S. customer's dollar account for the appropriate amount in dollars. Conversely, exporting U.S. goods to Switzerland results in a debit to the U.S. bank's Swiss correspondent account. The first transaction results in an outflow of the U.S. bank's "inventory" of Swiss francs, while the second transaction results in an inflow of Swiss francs. The U.S. bank must maintain adequate balances in its nostro accounts to meet unexpected needs and to avoid overdrawing those accounts for which interest must be paid. However, the bank should not maintain excessive idle nostro balances that do not earn interest, causing a loss of income.

The U.S. bank also runs risks by being either long or short in a particular foreign currency or by maintaining undue gaps. Losses could result if that currency appreciates or depreciates significantly or if the bank must purchase or borrow the currency at a higher rate.

Excessive nostro overages and shortages can be avoided by entering into spot and forward exchange contracts to buy or sell such nostro inventories. Those contracts are discussed in "International—Foreign Exchange," section 7100.1. However, all foreign-currency transactions, except over-the-counter cash trades, are settled through nostro accounts. Therefore, the volume of activity in those accounts may be substantial, and the accounts must be properly controlled.

In addition, an account service known as a payable-through account is being marketed by U.S. banks, Edge corporations, and the U.S. branches and agencies of foreign banks to foreign banks that otherwise would not have the ability to offer their customers access to the U.S. banking system. This account service, referred to by other names such as pass-through accounts and pass-by accounts, involves a U.S. banking entity's opening of a deposit account for the foreign bank. Policies and procedures should be

developed to guard against the possible improper or illegal use of payable-through account facilities by foreign banks and their customers. Examination procedures relating to this area are part of the *FFIEC Bank Secrecy Act/Anti-Money Laundering Examination Manual*.

1. To determine if the policies, practices, procedures, and internal controls regarding due from banks are adequate.
2. To determine if bank officers and employees are operating in conformance with the established guidelines.
3. To determine that all due from accounts are reasonably stated and represent funds on deposit with other banks.
4. To evaluate the credit quality of banks with whom demand accounts are maintained.
5. To determine the scope and adequacy of the audit coverage.
6. To determine compliance with laws, rulings, and regulations.
7. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of law, rulings, or regulations have been noted.

1. If selected for implementation, complete or update the Due From Banks Internal Control Questionnaire.
2. Determine the scope of the examination, based on the evaluation of internal controls and the work performed by internal/external auditors.
3. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest review done by internal/external auditors from the examiner assigned "Internal Control," and determine if corrections have been accomplished.
4. Scan the most recent bank-prepared reconcilements for any unusual items and determine that closing balances listed on reconcilements agree with the general ledger and with the balance shown on the cut-off statement if one has been obtained.
5. If the bank's policy for charge-off of old open items provides for exceptions in extenuating circumstances, review excepted items and determine if charge-off is appropriate.
6. If the bank has no policy for charge-off of old open items, review any items which are large or unusual or which have been outstanding for over two months, along with related correspondence, and determine if charge-off is appropriate.
7. Test the bank's calculation of its Federal Reserve requirement and determine that reports are accurate and complete by:
   a. Performing a limited review of a sample of line items if the bank has effective operating procedures and has an audit program covering the required reports.
   b. Performing a detailed review of all line items if the bank has not established operating procedures or does not have an audit program covering the required reports.
8. Confer with the examiner assigned to check for compliance with the laws and regulations relating to insider loans at correspondent banks and loans to insiders of correspondent banks (Regulation O and 12 USC 1972(2)) and either provide a list, or verify a bank supplied list, of correspondent banks. (This effort should be coordinated with the examiner assigned to "Deposit Accounts" to avoid duplication of work.)
9. Review the maximum deposit balance established for each due from bank account and determine if the maximum balance:
   a. Is established after consideration of compensating balance requirements resulting from commitments or credit lines made available to the bank or its holding company. Coordinate this effort with examiner assigned "Bank-Related Organizations."
   b. Appears to be related to loans of executive officers or directors or to loans which have been used to acquire stock control of the bank under examination.
      - If such due from accounts are detected, provide full details of the account to the examiner assigned to check for compliance with the law relating to loans to insiders of correspondent banks (12 USC 1972(2)).
10. Determine the existence of any concentrations of assets with other banks. Include correspondent accounts, time deposits and any federal funds sold in computation. For concentrations exceeding 25 percent of the bank's capital structure, forward the information to examiners assigned "Concentrations of Credit" for possible inclusion in the report of examination.

Note: Procedures 11 through 21 apply to due from foreign banks—demand (nostro accounts).

11. Obtain or prepare a trial balance (including local currency book values) of due from foreign banks—demand by bank customer and:
    a. Agree or reconcile balances to department controls and the general ledger.
    b. Review reconciling items for reasonableness.
12. Using the appropriate sampling technique, select demand account banks for examination.
13. Prepare credit line sheets to include:
    a. Customer's aggregate due from banks—demand liability in foreign currency

amount and local currency equivalent.
b. Amount of customer's line designated by the bank.
c. Frequency of recent overdrawn nostro accounts.

(Overdrawn nostro accounts as they relate to foreign exchange activities are discussed in the International—Foreign Exchange section. Also, the examiner assigned "Borrowed Funds" must obtain (or prepare) a listing of overdrawn nostro accounts for inclusion in the borrowing section of the report of examination.)

d. Past compliance with customer's line limitation as determined from review of liability ledger records.

14. Obtain from the examiner assigned "International—Loan Portfolio Management," schedules on the following, if they are applicable to the due from foreign banks—demand:
    a. Delinquencies.
    b. Miscellaneous loan debit and credit suspense accounts.
    c. Criticized shared national credits.
    d. Interagency Country Exposure Review Committee credits.
    e. Loans criticized during the previous examination.
    f. Information on directors, officers and their interests, as contained in statements required under Regulation O (12 CFR 215).
    g. Specific guidelines in the bank policy relating to due from banks—demand.
    h. Current listing of due from foreign banks—demand approved customer lines.
    i. Any useful information resulting from the review of the minutes of the loan and discount committee or any similar committee.
    j. Reports furnished to the board of directors.
15. Review the information received and perform the following for:
    a. Miscellaneous loan debit and credit suspense accounts:
        • Discuss with management any large or old items.
        • Perform additional procedures as deemed appropriate.
    b. Interagency Country Exposure Review Committee Credits:
        • Compare the schedule to the trial balance to determine which due from foreign banks—demand deposits are portions of Interagency Country Exposure Review Committee credits.
        • For each due from foreign bank—demand deposit so identified, transcribe appropriate information to line sheets and forward the information to the examiner assigned "International—Loan Portfolio Management."
    c. Loans criticized during the previous examination (due from foreign banks—demand portion):
        • Determine the disposition of the due from foreign banks—demand so criticized by transcribing:
            — Current balance and payment status, or
            — Date the deposit was paid and the source of repayment.
16. Transcribe or compare information from the above schedules to credit line sheets, where appropriate, and indicate any cancelled bank lines.
17. Prepare credit line cards for any due from foreign banks—demand not in the sample which, based on information derived from the above schedules, requires in-depth review.
18. Obtain liability and other information on common borrowers from examiners assigned to cash items, overdrafts and loan areas and together decide who will review the borrowing relationship. Pass or retain completed credit line cards.
19. Obtain credit files for all due from foreign banks—demand for whom credit line cards were prepared and complete credit line cards where appropriate. To analyze the loans, perform the procedures set forth in step 14 of the International—Due From Banks–Time section.
20. By reviewing appropriate bank records, determine that:
    a. Profit or losses resulting from revaluation adjustment on net open positions spot are passed properly to the respective due from foreign bank—demand (nostro) account (usually monthly).
    b. At the delivery of the "swap" forward contract, proper entries are made to the respective due from foreign bank—demand (nostro) and swap adjustment accounts.

21. Determine compliance with laws, regulations and rulings pertaining to due from foreign banks—demand activities by performing the following for:
    a. Reporting of Foreign Exchange Activities:
        - Determine that Foreign Currency Forms FC-1, FC-2, FC-1a and FC-2a, as required, are submitted to the Department of the Treasury under the provisions of 31 CFR 128.
        - Check that copies of those forms are forwarded by each state member bank to the Federal Reserve at each filing time specified in 31 CFR 128.

    Note: Due from foreign banks—demand (nostro) deposits will be reviewed, discussed with appropriate bank officers, and prepared in suitable report form by the examiner assigned ''International—Due From Banks–Time'', if the bank maintains international due from banks—time and/or call money deposits.

22. Forward list of due from banks accounts to the examiner assigned to ''Investment Securities'' and to ''Loan Portfolio Management.''
23. Consult with the examiner assigned ''Asset/Liability Management'' and provide the following, if requested:
    a. A listing, by maturity and amount, of due from banks—time deposits.
    b. The amounts of due from banks—demand deposits that exceed the required reserve balance at the Federal Reserve Bank and that exceed the working balances at correspondent banks.
24. Discuss with appropriate officer(s) and prepare in suitable report form of:
    a. Cancelled due from foreign banks—demand deposit lines that are unpaid.
    b. Violations of laws, regulations and rulings.
    c. Internal control exceptions and deficiencies, or noncompliance with written policies, practices and procedures.
    d. Any items to be considered for charge-off.
    e. Uncorrected audit deficiencies.
    f. Due from foreign banks—demand deposits not supported by current and complete financial information.
    g. Due from foreign banks—demand deposits on which documentation is deficient.
    h. Concentrations.
    i. Criticized loans (portions applicable to due from foreign banks—demand deposits).
    j. Due from foreign banks—demand deposits which for any other reason are questionable as to quality and ultimate collection.
    k. Other matters regarding condition of the department.
25. Update the workpapers with any information that will facilitate future examinations.

Due From Banks
Internal Control Questionnaire
Effective date March 1984

Section 2010.4

Review the bank's internal controls, policies, practices and procedures for due from bank accounts. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICIES FOR DUE FROM BANK DOMESTIC AND FOREIGN—DEMAND ACCOUNTS

1. Has the board of directors, consistent with its duties and responsibilities, adopted written policies for due from bank accounts that:
   a. Provide for periodic review and approval of balances maintained in each such account?
   b. Indicate person(s) responsible for monitoring balances and the application of approved procedures?
   c. Establish levels of check-signing authority?
   d. Indicate officers responsible for approval of transfers between correspondent banks and procedures for documenting such approval?
   e. Indicate the supervisor responsible for regular review of reconciliations and reconciling items?
   f. Indicate that all entries to the accounts are to be approved by an officer or appropriate supervisor and that such approval will be documented?
   g. Establish time guidelines for charge-off of old open items?
2. Are the policies for due from bank accounts reviewed at least annually by the board or the board's designee to determine their adequacy in light of changing conditions?

BANK RECONCILEMENTS

3. Are bank reconcilements prepared promptly upon receipt of the statements?

*4. Are bank statements examined for any sign of alteration and are payments or paid drafts compared with such statements by the persons who prepare bank reconcilements (if so, skip question 5)?

*5. If the answer to question 4 is no, are bank statements and paid drafts or payments handled before reconcilement only by persons who do not also:
   a. Issue drafts or official checks and prepare, add or post the general or subsidiary ledgers?
   b. Handle cash and prepare, add or post the general ledger or subsidiary ledgers?

*6. Are bank reconcilements prepared by persons who do not also:
   a. Issue drafts or official checks?
   b. Handle cash?
   c. Prepare general ledger entries?

7. Concerning bank reconcilements:
   a. Are amounts of paid drafts or repayments compared or tested to entries on the ledgers?
   b. Are entries or paid drafts examined or reviewed for any unusual features?
   c. Whenever a delay occurs in the clearance of deposits in transit, outstanding drafts and other reconciling items, are such delays investigated?
   d. Is a record maintained after an item has cleared regarding the follow-up and reason for any delay?
   e. Are follow-up and necessary adjusting entries directed to the department originating or responsible for the entry for correction with subsequent review of the resulting entries by the person responsible for reconcilement?
   f. Is a permanent record of the account reconcilement maintained?
   g. Are records of the account reconcilements safeguarded against alteration?
   h. Are all reconciling items clearly described and dated?
   i. Are details of account reconcilement reviewed and approved by an officer or supervisory employee?
   j. Does the person performing reconcilements sign and date them?
   k. Are reconcilement duties for foreign

demand accounts rotated on a formal basis?

DRAFTS

8. Are procedures in effect for the handling of drafts so that:
   - *a. All unissued drafts are maintained under dual control?
   - b. All drafts are prenumbered?
   - c. A printer's certificate is received with each supply of new prenumbered drafts?
   - d. A separate series of drafts is used for each bank?
   - e. Drafts are never issued payable to cash?
   - f. Voided drafts are adequately cancelled to prevent possible reuse?
   - *g. A record of issued and voided drafts is maintained?
   - *h. Drafts outstanding for an unreasonable period of time (perhaps six months or more) are placed under special controls?
   - i. All drafts are signed by an authorized employee?
   - *j. The employees authorized to sign drafts are prohibited from doing so before a draft is completely filled out?
   - *k. If a check-signing machine is used, controls are maintained to prevent its unauthorized use?

FOREIGN CASH LETTERS

9. Is the handling of foreign cash letters such that:
   - a. They are prepared and sent on a daily basis?
   - b. They are copied or photographed prior to leaving the bank?
   - c. A copy of proof or hand run tape is properly identified and retained?
   - d. Records of foreign cash letters sent to correspondent banks are maintained, identifying the subject bank, date and amount?

FOREIGN RETURN ITEMS

10. Are there procedures for the handling of return items so that:
    - *a. They are delivered unopened and reviewed by someone who is not responsible for preparation of cash letters?
    - b. All large unusual items or items on which an employee is listed as maker, payee or endorser are reported to an officer?
    - c. Items reported missing from cash letters are promptly traced and a copy sent for credit?

FOREIGN EXCHANGE ACTIVITIES

*11. Are persons handling and reconciling due from foreign bank—demand accounts excluded from performing foreign exchange and position clerk functions?

*12. Is there a daily report of settlements made and other receipts and payments of foreign currency affecting the due from foreign bank—demand accounts?

*13. Is each due from foreign bank—-demand foreign currency ledger revalued monthly and are appropriate profit or loss entries passed to applicable subsidiary ledgers and the general ledger?

*14. Does an officer not preparing the calculations review revaluations of due from foreign bank—demand ledgers, including the verification of rates used and the resulting general ledger entries?

OTHER—FOREIGN

*15. Are separate dual currency general ledger or individual subsidiary accounts maintained for each due from foreign bank—demand account, indicating the foreign currency balance and a U.S. dollar (or local currency) equivalent balance?

16. Do the above ledger or individual subsidiary accounts clearly reflect entry and value dates?

17. Are the above ledger or individual subsidiary accounts balanced to the general ledger on a daily basis?

18. Does international division management receive a daily trial balance of due from foreign bank—demand customer balances by foreign currency and U.S. dollar (or local currency) equivalents?

OTHER

19. Is a separate general ledger account or individual subsidiary account maintained for each due from bank account?
20. Are overdrafts of domestic and foreign due from bank accounts properly recorded on the bank's records and promptly reported to the responsible officer?
21. Are procedures for handling the Federal Reserve account established so that:
    a. The account is reconciled on a daily basis?
    b. Responsibility is assigned for assuring that the required reserve is maintained?
    c. Figures supplied to the Federal Reserve for use in computing the reserve requirement are reviewed to ensure they do not include asset items ineligible for meeting the reserve requirement, and that all liability items are properly classified as required by Regulation D and its interpretations?
22. Does the foregoing information constitute an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly and indicate any additional examination procedures deemed necessary.
23. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

It is important for a federally insured depository institution[1] (bank) to control and limit the risk exposures posed to it by another domestic bank (whether or not that institution is an insured depository institution) or foreign bank with which it does business (referred to as a *correspondent*). These exposures may include all extensions of credit to a correspondent; deposits or reverse repurchase agreements with a correspondent; guarantees, acceptances, or standby letters of credit on behalf of a correspondent; purchases or acceptance as collateral of correspondent-issued securities; and all similar transactions. A bank needs to develop internal procedures to evaluate and control the risk exposures to the bank from its correspondents. Such procedures would help prevent a situation whereby the failure of a single correspondent could trigger the failure of a federally insured depository institution having claims on the failed correspondent. (See SR-93-36.)

A bank's principal sources of exposure to its correspondent tend to arise from two types of activity. First, banks may become exposed when obtaining services from (such as check-collection services), or providing services to, their correspondents. Second, exposure may arise when banks engage in transactions with correspondents in the financial markets. Each type of exposure has its own characteristics and its own risks.

Correspondent banking services are the primary source of interbank exposure for the majority of banks, particularly small and medium-sized banks. In connection with check-collection services and other trade- or payment-related correspondent services, banks often maintain balances with their correspondents in order to settle transactions and compensate the correspondents for the services provided. These balances give rise to exposure to the correspondents. Although correspondent services are in some cases provided on a fee basis, many correspondents may prefer compensating-balance arrangements, as these balances provide the correspondents with a stable source of funding. Also, some banks may prefer to pay for services with "soft charges" in the form of balances instead of "hard charges" in the form of fees.

Exposure to a correspondent may be significant, particularly when a bank uses one correspondent for all of its check collections and other payment services; loans excess reserve account balances (federal, or fed, funds) to the correspondent,[2] or engages in other banking transactions with correspondents.[3] This exposure may increase when interest rates fall, as higher levels of compensating balances may be required to provide adequate compensation to the correspondent.

Money-center banks and large regional banks may have significant exposure to correspondents[4] through their activities in interbank markets, such as the securities, swap, and foreign-exchange markets. Interbank transactions that call for performance in the future (such as swaps, foreign-exchange contracts, and over-the-counter options) give rise to exposure to the correspondents that act as counterparties[5] in such transactions. In addition to credit risk, such transactions may involve interest-rate risk,

1. A federally insured depository institution refers to a bank, as defined in section 3 of the Federal Deposit Insurance Act (12 USC 1813), and includes a federally insured national bank, state bank, District bank, or savings association, and a federally insured branch of a foreign bank.

2. In the fed funds market, a loan of fed funds is often referred to as a sale. Borrowing of fed funds is referred to as a purchase.

3. Although a bank's primary correspondent often will borrow (purchase) fed funds as principal directly from the bank, a correspondent may act as agent to place the funds with another institution. In such agency arrangements, a bank may provide its correspondent with a preapproved list of institutions with which the correspondent may place the funds. When a correspondent is acting as the bank's agent in placing fed funds, the bank's exposure would be to the ultimate purchaser of the funds, not to the correspondent placing the funds on its behalf.

Generally, fed funds loans are unsecured. A bank may also provide funds to a correspondent through transactions known as *reverse repurchase agreements*, in which the bank provides funds to the correspondent by buying an asset, generally a government security. The correspondent agrees that it will repurchase the asset from the bank at the expiration of a set period, generally overnight, at a repurchase price calculated to compensate the bank for the use of its funds. Unlike fed funds loans, these transactions are essentially secured transactions.

4. Although the depository institutions that are parties to transactions in the interbank markets discussed above generally are referred to as *counterparties*, the term *correspondent* is used in this discussion to denote any domestic depository institution or a foreign bank to which a bank is exposed. The term *correspondent* does not include a commonly controlled correspondent, as defined in section 206.2(b) of Regulation F.

5. In other banking transactions, such as foreign-exchange, money market, and other permissible transactions, activities, or contractual arrangements, the other party to the transaction is referred to as the counterparty rather than as the correspondent.

foreign-exchange risk, and settlement risk. Settlement risk is the risk that a counterparty will fail to make a payment or delivery in a timely manner. Settlement risk may arise from unsecured transactions in the government securities, foreign-exchange, or other markets, and it may result from operational, liquidity, or credit problems.

Lending limits prohibit national banks from lending amounts equal to more than 15 percent of a national bank's unimpaired capital and surplus to a single borrower on an unsecured basis (12 USC 84(a)(1)); these limits also prohibit a national bank from lending an additional 10 percent on a secured basis (12 USC 84(a)(2)). The national bank lending limits apply only to "loans and extensions of credit," and the limits do not include most off-balance-sheet transactions that may provide significant sources of exposure to correspondents. Additionally, the national bank lending limits do not apply to overnight fed funds loans, a significant source of short-term exposure to correspondents. State limits generally do not apply to a broader range of transactions than the national bank limits, although some states include fed funds transactions within their limits.

State-chartered banks generally are subject to lending limits under state law. Almost all states impose lending limits on the banks they charter. Most of these limits are patterned on the national bank lending limits, although the specific percentages or transactions covered vary. The state limits generally do not apply to a broader range of off-balance-sheet transactions, although some states include fed funds transactions within their limits. A number of states, however, exclude interbank transactions from their lending limits entirely.

LIMITS ON INTERBANK LIABILITIES

Regulation F, Limitations on Interbank Liabilities (12 CFR 206), implemented section 308 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), which amended section 23 of the Federal Reserve Act (12 USC 371b-2). Section 23, as amended, requires the Board of Governors of the Federal Reserve System (the Board) to prescribe standards to limit the risks posed by exposure of banks to other domestic depository institutions and foreign banks. Regulation F sets forth these standards. All depository institutions insured by the FDIC are subject to the Federal Reserve Board's Regulation F.[6] Regulation F was first adopted in 1992 and has remained substantially the same, except for the technical amendments adopted by the Board on September 10, 2003. (See 68 *Fed. Reg.* 53,283.) Regulation F consists of two primary parts: (1) prudential standards that apply to exposures generally (section 206.3) and (2) special rules that apply to credit exposure under certain circumstances (section 206.4).

The "Prudential Standards" section requires depository institutions to develop and adopt internal policies and procedures to evaluate and control all types of exposures to correspondents with which they do business.[7] Policies and procedures are to be established and maintained to prevent excessive exposure to any individual correspondent in relation to the condition of the correspondent. The "Prudential Standards" section requires a bank to adopt internal exposure limits when the financial condition of the correspondent and the form or maturity of the exposure create a significant risk that payments will not be made in full or on time. This section also provides that a bank shall structure the transactions of a correspondent or monitor exposures to a correspondent such that the bank's exposure ordinarily does not exceed its internal limits.

The "Credit Exposure" section provides that a bank's internal limit on interday *credit exposure* to an individual correspondent may not be more than 25 percent of the exposed bank's total capital, unless the bank can demonstrate that its correspondent is at least "adequately capitalized," as defined in section 206.5(a) of the rule. No limit is specified for credit exposure to correspondents that are at least adequately capitalized, but prudential standards are required for all correspondents, regardless of capital level. The term *correspondent* includes both domestically chartered depository institutions that are FDIC insured and foreign banks; the term does not include a commonly controlled correspondent.

6. Correspondent is defined in section 206.2(c) of Regulation F to mean a U.S. depository institution or a foreign bank to which a bank has exposure, but does not include commonly controlled correspondents.

7. Banks had to have the internal policies and procedures in place on June 19, 1993.

Prudential Standards

Standards for Selecting Correspondents

Banks are to address the risk arising from exposure to a correspondent, taking into account the financial condition of the correspondent and the size, form, and maturity of its exposure to the correspondent. Banks must adopt internal policies and procedures that evaluate the credit and liquidity risks, including operational risks, in selecting correspondents and terminating those relationships. Depository institutions are permitted to adopt flexible policies and procedures in order to permit resources to be allocated in a manner that will result in real reductions in risk. The policies and procedures must be reviewed annually by the bank's board of directors, but individual correspondent relationships need not be approved by the board. Examiners should determine that the policies and procedures adopted by the board provide for a determination of the credit, liquidity, and operational risks of a correspondent when the relationship with the correspondent is established and as it is maintained.[8] Additionally, if the bank has significant operational risk—such as relying on a correspondent for extensive data processing—that exposure could also lead to liquidity problems. This exposure may not be an issue for institutions that are not operationally dependent on any particular correspondent. Many banks may also address this exposure elsewhere in their operational procedures.

A bank's policies and procedures should provide for periodic review of the financial condition of any correspondent to which the bank has significant exposure. This review should evaluate whether the size and maturity of the exposure is commensurate with the correspondent's financial condition.[9] Factors bearing on the financial condition of the correspondent include, but are not necessarily limited to, (1) the capital level of the correspondent, (2) the level of nonaccrual and past-due loans and leases, and (3) the level of earnings.

Examiners should determine that a bank has periodically reviewed the financial condition of any correspondent to which the bank has significant exposure. The frequency of these reviews will depend on the size and maturity of the exposure and the condition of the correspondent. For example, the policies of many banks provide for an extensive annual review of a correspondent's financial condition; such policies may also provide for less extensive interim reviews under some circumstances, such as when exposure to a correspondent is very high or when a correspondent has experienced financial difficulty. A bank need not require periodic review of the financial condition of all correspondents. For example, periodic reviews would not be necessary for a correspondent to which the bank has only insignificant levels of exposure, such as small balances maintained for clearing purposes.[10] Significant levels of exposure should reflect those amounts that a prudent bank believes deserve analysis for risk of loss.

A bank may base its review of the financial condition of a correspondent on publicly available information, such as bank Call Reports, financial statements or reports, Uniform Bank Performance Reports, or annual reports, or the bank may use financial information obtained from a rating service. A bank generally is not required to obtain nonpublic information to use as the basis for its analysis and review of the financial condition of a correspondent.[11] For

8. *Liquidity risk* and *operational risk* are terms used in the definition of exposure. Liquidity risk is the risk that payment will be delayed for some period of time. For example, a bank is subject to the liquidity risk that a payment due from a failed correspondent will not be made on time; the bank's credit risk may be a lesser amount due to later distributions from the correspondent's receiver. Liquidity risk is included in the definition of exposure.

Operational risk is the risk that a correspondent's operational problems may prevent it from making payments, thereby creating liquidity risks for other banks. For example, a computer failure at a correspondent that a bank relies on for extensive data processing support may prevent the correspondent from making payments, and thus may create liquidity problems for the bank and other banks as well. Operational risk is also included in the definition of exposure.

9. Because exposure to a Federal Reserve Bank or Federal Home Loan Bank poses minimal risk to a respondent, Federal Reserve Banks and Federal Home Loan Banks are not included in the definition of correspondent.

10. Other forms of exposure that generally would not be considered significant include (1) a collecting bank's risk that a check will be returned, (2) an originating bank's risk that an automated clearinghouse (ACH) debit transfer will be returned or its settlement reversed, (3) a receiving bank's remote risk that settlement for an automated credit transfer could be reversed, or (4) a credit card transaction. In these types of transactions, the amounts involved are generally small, and the exposed bank usually has prompt recourse to other parties.

11. A bank *is* required to obtain nonpublic information to evaluate a correspondent's condition for those foreign banks for which no public financial statements are available. In these limited circumstances, the bank would need to obtain financial information for its review (including information obtained directly from the correspondent).

correspondents with which a bank has a significant relationship, a bank may have considerable nonpublic information, such as information on the quality of management, general portfolio composition, and similar information, but such information is not always available and is not required.

Regardless of whether public or nonpublic sources of information are used, a bank may rely on another party, such as a bank rating agency, its bank holding company, or another correspondent, to assess the financial condition of or select a correspondent, provided that the board of directors has reviewed and approved the general assessment or selection criteria used by that party. Examiners should ascertain that the bank reviews and approves the assessment criteria used by such other parties. Additionally, when a bank relies on its bank holding company to select and monitor correspondents—or relies on a correspondent, such as a bankers' bank, to choose other correspondents with which to place the bank's federal funds or other deposits—examiners should ensure that the bank has reviewed and approved the selection criteria used.

Internal Limits on Exposure

When the financial condition of the correspondent and the form or maturity of the exposure represent a significant risk that payments will not be made in full or in a timely manner, a bank's policies and procedures must limit its exposure to the correspondent, either by the establishment of internal limits or by other means. Limits are to be consistent with the risks undertaken, considering the financial condition and the form and maturity of the exposure to the correspondent. Limits may specify fixed exposure amounts, or they may be more flexible and be based on factors such as the monitoring of exposure and the financial condition of the correspondent. Different limits may be set for different forms of exposure, different products, and different maturities.

When a bank has exposure to a correspondent that has a deteriorating financial condition, examiners should determine if the bank took that deterioration into account when it evaluated the correspondent's creditworthiness. The examiner should also evaluate if the bank's level of exposure to the correspondent was appropriate.

Examiners need to determine that the bank's policy and procedural limits are consistent with the risk undertaken, given the maturity of the exposure and the condition of the correspondent. Inflexible dollar limits may not be necessary in all cases. As stated earlier, limits can be flexible and be based on factors such as the level of the bank's monitoring of its exposure and the condition of the correspondent. For example, a bank may choose not to establish a specific limit on exposure to a correspondent when the bank is able to ascertain account balances with the correspondent on a daily basis, because such balances could be reduced rapidly if necessary. In appropriate circumstances, a bank may establish limits for longer-term exposure to a correspondent, while not setting limits for interday (overnight) or intraday (within the day) exposure. Generally, banks do not need to set one overall limit on their exposure to a correspondent. Banks may prefer instead to set separate limits for different forms of exposure, products, or maturities. A bank's evaluation of its overall facility with a correspondent should take into account utilization levels and procedures for further limiting or monitoring overall exposure.

When a bank has established internal limits for its significant exposure, examiners should ensure that the bank either (1) has procedures to monitor its exposure to remain within established limits or (2) structures transactions with the correspondent to ensure that the exposure ordinarily remains within the bank's established internal limits. While some banks may monitor actual overall exposure, others may establish individual lines for significant sources of exposure, such as federal funds sales. For such banks, the examiner should ensure that the bank has established procedures to ensure that exposure generally remains within the established lines. In some instances, a bank may accomplish this objective by establishing limits on exposure that are monitored by a correspondent, such as for sales of federal funds through the correspondent as agent.

When a bank monitors its exposures, the appropriate level of monitoring will depend on (1) the type and volatility of the exposure, (2) the extent to which the exposure approaches the bank's internal limits for the correspondent, and (3) the condition of the correspondent. Generally, monitoring may be conducted retrospectively. Examples of retrospective monitoring include checking close-of-business balances at a correspondent for the prior day or obtaining daily balance records from a correspondent at

the end of each month. Thus, banks are not expected to monitor exposure to correspondents on a real-time basis.

The purpose of requiring banks to monitor or structure their transactions that are subject to limits is to ensure that the bank's exposure generally remains within established limits. However, occasional excesses over limits may result from factors such as unusual market disturbances, unusual favorable market moves, or other unusual increases in activity or operational problems. Unusual late incoming wires or unusually large foreign cash letters (international pouch) would be considered examples of activities that could lead to excesses over internal limits and that would not be considered impermissible under the rule. Examiners should verify that banks have established appropriate procedures to address any excesses over internal limits.

A bank's internal policies and procedures must address intraday exposure. However, as with other exposure of longer maturities (i.e., interday or longer), the rule does not necessarily require that limits be established on intraday exposure. Examiners should expect to see such limits or frequent monitoring of balances only if the size of the intraday exposure and the condition of the correspondent indicate a significant risk that payments will not be made as contemplated. Examiners should keep in mind that intraday exposure may be difficult for a bank to actively monitor and limit. Consequently, like interday exposure, intraday exposure may be monitored retrospectively. In addition, smaller banks may limit their focus on intraday exposure to being aware of the range of peak intraday exposure to particular institutions and the effect that exposure may have on the bank. For example, a bank may receive reports on intraday balances from a correspondent on a monthly basis and would only need to take actions to limit or more actively monitor such exposure if the bank becomes concerned about the size of the intraday exposure relative to the condition of the correspondent.

Credit Exposure

A bank's internal policies and procedures must limit overnight credit exposure to an individual correspondent to not more than 25 percent of the exposed bank's total capital, unless the bank can demonstrate that its correspondent is at least adequately capitalized.[12] The credit exposure of a bank to a correspondent shall consist of the bank's assets and off-balance-sheet items that are (1) subject to capital requirements under the capital adequacy guidelines of the bank's primary federal supervisor and (2) involve claims on the correspondent or capital instruments issued by the correspondent.[13] Credit exposure therefore includes items such as deposit balances with a correspondent, fed funds sales, and credit-equivalent amounts of interest-rate and foreign-exchange-rate contracts and other off-balance-sheet transactions. Credit exposure does not include settlement of transactions, transactions conducted in an agency or similar capacity where losses will be passed back to the principal or other party, and other sources of exposure that are not covered by the capital adequacy guidelines or that do not involve exposure to a correspondent.[14] A bank may exclude the following from the calculation of credit exposure to a correspondent: (1) transactions, including reverse repurchase agreements, to the extent that the transactions are secured by government securities or readily marketable collateral; (2) the proceeds of checks and other cash items depos-

12. Total capital is the total of a bank's tier 1 and tier 2 capital calculated according to the risk-based capital guidelines of the bank's primary federal supervisor. For an insured branch of a foreign bank organized under the laws of a country that subscribes to the principles of the Basel Capital Accord, *total capital* means total tier 1 and tier 2 capital as calculated under the standards of that country. For an insured branch of a foreign bank organized under the laws of a country that does not subscribe to the principles of the Basel Capital Accord, *total capital* means total tier 1 and tier 2 capital as calculated under the provisions of the accord. The limit on credit exposure of the insured branch of a foreign bank is based on the foreign bank's total capital, as defined in this section, not on the imputed capital of the branch.

For purposes of Regulation F, an adequately capitalized correspondent is a correspondent with a total risk-based capital ratio of 8.0 percent or greater, a tier 1 risk-based capital ratio of 4.0 percent or greater, and a leverage ratio of 4.0 percent or greater. The leverage ratio does not apply to correspondents that are foreign banks. See section 206.5(e) for definitions of these terms.

13. A bank is required to include with its own credit exposure 100 percent of the credit exposure of any subsidiary that the bank is required to consolidate on its bank Call Report. This provision generally captures the credit exposure of any majority-owned subsidiary of the bank. Therefore, none of a minority-owned subsidiary's exposure and all of a majority-owned subsidiary's exposure would be included in the parent bank's exposure calculation.

14. For example, when assets of a bank, such as securities, are held in safekeeping by a correspondent, there is no exposure to the correspondent, even though the securities themselves may be subject to a capital charge.

ited in an account at a correspondent that are not yet available for withdrawal, (3) quality assets on which the correspondent is secondarily liable, or obligations of the correspondent on which a creditworthy obligor in addition to the correspondent is available; (4) exposure that results from the merger with or acquisition of another bank for one year after that merger or acquisition is consummated; and (5) the portion of the bank's exposure to the correspondent that is covered by federal deposit insurance. (See section 206.4(d) for a more detailed discussion of these exclusions.) This regulatory limit on credit exposure should be implemented as part of the bank's policies and procedures required under the "Prudential Standards" section. Regulation F does not impose regulatory limits for "credit exposure" to adequately or well-capitalized correspondents.

Quarterly monitoring of capital is only required for correspondents to which a bank's potential credit exposure is more than 25 percent of its total capital.[15] If the internal systems of a bank ordinarily limit credit exposure to a correspondent to 25 percent or less of the exposed bank's total capital, no monitoring of the correspondent's capital would be necessary, although periodic reviews of the correspondent's financial condition may be required under the "Prudential Standards" section if exposure to the correspondent is significant. Every effort should be made to allow banks to use existing risk-monitoring and -control systems and practices when these systems and practices effectively maintain credit exposure within the prescribed limits. For smaller institutions, it is relatively easy to determine how their measure of exposure compares with the definition of credit exposure in Regulation F because these institutions have relatively simple types of exposure. Examiners should remember that the regulation emphasizes appropriate levels of exposure based on the exposed bank's analysis of the creditworthiness of its correspondents. Accordingly, for those correspondents that the bank has not demonstrated are at least adequately capitalized, this limit should be viewed as a maximum credit-exposure level rather than as a safe-harbor level of credit exposure.

Examiners should ensure that the bank has in place policies and procedures that ensure the quarterly monitoring of the capital of its domestic correspondents. This quarterly schedule allows the bank to pick up information from the correspondent's most recent bank Call Report, financial statement, or bank rating report. Currently, it is difficult to obtain information on the risk-based capital levels of a correspondent. Regulation F requires that a bank must be able to demonstrate only that its correspondent's capital ratios qualify it as at least adequately capitalized.

A bank is not limited to a single source of information for capital ratios. A bank may rely on capital information obtained from a correspondent, a bank rating agency, or another reliable source of information. Further, examiners should anticipate that most banks will receive information on their correspondent's capital ratios either directly from the correspondents or from a bank rating agency. The standard used in the rule is based solely on capital ratios and does not require disclosure of CAMELS ratings. For foreign bank correspondents, monitoring frequency should be related to the frequency with which financial statements or other regular reports are available. Although such information is available quarterly for some foreign banks, financial statements for many foreign banks are generally available only on a semiannual basis.

Information on risk-based capital ratios may not be available for many foreign bank correspondents. As with domestic correspondents, however, examiners should anticipate that in most instances the correspondent will provide the information to the banks with which it does business.

A bank's internal policies and procedures should limit overnight credit exposure to a correspondent to not more than 25 percent of the exposed bank's total capital, unless the bank can demonstrate that its correspondent is at least adequately capitalized, as defined by the rule. However, examiners should not necessarily expect banks to have formal limits on credit exposure to a correspondent for which the bank does not maintain quarterly capital information or that is a less than adequately capitalized correspondent if the banks' policies and procedures effectively limit credit exposure to an amount below the 25 percent limit of total capital. Such situations include those in which

15. Because information on risk-based capital ratios for banks is generally based on the bank Call Report, a bank would be justified in relying on the most recently available reports based on Call Report data. While there may be a significant lag in such data, Call Reports are useful for monitoring trends in the condition of a correspondent—especially when a bank follows the data on a continuing basis.

only small balances are maintained with the correspondent or in which the correspondent has only been approved for a limited relationship. Although in many cases it will be necessary for a bank to establish formal internal limits to meet the regulatory limit, the provisions of section 206.3 (prudential standards) concerning excesses over internal limits also apply to limits established for the purpose of controlling credit exposure under section 206.4 of Regulation F.

Interbank Liabilities
Examination Objectives
Effective date May 2006

Section 2015.2

The following examination objectives should be considered when examiners are (1) evaluating the bank's interbank liabilities with respect to its credit exposures to correspondents and (2) assessing the bank's compliance with Regulation F.

1. To determine if the policies, practices, procedures, and internal controls for interbank liabilities adequately address the risks posed by the bank's exposure to other domestic depository institutions and foreign banks.
2. To determine if bank officers and employees are operating in compliance with the policies and procedures established by the bank.
3. To determine if the financial condition of correspondents to which the bank has significant exposure—significant both in the size and maturity of the exposure and the financial condition of the correspondent—is reviewed periodically.
4. To determine if internal limits on exposure (1) have been established where necessary and (2) are consistent with the risk undertaken.
5. To determine if (1) exposure ordinarily remains within the established internal limits and (2) appropriate procedures have been established to address excesses over internal limits.
6. To determine that a bank's credit exposure to less than adequately capitalized correspondents is not more than 25 percent of the exposed bank's total capital. (Note that Regulation F places greater emphasis on maintaining appropriate levels of exposure based on a bank's analysis of the creditworthiness of its correspondents as opposed to merely staying within regulatory established limits.)
7. To determine if those correspondents to which the bank has credit exposure exceeding 25 percent of total capital are monitored quarterly to ensure that such correspondents remain at least adequately capitalized.
8. To reach agreement with the board of directors and senior management to initiate corrective action when policies, procedures, or internal controls are deficient, or when there are violations of laws or regulations.

Examiners should obtain or prepare the information necessary to perform the appropriate procedural steps.

1. If selected for implementation, complete or update the ''Interbank Liabilities'' section of the internal control questionnaire.
2. On the basis of an evaluation of the bank's internal controls, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures.
4. Request bank files relating to its exposure to its correspondents, as exposure is defined in Regulation F and applied and used in the ''Prudential Standards'' section of the regulation.
   a. Request documentation demonstrating that the bank has periodically reviewed the financial condition of any correspondent to which the depository institution has significant exposure. Factors bearing on the financial condition of the correspondent that should be addressed by the bank (depository institution) include the capital level of the correspondent, the level of nonaccrual and past-due loans and leases, the level of earnings, and other factors affecting the financial condition of the correspondent.
   b. Request that the bank provide information indicating its level of exposure to each correspondent, as measured by the bank's internal control systems (for smaller banks, this information may include correspondent statements and a list of securities held in the investment portfolio).
   c. Determine if the frequency of the bank's reviews of its correspondents' financial condition is adequate for those correspondents to which the bank has very large or long maturities or for correspondents in deteriorating condition.
   d. If a bank relies on another party (such as a bank rating agency, its bank holding company, or another correspondent) to provide financial analysis of a correspondent, determine if the bank's board of directors has reviewed and approved the assessment criteria used by the other party.
   e. When the bank relies on its bank holding company or on a correspondent, such as a bankers' bank, to select and monitor correspondents or to choose other correspondents with which to place the depository institution's federal funds, ensure that the bank's board of directors has reviewed and approved the selection criteria used.
   f. If the bank is exposed to a correspondent that has experienced deterioration in its financial condition, ascertain whether the bank has taken the deterioration into account in its evaluation of the creditworthiness of the correspondent and of the appropriate level of exposure to the correspondent.
   g. When the bank has established internal limits for significant exposure, determine that the bank either monitors its exposure or structures transactions with the correspondent to ensure that exposure ordinarily remains within the bank's internal limits for the risk undertaken.
   h. If the bank chooses to set separate limits for different forms of exposure, products, or maturities and does not set an overall internal limit on exposure to a correspondent, review information on actual interday exposure to determine if the aggregate exposure (especially for less than adequately capitalized correspondents or financially deteriorating correspondents) is consistent with the risk undertaken.
   i. When a bank monitors its exposures, determine if the level of monitoring of significant exposure (especially for less than adequately capitalized correspondents or financially deteriorating correspondents) is adequate, commensurate with the type and volatility of exposure, the extent to which the exposure approaches the bank's internal limits, and the condition of the correspondent.
   j. Determine if the bank had any occasional excesses in exposure over its internal limits. If so, verify that the bank used appropriate and adequate procedures to address such excesses.
   k. If the size of intraday exposure to a

correspondent and the condition of the correspondent indicate a significant risk that payments will not be made in full or in a timely manner, verify that the bank has established intraday limits consistent with the risk undertaken and that it has monitored its intraday exposure.

5. Request and review a list of the correspondent transaction files for all domestic depository institutions and foreign banks to which the bank regularly has credit exposure (as defined in section 206.4 of Regulation F) exceeding 25 percent of the bank's total capital during a specified time interval. (Where appropriate, every effort should be made to allow banks to use existing risk-monitoring and -control systems and practices when these systems and practices effectively maintain credit exposure within the prescribed limits). Review the bank's files to—
   a. verify that the correspondent's capital levels are monitored quarterly;
   b. verify that these correspondents are at least adequately capitalized, in compliance with Regulation F; and
   c. determine that the credit exposure to those correspondents that are at risk of dropping below the adequately capitalized capital levels could be reduced to 25 percent or less of the bank's total capital in a timely manner.

Review the bank's internal controls, policies, practices, and procedures for interbank liabilities and compliance with the Board's Regulation F. The bank's system should be documented completely and concisely and should include, where appropriate, narrative descriptions, flow charts, copies of forms used, and other pertinent information. When identifying and resolving any existing deficiencies, examiners should seek the answers to the following key questions.

PRUDENTIAL STANDARDS

1. Has the bank developed written policies and procedures to evaluate and control its exposure to all of its correspondents?
2. Have the written policies and procedures been reviewed and approved by the board of directors annually?
3. Do the written policies and procedures adequately address the bank's exposure(s) to a correspondent, including credit risk, liquidity risk, operational risk, and settlement risk?
4. Has the bank adequately evaluated its intraday exposure? Does the bank have significant exposure to its correspondent from operational risks, such as extensive reliance on a correspondent for data processing? If so, has the bank addressed these operational risks?
5. Do the bank's written policies and procedures establish criteria for selecting a correspondent or terminating that relationship?
6. Do the bank's written policies and procedures require a periodic review of the financial condition of a correspondent whenever the size and maturity of exposure is considered significant in relation to the financial condition of the correspondent?
7. When exposure is considered significant, is the financial condition of a correspondent periodically reviewed?
8. Does the periodic review of a correspondent's financial condition include—
   a. the level of capital?
   b. the level of nonaccrual and past-due loans and leases?
   c. the level of earnings?
   d. other factors affecting the financial condition of the correspondent?
9. If a party other than bank management conducts the financial analysis of or selects a correspondent, has the bank's board of directors reviewed and approved the general assessment and selection criteria used by that party?
10. If the financial condition of a correspondent, or the form or maturity of the bank's exposure to that correspondent, creates significant risk, do the bank's written policies and procedures establish internal limits or other procedures, such as monitoring, to control exposure?
11. Are the bank's internal limits or controls appropriate for the level of its risk exposure to correspondents? If no internal limits have been established, is this appropriate based on the financial condition of a correspondent and the size, form, and maturity of the bank's exposure? What are your reasons for this conclusion?
12. When internal limits for significant exposure to a correspondent have been set, has the bank established procedures and structured its transactions with the correspondent to ensure that the exposure ordinarily remains within the bank's established internal limits?
13. If not, is actual exposure to a correspondent monitored to ensure that the exposure ordinarily remains within the bank's established internal limits?
14. Is the level (frequency) of monitoring performed appropriate for—
    a. the type and volatility of the exposure?
    b. the extent to which the exposure approaches the bank's internal limits?
    c. the financial condition of the correspondent?
15. Are transactions and monitoring reports on exposure reviewed for compliance with internal policies and procedures? If so, by whom and how often?
16. Do the bank's written policies and procedures address deterioration in a correspondent's financial condition with respect to—
    a. the periodic review of the correspondent's financial condition?
    b. appropriate limits on exposure?
    c. the monitoring of the exposure, or the structuring of transactions with the cor-

respondent, to ensure that the exposure remains within the established internal limits?

Are these measures appropriate and realistic?

17. Do the bank's written procedures establish guidelines to address excesses over its internal limits? (Such excesses could include unusual late incoming wires, unusually large foreign cash letters (international pouch), unusual market moves, or other unusual increases in activity or operational problems.) Are the procedures appropriate?

CREDIT-EXPOSURE LIMITS

1. Do the bank's written policies and procedures effectively limit overnight credit exposure to 25 percent or less of the bank's total capital, if a correspondent is less than adequately capitalized?
2. If credit exposure is not limited to 25 percent or less of the bank's total capital, does the bank—
   a. obtain quarterly information to determine its correspondent's capital levels (if so, determine the source of the information)?
   b. monitor its overnight credit exposure to its correspondents (if so, determine the frequency)?

This interagency guidance reminds institutions of supervisory expectations on sound practices for managing risks associated with funding and credit concentrations arising from correspondent relationships (correspondent concentration risk).[1] The guidance highlights the need for institutions to identify, monitor, and manage correspondent concentration risk on a standalone and organization-wide basis and to take into account exposures to the correspondents' affiliates as part of their prudent risk-management practices. Institutions also should be aware of their affiliates' exposures to correspondents as well as the correspondents' subsidiaries and affiliates. The guidance also reinforces the supervisory view that financial institutions should perform appropriate due diligence on all credit exposures to, and funding transactions with, other financial institutions. See SR-10-10 and its attachments. Also see 75 *Fed. Reg.* 23764, May 4, 2010.

INTERAGENCY GUIDANCE ON CORRESPONDENT CONCENTRATION RISKS

A financial institution's[2] relationship with a correspondent[3] may result in credit (asset) and funding (liability) concentrations. On the asset side, a credit concentration represents a significant volume of credit exposure that a financial institution has advanced or committed to a correspondent. On the liability side, a funding concentration exists when an institution depends on one or a few correspondents for a disproportionate share of its total funding.

The Federal Reserve[4] realizes some concentrations meet certain business needs or purposes, such as a concentration arising from the need to maintain large "due from" balances to facilitate account clearing activities. However, correspondent concentrations represent a lack of diversification, which adds a dimension of risk that management should consider when formulating strategic plans and internal risk limits.

The Federal Reserve considers credit exposures greater than 25 percent of total capital[5] as concentrations. While a liability concentration threshold has not been established, the Federal Reserve has seen instances where funding exposures as low as 5 percent of an institution's total liabilities have posed an elevated liquidity risk to the recipient institution.

These levels of credit and funding exposures are not firm limits but indicate an institution has concentration risk with a correspondent. Such relationships warrant robust risk-management practices, particularly when aggregated with other similarly sized funding concentrations, in addition to meeting the minimum regulatory requirements specified in applicable regulations. Financial institutions should identify, monitor, and manage both asset and liability correspondent concentrations and implement procedures to perform appropriate due diligence on all credit exposures to and funding transactions with correspondents, as part of their overall risk-management policies and procedures.

This guidance does not supplant or amend applicable regulations, such as the Board's *Limitations on Interbank Liabilities* (Regulation F).[6] This guidance clarifies that financial institutions should consider taking actions beyond the minimum requirements established in Regulation F to identify, monitor, and manage correspondent concentration risks in order to maintain risk-management practices consistent with safe and sound operations, especially when there are rapid changes in market conditions or in a correspondent's financial condition.

1. See, for example, section 2015.1 or SR-93-36.

2. This guidance applies to all banks and their subsidiaries, bank holding companies and their nonbank subsidiaries, savings associations and their subsidiaries, and savings and loan holding companies and their subsidiaries that are supervised by the Board of Governors of the Federal Reserve System.

3. Unless the context indicates otherwise, references to "correspondent" include the correspondent's holding company, subsidiaries, and affiliates. A correspondent relationship results when a financial organization provides another financial organization a variety of deposit, lending, or other services.

4. The interagency guidance references, collectively, the Agencies, meaning the Board of Governors of the Federal Reserve System (Board), the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS).

5. For purposes of this guidance, the term "total capital" means the total risk-based capital as reported for commercial banks and thrifts in the Report of Condition and the Thrift Financial Report, respectively.

6. 12 CFR 206. All depository institutions insured by the FDIC are subject to the Board's Regulation F.

Identifying Correspondent Concentrations

Institutions should implement procedures for identifying correspondent concentrations. For prudent risk-management purposes, these procedures should encompass the totality of the institutions' aggregate credit and funding concentrations to each correspondent on a standalone basis, as well as take into account exposures to each correspondent organization as a whole.[7] In addition, the institution should be aware of exposures of its affiliates to the correspondent and its affiliates.

Credit Concentrations

Credit concentrations can arise from a variety of assets and activities. For example, an institution could have due from bank accounts, federal funds sold on a principal basis and direct or indirect loans to, or investments in, a correspondent. In identifying credit concentrations for risk-management purposes, institutions should aggregate all exposures, including but not limited to

- due from bank accounts (demand deposit accounts (DDA) and certificates of deposit (CD));
- federal funds sold on a principal basis;
- the over-collateralized amount on repurchase agreements;
- the under-collateralized portion of reverse repurchase agreements;
- net current credit exposure on derivatives contracts;
- unrealized gains on unsettled securities transactions;
- direct or indirect loans to, or for the benefit of, the correspondent;[8] and
- investments, such as trust preferred securities, subordinated debt, and stock purchases, in the correspondent.

Funding Concentrations

Depending on its size and characteristics, a concentration of credit for a financial institution may be a funding exposure for the correspondent. The primary risk of a funding concentration is that an institution will have to replace those advances on short notice. This risk may be more pronounced if the funds are credit sensitive or if the financial condition of the party advancing the funds has deteriorated.

The percentage of liabilities or other measurements that may constitute a concentration of funding is likely to vary depending on the type and maturity of the funding and the structure of the recipient's sources of funds. For example, a concentration in overnight unsecured funding from one source might raise different concentration issues and concerns than unsecured term funding, assuming compliance with covenants and diversification with short- and long-term maturities. Similarly, concerns arising from concentrations in long-term unsecured funding typically increase as these instruments near maturity.

Calculating Credit and Funding Concentrations

When identifying credit and funding concentrations for risk-management purposes, institutions should calculate both gross and net exposures to the correspondent on a standalone basis and on a correspondent organization-wide basis as part of their prudent risk-management practices. Exposures are reduced to net positions to the extent that the transactions are secured by the net realizable proceeds from readily marketable collateral or are covered by valid and enforceable netting agreements. Appendix A and appendix B contain examples, which are provided for illustrative purposes only.

Monitoring Correspondent Relationships

Prudent management of correspondent concentration risks includes establishing and maintaining written policies and procedures to prevent excessive exposure to any correspondent in relation to the correspondent's financial condition. For risk-management purposes, institu-

7. Financial institutions should identify and monitor all direct or indirect relationships with their correspondents. Institutions should take into account exposures of their affiliates to correspondents and how those relationships may affect the institution's exposure. While each financial institution is responsible for monitoring its own credit and funding exposures, institution holding companies, if any, should manage their organizations' concentration risk on a consolidated basis.

8. Exclude loan participations purchased without recourse from a correspondent, its holding company, or an affiliate.

tions' procedures and frequency for monitoring correspondent relationships may be more or less aggressive depending on the nature, size, and risk of the exposure.

In monitoring correspondent relationships for risk-management purposes, institutions should specify internal parameters relative to what information, ratios, or trends will be reviewed for each correspondent on an ongoing basis. In addition to a correspondent's capital, level of problem loans, and earnings, institutions may want to monitor other factors, which could include but are not limited to

- deteriorating trends in capital or asset quality.
- reaching certain target ratios established by management (for example, aggregate of nonaccrual and past due loans and leases as a percentage of gross loans and leases).
- increasing level of other real estate owned.
- attaining internally specified levels of volatile funding sources such as large CDs or brokered deposits.
- experiencing a downgrade in its credit rating, if publicly traded.
- being placed under a public enforcement action.

For prudent risk-management purposes, institutions should implement procedures that ensure ongoing, timely reviews of correspondent relationships. Institutions should use these reviews to conduct comprehensive assessments that consider their internal parameters and are commensurate with the nature, size, and risk of their exposure. Institutions should increase the frequency of their internal reviews when appropriate, as even well-capitalized institutions can experience rapid deterioration in their financial condition, especially in economic downturns.

Institutions' procedures also should establish documentation requirements for the reviews conducted. In addition, the procedures should specify when relationships that meet or exceed internal criteria are to be brought to the attention of the board of directors or the appropriate management committee.

Managing Correspondent Concentrations

Institutions should establish prudent internal concentration limits, as well as ranges or tolerances for each factor being monitored for each correspondent. Institutions should develop plans for managing risk when these internal limits, ranges, or tolerances are met or exceeded, either on an individual or collective basis. Contingency plans should provide a variety of actions that could be considered relative to changes in the correspondent's financial condition. However, contingency plans should not rely on temporary deposit insurance programs for mitigating concentration risk.

Prudent risk management of correspondent concentration risks should include procedures that provide for orderly reductions of correspondent concentrations that exceed internal parameters over a reasonable timeframe that is commensurate with the size, type, and volatility of the risk in the exposure. Such actions could include, but are not limited to

- reducing the volume of uncollateralized/uninsured funds.
- transferring excess funds to other correspondents after conducting appropriate reviews of their financial condition.
- requiring the correspondent to serve as agent rather than as principal for federal funds sold.
- establishing limits on asset and liability purchases from, and investments in, correspondents.
- specifying reasonable timeframes to meet targeted reduction goals for different types of exposures.

Examiners will review correspondent relationships during examinations to ascertain whether an institution's policies and procedures appropriately identify and monitor correspondent concentrations. Examiners also will review the adequacy and reasonableness of institutions' contingency plans to manage correspondent concentrations.

Performing Appropriate Due Diligence

Financial institutions that maintain credit exposures in, or provide funding to, other financial institutions should have effective risk-management programs for these activities. For this purpose, credit or funding exposures may include but are not limited to due from bank accounts; federal funds sold as principal; direct or indirect loans (including participations and

syndications); trust preferred securities; subordinated debt; and stock purchases of the correspondent.

An institution that maintains or contemplates entering into any credit or funding transactions with another financial institution should have written investment, lending, and funding policies and procedures, including appropriate limits, that govern these activities. In addition, these procedures should ensure that the institution conducts an independent analysis of credit transactions prior to committing to engage in the transactions. The terms for all such credit and funding transactions should strictly be on an arm's-length basis; conform to sound investment, lending, and funding practices; and avoid potential conflicts of interest.

APPENDIX A

Calculating Respondent *Credit Exposures* on an *Organization-Wide* Basis

Respondent Bank's *Gross Credit Exposure* to a Correspondent, its Holding Company, and Affiliates	
Due from DDA with correspondent	$ 50,000,000
Due from DDA with correspondent's two affiliated insured depository institutions (IDIs)	1,000,000
CDs issued by correspondent bank	1,000,000
CDs issued by one of correspondent's two affiliated IDIs	500,000
Federal funds sold to correspondent on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	2,500,000
Reverse repurchase agreements	3,750,000
Net current credit exposure on derivatives[1]	250,000
Direct and indirect loans to, or for benefit of, a correspondent, its holding company, or affiliates	4,500,000
Investments in the correspondent, its holding company, or affiliates	2,500,000
Gross Credit Exposure	**$117,500,000**
Total Capital	**$100,000,000**
Gross Credit Concentration	**118%**

Respondent Bank's *Net Credit Exposure* to a Correspondent, its Holding Company, and Affiliates	
Due from DDA (less checks/cash not available for withdrawal and federal deposit insurance (FDI))[2]	$ 17,850,000
Due from DDA with correspondent's two affiliated IDIs (less FDI)[2]	500,000
CDs issued by correspondent bank (less FDI)	750,000
CDs issued by one of correspondent's two affiliated IDIs (less FDI)	250,000
Federal funds sold on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	2,500,000
Under-collateralized amount on reverse repurchase agreements (less the current market value of government securities or readily marketable collateral pledged)[3]	100,000
Uncollateralized net current derivative position[1]	50,000
Direct and indirect loans to, or for benefit of, a correspondent, its holding company, or affiliates	4,500,000
Investments in the correspondent, its holding company, or affiliates	2,500,000
Net Credit Exposure	**$ 80,500,000**
Total Capital	**$100,000,000**
Net Credit Concentration	**81%**

APPENDIX A—*continued*

Calculating Correspondent *Funding Exposures* on an *Organization-Wide* Basis

Correspondent's *Gross Funding Exposure* to a Respondent Bank	
Due to DDA with respondent	$ 50,000,000
Correspondent's two affiliated IDIs' due to DDA with respondent	1,000,000
CDs sold to respondent bank	1,000,000
CDs sold to respondent from one of correspondent's two affiliated IDIs	500,000
Federal funds purchased from respondent on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	2,500,000
Repurchase Agreements	1,000,000
Gross Funding Exposure	**$ 107,500,000**
Total Liabilities	**$1,350,000,000**
Gross Funding Concentration	**7.96%**

Correspondent's *Net Funding Exposure* to a Respondent, its Holding Company, and Affiliates	
Due to DDA with respondent (less checks and cash not available for withdrawal and FDI)[2]	$ 17,850,000
Correspondent's two affiliated IDIs' due to DDA with respondent (less FDI)[2]	500,000
CDs sold to correspondent (less FDI)	750,000
One of correspondent's two affiliated IDIs' CDs sold to respondent (less FDI)[2]	250,000
Federal funds purchased from respondent on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	2,500,000
Under-collateralized amount of repurchase agreements relative to the current market value of government securities or readily marketable collateral pledged[3]	150,000
Net Funding Exposure	**$ 73,500,000**
Total Liabilities	**$1,350,000,000**
Net Funding Concentration	**5.44%**

Note: Respondent bank has $1 billion in total assets, comprising 10 percent of total assets or $100 million in total capital and 90 percent of total assets or $900 million in total liabilities. The correspondent has $1.5 billion in total assets, comprising 10 percent of total assets or $1.15 million in total capital and 90 percent of total assets or $1.35 billion in total liabilities.

1. There are five derivative contracts with a mark-to-market fair value position as follows: Contract 1 ($100,000), Contract 2 + $400,000, Contract 3 ($50,000), Contract 4 +$150,000, and Contract 5 ($150,000), subtotal of $250,000 fair value for the derivative contracts. Subtracting the pledged collateral's fair value of $200,000 leaves a subtotal of $50,000 or a net uncollateralized position of $50,000.

2. While temporary deposit insurance programs may provide certain transaction accounts with higher levels of federal deposit insurance coverage, institutions should not rely on such programs for mitigating concentration risk.

3. Government securities means obligations of, or obligations fully guaranteed as to principal and interest by, the U.S. government or any department, agency, bureau, board, commission, or establishment of the United States, or any corporation wholly owned, directly or indirectly, by the United States.

APPENDIX B

Calculating Respondent *Credit Exposures* on a *Correspondent-Only* Basis

Respondent Bank's *Gross Credit Exposure* to a Correspondent	
Due from DDA with correspondent	$ 50,000,000
Due from DDA with correspondent's two affiliated IDIs	0
CDs issued by correspondent bank	1,000,000
CDs issued by one of correspondent's two affiliated IDIs	0
Federal funds sold to correspondent on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	0
Reverse repurchase agreements	3,750,000
Net current credit exposure on derivatives[1]	250,000
Direct and indirect loans to, or for benefit of, a correspondent, its holding company, or affiliates	4,500,000
Investments in the correspondent, its holding company, or affiliates	2,500,000
Gross Credit Exposure	**$113,500,000**
Total Capital	**$100,000,000**
Gross Credit Concentration	**114%**

Respondent Bank's *Net Credit Exposure* to a Correspondent	
Due from DDA (less checks/cash not available for withdrawal and FDI)[2]	$ 17,850,000
Due from DDA with correspondent's two affiliated IDIs (less FDI)[2]	0
CDs issued by correspondent bank (less FDI)	750,000
CDs issued by one of correspondent's two affiliated IDIs (less FDI)	0
Federal funds sold on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	0
Under-collateralized amount on reverse repurchase agreements (less the current market value of government securities or readily marketable collateral pledged)[3]	100,000
Uncollateralized net current derivative position[1]	50,000
Direct and indirect loans to, or for benefit of, a correspondent, its holding company, or affiliates	4,500,000
Investments in the correspondent, its holding company, or affiliates	2,500,000
Net Credit Exposure	**$ 77,250,000**
Total Capital	**$100,000,000**
Net Credit Concentration	**77%**

APPENDIX B—*continued*

Calculating Correspondent *Funding Exposures* on a *Correspondent-Only* Basis

Correspondent's *Gross Funding Exposure* to a Respondent	
Due to DDA with respondent	$ 50,000,000
Correspondent's two affiliated IDIs' due to DDA with respondent	0
CDs sold to respondent bank	1,000,000
CDs sold to respondent from one of correspondent's two affiliated IDIs	0
Federal funds purchased from respondent on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	0
Repurchase agreements	1,000,000
Gross Funding Exposure	**$ 103,500,000**
Total Liabilities	**$1,350,000,000**
Gross Funding Concentration	**7.67%**

Correspondent's *Net Funding Exposure* to a Respondent	
Due to DDA with respondent (less checks and cash not available for withdrawal and FDI)[2]	$ 17,850,000
Correspondent's two affiliated IDIs' due to DDA with respondent (less FDI)[2]	0
CDs sold to correspondent (less FDI)	750,000
One of correspondent's two affiliated IDIs' CDs sold to respondent (less FDI)[2]	0
Federal funds purchased from respondent on a principal basis	51,500,000
Federal funds sold to correspondent's affiliated IDIs on a principal basis	0
Under-collateralized amount on repurchase agreements (less the current market value of government securities or readily marketable collateral pledged)[3]	100,000
Net Funding Exposure	**$ 70,200,000**
Total Liabilities	**$1,350,000,000**
Net Funding Concentration	**5.20%**

Note: Respondent bank has $1 billion in total assets, comprising 10 percent of total assets or $100 million in total capital and 90 percent of total assets or $900 million in total liabilities. The correspondent has $1.5 billion in total assets, comprising 10 percent of total assets or $1.15 million in total capital and 90 percent of total assets or $1.35 billion in total liabilities.

1. There are five derivative contracts with a mark-to-market fair value position as follows: Contract 1 ($100,000), Contract 2 + $400,000, Contract 3 ($50,000), Contract 4 +$150,000, and Contract 5 ($150,000), subtotal of $250,000 fair value. Adding the collateral's fair value of $200,000 leaves a subtotal of $450,000 or a net uncollateralized position of $50,000.

2. While temporary deposit insurance programs may provide certain transaction accounts with higher levels of federal deposit insurance coverage, institutions should not rely on such programs for mitigating concentration risk.

3. Government securities means obligations of, or obligations fully guaranteed as to principal and interest by, the U.S. government or any department, agency, bureau, board, commission, or establishment of the United States, or any corporation wholly owned, directly or indirectly, by the United States.

This section provides guidance on the management of a depository institution's investment and end-user activities. The guidance applies to (1) all securities in held-to-maturity and available-for-sale accounts,[1] (2) all certificates of deposit held for investment purposes, and (3) all derivative contracts not held in trading accounts (end-user derivative contracts).[1a] The section discusses securities used for investment purposes, including money market instruments, fixed- and floating-rate notes and bonds, structured notes, mortgage pass-through and other asset-backed securities (ABS), and mortgage-derivative products.

National banks (in accordance with 12 CFR 1) and state member banks are to make assessments of a security's creditworthiness to determine whether it's investment-grade.[1b] The section emphasizes bank-eligible investments—securities that meet an "investment grade" test—whereby the issuer of a security has an adequate capacity to meet its financial commitments under the security for the projected life of the asset or exposure. An issuer has an adequate capacity to meet financial commitments if (1) the risk of default by the obligor is low and (2) the full and timely repayment of principal and interest is expected. A bank is expected to assess credit risk in an investment security based on the bank's risk profile and for the size and complexity of the instrument.[1b1] Generally, investment securities are expected to have good to very strong credit quality. In the case of structured securities, this determination may be influenced more by the quality of the underlying collateral, the expected cash flows, and the structure of the security itself than by the condition of the issuer. While banks are no longer able to rely solely on external ratings, they can be used to support the credit risk due diligence processes of the bank. Banks are expected to conduct an appropriate level of due diligence to understand the inherent risks of a security and determine that it is a permissible investment. The extent of the due diligence should be sufficient to support the institution's conclusion that a security meets the "investment-grade" standards. The depth of the due diligence should be a function of the security's credit quality, the complexity of the structure, and the size of the investment. Third-party analytics may be part of this analysis. The bank's management, however, remains responsible for the investment decision and should ensure that prospective third parties are independent, reliable, and qualified. The board of directors should oversee management to make sure that appropriate decisionmaking processes are in place.[1b2]

Investments in securities and stock by state member banks are required under the Federal Reserve Act and Regulation H to comply with 12 CFR 1. They also should meet the supervisory expectations set forth in the OCC's investment guidance, "OCC Guidance on Due Diligence Requirements in Determining Whether Securities Are Eligible for Investment" (see section 2022.1), and the guidance set forth in SR-12-15. In addition, state member banks are expected to continue to meet long-established supervisory expectations for risk-management processes to ensure that the credit risk of the bank, including the credit risk of the investment portfolio, is effectively identified, measured, monitored, and controlled. Investments by state member banks must also comply with applicable state law.

Many of these expectations are set forth in the 1998 interagency "Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities." See SR-98-12 ("FFIEC Policy Statement on Investment Securities and End-User Derivatives Activities"), which provides risk-management standards for the securities investment activities of banks and savings associations. SR-98-12 and the policy statement emphasize the importance of an institution conducting a thorough credit-risk analysis before and periodically after the acquisition of a security. Such analysis allows an institution to understand and effectively manage the risks within its investment portfolio, including credit risk, and is an essential element of a sound investment

1. Refer to Statement of FASB Accounting Standards Codification Section 320-10-35, Investments-Debt and Equity Securities-Subsequent Measurement (formerly FAS 115, "Accounting for Certain Investments in Debt and Equity Securities").

1a. Derivatives, in general, are financial contracts whose values are derived from the value of one or more underlying assets, interest rates, exchange rates, commodities, or financial or commodity indexes.

1b. For the OCC's final rules, see 77 *Fed. Reg.* 35253 (June 13, 2012); for its guidance, see 77 *Fed. Reg.* 35259 (June 13, 2012) and OCC Bulletin 2012-18 (June 26, 2012).

1b1. See 77 *Fed. Reg.* 35254 (June 13, 2012).

1b2. See 77 *Fed. Reg.* 35259 (June 13, 2012).

portfolio risk-management framework. These supervisory expectations include criteria that institutions can use in meeting the requirements within 12 CFR 1. State member banks should follow these expectations when deciding whether to invest in securities.

An institution's maintenance of timely information about market risk-measurement systems is discussed within this section, including the information on the current carrying values of its securities and derivative holdings. This includes an institution's use of internal models and its need to validate the models. (See SR-11-7.) Swaps, futures, and options and other end-user derivative instruments used for non-trading purposes are discussed.

Institutions must ensure that their investment and end-user activities are permissible and appropriate within established limitations and restrictions on bank holdings of these instruments. Institutions should also employ sound risk-management practices consistently across these varying product categories, regardless of their legal characteristics or nomenclature. This section provides examiners with guidance on—

- the permissibility and appropriateness of securities holdings by state member banks;
- sound risk-management practices and internal controls used by banking institutions in their investment and end-user activities;
- the review of securities and derivatives acquired by the bank's international division and overseas branches for its own account as well as the bank's foreign equity investments that are held either directly or through Edge Act corporations;
- banking agency policies on certain high-risk mortgage-derivative products; and
- unsuitable investment practices.

LIMITATIONS AND RESTRICTIONS ON SECURITIES HOLDINGS

Many states extend the investment authority that is available to national banks to their chartered banks—often by direct reference. The security investments of national banks are governed in turn by the seventh paragraph of 12 USC 24 (12 USC 24 (Seventh)) and by the investment securities regulations of the Office of the Comptroller of the Currency (OCC), 12 CFR 1. These standards also apply to federal branches of foreign banks. If state law permits, pursuant to 12 USC 335, state member banks are subject to the same limitations and conditions for purchasing, selling, dealing in, and underwriting investment securities and stocks as national banks under 12 USC 24 (Seventh).[1b3] To determine whether an obligation qualifies as a permissible investment for state member banks, and to calculate the limits with respect to the purchase of such obligations, refer to the OCC's investment securities regulation at 12 CFR 1. (See also section 2022.1, "OCC Guidance on Due Diligence Requirements in Determining Whether Securities Are Eligible for Investment," and section 208.21(b) of Regulation H (12 CFR 208.21(b)).)

Under 12 USC 24, "investment securities" are defined as "marketable obligations, evidencing indebtedness . . . in the form of bonds, notes and/or debentures commonly known as investment securities under such further definition of the 'investment securities' as may be by regulation prescribed by the Comptroller of the Currency." Nothing contained in this provision of the statute authorizes the purchase by the association (national bank) for its own account of any shares of stock of any corporation. The OCC's investment securities regulation (at 12 CFR 1) defines *investment security* as a marketable debt obligation that is investment grade and not predominately speculative in nature. *Investment grade* means the issuer of a security has an adequate capacity to meet financial commitments under the security for the projected life of the asset or exposure. An issuer has an adequate capacity to meet financial commitments if the risk of default by the obligor is low and the full and timely repayment of principal and interest is expected.

Marketable means that the security—

- is registered under the Securities Act of 1933, 15 USC 77a et seq.;
- is a municipal revenue bond exempt from registration under the Securities Act of 1933, 15 USC 77c(a)(2);
- is offered and sold pursuant to Securities and Exchange Commission Rule 144A, 17 CFR 230.144A, and investment grade; or

1b3. References to a "bank" in this section mean a state member bank and a national bank, unless stated otherwise.

- can be sold with reasonable promptness at a price that corresponds reasonably to its fair value.

Bank-Eligible Securities

The OCC's investment securities regulation, 12 CFR 1.2, identifies five basic types of investment securities (Types I, II, III, IV, and V) and establishes limitations on a bank's investment in those types of securities based on the percentage of capital and surplus that such holdings represent. For calculating concentration limits, the term ''capital and surplus'' includes a bank's tier 1 and tier 2 capital and the balance of a bank's allowance for loan and lease losses not included in tier 2 capital. Table 2 summarizes bank-eligible securities and their investment limitations.

Table 2—Summary of Investment-Type Categories

Type Category	*Characteristics*	*Limitations*
Type I securities	• U.S. government obligations and obligations issued, insured, or guaranteed by a U.S. department or agency, if backed by the full faith and credit of the U.S. government • general obligations of a state of the U.S. or any political subdivision thereof • municipal bonds, if the bank is well capitalized,* other than Types II, III, IV, or V securities	The bank may deal in, underwrite, purchase, and sell Type I securities for its own account. The amount of Type I securities that the bank may deal in, underwrite, purchase, and sell is not limited to a specified percentage of the bank's capital and surplus. With respect to all municipal securities, a member bank that is well capitalized* may deal in, underwrite, purchase, and sell any municipal bond for its own account without any limit tied to the bank's capital and surplus.

continued

* subject to the statutory prompt-corrective-action standards (12 USC 1831o)

Type Category	*Characteristics*	*Limitations*
Type II securities	• obligations issued by a state, or a political subdivision or agency of a state for housing, university, or dormitory purposes that would not qualify as a Type I municipal security • obligations of international and multilateral development banks • other obligations that a national bank is authorized to deal in, underwrite, purchase, and sell for the bank's own account as listed in 12 USC 24 (Seventh), other than Type I securities • other securities the OCC determines to be eligible as Type II securities	The bank may deal in, underwrite, purchase, and sell Type II securities for its own account, provided the aggregate par value of Type II securities issued by any one obligor held by the bank does not exceed 10 percent of the bank's capital and surplus. When applying this limitation, the bank is to take account of Type II securities that the bank is legally committed to purchase or to sell in addition to the bank's existing holdings. The bank may not hold Type II securities issued by any one obligor with an aggregate par value exceeding 10 percent of the bank's capital and surplus. However, if the proceeds of each issue are to be used to acquire and lease real estate and related facilities to economically and legally separate industrial tenants, and if each issue is payable solely from and secured by a first lien on the revenues to be derived from rentals paid by the lessee under net noncancellable leases, the bank may apply the 10 percent investment limitation separately to each issue of a single obligor.

continued

Type Category	*Characteristics*	*Limitations*
Type III securities	• an investment security that does not qualify as Type I, II, IV, or V security; examples of Type III securities include— — corporate bonds, and — municipal bonds that do not satisfy the definition of Type I securities in 12 CFR 1.2 (j) or the definition of Type II securities in 12 CFR 1.2 (k)	The bank may purchase and sell Type III securities for its own account, provided the aggregate par value of Type III securities issued by any one obligor held by the bank does not exceed 10 percent of the bank's capital and surplus. In applying this limitation, a national bank shall take account of Type III securities that the bank is legally committed to purchase or to sell in addition to the bank's existing holdings. The bank may not hold Type III securities issued by any one obligor with an aggregate par value exceeding 10 percent of the bank's capital and surplus. However, if the proceeds of each issue are to be used to acquire and lease real estate and related facilities to economically and legally separate industrial tenants, and if each issue is payable solely from and secured by a first lien on the revenues to be derived from rentals paid by the lessee under net noncancellable leases, the bank may apply the 10 percent investment limitation separately to each issue of a single obligor.

continued

Type Category	*Characteristics*	*Limitations*
Type IV securities	• a small business-related security as defined in section 3(a)(53)(A) of the Securities Exchange Act of 1934, 15 USC 78c(a)(53)(A), that is fully secured by interests in a pool of loans to numerous obligors • commercial mortgage-related security that is offered or sold pursuant to section 4(5) of the Securities Act of 1933, 15 USC 77d(5), that is investment grade, or a commercial mortgage-related security as described in section 3(a)(41) of the Securities Exchange Act of 1934 that represents ownership of a promissory note or certificate of interest or participation that is directly secured by a first lien on one or more parcels of real estate upon which one or more commercial structures are located and that is fully secured by interests in a pool of loans to numerous obligors • a residential mortgage-related security that is offered and sold pursuant to section 4(5) of the Securities Act of 1933, 15 USC 77d(5), that is investment grade, or a residential mortgage-related security as described in section 3(a)(41) of the Securities Exchange Act of 1934, 15 USC 78c(a)(41)) that does not otherwise qualify as a Type I security	The bank may purchase and sell Type IV securities for its own account. The amount of the Type IV securities that a bank may purchase and sell is not limited to a specified percentage of the bank's capital and surplus.
Type V securities	• a security that is— — investment grade; — marketable; — not a Type IV security; and — fully secured by interests in a pool of loans to numerous obligors and in which a national bank could invest directly	The bank may purchase and sell Type V securities for its own account provided that the aggregate par value of Type V securities issued by any one issuer held by the bank does not exceed 25 percent of the bank's capital and surplus. In applying this limitation, a national bank shall take account of Type V securities that the bank is legally committed to purchase or to sell in addition to the bank's existing holdings.

Type I securities are those debt instruments that national and state member banks can deal in, underwrite, purchase, and sell for their own accounts without limitation. Type I securities are obligations of the U.S. government or its agencies; general obligations of states and political subdivisions; municipal bonds (including municipal revenue bonds) other than a Type II, III, IV, or V security by a bank that is well capitalized; and mortgage-related securities. A bank may purchase Type I securities for its own account subject to no limitations, other than the exercise of prudent banking judgment. (See 12 USC 24 (Seventh) and 15 USC 78(c)(a).)

Type II securities are those debt instruments that national and state member banks may deal in, underwrite, purchase, and sell for their own account subject to a 10 percent limitation of a bank's capital and surplus for any one obligor. Type II investments include obligations issued by the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the Tennessee Valley Authority, and the U.S. Postal Service, as well as obligations issued by any state or political subdivision for housing, university, or dormitory purposes that do not qualify as a Type I security and other issuers specifically identified in 12 USC 24 (Seventh).

Type III securities is a residual securities category consisting of all types of investment securities not specifically designated to another security "type" category and that do not qualify as a Type I security. The bank may purchase and sell Type III securities for its own account, provided the aggregate par value of Type III securities issued by any one obligor held by the bank does not exceed 10 percent of the bank's capital and surplus for any one obligor. In applying this limitation, the bank must take account of Type III securities that the bank is legally committed to purchase or to sell in addition to the bank's existing holdings.

Type IV securities. A bank may purchase and sell Type IV securities for its own account. The amount of securities that a bank may purchase and sell is not limited to a specified percentage of the bank's capital and surplus. Type IV securities include the following ABS that are fully secured by interests in pools of loans made to numerous obligors:

- investment-grade residential mortgage-related securities that are offered or sold pursuant to section 4(5) of the Securities Act of 1933 (15 USC 77d(5))
- residential mortgage-related securities as described in section 3(a)(41) of the Securities Exchange Act of 1934 (15 USC 78c(a)(41)) that are rated in one of the two highest investment-grade rating categories
- investment-grade commercial mortgage securities offered or sold pursuant to section 4(5) of the Securities Act of 1933 (15 USC 77d(5))
- commercial mortgage securities as described in section 3(a)(41) of the Securities Exchange Act of 1934 (15 USC 78c(a)(41)) that are rated in one of the two highest investment-grade rating categories
- investment-grade, small-business-loan securities as described in section 3(a)(53)(A) of the Securities Exchange Act of 1934 (15 USC 78c(a)(53)(A))

For all Type IV commercial and residential mortgage securities and for Type IV small-business-loan securities, there is no limitation on the amount a bank can purchase or sell for its own account. In addition to being able to purchase and sell Type IV securities, subject to the above limitation, a bank may deal in those Type IV securities that are fully secured by Type I securities.

Type V securities consist of all ABS that are not Type IV securities. Specifically, they are defined as marketable, investment-grade securities that are not Type IV and are "fully secured by interests in a pool of loans to numerous obligors and in which a bank could invest directly." Type V securities include securities backed by auto loans, credit card loans, home equity loans, and other assets. Also included are residential and commercial mortgage securities as described in section 3(a)(41) of the Securities Exchange Act of 1934 (15 USC 78c(a)(41)) that are investment grade. A bank may purchase or sell Type V securities for its own account provided the aggregate par value of Type V securities issued by any one issuer held by the bank does not exceed 25 percent of the bank's capital and surplus. In applying this limitation, the bank must take account of Type V securities that the bank is legally committed to purchase or to sell in addition to the bank's existing holdings.

Additional Limitations

Securities Held Based on Estimates of Obligor's Performance

Notwithstanding the definition of "investment security" and "investment grade," a bank may treat a debt security as an investment security under the rule if it does not meet those definitions, provided that the security is marketable and the bank concludes, on the basis of estimates that the bank reasonably believes are reliable, that the obligor will be able to satisfy its obligations under that security. However, the aggregate value of such securities based on "reliable estimate" may not exceed 5 percent of the bank's capital and surplus. This activity must conform with the safety-and-soundness practices required by 12 CFR 1.5 (discussed below).

As shown in Table 2, there are *separate* Type I, II, III, IV, and V limits. In the extreme, however, banks can lend 15 percent of their capital to a corporate borrower, buy the borrower's corporate bonds amounting to another 10 percent of capital and surplus (Type III securities), and purchase the borrower's ABS up to an additional 25 percent of capital (Type V securities), for a total exposure of 50 percent of the bank's capital and surplus. This could be expanded even further if the borrower also issued highly rated Type IV securities, upon which there is no investment limitation. However, an exposure to any one issuer of 25 percent or more should be considered a credit concentration, and banks are expected to justify why exposures in excess of 25 percent do not entail an undue concentration.

Pooled Investments

A bank may purchase and sell for its own account investment company shares provided that—

a. the portfolio of the investment company consists exclusively of assets that the bank may purchase and sell for its own account, and
b. the bank's holdings of investment company shares do not exceed the limitations in 12 CFR 1.4(e).

Other Issues

The OCC may determine that a national bank may invest in an entity that is exempt from registration as an investment company under section 3(c)(1) of the Investment Company Act of 1940, provided that the portfolio of the entity consists exclusively of assets that a national bank may purchase and sell for its own account and that investments made under this authority comply with safe-and-sound practices under section 1.5 of the rule and applicable published OCC precedent. These investments also must be—

a. marketable and investment grade, or
b. satisfy the requirements of 12 CFR 1.3(i) (securities held based on estimates of obligor's performance). A bank may treat a debt security as an investment security if the security is marketable and the bank can conclude, on the basis of estimates that the bank reasonably believes are reliable, that the obligor will be able to satisfy its obligations under that security.

Safe-and-Sound Banking Practices

As set forth in section 1.5, a bank shall adhere to safe-and-sound banking practices and the specific requirements of this part when conducting the investment activities permitted under the rule. As stated in section 1.5, the bank is to consider, as appropriate, the interest rate, credit, liquidity, price, foreign exchange, transaction, compliance, strategic, and reputation risks presented by a proposed activity, and the particular activities undertaken by the bank, which must be appropriate for that bank.

When conducting these activities, the bank shall determine that there is adequate evidence that an obligor possesses resources sufficient to provide for all required payments on its obligations, or, in the case of securities deemed to be investment securities on the basis of reliable estimates of an obligor's performance, that the bank reasonably believes that the obligor will be able to satisfy the obligation.

The bank must maintain records that are available for examination purposes and are adequate to demonstrate that it meets the requirements of this part (12 CFR 1). The bank may store the information in any manner that can be

readily retrieved and reproduced in a readable form.

Reservation of Authority

In addition to the investment securities discussed in 12 USC 24 (Seventh), the OCC may determine, on a case-by-case basis, that a national bank may acquire an investment security other than an investment security of a type set forth in this part, provided the OCC determines that the bank's investment is consistent with 12 USC 24 (Seventh) and with safe-and-sound banking practices. (See 73 *Fed. Reg.* 22235, April 24, 2008, and 12 CFR 1.1 for more information.) A state member bank should consult the Board for a determination with respect to the application of 12 USC 24 (Seventh), with respect to issues not addressed in 12 CFR 1. The provisions of 12 CFR 1 do not provide authority for a state member bank to purchase securities of a type or amount that the bank is not authorized to purchase under applicable state law. (See 12 CFR 208.21(b).)

Municipal Revenue Bonds

Upon enactment of the Gramm-Leach-Bliley Act (the GLB Act), most state member banks were authorized to deal in, underwrite, purchase, and sell municipal revenue bonds (12 USC 24 (Seventh)). Effective March 13, 2000, these activities (involving Type I securities) could be conducted by well-capitalized [1b4] banks, without limitation as to the level of these activities relative to the bank's capital. As a result of the GLB Act amendment, municipal revenue bonds are the equivalent of Type I securities for well-capitalized state member banks. [1b5] (See SR-01-13.)

The expanded municipal revenue bond authority under the GLB Act necessitates heightened awareness by banks, examiners, and supervisory staff of the particular risks of municipal revenue bond underwriting, dealing, and investment activities. Senior management of a state member bank has the responsibility to ensure that the bank conducts municipal securities underwriting, dealing, and investment activities in a safe and sound manner, in compliance with applicable laws and regulations. Sound risk-management practices are critical. State member banks engaged in municipal securities activities should maintain written policies and procedures governing these activities and make them available to examiners upon request.

Prudent municipal securities investment involves considering and adopting risk-management policies, including appropriate limitations, on the interest-rate, liquidity, price, credit, market, and legal risks in light of the bank's appetite and tolerance for risk. Historically, municipal revenue bonds have had higher default rates than municipal general obligation bonds. The risks of certain industrial development revenue bonds have been akin to the risks of corporate bonds. Therefore, when bondholders are relying on a specific project or private-sector obligation for repayment, banks should conduct a credit analysis, using their normal credit standards, to identify and evaluate the source of repayment before purchasing the bonds. Banks must also perform periodic credit analyses of those securities that remain in the bank's investment portfolio. Prudent banking practices require that management adopt appropriate exposure limits for individual credits and on credits that rely on a similar repayment source; these limits help ensure adequate risk diversification. Furthermore, examiners and other supervisory staff should be aware of the extent to which state laws place further restrictions on municipal securities activities but should defer to state banking regulators on questions of legal authority under state laws and regulations.

For underwriting and dealing activities, the nature and extent of due diligence should be commensurate with the degree of risk posed and the complexity of the proposed activity. Bank dealer activities should be conducted subject to the types of prudential limitations described above but should also be formulated in light of the reputational risk that may accompany underwriting and dealing activities. Senior management and the board of directors should establish credit-quality and position-risk guidelines, including guidelines for concentration risk.

A bank serving as a syndicate manager would be expected to conduct extensive due diligence

1b4. See the prompt corrective action at 12 USC 1831o and see subpart D of the Federal Reserve's Regulation H (12 CFR 208).

1b5. The OCC published final amendments to its investment securities regulation (12 CFR 1) on July 2, 2001 (66 *Fed. Reg.* 34784), and further amended this regulation on June 13, 2012 (77 *Fed. Reg.* 35257). State member banks must comply with the requirements of 12 CFR 1 with respect to investments in municipal and other securities.

to mitigate its underwriting risk. Due diligence should include an assessment of the creditworthiness of the issuer and a full analysis of primary and any contingent sources of repayment. Offering documents should be reviewed for their accuracy and completeness, as well as for full disclosure of all of the offering's relevant risks.

CLASSIFICATION AND APPRAISAL OF SECURITIES

This supervisory guidance[2] (2013 Securities Classification Guidance) outlines principles related to the proper classification of securities without relying on ratings issued by nationally recognized statistical rating organizations (external credit ratings) and applies to state member banks and, in principle, to all institutions supervised by the Federal Reserve. Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 requires each federal agency to remove references to, and requirements of reliance on, external credit ratings in any regulation issued by the agency that requires the assessment of the creditworthiness of a security or money market instrument. Therefore, in 2012, the OCC revised its investment security regulations (12 CFR 1) to remove reliance on external credit ratings. Investment in securities and stock by state member banks are required under the Federal Reserve Act (12 USC 335) and Regulation H (12 CFR 208.21) to comply with the OCC investment security regulations.

The OCC investment security regulations require an institution to monitor investment credit quality through an analytical review of the obligor rather than solely through external credit ratings. Credit quality monitoring provides an opportunity for management to determine whether a security continues to be investment grade or if it has deteriorated and thus requires classification. The 2013 Securities Classification Guidance clarifies the classification standards for securities held by an institution and includes illustrated examples that demonstrate when a security is investment grade and when it is not investment grade. See SR-13-18.

2. The October 29, 2013, "Uniform Agreement on the Classification and Appraisal of Securities Held by Depository Institutions" was issued by the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency (OCC) (the agencies).

UNIFORM AGREEMENT ON THE CLASSIFICATION AND APPRAISAL OF SECURITIES HELD BY DEPOSITORY INSTITUTIONS (AGREEMENT)

This joint Agreement[3] applies creditworthiness standards to the classification of securities and removes the reliance on credit ratings as a determinant of classification.[4] Specific examples are illustrated to demonstrate the appropriate application of these standards to the classification of securities. This Agreement should be used by depository institutions to assist and facilitate the classification of investment securities.

I. The Classification of Assets in Depository Institutions

The agencies' longstanding asset classification definitions have not changed and are provided as an attachment to the Agreement. This Agreement clarifies how the unique characteristics exhibited by investment securities are to be interpreted within these classification categories.

II. The Appraisal of Securities in Depository Institutions

Fundamental credit analysis is central to understanding the risk associated with all assets and should be applied to investment securities as part of a pre-purchase and ongoing due diligence process, as discussed in regulatory guidance. Depository institutions are expected to perform an assessment of creditworthiness that

3. The agencies are issuing this joint Agreement to depository institutions to revise the 2004 Uniform Agreement on the Classification of Assets and Appraisal of Securities Held by Banks and Thrifts (2004 Agreement).

4. For the OCC's final rules, see 77 *Fed. Reg.* 35253 (June 13, 2012). For the OCC's guidance, see 77 *Fed. Reg.* 35259 (June 13, 2012), OCC Bulletin 2012-18, and OCC Bulletin 2012-26. For the Board, refer to SR letter 12-15, "Investing in Securities without Reliance on Nationally Recognized Statistical Rating Organization Ratings." For the FDIC, see Permissible Investments for Federal and State Savings Associations: Corporate Debt Securities, 77 *Fed. Reg.* 43151 (July 24, 2012) and "Guidance on Due Diligence Requirements for Savings Associations in Determining Whether a Corporate Debt Security Is Eligible for Investment," 77 *Fed. Reg.* 43155 (July 24, 2012).

is not solely reliant on external credit ratings provided by a Nationally Recognized Statistical Rating Organizations (NRSRO). Such an assessment may include internal-risk analyses and a risk rating framework, third-party research and analytics (which could include NRSRO credit ratings), default statistics, and other sources of data as appropriate for the particular security. The depth of analysis should be a function of the security's risk characteristics, including its size, nature, and complexity. Individual security analysis should form the basis of any classification determination.

A. *Investment Grade Debt Securities*

A security is investment grade if the issuer of the security has an adequate capacity to meet financial commitments for the life of the asset.[5] An issuer has adequate capacity to meet its financial commitments if the risk of default is low, and the full and timely repayment of principal and interest is expected.[6] A "pass" rating may be supported by an appropriate credit analysis that documents the quality of an investment grade security, as well as ongoing analyses that demonstrate the obligor's continued repayment capacity. Therefore, investment-grade securities will generally not be classified. However, examiners may use discretion to classify a security when justified by available credit-risk information.

B. *Sub-investment Grade Debt Securities*

Securities that do not meet the investment grade standard, as defined in applicable regulations, and for which the timely repayment of principal and interest is not certain, have investment characteristics that are distinctly or predominantly speculative and are generally subject to classification. For investment securities, the classification should be based on the instrument's worth as an earning asset assuming it is held to maturity. Therefore, the phrase "liquidation of the debt" in the classification definitions is synonymous with "payment of the obligation in full." Accordingly, if payment of the obligation in full is in question, it is no longer investment grade and management should classify the security.

A *Doubtful* classification is appropriate when an asset has experienced significant credit deterioration and decline in fair value, but estimation of impairment involves significant uncertainty because of various pending factors. These factors could include uncertain financial data that may not permit the accurate forecasting of future cash flows or estimating recovery value. The use of the Doubtful classification is an interim measure until information becomes available to substantiate a more appropriate treatment.

C. *Classification and Assessment of Other Types of Debt Securities*

Some securities with equity-like risk and return profiles can have highly speculative performance characteristics. When determining classification examiners should evaluate such holdings based upon an assessment of each instrument's facts and circumstances. This Agreement does not apply to securities held in trading accounts that are measured at fair value with changes in fair value recognized in current earnings and regulatory capital.[7]

5. To determine whether a security to be acquired for investment must be investment grade and the applicable definition of "investment grade," a bank or savings association should consult the regulations of its appropriate federal banking agency, e.g., national banks should look to the OCC's rules at 12 CFR 1. For state-chartered financial institutions, the term "investment grade" may be defined differently across laws and regulations issued by each state, and therefore may be subject to restrictions on investments that are more stringent than those in 12 CFR 1. In addition, for corporate investments, federal and state savings associations are required to determine if the security meets the investment permissibility standards under 12 CFR 362 of the FDIC Rules and Regulations. 12 CFR 362 requires that the issuer has adequate capacity to meet all financial commitments under the security for the projected life of the investment. This standard is consistent with the one adopted by the OCC for national banks defined in 12 CFR 1, which was revised to replace the previous definition of "investment grade." State and federal savings associations had to comply with the FDIC's final rule on January 1, 2013. See 77 *Fed. Reg.* 43151 (July 24, 2012). Under the Federal Reserve Act (12 USC 335) and the Federal Reserve's Regulation H (12 CFR 208.21), state member banks are subject to the same limitations and conditions with respect to the purchasing, selling, underwriting, and holding of investment securities and stock as national banks under the National Banking Act (12 USC 24 (Seventh)) and may only invest in securities to the extent permitted under applicable state law.

6. See, e.g., 12 CFR 1.2(d). Generally, assets that defer payments, even if allowed for in the instrument's contracts, do not meet the "full and timely" repayment standard for investment grade and typically should be classified.

7. For more information, please refer to the Glossary

D. Classification of Securities with Credit Deterioration

Depository institutions should continually assess whether securities meet the investment grade standard. Throughout the term of an investment security, its credit-risk profile can decline and improve as credit conditions change. Similarly, an institution's analysis should consider how potential adverse economic conditions can negatively affect an individual security. An institution's management expertise and the sophistication of its risk management and due diligence processes should be commensurate with the complexity of its investment portfolio holdings.

For securities already owned:

Depository institutions should classify a security to accurately reflect its credit-risk profile. For example, a security may meet the criteria for an investment grade rating at purchase and, therefore, be considered a "pass" security. However, as credit conditions deteriorate and ongoing analysis confirms a weakened repayment capacity, the security should be downgraded to Substandard or Doubtful. In situations where the credit condition subsequently improves, the facts and circumstances supported by current analysis may warrant an upgrade to "pass." An upgrade is only appropriate following a period of sustained performance. If the security incurs credit losses,[8] but subsequent analysis shows that all future contractual payments will be received, the security may warrant an upgrade to "pass." Notwithstanding this possibility, securities with realized credit losses do not conform to the investment grade standard and may be subject to restrictions under the agencies' permissible investment regulations or rules governing transfers to affiliates. In situations where credit losses are incurred and analysis does not support the full payment of future contractual amounts, the security cannot be upgraded to "pass."

For potential purchases:

Depository institutions may not purchase investment securities that fail to meet the investment-grade standard as defined by applicable regulations. If pre-purchase analysis reveals previous credit losses in a security under consideration, regardless of its current performance or projected payment analysis, the security does not, and cannot, meet the investment-grade standard.[9] In contrast, if a security experienced credit deterioration and downgrades in the past, but did not sustain actual credit losses, the security's current and projected payment performance may indicate that the security could meet the investment-grade criteria once more. If it is offered for sale at this point and has a history of sustained performance, this security would be considered eligible for purchase by a depository institution.

III. Classification Approach Illustrations

Table 3 that follows outlines examples of how the agencies would apply the uniform classification approach to specific situations. Examiners may use discretion to assess credit risk and assign a classification based on current information, independent of any assigned credit rating.

section of the FFIEC Instructions for Preparation of Consolidated Reports of Condition and Income, which can be found at the following URL: www.fdic.gov/regulations/resources/call/.

8. Credit losses can occur throughout various stages of a security's existence and will depend on a variety of factors, that is, the type of instrument, the ability of the underlying payment source (for example, issuer, underlying asset, and obligors), and the existence of guarantees or credit enhancements. For corporate and municipal obligations, credit losses may represent payment defaults that the issuer does not have the financial capacity to cure. In the case of structured finance products, if a particular class of securities or tranches is no longer fully supported by cash flows from underlying assets, credit losses represent the deficiencies between remaining available cash flow and the principal and interest requirements.

9. One exception to this rule is a security that has undergone a court-supervised legally binding restructure, which has performed for a sustained period following the restructure. This scenario is discussed further in Table 3.

Table 3—Classification Approach Examples

Description of Scenario	*Currently Owned*	*Potential Purchase*[1]
• Credit deterioration caused concerns about potential loss that led to a Substandard classification. • *Credit deterioration is considered temporary.* • Subsequently, the credit condition improved and prior concerns no longer exist. • No actual credit losses were sustained. • Security has performed as agreed to date and is expected to perform to maturity.	Upgrade to "pass."	Eligible for purchase as investment grade.
• Credit deterioration caused concerns about potential loss that led to a Substandard classification. • *An other-than-temporary impairment (OTTI) charge is recognized in earnings; however, all contractual payments were received.* • Subsequent to adverse classification /OTTI determination, the credit condition improved and prior concerns no longer exist. • Current analysis shows that all future contractual payments will be received.	Upgrade to "pass."	Eligible for purchase as investment grade.
• Credit deterioration caused concerns about potential loss that led to a Substandard classification. • *An OTTI charge is recognized in earnings; however, contractual payments are received after recognition of the OTTI charge.* • Subsequently, credit conditions remain weak and analysis shows that *not all* contractual payments are expected to be received.	Substandard classification remains until issuer demonstrates adequate capacity to repay.	Not eligible for purchase as long as current credit conditions remain.

Description of Scenario	*Currently Owned*	*Potential Purchase*[1]
• Credit deterioration caused concerns about potential loss that led to a Substandard classification. • *Credit losses actually incurred.* • A court supervised a legally binding restructure of the obligation. • The issuer demonstrated performance, after the restructure, in accordance with the court approved plan over an appropriate time period. Current analysis shows that *all* future contractual payments will be received.	Upgrade to "pass" after a period of satisfactory performance.	Eligible for purchase as investment grade subsequent to the restructure.
• Credit deterioration caused concerns about potential loss that led to a Substandard classification. • *Credit losses actually incurred.* • Subsequently, the credit condition improved and prior concerns no longer exist. • Subsequent analysis shows that *all* future contractual payments will be received. • Previously incurred credit losses may or may not be recovered.	Substandard classification remains until issuer demonstrates adequate capacity to repay based on sustained period of performance. May be upgraded to "pass" but is not investment grade; considered a nonconforming investment.	Not eligible for purchase; does not meet the criteria for investment grade due to credit losses.
• Credit deterioration caused concerns about potential loss that led to a Substandard classification. • *Credit losses actually incurred.* • Subsequently, credit condition stabilization may, or may not, be evident. • Subsequent analysis shows that *not all* future contractual payments will be received; or analysis does not clearly show no future risk of loss.	Classification remains as long as credit analysis indicates future potential losses. Determine appropriate classification based on credit analysis.	Not eligible for purchase; does not meet the criteria for investment grade due to credit losses.

1. Depository institutions contemplating an investment purchase are not expected to be knowledgeable of the classification and impairment accounting treatment by the seller. However, all salient information leading to investment-grade determination should be gathered and analyzed before a purchase is consummated.

Note to the Agreement: Any upgrade in classification should follow a sustained period of performance and be based on improvement in credit condition and an analysis that supports that all future contractual payments will be received. Generally, the performance period should cover multiple payments as determined by the security's payment structure: monthly, quarterly, annually.

* * * *

CLASSIFICATION OF ASSETS IN EXAMINATIONS

Classification units are designated as Substandard, Doubtful, and Loss. The following definitions apply to assets adversely classified for supervisory purposes:

- A *Substandard* asset is inadequately protected by the current sound worth and paying capacity of the obligor or of the collateral pledged, if any. Assets so classified must have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt. They are characterized by the distinct possibility that the institution will sustain some loss if the deficiencies are not corrected.
- An asset classified *Doubtful* has all the weaknesses inherent in one classified Substandard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable.
- Assets classified *Loss* are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the asset has absolutely no recovery or salvage value but rather that it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be effected in the future. Amounts classified Loss should be promptly charged off.

FOREIGN DEBT SECURITIES

The Interagency Country Exposure Review Committee (ICERC) assigns transfer-risk ratings for cross-border exposures. Examiners should use the guidelines in this uniform agreement rather than ICERC transfer-risk ratings in assigning security classifications, except when the ICERC ratings result in a more-severe classification.

CREDIT-RISK-MANAGEMENT FRAMEWORK FOR SECURITIES

When an institution has developed an accurate, robust, and documented credit-risk-management framework to analyze its securities holdings, examiners may choose to depart from the general debt security classification guidelines in favor of individual asset review in determining whether to classify those holdings. A robust credit-risk-management framework entails appropriate pre-acquisition credit due diligence by qualified staff that grades a security's credit risk based on an analysis of the repayment capacity of the issuer and the structure and features of the security. It also involves the ongoing monitoring of holdings to ensure that risk ratings are reviewed regularly and updated in a timely fashion when significant new information is received.

The credit analysis of securities should vary based on the structural complexity of the security, the type of collateral, and external ratings. The credit-risk-management framework should reflect the size, complexity, quality, and risk characteristics of the securities portfolio; the risk appetite and policies of the institution; and the quality of its credit-risk-management staff, and should reflect changes to these factors over time. Policies and procedures should identify the extent of credit analysis and documentation required to satisfy sound credit-risk-management standards.

TRANSFERS OF LOW-QUALITY SECURITIES AND ASSETS

The purchase of low-quality assets by a bank from an affiliated bank or nonbank affiliate is a violation of section 23A of the Federal Reserve Act and Regulation W. The transfer of low-quality securities from one depository institution to another may be done to avoid detection and classification dur-ing regulatory examinations; this type of transfer may be accomplished through participations, purchases or sales, and asset swaps with other affiliated or nonaffiliated financial institutions. Broadly defined, low-quality securities include depreciated or sub-investment-quality securities. Situations in which an institution appears to be concealing low-quality securities to avoid examination scrutiny and possible classification represent an unsafe and unsound activity.

Any situations involving the transfer of low-quality or questionable securities should be brought to the attention of Reserve Bank supervisory personnel who, in turn, should notify the local office of the primary federal regulator of the other depository institution involved in the

transaction. For example, if an examiner determines that a state member bank or holding company has transferred or intends to transfer low-quality securities to another depository institution, the Reserve Bank should notify the recipient institution's primary federal regulator of the transfer. The same notification requirement holds true if an examiner determines that a state member bank or holding company has acquired or intends to acquire low-quality securities from another depository institution. This procedure applies to transfers involving savings associations and savings banks, as well as commercial banking organizations.

Situations may arise when transfers of securities are undertaken for legitimate reasons. In these cases, the securities should be properly recorded on the books of the acquiring institution at their fair value on the date of transfer. If the transfer was with the parent holding company or a nonbank affiliate, the records of the affiliate should be reviewed as well.

PERMISSIBLE STOCK HOLDINGS

The purchase of securities convertible into stock at the option of the issuer is prohibited (12 CFR 1.6). Other than as specified in table 4, banks are prohibited from investing in stock.

Table 4—Permitted Stock Holdings by Member Banks*

Type of stock	*Authorizing statute and limitation*
Federal Reserve Bank	Federal Reserve Act, sections 2 and 9 (12 USC 282 and 321) and Regulation I (12 CFR 209). Subscription must equal 6 percent of the bank's capital and surplus, 3 percent paid in.
Safe deposit corporation	12 USC 24. 15 percent of capital and surplus.
Corporation holding bank premises	Federal Reserve Act, section 24A (12 USC 371(d)). 100 percent of capital stock. Limitation includes total direct and indirect investment in bank premises in any form (such as loans). Maximum limitation may be exceeded with permission of the Federal Reserve Bank for state member banks and the Comptroller of the Currency for national banks.
Small business investment company	Small Business Investment Act of August 21, 1958, section 302(b) (15 USC 682(b)). Banks are prohibited from acquiring shares of such a corporation if, upon making the acquisition, the aggregate amount of shares in small business investment companies then held by the bank would exceed 5 percent of its capital and surplus.
Edge Act and agreement corporations and foreign banks	Federal Reserve Act, sections 25 and 25A (12 USC 601 and 618). The aggregate amount of stock held in all such corporations may not exceed 10 percent of the member bank's capital and surplus. Also, the member bank must possess capital and surplus of $1 million or more before acquiring investments pursuant to section 25.
Bank service company	Bank Service Corporation Act of 1958, section 2 (12 USC 1861 and 1862). (Redesignated as Bank Service Company Act.) 10 percent of paid in and unimpaired capital and surplus. Limitation includes total direct and indirect investment in any form. No insured banks shall invest more than 5 percent of their total assets.
Federal National Mortgage Corporation	National Housing Mortgage Association Act of 1934, section 303(f) (12 USC 1718(f)). No limit.
Bank's own stock	12 USC 83. Shares of the bank's own stock may not be acquired or taken as security for loans, except as necessary to prevent loss from a debt previously contracted in good faith. Stock so acquired must be disposed of within six months of the date of acquisition.
Corporate stock acquired through debt previously contracted (DPC) transaction	Case law has established that stock of any corporation debt may be acquired to prevent loss from a debt previously contracted in good faith. See Oppenheimer v. Harriman National Bank & Trust Co. of the City of New York, 301 US 206 (1937). However, if the stock is not disposed of within a reasonable time period, it loses its status as a DPC transaction and becomes a prohibited holding under 12 USC 24(7).
Operations subsidiaries	12 CFR 250.141. Permitted if the subsidiary is to perform, at locations at which the bank is authorized to engage in business, functions that the bank is empowered to perform directly.

Type of stock	*Authorizing statute and limitation*
State housing corporation incorporated in the state in which the bank is located	12 USC 24. 5 percent of its capital stock, paid in and unimpaired, plus 5 percent of its unimpaired surplus fund when considered together with loans and commitments made to the corporation.
Agricultural credit corporation	12 USC 24. 20 percent of capital and surplus unless the bank owns over 80 percent. No limit if the bank owns 80 percent or more.
Government National Mortgage Association	12 USC 24. No limit.
Student Loan Marketing Association	12 USC 24. No limit.
Bankers' banks	12 USC 24. 10 percent of capital stock and paid-in and unimpaired surplus. Bankers' banks must be insured by the FDIC, owned exclusively by depository institutions, and engaged solely in providing banking services to other depository institutions and their officers, directors, or employees. Ownership shall not result in any bank's acquiring more than 5 percent of any class of voting securities of the bankers' bank.
Mutual funds	12 USC 24(7). Banks may invest in mutual funds as long as the underlying securities are permissible investments for a bank.
Community development corporation	Federal Reserve Act, section 9, paragraph 23 (12 USC 338a). Up to 10 percent of capital stock and surplus[1] subject to 12 CFR 208.22.

* This information precedes November 2004.

1. Section 208.2(d) of Regulation H defines "capital stock and surplus" to mean tier 1 and tier 2 capital included in a member bank's risk-based capital and the balance of a member bank's allowance for loan and lease losses *not included in its tier 2 capital for calculation of risk-based capital,* based on the bank's most recent consolidated Report of Condition and Income. Section 9 of the Federal Reserve Act (12 USC 338a) provides that the Board has the authority under this law to approve public-welfare or other such investments, up to the sum of 5 percent of paid-in and unimpaired capital stock and 5 percent of unimpaired surplus, unless the Board determines by order that the higher amount will pose no significant risk to the affected deposit insurance fund, and the bank is adequately capitalized. In no case may the aggregate of such investments exceed 10 percent of the bank's combined capital stock and surplus.

LIMITED EQUITY INVESTMENTS

Investing in the equity of nonfinancial companies and lending to private-equity-financed companies (that is, companies financed by private equity) have emerged as increasingly important sources of earnings and business relationships at a number of banking organizations (BOs). In this guidance, the term *private equity* refers to shared-risk investments outside of publicly quoted securities and also covers activities such as venture capital, leveraged buyouts, mezzanine financing, and holdings of publicly quoted securities obtained through these activities. While private equity securities can contribute substantially to earnings, these activities can give rise to increased volatility of both earnings and capital. The supervisory guidance in SR-00-9 on private equity investments and merchant banking activities is concerned with a BO's proper risk-focused management of its private equity investment activities so that these investments do not adversely affect the safety and soundness of the affiliated insured depository institutions.

An institution's board of directors and senior management are responsible for ensuring that the risks associated with private equity activities do not adversely affect the safety and soundness of the banking organization or any other affiliated insured depository institutions. To this end,

sound investment and risk-management practices and strong capital positions are critical elements in the prudent conduct of these activities.

Legal and Regulatory Authority

Depository institutions are able to make limited equity investments under the following statutory and regulatory authorities:

- Depository institutions may make equity investments through small business investment corporations (SBICs). Investments made by SBIC subsidiaries are allowed up to a total of 50 percent of a portfolio company's outstanding shares, but can only be made in companies defined as a small business, according to SBIC rules. A bank's aggregate investment in the stock of SBICs is limited to 5 percent of the bank's capital and surplus.
- Under Regulation K, which implements sections 25 and 25A of the Federal Reserve Act (FRA) and section 4(c)(13) of the Bank Holding Company Act of 1956 (BHC Act), a depository institution may make portfolio investments in foreign companies, provided the investments do not in the aggregate exceed 25 percent of the tier 1 capital of the bank holding company. In addition, individual investments must not exceed 19.9 percent of a portfolio company's voting shares or 40 percent of the portfolio company's total equity.[10]

Equity investments made under the authorities listed above may be in publicly traded securities or privately held equity interests. The investment may be made as a direct investment in a specific portfolio company, or it may be made indirectly through a pooled investment vehicle, such as a private equity fund.[11] In general, private equity funds are investment companies, typically organized as limited partnerships, that pool capital from third-party investors to invest in shares, assets, and ownership interests in companies for resale or other disposition. Private-equity-fund investments may provide seed or early-stage investment funds to start-up companies or may finance changes in ownership, middle-market business expansions, and mergers and acquisitions.

Oversight by the Board of Directors and Senior Management

Equity investment activities require the active oversight of the board of directors and senior management of the depository institution that is conducting the private equity investment activities. The board should approve portfolio objectives, overall investment strategies, and general investment policies that are consistent with the institution's financial condition, risk profile, and risk tolerance. Portfolio objectives should address the types of investments, expected business returns, desired holding periods, diversification parameters, and other elements of sound investment-management oversight. Board-approved objectives, strategies, policies, and procedures should be documented and clearly communicated to all the personnel involved in their implementation. The board should actively monitor the performance and risk profile of equity investment business lines in light of the established objectives, strategies, and policies.

The board also should ensure that there is an effective management structure for conducting the institution's equity activities, including adequate systems for measuring, monitoring, controlling, and reporting on the risks of equity investments. The board should approve policies that specify lines of authority and responsibility for both acquisitions and sales of investments. The board should also approve (1) limits on aggregate investment and exposure amounts; (2) the types of investments (for example, direct and indirect, mezzanine financing, start-ups, seed financing); and (3) appropriate diversification-related aspects of equity investments such as industry, sector, and geographic concentrations.

For its part, senior management must ensure that there are adequate policies, procedures, and management information systems for managing equity investment activities on a day-to-day and longer-term basis. Management should set clear lines of authority and responsibility for making and monitoring investments and for managing risk. Management should ensure that an institution's equity investment activities are conducted by competent staff whose technical knowledge

10. Shares of a corporation held in trading or dealing accounts or under any other authority are also included in the calculation of a depository institution's investment. Portfolio investments of $25 million or less can be made without prior notice to the Board. See Regulation K for more detailed information.

11. For additional stock holdings that state member banks are authorized to hold, see table 4.

and experience are consistent with the scope of the institution's activities.

Management of the Investment Process

Depository institutions engaging in equity investment activities should have a sound process for executing all elements of investment management, including initial due diligence, periodic reviews of holdings, investment valuation, and realization of returns. This process requires appropriate policies, procedures, and management information systems, the formality of which should be commensurate with the scope, complexity, and nature of an institution's equity investment activities. The supervisory review should be risk-focused, taking into account the institution's stated tolerance for risk, the ability of senior management to govern these activities effectively, the materiality of activities in comparison to the institution's risk profile, and the capital position of the institution.

Depository institutions engaging in equity investment activities require effective policies that (1) govern the types and amounts of investments that may be made, (2) provide guidelines on appropriate holding periods for different types of investments, and (3) establish parameters for portfolio diversification. Investment strategies and permissible types of investments should be clearly identified. Portfolio-diversification policies should identify factors pertinent to the risk profile of the investments being made, such as industry, sector, geographic, and market factors. Policies establishing expected holding periods should specify the general criteria for liquidation of investments and guidelines for the divestiture of an underperforming investment. Decisions to liquidate underperforming investments are necessarily made on a case-by-case basis considering all relevant factors. Policies and procedures, however, should require more frequent review and analysis for investments that are performing poorly or that have been in a portfolio for a considerable length of time, as compared with the other investments overall.

Policies and Limits

Policies should identify the aggregate exposure that the institution is willing to accept, by type and nature of investment (for example, direct or indirect, industry sectors). The limits should include funded and unfunded commitments. Formal and clearly articulated hedging policies and strategies should identify limits on hedged exposures and permissible hedging instruments.

Procedures

Management and staff compensation play a critical role in providing incentives and controlling risks within a private equity business line. Clear policies should govern compensation arrangements, including co-investment structures and staff sales of portfolio company interests.

Institutions have different procedures for assessing, approving, and reviewing investments based on the size, nature, and risk profile of an investment. The procedures used for direct investments may be different than those used for indirect investments made through private equity funds. For example, different levels of due diligence and senior management approvals may be required. When constructing management infrastructures for conducting these investment activities, management should ensure that operating procedures and internal controls appropriately reflect the diversity of investments.

The potential diversity in investment practice should be recognized when conducting supervisory reviews of the equity investment process. The supervisory focus should be on the appropriateness of the process employed relative to the risk of the investments made and on the materiality of this business line to the overall soundness of the depository institution, as well as the potential impact on affiliated depository institutions. The procedures employed should include the following:

- *Investment analysis and approvals, including well-founded analytical assessments of investment opportunities and formal investment-approval processes.*
  The methods and types of analyses conducted should be appropriately structured to adequately assess the specific risk profile, industry dynamics, management, specific terms and conditions of the investment opportunity, and other relevant factors. All elements of the analytical and approval processes, from initial review through the formal investment decision, should be documented and clearly

understood by the staff conducting these activities.

The evaluation of existing and potential investments in private equity funds should involve an assessment of the adequacy of a fund's structure. Consideration should be given to the (1) management fees, (2) carried interest and its computation on an aggregate portfolio basis,[12] (3) sufficiency of capital commitments that are provided by the general partners in providing management incentives, (4) contingent liabilities of the general partner, (5) distribution policies and wind-down provisions, and (6) performance benchmarks and return-calculation methodologies.

- *Investment-risk ratings.*
  Internal risk ratings should assign each investment a rating based on factors such as the nature of the company, strength of management, industry dynamics, financial condition, operating results, expected exit strategies, market conditions, and other pertinent factors. Different rating factors may be appropriate for indirect investments and direct investments.
- *Periodic and timely investment strategy and performance (best, worst, and probable case assessment) reviews of equity investments, conducted at the individual and portfolio levels.*
  Management should ensure that periodic and timely review of the institution's equity investments takes place at both individual-investment and portfolio levels. Depending on the size, complexity, and risk profile of the investment, reviews should, when appropriate, include factors such as—
  - the history of the investment, including the total funds approved;
  - commitment amounts, principal-cash-investment amounts, cost basis, carrying value, major-investment cash flows, and supporting information including valuation rationales and methodologies;
  - the current actual percentage of ownership in the portfolio company on both a diluted and undiluted basis;
  - a summary of recent events and current outlook;
  - the recent financial performance of portfolio companies, including summary compilations of performance and forecasts, historical financial results, current and future plans, key performance metrics, and other relevant items;
  - internal investment-risk ratings and rating-change triggers;
  - exit strategies, both primary and contingent, and expected internal rates of return upon exit; and
  - other pertinent information for assessing the appropriateness, performance, and expected returns of investments.

Portfolio reviews should include an aggregation of individual investment-risk and performance ratings; an analysis of appropriate industry, sector, geographic, and other pertinent concentrations; and total portfolio valuations. Portfolio reports that contain the cost basis, carrying values, estimated fair values, valuation discounts, and other factors summarizing the status of individual investments are integral tools for conducting effective portfolio reviews. Reports containing the results of all reviews should be available to supervisors for their inspection.

Given the inherent uncertainties in equity investment activities, institutions should include in their periodic reviews consideration of the best case, worst case, and probable case assessments of investment performance. These reviews should evaluate changes in market conditions and the alternative assumptions used to value investments—including expected and contingent exit strategies. Major assumptions used in valuing investments and forecasting performance should be identified. These assessments need not be confined to quantitative analyses of potential losses, but may also include qualitative analyses. The formality and sophistication of investment reviews should be appropriate for the overall level of risk the depository institution incurs from this business line.

- *Assessment of the equity investment valuation and accounting policies and the procedures used, their impact on earnings, and the extent of their compliance with generally accepted accounting principles (GAAP).*
  Valuation and accounting policies and procedures can have a significant impact on the earnings of institutions engaged in equity investment activities. Many equity investments are made in privately held companies, for which independent price quotations are either unavailable or not available in sufficient volume to provide meaningful liquidity or a

12. The carried interest is the share of a partnership's return that is received by the general partners or investment advisers.

market valuation. Valuations of some equity investments may involve a high degree of judgment on the part of management or the skillful use of peer comparisons. Similar circumstances may exist for publicly traded securities that are thinly traded or subject to resale and holding-period restrictions, or when the institution holds a significant block of a company's shares. It is of paramount importance that an institution's policies and procedures on accounting and valuation methodologies for equity investments be clearly articulated.

Under GAAP, equity investments held by investment companies, held by broker-dealers, or maintained in the trading account are reported at fair value, with any unrealized appreciation or depreciation included in earnings and flowing to tier 1 capital. For some holdings, fair value may reflect adjustments for liquidity and other factors.

Equity investments that are not held in investment companies, by broker-dealers, or in the trading account and that have a readily determinable fair value (quoted market price) are generally reported as available-for-sale (AFS). They are marked to market with unrealized appreciation or depreciation recognized in GAAP-defined "comprehensive income" but not earnings. Appreciation or depreciation flows to equity, but, for regulatory capital purposes only, depreciation is included in tier 1 capital.[13] Equity investments without readily determinable fair values generally are held at cost, subject to write-downs for impairments to the value of the asset. Impairments of value should be promptly and appropriately recognized and written down.

In determining fair value, the valuation methodology plays a critical role. Formal valuation and accounting policies should be established for investments in public companies; direct private investments; indirect fund investments; and, where appropriate, other types of investments with special characteristics. When establishing valuation policies, institutions should consider market conditions, taking account of lockout provisions, the restrictions of Securities and Exchange Commission Rule 144, liquidity features, the dilutive effects of warrants and options, and industry characteristics and dynamics.

Accounting and valuation of equity investments should be subject to regular periodic review. In all cases, valuation reviews should produce documented audit trails that are available to supervisors and auditors. These reviews should assess the consistency of the methodologies used in estimating fair value.

Accounting and valuation treatments should be assessed in light of their potential for abuse, such as through the inappropriate management or manipulation of reported earnings on equity investments. For example, high valuations may produce overstatements of earnings through gains and losses on investments reported at "fair value." On the other hand, inappropriately understated valuations can provide vehicles for smoothing earnings by recognizing gains on profitable investments when an institution's earnings are otherwise under stress. While reasonable people may disagree on valuations given to illiquid private equity investments, institutions should have rigorous valuation procedures that are applied consistently.

Increasingly, equity investments are contributing to an institution's earnings. The potential impact of these investments on the composition, quality, and sustainability of overall earnings should be appropriately recognized and assessed by both management and supervisors.

- *A review of assumed and actual equity-investment exit strategies and the extent of their impact on the returns and reported earnings.*

  The principal means of exiting an equity investment in a privately held company include initial public stock offerings, sales to other investors, and share repurchases. An institution's assumptions on exit strategies can significantly affect the valuation of the investment. Management should periodically review investment exit strategies, with particular focus on larger or less-liquid investments.
- *Policies and procedures governing the sale, exchange, transfer, or other disposition of equity investments.*

  Policies and procedures to govern the sale, exchange, transfer, or other disposition of the institution's investments should state clearly the levels of management or board approval required for the disposition of investments.
- *Internal methods for allocating capital based*

13. Under the risk-based capital rule, supplementary (tier 2) capital may include up to 45 percent of pretax unrealized holding gains (that is, the excess, if any, of the fair value over historical cost) on AFS equity securities with readily determinable fair values.

on the risk inherent in the equity investment activities, including the methods for identifying all material risks and their potential impact on the safety and soundness of the institution.

Consistent with SR-99-18, depository institutions that are conducting material equity investment activities should have internal methods for allocating economic capital. These methods should be based on the risk inherent in the equity investment activities, including the identification of all material risks and their potential impact on the institution. Organizations that are substantially engaged in these investment activities should have strong capital positions supporting their equity investments. The economic capital that organizations allocate to their equity investments should be well in excess of the current regulatory minimums applied to lending activities. The amount of percentage of capital dedicated to the equity investment business line should be appropriate to the size, complexity, and financial condition of the institution. Assessments of capital adequacy should cover not only the institution's compliance with regulatory capital requirements and the quality of regulatory capital, but should also include an institution's methodologies for internally allocating economic capital to this business line.

Internal Controls

An adequate system of internal controls, with appropriate checks and balances and clear audit trails, is critical to conducting equity investment activities effectively. Appropriate internal controls should address all the elements of the investment-management process. The internal controls should focus on the appropriateness of existing policies and procedures; adherence to policies and procedures; and the integrity and adequacy of investment valuations, risk identification, regulatory compliance, and management reporting. Any departures from policies and procedures should be documented and reviewed by senior management, and this documentation should be available for examiner review.

As with other financial activities, the assessments of an organization's compliance with both written and implied policies and procedures should be independent of line decision-making functions to the fullest extent possible. When fully independent reviews are not possible in smaller, less-complex institutions, alternative checks and balances should be established. These alternatives may include random internal audits, reviews by senior management who are independent of the function, or the use of outside third parties.

Documentation

Documentation of key elements of the investment process, including initial due diligence, approval reviews, valuations, and dispositions, is an integral part of any private equity investment internal control system. This documentation should be accessible to supervisors.

Legal Compliance

An institution's internal controls should focus on compliance with all federal laws and regulations that are applicable to the institution's investment activities. Regulatory compliance requirements, in particular, should be incorporated into internal controls so managers outside of the compliance or legal functions understand the parameters of permissible investment activities.

To ensure compliance with federal securities laws, institutions should establish policies, procedures, and other controls addressing insider trading. A "restricted list" of securities for which the institution has inside information is one example of a widely used method for controlling the risk of insider trading. In addition, control procedures should be in place to ensure that appropriate reports are filed with functional regulators.

The limitations in sections 23A and 23B of the FRA, which deal with transactions between a depository institution and its affiliates, are presumed by the Gramm-Leach-Bliley Act (GLB Act) to apply to certain transactions between a depository institution and any portfolio company in which an affiliate of the institution owns at least a 15 percent equity interest. This ownership threshold is lower than the ordinary definition of an affiliate, which is typically 25 percent.

Compensation

Often, key employees in the private equity investment units of banking organizations may co-invest in the direct or fund investments made by the unit. These co-investment arrangements can be an important incentive and risk-control technique, and they can help to attract and retain qualified management. However, "cherry picking," or selecting only certain investments for employee participation while excluding others, should be discouraged.

The employees' co-investment may be funded through loans from the depository institution or its affiliates, which, in turn, would hold a lien against the employees' interests. The administration of the compensation plan should be appropriately governed pursuant to formal agreements, policies, and procedures. Among other matters, policies and procedures should address the terms and conditions of employee loans and the sales of participants' interests before the release of the lien.

Disclosure of Equity Investment Activities

Given the important role that market discipline plays in controlling risk, institutions should ensure that they adequately disclose the information necessary for the markets to assess the institution's risk profile and performance in this business line. Indeed, it is in the institution's interest, as well as that of its creditors and shareholders, to publicly disclose information about earnings and risk profiles. Institutions are encouraged to disclose in public filings information on the type and nature of investments, portfolio concentrations, returns, and their contributions to reported earnings and capital. Supervisors should fully review and use these disclosures, as well as periodic regulatory reports filed by publicly held banking organizations, as part of the information they review routinely. The following topics are relevant for public disclosure, though disclosures on each of these topics may not be appropriate, relevant, or sufficient in every case:

- the size of the portfolio
- the types and nature of investments (for example, direct or indirect, domestic or international, public or private, equity or debt with conversion rights)
- initial cost, carrying value, and fair value of investments and, when applicable, comparisons to publicly quoted share values of portfolio companies
- the accounting techniques and valuation methodologies, including key assumptions and practices affecting valuation and changes in those practices
- the realized gains (or losses) arising from sales and unrealized gains (or losses)
- insights regarding the potential performance of equity investments under alternative market conditions

Lending to or Engaging in Other Transactions with Portfolio Companies

Additional risk-management issues may arise when a depository institution or an affiliate lends to or has other business relationships with (1) a company in which the depository institution or an affiliate has invested (that is, a portfolio company), (2) the general partner or manager of a private equity fund that has also invested in a portfolio company, or (3) a private-equity-financed company in which the banking institution does not hold a direct or indirect ownership interest but which is an investment or portfolio company of a general partner or fund manager with which the banking organization has other investments. Given the potentially higher-than-normal risk attributes of these lending relationships, institutions should devote special attention to ensuring that the terms and conditions of such relationships are at arm's length and are consistent with the lending policies and procedures of the institution. Similar issues may arise in the context of derivatives transactions with or guaranteed by portfolio companies and general partners. Lending and other business transactions between an insured depository institution and a portfolio company that meet the definition of an affiliate must be negotiated on an arm's-length basis, in accordance with section 23B of the FRA.

When a depository institution lends to a private-equity-financed company in which it has no equity interest but in which the borrowing company is a portfolio investment of private equity fund managers or general partners with which the institution may have other private-equity-related relationships, care must be taken

to ensure that the extension of credit is conducted on reasonable terms. In some cases, lenders may wrongly assume that the general partners or another third party implicitly guarantees or stands behind such credits. Reliance on implicit guarantees or comfort letters should not substitute for reliance on a sound borrower that is expected to service its debt with its own resources. As with any type of credit extension, absent a written contractual guarantee, the credit quality of a private equity fund manager, general partner, or other third party should not be used to upgrade the internal credit-risk rating of the borrower company or to prevent the classification or special mention of a loan.

When an institution lends to a portfolio company in which it has a direct or an indirect interest, implications arise under sections 23A and 23B of the FRA, which govern credit-related transactions and asset purchases between a depository institution and its affiliates. Section 23A applies to transactions between a depository institution and any company in which the institution's holding company or shareholders own at least 25 percent of the company's voting shares. The GLB Act extends this coverage by establishing a presumption that a portfolio company is an affiliate of a depository institution if the financial holding company (FHC) uses the merchant banking authority of the GLB Act to own or control more than 15 percent of the equity of the company. Institutions should obtain the assistance of counsel in determining whether such issues exist or would exist if loans were extended to a portfolio company, general partner, or manager. Supervisors, including examiners, should ensure that the institution has conducted a proper review of these issues to avoid violations of law or regulations.

INVESTMENT SECURITIES' RISKS

Market Risk

Market risk is the exposure of an institution's financial condition to adverse movements in the market rates or prices of its holdings before such holdings can be liquidated or expeditiously offset. It is measured by assessing the effect of changing rates or prices on either the earnings or economic value of an individual instrument, a portfolio, or the entire institution. Although many banking institutions focus on carrying values and reported earnings when assessing market risk at the institutional level, other measures focusing on total returns and changes in economic or fair values better reflect the potential market-risk exposure of institutions, portfolios, and individual instruments. Changes in fair values and total returns directly measure the effect of market movements on the economic value of an institution's capital and provide significant insights into their ultimate effects on the institution's long-term earnings. Institutions should manage and control their market risks using both an earnings and an economic-value approach, and at least on an economic or fair-value basis.

When evaluating capital adequacy, examiners should consider the effect of changes in market rates and prices on the economic value of the institution by evaluating any unrealized losses in an institution's securities or derivative positions. This evaluation should assess the ability of the institution to hold its positions and function as a going concern if recognition of unrealized losses would significantly affect the institution's capital ratios. Examiners also should consider the impact that liquidating positions with unrealized losses may have on the institution's prompt-corrective-action capital category.

Market-risk limits should be established for both the acquisition and ongoing management of an institution's securities and derivative holdings and, as appropriate, should address exposures for individual instruments, instrument types, and portfolios. These limits should be integrated fully with limits established for the entire institution. At the institutional level, the board of directors should approve market-risk exposure limits that specify percentage changes in the economic value of capital and, when applicable, in the projected earnings of the institution under various market scenarios. Similar and complementary limits on the volatility of prices or fair value should be established at the appropriate instrument, product-type, and portfolio levels, based on the institution's willingness to accept market risk. Limits on the variability of effective maturities may also be desirable for certain types of instruments or portfolios.

The scenarios an institution specifies for assessing the market risk of its securities and derivative products should be sufficiently rigorous to capture all meaningful effects of any options. For example, in assessing interest-rate risk, scenarios such as 100, 200, and 300 basis

point parallel shifts in yield curves should be considered as well as appropriate nonparallel shifts in structure to evaluate potential basis, volatility, and yield curve risks.

Accurately measuring an institution's market risk requires timely information about the current carrying and market values of its securities and derivative holdings. Accordingly, institutions should have market-risk measurement systems commensurate with the size and nature of these holdings. Institutions with significant holdings of highly complex instruments should ensure that they have independent means to value their positions. Institutions using internal models to measure risk should validate the models according to the standards in SR-11-7. This should include a periodic review of all elements of the modeling process, including its assumptions and risk-measurement techniques. Institutions relying on third parties for market-risk measurement systems and analyses should fully understand the assumptions and techniques used by the third party.

Institutions should evaluate the market-risk exposures of their securities and derivative positions and report this information to their boards of directors regularly, not less frequently than each quarter. These evaluations should assess trends in aggregate market-risk exposure and the performance of portfolios relative to their established objectives and risk constraints. They also should identify compliance with board-approved limits and identify any exceptions to established standards. Examiners should ensure that institutions have mechanisms to detect and adequately address exceptions to limits and guidelines. Examiners should also determine that management reporting on market risk appropriately addresses potential exposures to basis risk, yield curve changes, and other factors pertinent to the institution's holdings. In this connection, examiners should assess an institution's compliance with broader guidance for managing interest-rate risk in a consolidated organization.

Complex and illiquid instruments often involve greater market risk than broadly traded, more liquid securities. Often, this higher potential market risk arising from illiquidity is not captured by standardized financial-modeling techniques. This type of risk is particularly acute for instruments that are highly leveraged or that are designed to benefit from specific, narrowly defined market shifts. If market prices or rates do not move as expected, the demand for these instruments can evaporate. When examiners encounter such instruments, they should review how adequately the institution has assessed its potential market risks. If the risks from these instruments are material, the institution should have a well-documented process for stress testing their value and liquidity assumptions under a variety of market scenarios.

Liquidity Risk

Banks face two types of liquidity risk in their securities and derivative activities: risks related to specific products or markets and risks related to the general funding of their activities. The former, market-liquidity risk, is the risk that an institution cannot easily unwind or offset a particular position at or near the previous market price because of inadequate market depth or disruptions in the marketplace. The latter, funding-liquidity risk, is the risk that the bank will be unable to meet its payment obligations on settlement dates. Since neither type of liquidity risk is unique to securities and derivative activities, management should evaluate these risks in the broader context of the institution's overall liquidity.

When specifying permissible securities and derivative instruments to accomplish established objectives, institutions should take into account the size, depth, and liquidity of the markets for specific instruments, and the effect these characteristics may have on achieving an objective. The market liquidity of certain types of instruments may make them entirely inappropriate for achieving certain objectives. Moreover, institutions should consider the effects that market risk can have on the liquidity of different types of instruments. For example, some government-agency securities may have embedded options that make them highly illiquid during periods of market volatility and stress, despite their high credit rating. Accordingly, institutions should clearly articulate the market-liquidity characteristics of instruments to be used in accomplishing institutional objectives.

Operating and Legal Risks

Operating risk is the risk that deficiencies in information systems or internal controls will result in unexpected loss. Some specific sources of operating risk include inadequate procedures,

human error, system failure, or fraud. Inaccurately assessing or controlling operating risks is one of the more likely sources of problems facing institutions involved in securities and derivative activities.

Adequate internal controls are the first line of defense in controlling the operating risks involved in an institution's securities and derivative activities. Of particular importance are internal controls to ensure that persons executing transactions are separated from those individuals responsible for processing contracts, confirming transactions, controlling various clearing accounts, approving the accounting methodology or entries, and performing revaluations.

Institutions should have approved policies, consistent with legal requirements and internal policies, that specify documentation requirements for transactions and formal procedures for saving and safeguarding important documents. Relevant personnel should fully understand the requirements. Examiners should also consider the extent to which institutions evaluate and control operating risks through internal audits, stress testing, contingency planning, and other managerial and analytical techniques.

An institution's operating policies should establish appropriate procedures to obtain and maintain possession or control of instruments purchased. Institutions should ensure that transactions consummated orally are confirmed as soon as possible. As noted earlier in this section, banking organizations should, to the extent possible, seek to diversify the firms used for their safekeeping arrangements to avoid concentrations of assets or other types of risk.

Legal risk is the risk that contracts are not legally enforceable or documented correctly. This risk should be limited and managed through policies developed by the institution's legal counsel. At a minimum, guidelines and processes should be in place to ensure the enforceability of counterparty agreements. Examiners should determine whether an institution is adequately evaluating the enforceability of its agreements before individual transactions are consummated. Institutions should also ensure that the counterparty has sufficient authority to enter into the transaction and that the terms of the agreement are legally sound. Institutions should further ascertain that their netting agreements are adequately documented, have been executed properly, and are enforceable in all relevant jurisdictions. Institutions should know relevant tax laws and interpretations governing the use of netting instruments.

An institution's policies should also provide conflict-of-interest guidelines for employees who are directly involved in purchasing securities from and selling securities to securities dealers on behalf of their institution. These guidelines should ensure that all directors, officers, and employees act in the best interest of the institution. The board of directors may wish to adopt policies prohibiting these employees from engaging in personal securities transactions with the same securities firms the institution uses without the specific prior approval of the board. The board of directors may also wish to adopt a policy applicable to directors, officers, and employees that restricts or prohibits them from receiving gifts, gratuities, or travel expenses from approved securities dealer firms and their personnel.

INTERNATIONAL DIVISION INVESTMENTS

The same types of instruments exist in international banking as in domestic banking. Securities and derivative contracts may be acquired by a bank's international division and overseas branches for its own account, and foreign equity investments may be held by the bank directly or through Edge Act corporations. The investments held by most international divisions are predominately securities issued by various governmental entities of the countries in which the bank's foreign branches are located. These investments are held for a variety of purposes:

- They are required by various local laws.
- They are used to meet foreign reserve requirements.
- They result in reduced tax liabilities.
- They enable the bank to use new or increased re-discount facilities or benefit from greater deposit or lending authorities.
- They are used by the bank as an expression of "goodwill" toward a country.

The examiner should be familiar with the applicable sections of Regulation K (12 CFR 211) governing a member bank's international investment holdings, as well as other regulations discussed in this section. Because of the mandatory investment requirements of some countries, securities held cannot always be as "liq-

uid" and "readily marketable" as required in domestic banking. However, the amount of a bank's "mandatory" holdings will normally be a relatively small amount of its total investments or capital funds.

A bank's international division may also hold securities strictly for investment purposes; these are expected to provide a reasonable rate of return commensurate with safety considerations. As with domestic investment securities, the bank's safety must take precedence, followed by liquidity and marketability. Securities held by international divisions are considered to be liquid if they are readily convertible into cash at their approximate carrying value. They are marketable if they can be sold in a very short time at a price commensurate with yield and quality. Speculation in marginal foreign securities to generate more favorable yields is an unsound banking practice and should be discouraged.

Banks are generally prohibited from investing in stocks. However, a number of exceptions (detailed earlier in this section) are often applicable to the international division. For example, the bank may, under section 24A of the Federal Reserve Act (12 USC 371d), hold stock in overseas corporations that hold title to foreign bank premises. Both stock and other securities holdings are permissible under certain circumstances and in limited amounts under section 211.4 of Regulation K—Permissible Activities and Investments of Foreign Branches of Member Banks (12 CFR 211). Other sections of Regulation K permit the bank to make equity investments in Edge Act and agreement corporations and in foreign banks, subject to certain limitations.

Standard & Poor's, Moody's, and other publications from U.S. rating-services rate Canadian and other selected foreign securities that are authorized for U.S. commercial bank investment purposes under 12 USC 24 (Seventh). However, in many other countries, securities-rating services are limited or nonexistent. When they do exist, the ratings are only indicative and should be supplemented with additional information on legality, credit soundness, marketability, and foreign-exchange and country-risk factors. The opinions of local attorneys are often the best source of determining whether a particular foreign security has the full faith and credit backing of a country's government.

Sufficient analytical data must be provided to the bank's board of directors and senior management so they can make informed judgments about the effectiveness of the international division's investment policy and procedures. The institution's international securities and derivative contracts should be included on all board and senior management reports detailing domestic securities and derivative contracts received. These reports should be timely and sufficiently detailed to allow the board of directors and senior management to understand and assess the credit, market, and liquidity risks facing the institution and its securities and derivative positions.

ACCOUNTING FOR SECURITIES PORTFOLIOS

A single class of a financial instrument that can meet trading, investment, or hedging objectives may have a different accounting treatment applied to it, depending on management's purpose for holding it. Therefore, an examiner reviewing investment or trading activities should be familiar with the different accounting methods to ensure that the particular accounting treatment being used is appropriate for the purpose of holding a financial instrument and the economic substance of the related transaction.

The accounting principles that apply to securities portfolios, including trading accounts, and to derivative instruments are complex and have evolved over time—both with regard to authoritative standards and related banking practices. Examiners should consult the sources of generally accepted accounting principles (GAAP); FASB ASC 320, Investments—Debt and Equity Securities; and the reporting requirements in the bank Call Report (referred to in this section) for more detailed guidance in these areas.

Examiners should be aware that accounting practices in foreign countries may differ from the accounting principles followed in the United States. Nevertheless, foreign institutions are required to submit regulatory reports prepared in accordance with U.S. banking agency regulatory reporting instructions, which incorporate GAAP.

Treatment under FASB ASC TOPIC 320, formerly FASB Statement No. 115

In May 1993, the Financial Accounting Standards Board issued Statement of Financial

Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities."[14] FASB 115 supersedes FASB 12, "Accounting for Certain Marketable Securities," and related interpretations. It also amends other standards, including FASB 65, "Accounting for Certain Mortgage-Banking Activities," to eliminate mortgage-backed securities from that statement's scope. FASB 115 addresses investments in equity securities that have readily determinable fair values and all investments in debt securities.[15] The accounting standard was effective for fiscal years beginning after December 15, 1993, for regulatory reporting and financial reporting purposes. It was to be initially applied as of the beginning of an institution's fiscal year and cannot be applied retroactively to prior years' financial statements. Investments subject to the standard are to be classified in three categories and accounted for as follows:

- *Held-to-maturity account*. Debt securities that the institution has the positive intent and ability to hold to maturity are classified as held-to-maturity securities and reported at amortized cost.
- *Trading account*. Debt and equity securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Trading generally reflects active and frequent buying and selling, and trading securities are generally used with the objective of generating profits on short-term differences in price.
- *Available-for-sale account*. Debt and equity securities not classified as either held-to-maturity securities or trading securities are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported as a net amount in a separate component of shareholders' equity.

Under FASB 115, mortgage-backed securities that are held for sale in conjunction with mortgage-banking activities should be reported at fair value in the trading account. The standard does not apply to loans, including mortgage loans, that have not been securitized.

Upon the acquisition of a debt or equity security, an institution must place the security into one of the above three categories. At each reporting date, the institution must reassess whether the balance-sheet designation continues to be appropriate. Proper classification of securities is a key examination issue. (See SR-94-25 and SR-93-72; see also SR-96-32.)

FASB 115 recognizes that certain changes in circumstances may cause the institution to change its intent to hold a certain security to maturity without calling into question its intent to hold other debt securities to maturity in the future. Thus, the sale or transfer of a held-to-maturity security due to one of the following changes in circumstances will not be viewed as inconsistent with its original balance-sheet classification:

- evidence of a significant deterioration in the issuer's creditworthiness
- a change in tax law that eliminates or reduces the tax-exempt status of interest on the debt security (but not a change in tax law that revises the marginal tax rates applicable to interest income)
- a major business combination or major disposition (such as the sale of a segment) that necessitates the sale or transfer of held-to-maturity securities to maintain the institution's existing interest-rate risk position or credit-risk policy
- a change in statutory or regulatory requirements that significantly modifies either what constitutes a permissible investment or the maximum level of investments in certain kinds of securities, thereby causing an institution to

14. FASB 115 does not apply to investments in equity securities accounted for under the equity method or to investments in consolidated subsidiaries. This statement does not apply to institutions whose specialized accounting practices include accounting for substantially all investments in debt and equity securities at market value or fair value, with changes in value recognized in earnings (income) or in the change in net assets. Examples of those institutions are brokers and dealers in securities, defined-benefit pension plans, and investment companies.

15. FASB 115 states that the fair value of an equity security is readily determinable if sales prices or bid-asked quotations are currently available on a securities exchange registered with the SEC or in the over-the-counter market, provided that those prices or quotations for the over-the-counter market are publicly reported by the FINRA Automated Quotations systems or by the National Quotation Bureau, Inc. Restricted stock does not meet that definition.

The fair value of an equity security traded only in a foreign market is readily determinable if that foreign market is of a breadth and scope comparable to one of the U.S. markets referred to above. The fair value of an investment in a mutual fund is readily determinable if the fair value per share (unit) is determined and published and is the basis for current transactions.

dispose of a held-to-maturity security
- a significant increase by the regulator in the industry's capital requirements that causes the institution to downsize by selling held-to-maturity securities
- a significant increase in the risk weights of debt securities used for regulatory risk-based capital purposes

Furthermore, FASB 115 recognizes that other events that are isolated, nonrecurring, and unusual for the reporting institution and could not have been reasonably anticipated may cause the institution to sell or transfer a held-to-maturity security without necessarily calling into question its intent to hold other debt securities to maturity. However, all sales and transfers of held-to-maturity securities must be disclosed in the footnotes to the financial statements.

An institution must not designate a debt security as held-to-maturity if the institution has the intent to hold the security for only an indefinite period. Consequently, a debt security should not, for example, be designated as held-to-maturity if the banking organization or other company anticipates that the security would be available to be sold in response to—

- changes in market interest rates and related changes in the security's prepayment risk,
- needs for liquidity (for example, due to the withdrawal of deposits, increased demand for loans, surrender of insurance policies, or payment of insurance claims),
- changes in the availability of and the yield on alternative investments,
- changes in funding sources and terms, or
- changes in foreign-currency risk.

According to FASB 115, an institution's asset-liability management may take into consideration the maturity and repricing characteristics of all investments in debt securities, including those held to maturity or available for sale, without tainting or casting doubt on the standard's criterion that there be a ''positive intent to hold until maturity.''[16] However, securities should not be designated as held-to-maturity if they may be sold. Further, liquidity can be derived from the held-to-maturity category by the use of repurchase agreements that are designated as financings, but not sales.

Transfers of a security between investment categories should be accounted for at fair value. FASB 115 requires that at the date of the transfer, the security's unrealized holding gain or loss must be accounted for as follows:

- For a security transferred from the trading category, the unrealized holding gain or loss at the date of the transfer will have already been recognized in earnings and should not be reversed.
- For a security transferred into the trading category, the unrealized holding gain or loss at the date of the transfer should be recognized in earnings immediately.
- For a debt security transferred into the available-for-sale category from the held-to-maturity category, the unrealized holding gain or loss at the date of the transfer should be recognized in a separate component of shareholders' equity.
- For a debt security transferred into the held-to-maturity category from the available-for-sale category, the unrealized holding gain or loss at the date of the transfer should continue to be reported in a separate component of shareholders' equity but should be amortized over the remaining life of the security as an adjustment of its yield in a manner consistent with the amortization of any premium or discount.

Transfers from the held-to-maturity category should be rare, except for transfers due to the changes in circumstances that were discussed above. Transfers from the held-to-maturity account not meeting the exceptions indicated above may call into question management's intent to hold other securities to maturity. According to the standard, transfers into or from the trading category should also be rare.

FASB 115 requires that institutions determine whether a decline in fair value below the amortized cost for individual securities in the available-for-sale or held-to-maturity accounts is ''other than temporary'' (that is, whether this

16. In summary, under FASB 115, sales of debt securities that meet either of the following two conditions may be considered as ''maturities'' for purposes of the balance-sheet classification of securities: (i) The sale of a security occurs near enough to its maturity date (or call date if exercise of the call is probable)—for example, within three months—that interest-rate risk has been substantially eliminated as a pricing factor. (ii) The sale of a security occurs after the institution has already collected at least 85 percent of the principal outstanding at acquisition from either prepayments or scheduled payments.

decline results from permanent impairment). For example, if it is probable that the investor will be unable to collect all amounts due according to the contractual terms of a debt security that was not impaired at acquisition, an other-than-temporary impairment should be considered to have occurred. If the decline in fair value is judged to be other than temporary, the cost basis of the individual security should be written down to its fair value, and the write-down should be accounted in earnings as a realized loss. This new cost basis should not be written up if there are any subsequent recoveries in fair value.

1. To determine if policies, practices, procedures, and internal controls regarding investments are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To determine the scope and adequacy of the audit function.
4. To determine the overall quality of the investment portfolio and how that quality relates to the soundness of the bank.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures or internal controls are deficient or when violations of laws or regulations have been noted.

1. If used, answer the questions in section 2020.4, the "Investment Securities and End-User Activities" internal control questionnaire.
2. On the basis of an evaluation of internal controls and the work performed by internal or external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the following examination procedures. Also, obtain a listing of any deficiencies noted in the latest review conducted by internal or external auditors, and determine if any corrections have been accomplished. Determine the extent and effectiveness of investment-policy supervision by—
   a. reviewing the abstracted minutes of meetings of the board of directors or appropriate committees;
   b. determining that proper authorizations have been made for investment officers or committees;
   c. determining any limitations or restrictions on delegated authorities;
   d. evaluating the sufficiency of analytical data used by the board or investment committee;
   e. reviewing the reporting methods used by department supervisors and internal auditors to ensure compliance with established policy; and
   f. preparing a memo for the examiner who is assigned "Duties and Responsibilities of Directors" and the examiner who is in charge of the international examination, if applicable, stating conclusions on the effectiveness of directors' supervision of the domestic or international division investment policy. All conclusions should be documented.
4. Obtain the following:
   a. Trial balances of investment-account holdings and money market instruments, such as commercial paper, banker's acceptances, negotiable certificates of deposit, securities purchased under agreements to resell, and federal funds sold. Identify any depository instruments placed through money brokers.
   b. A list of any assets carried in loans, and a list of discounts on which interest is exempt from federal income taxes and which are carried in the investment account on Call Reports.
   c. A list of open purchase and sale commitments.
   d. A schedule of all securities, forward placement contracts, futures contracts, contracts on exchange-traded puts and calls, option contracts on futures puts and calls, and standby contracts purchased or sold since the last examination.
   e. A maturity schedule of securities sold under repurchase agreements.
   f. A list of pledged assets and secured liabilities.
   g. A list of the names and addresses of all securities dealers doing business with the bank.
   h. A list of the bank's personnel authorized to trade with dealers.
   i. A list of all U.S. government–guaranteed loans that are recorded and carried as an investment-account security.
   j. For international division and overseas branches, a list of investments—
      - held to comply with various foreign governmental regulations requiring such investments;
      - used to meet foreign reserve requirements;
      - required as stock exchange guarantees or used to enable the bank to provide securities services;
      - representing investment of surplus funds;
      - used to obtain telephone and telex services;
      - representing club and school memberships;
      - acquired through debts previously contracted;
      - representing minority interests in non-affiliated companies;
      - representing trading-account securities;
      - representing equity interests in Edge Act and agreement corporations and foreign banks;
      - representing portfolio investments made

pursuant to Regulation K; and
- held for other purposes.

5. Using updated data available from reports of condition, UBPR printouts, and investment adviser and correspondent bank portfolio-analysis reports, obtain or prepare an analysis of investment and money market holdings that includes—
   a. a month-by-month schedule of par, book, and market values of issues maturing in one year;
   b. schedules of par, book, and market values of holdings in the investment portfolio (schedules should be indexed by maturity date, and individual schedules should be detailed by maturity dates over the following time periods: over one through five years, over five through 10 years, and over 10 years);
   c. value totals of holdings by obligor or industry; related obligors or industries; geographic distribution; yield; and special characteristics, such as moral obligations, conversion, or warrant features;
   d. par-value schedules of type I, II, III, and IV investment holdings, by those legally defined types; and
   e. for the international division, a list of international investment holdings (foreign-currency amounts and U.S. dollar equivalents) to include—
      - descriptions of securities held (par, book, and market values),
      - names of issuers,
      - issuers' countries of domicile,
      - interest rates, and
      - pledged securities.
6. Review the reconcilement of investment and money market account (or accounts) trial balances to the general-ledger control account (or accounts).
7. Using either an appropriate sampling technique or the asset-coverage method, select from the trial balance (or balances) the international investments, municipal investments, and money market holdings for examination. If transaction volume permits, include all securities purchased since the last general examination in the population of items to be reviewed.
8. Perform the following procedures for each investment and money market holding selected in step 7:
   a. Check appropriate legal opinions or published data outlining legal status.
   b. If market prices are provided to the bank by an independent party (excluding affiliates and securities dealers selling investments to the bank) or if they are independently tested as a documented part of the bank's audit program, accept those prices. If the independence of the prices cannot be established, test market values by reference to one of the following sources:
      - published quotations, if available
      - appraisals by outside pricing services, if performed
   c. If market prices are provided by the bank and cannot be verified by reference to published quotations or other sources, test those prices by using the "comparative yield method" to calculate approximate yield to maturity:

$$\text{approximate yield to maturity} = \frac{\text{annual interest} + \dfrac{\text{par value} - \text{book value}}{\text{number of years to maturity}}}{\frac{1}{2}\,(\text{bank-provided market price} + \text{par value})}$$

      - Compare the bank-provided market price and the examiner-calculated approximate yield to maturity with an independent publicly offered yield or market price for a similar type of investment with similar rating, trading-volume, and maturity or call characteristics.
      - Investigate market-value variances in excess of 5 percent.
   d. For investments and money market obligations in the sample that are rated, compare the ratings provided with the most recent published ratings.

Before continuing, refer to steps 16 through 18. They should be performed in conjunction with steps 9 through 15. International division holdings should be reviewed with domestic holdings to ensure compliance, when combined, with applicable legal requirements.

9. To the extent practical under the circumstances, perform credit analyses of—
   a. the obligors on securities purchased under agreements to resell, when the readily marketable value of the securities is not sufficient to satisfy the obligation;
   b. all international investments, nonrated

securities, and money market instruments selected in step 7 or acquired since the last examination;

c. all previously detailed or currently known speculative issues;
d. all defaulted issues; and
e. any issues in the current Interagency Country Exposure Review Committee credit schedule obtained from the international loan portfolio manager by—
   - comparing the schedule with the foreign securities trial balance obtained in step 4 to ascertain which foreign securities are to be included in Interagency Country Exposure Review Committee credits;
   - for each security so identified, transcribing the following appropriate information to a separate examiner's line sheet or a related examiner's credit line sheet:
     — amount (and U.S. dollar equivalent if a foreign currency) to include par, book, and fair values
     — how and when acquired
     — maturity date (or dates)
     — default date, if appropriate
     — any pertinent comments; and
   - returning the schedule and the appropriate examiner's line sheet (or sheets) to the examiner who is assigned "International—Loan Portfolio Management."

10. Review the most recent reports of examination of the bank's Edge Act and agreement corporation affiliates and foreign subsidiaries to determine their overall conditions. Also, compile data on Edge Act and agreement corporations and foreign subsidiaries necessary for the commercial report of examination (that is, asset criticisms, transfer risk, and other material examination findings). Review portfolio investments made by Edge and agreement corporations under Regulation K for compliance with the investment limitations in Regulation K.
11. Review the asset quality and the liquidity of all investment securities. Debt securities that have nontemporary impairments should be classified according to the October 29, 2014, interagency Uniform Agreement on the Classification and Appraisal of Securities Held by Depository Institutions. (See SR-13-18.) Classify speculative and defaulted issues according to the sub-investment-quality debt securities category of the agreement. No preferential treatment should be given to defaulted municipal securities. Comments to be included in the examination report are—
    a. a description of the issue;
    b. how and when each issue was acquired;
    c. the default date, if appropriate;
    d. the date up to which interest was paid;
    e. the credit assessment or determinations at the time of acquisition; and
    f. other comments supporting the classification.
12. Review the bank's investment-security maturity program.
    a. Review the maturity schedules.
       - Compare the book values and the fair values and, after considering the gain or loss on year-to-date sales, determine if the costs of selling intermediate and long-term issues appear prohibitive.
       - Determine if recent acquisitions show a trend toward lengthened or shortened maturities. Discuss such trends with management, particularly with regard to investment objectives approved by the investment committee.
    b. Review the pledged asset and secured liability schedules and isolate pledged securities by maturity segment. Then determine the fair value of securities pledged in excess of net secured liabilities.
    c. Review the schedule of securities sold under repurchase agreement and determine—
       - whether financing for securities purchases is provided by repurchase agreement by the securities dealer who originally sold the security to the bank;
       - whether funds acquired through the sale of securities under agreement to repurchase are invested in money market assets, or if short-term repurchase agreements are being used to fund longer-term, fixed-rate assets;
       - the extent of matched asset repo and liability repo maturities and the overall effect on liquidity resulting from unmatched positions;
       - whether the interest rate paid on securities sold under agreement to repurchase is appropriate relative to current money market rates; and

- whether the repurchase agreement is at the option of the buying or selling bank.

d. Review the list of open purchase and sale commitments and determine the effect of their completion on maturity scheduling.
e. Submit investment portfolio information regarding the credit quality and practical liquidity of the investment portfolio to the examiner who is assigned to review the "Asset/Liability Management."

13. Consult with the examiner responsible for the asset/liability management analysis to determine what information is needed to assess the bank's sensitivity to interest-rate fluctuations and its ability to meet short-term funding requirements. If requested, compile the information using bank records or other appropriate sources. See section 6000.1, "Instructions for the Report of Examination," for factors to be taken into account when compiling this information. Information which may be required to be furnished includes—
    a. the fair value of unpledged government and federal-agency securities maturing within one year;
    b. the fair value of other unpledged government and federal-agency securities which would be sold without loss;
    c. the fair value of unpledged municipal securities maturing within one year;
    d. the book value of money market instruments, such as banker's acceptances, commercial paper, and certificates of deposit (provide amounts for each category); and
    e. commitments to purchase and sell securities, including futures, forward, and standby contracts. (Provide a description of the security contract, the purchase or sales price, and the settlement or expiration date.)
14. Determine whether the bank's investment policies and practices are satisfactorily balancing earnings and risk considerations.
    a. Use UBPR or average Call Report data to calculate investments as a percentage of total assets, and use average yields on U.S. government and nontaxable investments to—
        - compare results with peer-group statistics,
        - determine the reasons for significant variances from the norm, and
        - determine if trends are apparent and the reasons for such trends.
    b. Calculate current market depreciation as a percentage of gross capital funds.
    c. Review the analysis of municipal and corporate issues by rating classification and—
        - determine the total in each rating class and the total of nonrated issues,
        - determine the total of nonrated investment securities issued by obligors located outside of the bank's service area (exclude U.S. government–guaranteed issues), and
        - review acquisitions since the prior examination and ascertain reasons for trends that may suggest a shift in the rated quality of investment holdings.
    d. Review coupon rates or yields (when available) and compare those recently acquired investments and money market holdings with coupon rates or yields that appear high or low with similarly acquired instruments of analogous types, credit assessments or determinations, or maturity characteristics. (Discuss significant rate or yield variances with management.)
    e. Review the schedule of securities, futures, forward, and standby contracts purchased and sold since the last examination, and determine whether the volume of trading is consistent with policy objectives. (If the bank does not have a separate trading account, determine whether such an account should be established, including appropriate recordkeeping and controls.)
    f. If the majority of sales resulted in gains, determine if profit-taking is consistent with stated policy objectives or is motivated by anxiety for short-term income.
    g. Determine whether the bank has discounted or has plans to discount future investment income by selling interest coupons in advance of interest-payment dates.
    h. Review the list of commitments to purchase or sell investments or money market investments. (Determine the effect of completion of these contracts on future earnings.)
15. Review the bank's federal income tax position and

a. determine, by discussion with appropriate officer(s), if the bank is taking advantage of procedures to minimize tax liability in view of other investment objectives;

b. review or compute actual and budgeted—

- tax-exempt holdings as a percentage of total assets and
- applicable income taxes as a percentage of net operating income before taxes; and

c. discuss with management the tax implications of losses resulting from securities sales.

16. Determine that proper risk diversification exists within the portfolio by—

a. reviewing totals of holdings by single obligor or industry, related obligors or industries, geographic distribution, yields, and securities that have special characteristics (include individual due from bank accounts from the list received from the bank or from the examiner assigned "Due from Banks" and all money market instruments) and—

- detail, as concentrations, all holdings equaling 25 percent or more of capital funds and
- list all holdings equaling at least 10 percent but less than 25 percent of capital funds and submit that information to the examiner assigned "Loan Portfolio Management" (These holdings will be combined with any additional advances in the lending areas.) and

b. performing a credit analysis of all nonrated holdings determined to be a concentration if not performed in step 9.

17. If the bank is engaged in financial futures, exchange-traded puts and calls, forward placement, or standby contracts, determine if—

a. the policy is specific enough to outline permissible contract strategies and their relationships to other banking activities;

b. recordkeeping systems are sufficiently detailed to permit a determination of whether operating personnel have acted in accordance with authorized objectives;

c. the board of directors or its designee has established specific contract position limits and reviews contract positions at least monthly to ascertain conformance with those limits;

d. gross and net positions are within authorized positions and limits, and if trades were executed by persons authorized to trade futures; and

e. the bank maintains general-ledger memorandum accounts or commitment registers which, at a minimum, include—

- the type and amount of each contract,
- the maturity date of each contract,
- the current market price and cost of each contract, and
- the amount held in margin accounts:
  - — All futures contracts and forward and standby and options contracts are revalued on the basis of fair value each month-end.
  - — Securities acquired as the result of completed contracts are valued at fair value upon settlement.
  - — Fee income received by the bank on standby contracts is accounted for properly.
  - — Financial reports disclose futures, forwards, options, and standby activity.
  - — The bank has instituted a system for monitoring credit-risk exposure in forward and standby contract activity.
  - — The bank's internal controls, management reports, and audit procedures are adequate to ensure adherence to policy.

18. If the bank is engaged in financial futures, forward placement, options, or standby contracts, determine if the contracts have a reasonable correlation to the bank's business needs (including gap position) and capacity to fulfill its obligations under the contracts by—

a. comparing the contract commitment and maturity dates to anticipated offset,

b. reporting significant gaps to the examiner assigned "Asset/Liability Management" (refer to step 13),

c. comparing the amounts of outstanding contracts to the amounts of the anticipated offset,
d. ascertaining the extent of the correlation between expected interest-rate movements on the contracts and the anticipated offset, and
e. determining the effect of the loss recognition on future earnings, and, if significant, reporting it to the examiner assigned "Analytical Review and Income and Expense."

19. On the basis of pricings, ratings, and credit analyses performed above, and using the investments selected in step 7 or from lists previously obtained, test for compliance with applicable laws and regulations by—
    a. determining if the bank holds type II or III investments that are predominantly speculative in nature or securities that are not marketable (12 CFR 1.3(b));
    b. reviewing the recap of investment securities by legal types, as defined by 12 CFR 1, on the basis of the legal restrictions of 12 USC 24 and competent legal opinions, as follows:
        - If a type II or III security is readily marketable, and if the purchaser's judgment was based on evidence of the obligor's ability to perform, determine if the par value of such securities issued by a single obligor, which the bank owns or is committed to purchase, exceeds 10 percent of the bank's capital funds (12 CFR 1.5(a) and 1.7(a)).
        - If the holding of a type II or III security was based on a reliable estimate of the obligor's ability to perform, determine if the aggregate par value of such issues exceeds 5 percent of the bank's capital funds (12 CFR 1.5(b) and 1.7(b));
    c. for those investment securities that are convertible into stock or which have stock purchase warrants attached—
        - determining if the book value has been written down to an amount that represents the fair value of the security, independent of the conversion or warrant provision and
        - determining if the fair values of other securities that have been ruled eligible for purchase are within specified capital limitations;
    d. reviewing pledge agreements and secured liabilities and determining that—
        - proper custodial procedures have been followed,
        - eligible securities are pledged,
        - securities pledged are sufficient to secure the liability that requires securing,
        - Treasury Tax and Loan Remittance Options and Note Options are properly secured, and
        - private deposits are not being secured;

        (Information needed to perform the above steps will be contained in the pledge agreement; Treasury circulars 92, Treasury Tax and Loan Accounts (12 CFR 203), and 176, Depositories and Fiscal Agents of the Federal Government (12 CFR 202), as amended.)
    e. reviewing accounting procedures to determine that—
        - investment premiums are being extinguished by maturity or call dates,
        - premium amortization is charged to operating income,
        - accretion of discount is included in current income for banks required to use accrual accounting for reporting purposes,
        - accretion of bond discount requires a concurrent accrual of deferred income tax payable, and
        - securities gains or losses are reported net of applicable taxes and net gains or losses are reflected in the period in which they are realized;
    f. determining if securities purchased under agreement to resell are in fact securities (not loans), are eligible for investment by the bank, and are within prescribed limits (12 USC 24 and 12 CFR 1). If not, determine whether the transaction is within applicable state legal lending limits;
    g. reviewing securities sold under agreement to repurchase and determining whether they are, in fact, deposits (Regulation D, 12 CFR 204.2(a)(1));
    h. determining that securities and money market investments held by foreign branches comply with section 211.3 of Regulation K—Foreign Branches of Member Banks (12 CFR 211.3) as to—
        - acquiring and holding securities (section 211.3(b)(3)) and

- underwriting, distributing, buying, and selling obligations of the national government of the country in which the branch is located (section 211.3(b)(4)); and

(Further considerations relating to the above are contained in other sections of Regulation K. Also review any applicable sections of Regulation T—Credit by Brokers and Dealers (12 CFR 220) and Regulation X—Borrowers of Securities Credit (12 CFR 224). Edge Act and agreement corporations are discussed in the Bank-Related Organizations section.

i. determining that the bank's equity investments in foreign banks comply with the provisions of section 25 of the Federal Reserve Act and section 211.5 of Regulation K as to—
   - investment limitations and
   - investment procedures.

20. Test for compliance with other laws and regulations as follows:
    a. Review lists of affiliate relationships and lists of directors and principal officers and their interests.
       - Determine if the bank is an affiliate of a firm that primarily is engaged in underwriting or selling securities (12 USC 377).
       - Determine if directors or officers are engaged in or employed by firms that are engaged in similar activities (12 USC 78, 377, and 378). (It is an acceptable practice for bank officers to act as directors of securities companies not doing business in the United States, the stock of which is owned by the bank as authorized by the Board of Governors of the Federal Reserve System.)
       - Review the list of federal funds sold, securities purchased under agreements to resell, interest-bearing time deposits, and commercial paper, and determine if the bank is investing in money market instruments of affiliated banks or firms (section 23A, Federal Reserve Act, and 12 USC 371(c)).
       - Determine if transactions involving affiliates, insiders, or their interests have terms that are less favorable to the bank than transactions involving unrelated parties (sections 23A and 22, Federal Reserve Act, and 12 USC 371c, 375, 375a, and 375b).
    b. Determine if Federal Reserve stock equals 6 percent of the subject bank's booked capital and surplus accounts (Regulation I, 12 CFR 209—Issuance and Cancellation of Federal Reserve Stock).
    c. Review the nature and duration of federal-funds sales to determine if term federal funds are being sold in an amount exceeding the limit imposed by state legal lending limits.

21. With regard to potential unsafe and unsound investment practices and possible violations of the Securities Exchange Act of 1934, review the list of securities purchased and/or sold since the last examination and—
    a. determine if the bank engages one securities dealer or salesperson for virtually all transactions. If so—
       - evaluate the reasonableness of the relationship on the basis of the dealer's location and reputation and
       - compare purchase and sale prices to independently established market prices as of trade dates, if appropriate;
    b. determine if investment-account securities have been purchased from the bank's own trading department. If so—
       - independently establish the market price as of trade date,
       - review trading-account purchase and sale confirmations and determine if the security was transferred to the investment portfolio at market price, and
       - review controls designed to prevent dumping; and
    c. determine if the volume of trading activity in the investment portfolio appears unwarranted. If so—
       - review investment-account daily ledgers and transaction invoices to determine if sales were matched by a like amount of purchases,
       - determine whether the bank is financing a dealer's inventory,
       - compare purchase and sale prices with independently established market prices as of trade dates, if appropriate. The carrying value should be determined by the market value of the securities as of the trade date, and
       - cross-reference descriptive details on investment ledgers and purchase confirmations to the actual bonds or safe-

keeping receipts to determine if the bonds delivered are those purchased.

22. Discuss with appropriate officer(s) and prepare report comments on—
    a. defaulted issues;
    b. speculative issues;
    c. incomplete credit information;
    d. absence of legal opinions;
    e. significant changes in maturity scheduling;
    f. shifts in the rated quality of holdings;
    g. concentrations;
    h. unbalanced earnings and risk considerations;
    i. unsafe and unsound investment practices;
    j. apparent violations of laws, rulings, and regulations and the potential personal liability of the directorate;
    k. significant variances from peer-group statistics;
    l. market-value depreciation, if significant;
    m. weaknesses in supervision;
    n. policy deficiencies; and
    o. material problems being encountered by the bank's Edge Act and agreement corporation affiliates, and other related international concerns, that could affect the condition of the bank.
23. The following guidelines are to be implemented while reviewing securities participations, purchases/sales, swaps, or other transfers. The guidelines are designed to ensure that securities transfers involving state member banks, bank holding companies, other holding companies, and nonbank affiliates are carefully evaluated to determine if they were carried out to avoid classification and to determine the effect of the transfer on the condition of the institution. In addition, the guidelines are designed to ensure that the primary regulator of the other financial institution involved in the transfer is notified.
    a. Investigate any situations in which securities were transferred before the date of examination to determine if any were transferred to avoid possible criticism during the examination.
    b. Determine whether any of the securities transferred were nonperforming at the time of transfer, classified at the previous examination, depreciated or sub-investment-grade, or for any other reason were considered to be of questionable quality.
    c. Review the bank's policies and procedures to determine whether or not securities purchased by the bank are given an independent, complete, and adequate credit evaluation. If the bank is a holding company subsidiary or a member of a chain-banking organization, review securities purchases or participations from affiliates or other known members of the chain to determine if the securities purchases are given an *arm's-length* and *independent* credit evaluation by the purchasing bank.
    d. Determine whether or not any bank purchases of securities from an affiliate are in conformance with section 23A of the Federal Resrve Act and Regulation W, which generally prohibits purchases of low-quality assets from an affiliate.
    e. Determine that any securities purchased by the bank are properly reflected on its books at fair market value (fair market value should at a minimum reflect both the rate of return being earned on such assets and an appropriate risk premium). Determine that appropriate write-offs are taken on any securities sold by the bank at less than book value.
    f. Determine that transactions involving transfers of low-quality securities to the parent holding company or a nonbank affiliate are properly reflected at fair market value on the books of both the bank and the holding company affiliate.
    g. If poor-quality securities were transferred to or from another financial institution for which the Federal Reserve is not the primary regulator, prepare a memorandum to be submitted to the Reserve Bank supervisory personnel. The Reserve Bank will then inform the local office of the primary federal regulator of the other institution involved in the transfer. The memorandum should include the following information, as applicable:
        - name of originating and receiving institutions
        - type of securities involved and type of transfer (e.g., participation, purchase/sale, swap)
        - date(s) of transfer
        - total number and dollar amount of securities transferred
        - status of the securities when transferred (e.g., credit quality determina-

tion, depreciation, nonperforming, classified, etc.)
- any other information that would be helpful to the other regulator.

24. Reach a conclusion regarding the quality of department management. Communicate your conclusion to the examiner assigned "Management Assessment" and the examiner who is in charge of the international examination, if applicable.
25. Update the workpapers with any information that will facilitate future examination. If the bank has overseas branches, indicate those securities requiring review during the next overseas examination and the reasons for the review.

Investment Securities and End-User Activities

Internal Control Questionnaire

Effective date October 2013

Section 2020.4

Review the bank's internal controls, policies, practices, and procedures regarding purchases, sales, and servicing of the investment portfolio. The bank's system should be documented in a complete, concise manner and should include, where appropriate, narrative descriptions, flow charts, copies of forms used, and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written investment securities policies, including when-issued securities, futures, and forward placement contracts, that outline—
   a. objectives,
   b. permissible types of investments,
   c. diversification guidelines to prevent undue concentration,
   d. maturity schedules,
   e. limitation on quality ratings,
   f. policies regarding exceptions to standard policy, and
   g. valuation procedures and frequency?
2. Are investment policies reviewed at least annually by the board to determine if they are compatible with changing market conditions?
3. Are securities designated at time of purchase as to whether they are investments for the portfolio or trading account?
4. Have policies been established governing the transfer of securities from the trading account to the investment-securities account?
5. Have limitations been imposed on the investment authority of officers?

*6. Do security transactions require dual authorization?

7. If the bank has due from commercial banks or other depository institutions time, federal funds sold, commercial paper, securities purchased under agreements to resell, or any other money market type of investment—
   a. is purchase or sale authority clearly defined,
   b. are purchases or sales reported to the board of directors or its investment committee,
   c. are maximums established for the amount of each type of asset,
   d. are maximums established for the amount of each type of asset that may be purchased from or sold to any one bank,
   e. do money market investment policies outline acceptable maturities, and
   f. have credit standards and review procedures been established?

CUSTODY OF SECURITIES

*8. Do procedures preclude the custodian of the bank securities from—
   a. having sole physical access to securities;
   b. preparing release documents without the approval of authorized persons;
   c. preparing release documents not subsequently examined or tested by a second custodian; and
   d. performing more than one of the following transactions: (1) execution of trades, (2) receipt or delivery of securities, (3) receipt and disbursement of proceeds?

*9. Are securities physically safeguarded to prevent loss or unauthorized removal or use?

10. Are securities, other than bearer securities, held only in the name or nominee of the bank?

11. When a negotiable certificate of deposit is acquired, is the certificate safeguarded in the same manner as any other negotiable investment instrument?

RECORDS

12. Do subsidiary records of investment securities show all pertinent data describing the security; its location; pledged or unpledged status; changes in fair-market value; amortized cost (cost to purchase net of premium amortization or discount accretion); premium amortization; discount accretion; and interest earned, collected, and accrued? Do the subsidiary records

confirm and verify that the investment securities are accounted for, recorded, and reported in accordance with the bank's Call Report and its instructions?

*13. Is the preparation and posting of subsidiary records performed or reviewed by persons who do not also have sole custody of securities?

*14. Are subsidiary records reconciled at least monthly to the appropriate general-ledger accounts, and are reconciling items investigated by persons who do not also have sole custody of securities?

15. For international-division investments, are entries for U.S. dollar carrying values of foreign currency–denominated securities rechecked at inception by a second person?

PURCHASES, SALES, AND REDEMPTIONS

*16. Is the preparation and posting of security and open contractual commitments purchase, sale, and redemption records performed or reviewed by persons who do not also have sole custody of securities or authorization to execute trades?

*17. Are supporting documents, such as brokers' confirmations and account statements for recorded purchases and sales checked or reviewed subsequently by persons who do not also have sole custody of securities or authorization to execute trades?

*18. Are purchase confirmations compared to delivered securities or safekeeping receipts to determine if the securities delivered are the securities purchased?

FUTURES CONTRACTS, FORWARD PLACEMENT CONTROLS

19. Do futures and forward contract policies—
    a. outline specific strategies, and
    b. relate permissible strategies to other banking activities?
20. Are the formalized procedures used by the trader—
    a. documented in a policies and procedures manual and
    b. approved by the board or an appropriate board committee?
21. Are the bank's futures commission merchant(s) and/or forward brokers—
    a. notified in writing to trade with only those persons authorized as traders and
    b. notified in writing of revocation of trading authority?
22. Has the bank established futures and forward trading limits—
    a. for individual traders,
    b. for total outstanding contracts,
    c. which are endorsed by the board or an appropriate board committee, and
    d. the basis of which is fully explained?
23. Does the bank obtain prior written approval detailing amount of, duration, and reason—
    a. for deviations from individual limits and
    b. for deviations from gross trading limits?
24. Are these exceptions subsequently submitted to the board or an appropriate board committee for ratification?
25. Does the trader prepare a prenumbered electronic or paper trade ticket?
26. Does the electronic or paper trade ticket contain all of the following information:
    a. trade date
    b. purchase or sale
    c. contract description
    d. quantity
    e. price
    f. reason for trade
    g. reference to the position being matched (immediate or future case settlement)
    h. signature of trader
27. Are the accounting records maintained and controlled by persons who cannot initiate trades?
28. Are accounting procedures documented in a procedures manual?
29. Are all incoming trade confirmations—
    a. received by someone independent of the trading and recordkeeping functions and
    b. verified to the electronic or paper trade tickets by this independent party?
30. Does the bank maintain general-ledger control accounts disclosing, at a minimum—
    a. futures or forward contracts memoranda accounts,
    b. deferred gains or losses, and
    c. margin deposits?
31. Are futures and forward contracts activities—

   a. supported by detailed subsidiary records and
   b. agreed daily to general-ledger controls by someone who is not authorized to prepare general-ledger entries?
32. Do periodic statements received from futures commission merchants reflect—
   a. trading activity for the period,
   b. open positions at the end of the period,
   c. market value of open positions,
   d. unrealized gains and losses, and
   e. cash balances in accounts?
33. Are all of these periodic statements—
   a. received by someone independent of both the trading and recordkeeping functions and
   b. reconciled to all of the bank's accounting records?
34. Are the market prices reflected on the statements—
   a. verified with listed prices from a published source and
   b. used to recompute gains and losses?
35. Are daily reports of unusual increases in trading activity reviewed by senior management?
36. Are weekly reports prepared for an appropriate board committee which reflect—
   a. all trading activity for the week,
   b. open positions at the end of the week,
   c. market value of open positions,
   d. unrealized gains and losses,
   e. total trading limits outstanding for the bank, and
   f. total trading limits for each authorized trader?
37. Is the futures and forward contracts portfolio valued to market (fair market) value?
38. Are revaluation prices provided by persons or sources totally independent of the trading function?

OTHER

39. Does the board of directors receive regular reports on domestic and international-division investment securities which include—
   a. valuations,
   b. maturity distributions,
   c. average yield, and
   d. reasons for holding and benefits received (international-division and overseas holdings only)?
40. Are purchases, exchanges, and sales of securities and open contractual commitments ratified by action of the board of directors or its investment committee and thereby made a matter of record in the minutes?

CONCLUSION

41. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly and indicate any additional examination procedures deemed necessary.
42. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

Investing in Securities without Reliance on Ratings of Nationally Recognized Statistical Rating Organizations

Effective date April 2013

Section 2022.1

On November 15, 2012, state member banks were advised, effective January 1, 2013, that they may no longer rely solely on credit ratings issued by nationally recognized statistical rating organizations (NRSROs) or external credit ratings to determine whether a particular security is an ''investment security'' that is permissible for investment by a state member bank. Under the regulations of the Office of the Comptroller of the Currency (OCC), securities qualify for investment by national banks only if they are determined by the bank to be ''investment grade'' and not predominantly speculative in nature. (See SR-12-15 and its attachment.) The basic sound risk-management principles of this policy and other referenced guidance that follows also applies to bank holding companies (BHCs) and savings and loan holding companies (SLHCs). They should manage and control their risk exposures on a consolidated basis and give recognition to the legal distinctions and potential obstacles to the cash movements among their financial institution subsidiaries. Since a BHC's structure can include national banks, state member banks, and other financial institution subsidiaries, the referenced statutory, regulatory, and supervisory guidance is provided.

Under the Federal Reserve Act (12 USC 335) and the Federal Reserve (FR)'s Regulation H (12 CFR 208.21), state member banks are subject to the same limitations and conditions with respect to the purchasing, selling, underwriting, and holding of investment securities and stock as national banks under the National Banking Act (12 USC 24 (Seventh)). Therefore, when investing in securities, state member banks must comply with the provisions of the National Banking Act and the OCC's regulations in 12 CFR part 1. In addition to this federal requirement, a state member bank may purchase, sell, underwrite, or hold securities and stock only to the extent permitted under applicable state law.

National banks are to assess a security's creditworthiness to determine if it is ''investment grade.'' A security meets the ''investment grade'' test only if the issuer has an adequate capacity to meet its financial commitments under the security for the projected life of the asset or exposure. Under this definition, the issuer has an adequate capacity to meet financial commitments if (1) the risk of default by the obligor is low and (2) the full and timely repayment of principal and interest is expected.[1] National banks are expected to consider a number of factors, to the extent appropriate in making this determination. While a national bank may continue to take into account external credit ratings and assessments as a valuable source of information, the bank is expected to supplement these ratings with a degree of due diligence processes and additional analyses appropriate for the bank's risk profile and for the size and complexity of the instrument.[2]

The OCC issued guidance, effective January 1, 2013 (OCC investment guidance), to clarify regulatory expectations with respect to investment purchase decisions and ongoing portfolio due diligence processes. See appendix 1 below. The guidance clarifies that generally, investment securities are expected to have good to very strong credit quality. In the case of structured securities, this determination may be influenced more by the quality of the underlying collateral, the cash flow rules, and the structure of the security itself than by the condition of the issuer.

The OCC also expects national banks to conduct an appropriate level of due diligence to understand the inherent risks of a security and determine that it is a permissible investment. The extent of the due diligence should be sufficient to support the institution's conclusion that a security meets the ''investment-grade'' standards. The depth of the due diligence should be a function of the security's credit quality, the complexity of the structure, and the size of the investment. Third-party analytics may be part of this analysis, although the national bank's management remains responsible for the investment decision and should ensure that prospective third parties are independent, reliable, and qualified. The guidance also sets forth an expectation that the board of directors should oversee management to make sure appropriate decisionmaking processes are in place.[3]

Investment in securities and stock by state member banks are required under the Federal Reserve Act and Regulation H to comply with the revised 12 CFR part 1 and should meet the supervisory expectations set forth in the OCC's

1. See 77 *Fed. Reg.* 35257 (June 13, 2012).
2. See 77 *Fed. Reg.* 35254 (June 13, 2012).
3. See 77 *Fed. Reg.* 35259 (June 13, 2012).

investment guidance and this FR guidance. In addition, state member banks are expected to continue to meet long-established supervisory expectations for risk-management processes to ensure that the credit risk of the bank, including the credit risk of the investment portfolio, is effectively identified, measured, monitored, and controlled.

APPENDIX 1—OCC GUIDANCE ON DUE DILIGENCE REQUIREMENTS IN DETERMINING WHETHER SECURITIES ARE ELIGIBLE FOR INVESTMENT

The guidance below was issued by the Office of the Comptroller of the Currency (OCC) on June 13, 2012, and is being included for ease of reference. The official guidance was published in the Federal Register (77 Fed. Reg. 35259), and is available as an attachment to OCC Bulletin 2012-18. As discussed in SR-12-15, the Federal Reserve also expects that state member banks (SMBs) will meet the supervisory expectations set forth in the OCC guidance as this guidance provides further clarification to the OCC rule with which SMBs must comply. (See 12 CFR part 1, and 77 Fed. Reg. 35253, June 13, 2012.)

Purpose

The OCC has issued final rules to revise the definition of ‘‘investment grade,’’ as that term is used in 12 CFR parts 1 and 160 in order to comply with section 939A of the Dodd-Frank Act. Institutions, effective January 1, 2013, are to ensure that existing investments comply with the revised ‘‘investment grade’’ standard, as applicable based on investment type, and safety and soundness practices described in 12 CFR 1.5 and this guidance. This implementation period also will provide management with time to evaluate and amend existing policies and practices to ensure new purchases comply with the final rules and guidance. National banks that have established due diligence review processes, and that have not relied exclusively on external credit ratings, should not have difficulty establishing compliance with the new standard.

The OCC is issuing this guidance (Guidance) to clarify steps national banks ordinarily are expected to take to demonstrate they have properly verified their investments meet the newly established credit-quality standards under 12 CFR part 1 and steps national banks are expected to take to demonstrate they are in compliance with due diligence requirements when purchasing investment securities and conducting ongoing reviews of their investment portfolios. The standards below describe how national banks may purchase, sell, deal in, underwrite, and hold securities consistent with the authority contained in 12 USC 24 (Seventh). The activities of national banks must be consistent with safe and sound banking practices, and this Guidance reminds national banks of the supervisory risk-management expectations associated with permissible investment portfolio holdings under parts 1 and 160.

Background

Parts 1 and 160 provide standards for determining whether securities have appropriate credit quality and marketability characteristics to be purchased and held by national banks. These requirements also establish limits on the amount of investment securities an institution may hold for its own account. As defined in 12 CFR part 1, an ‘‘investment security’’ must be ‘‘investment grade.’’ For the purpose of part 1, ‘‘investment grade’’ securities are those where the issuer has an adequate capacity to meet the financial commitments under the security for the projected life of the investment. An issuer has an adequate capacity to meet financial commitments if the risk of default by the obligor is low and the full and timely repayment of principal and interest is expected. Generally, securities with good to very strong credit quality will meet this standard. In the case of a structured security (that is, a security that relies primarily on the cash flows and performance of underlying collateral for repayment, rather than the credit of the entity that is the issuer), the determination that full and timely repayment of principal and interest is expected may be influenced more by the quality of the underlying collateral, the cash flow rules, and the structure of the security itself than by the condition of the issuer.

National banks must be able to demonstrate that their investment securities meet applicable credit-quality standards. This Guidance pro-

vides criteria that national banks can use in meeting part 1 credit-quality standards and that national banks can use in meeting due diligence requirements.

Determining Whether Securities Are Permissible Prior to Purchase

The OCC's elimination of references to credit ratings in its regulations, in accordance with the Dodd-Frank Act, does not substantively change the standards institutions should use when deciding whether securities are eligible for purchase under part 1. The OCC's investment securities regulations generally require a national bank to determine whether or not a security is "investment grade" in order to determine whether purchasing the security is permissible. Investments are considered "investment grade" if they meet the regulatory standard for credit quality. To meet this standard, a national bank must be able to determine that the security has (1) low risk of default by the obligor and (2) the expectation of full and timely repayment of principal and interest over the expected life of the investment.

For national banks, Type I securities, as defined in part 1, generally are government obligations and are not subject to investment grade criteria for determining eligibility to purchase. Typical Type I obligations include U.S. Treasuries, agencies, municipal government general obligations, and for well-capitalized institutions, municipal revenue bonds. While Type I obligations do not have to meet the investment grade criteria to be eligible for purchase, all investment activities should comply with safe and sound banking practices as stated in 12 CFR 1.5 and in previous regulatory guidance. Under OCC rules, Treasury and agency obligations do not require individual credit analysis, but bank management should consider how those securities fit into the overall purpose, plans, and risk and concentration limitations of the investment policies established by the board of directors. Municipal bonds should be subject to an initial credit assessment and then ongoing review consistent with the risk characteristics of the bonds and the overall risk of the portfolio.

Financial institutions should be well acquainted with fundamental credit analysis, as this is central to a well-managed loan portfolio. The foundation of a fundamental credit analysis-character, capacity, collateral, and covenants-applies to investment securities just as it does to the loan portfolio. Accordingly, the OCC expects national banks to conduct an appropriate level of due diligence to understand the inherent risks and determine that a security is a permissible investment. The extent of the due diligence should be sufficient to support the institution's conclusion that a security meets the investment grade standards. This may include consideration of internal analyses, third party research and analytics including external credit ratings, internal risk ratings, default statistics, and other sources of information as appropriate for the particular security. Some institutions may have the resources to do most or all of the analytical work internally. Some, however, may choose to rely on third parties for much of the analytical work. While analytical support may be delegated to third parties, management may not delegate its responsibility for decisionmaking and should ensure that prospective third parties are independent, reliable, and qualified. The board of directors should oversee management to assure that an appropriate decisionmaking process is in place.

The depth of the due diligence should be a function of the security's credit quality, the complexity of the structure, and the size of the investment. The more complex a security's structure, the more credit-related due diligence an institution should perform, even when the credit quality is perceived to be very high. Management should ensure it understands the security's structure and how the security may perform in different default environments, and should be particularly diligent when purchasing structured securities.[4] The OCC expects national banks to consider a variety of factors relevant to the particular security when determining whether a security is a permissible and sound investment. The range and type of specific factors an institution should consider will vary depending on the particular type and nature of the securities. As a general matter, a national bank will have a greater burden to support its determination if one factor is contradicted by a finding under another factor.

The following matrix provides examples of factors for national banks to consider as part of

4. For example, a national bank should be able to demonstrate an understanding of the effects on cash flows of a structured security assuming varying default levels in the underlying assets.

a robust credit-risk assessment framework for designated types of instruments. The types of securities included in the matrix require a credit-focused pre-purchase analysis to meet the investment grade standard or safety and soundness standards. Again, the matrix is provided as a guide to better inform the credit-risk assessment process. Individual purchases may require more or less analysis dependent on the security's risk characteristics, as previously described.

Key factors	Corporate bonds	Municipal government general obligations	Revenue bonds	Structured securities
Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality	X	X	X	X
Confirm risk of default is low and consistent with bonds of similar credit quality	X	X	X	X
Confirm capacity to pay and assess operating and financial performance levels and trends through internal credit analysis and/or other third party analytics, as appropriate for the particular security	X	X	X	X
Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider debt profile and level of unfunded liabilities, diversity of revenue sources, taxing authority, and management experience		X		
Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values		X	X	
Assess the source and strength of revenue structure for municipal authorities. Consider obligor's financial condition and reserve levels, annual debt service and debt coverage ratio, credit enhancement, legal covenants, and nature of project			X	
Understand the class or tranche and its relative position in the securitization structure				X
Assess the position in the cash flow waterfall				X
Understand loss allocation rules, specific definition of default, the potential impact of performance and market value triggers, and support provided by credit and/or liquidity enhancements				X
Evaluate and understand the quality of the underwriting of the underlying collateral as well as any risk concentrations				X
Determine whether current underwriting is consistent with the original underwriting underlying the historical performance of the collateral and consider the effect of any changes				X

Key factors	Corporate bonds	Municipal government general obligations	Revenue bonds	Structured securities
Assess the structural subordination and determine if adequate given current underwriting standards				X
Analyze and understand the impact of collateral deterioration on tranche performance and potential credit losses under adverse economic conditions				X

Additional Guidance on Structured Securities Analysis

The creditworthiness assessment for an investment security that relies on the cash flows and collateral of the underlying assets for repayment (i.e., a structured security) is inherently different from a security that relies on the financial capacity of the issuer for repayment. Therefore, a financial institution should demonstrate an understanding of the features of a structured security that would materially affect its performance and that its risk of loss is low even under adverse economic conditions. Management's assessment of key factors, such as those provided in this guidance, will be considered a critical component of any structured security evaluation. Existing OCC guidance, including OCC Bulletin 2002-19, ''Supplemental Guidance, Unsafe and Unsound Investment Portfolio Practices,'' states that it is unsafe and unsound to purchase a complex high-yield security without an understanding of the security's structure and performing a scenario analysis that evaluates how the security will perform in different default environments. Policies that specifically permit this type of investment should establish appropriate limits, and prepurchase due diligence processes should consider the impact of such purchases on capital and earnings under a variety of possible scenarios. The OCC expects institutions to understand the effect economic stresses may have on an investment's cash flows. Various factors can be used to define the stress scenarios. For example, an institution could evaluate the potential impact of changes in economic growth, stock market movements, unemployment, and home values on default and recovery rates. Some institutions have the resources to perform this type of analytical work internally. Generally, analyses of the application of various stress scenarios to a structured security's cash flow are widely available from third parties. Many of these analyses evaluate the performance of the security in a base case and a moderate and severe stress case environment. Even under severe stress conditions, the stress scenario analysis should determine that the risk of loss is low and full and timely repayment of principal and interest is expected.

Maintaining an Appropriate and Effective Portfolio Risk-Management Framework

The OCC has had a long-standing expectation that national banks implement a risk-management process to ensure credit risk, including credit risk in the investment portfolio, is effectively identified, measured, monitored, and controlled. The *1998 Interagency Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities* (Policy Statement) contains risk-management standards for the investment activities of banks and savings associations.[5] The Policy Statement emphasizes the importance of establishing and maintaining risk processes to manage the market, credit, liquidity, legal, operational, and other risks of investment securities. Other previously issued guidance that supplements OCC investment standards are OCC 2009-15, ''Risk Management and Lessons Learned'' (which highlights lessons learned during the market disruption and re-emphasizes the key principles discussed in previously issued OCC guidance on portfolio risk management); OCC 2004-25, ''Uniform Agreement on the Classification of Securities'' (which describes

5. On April 23, 1998, the FRB, FDIC, NCUA, and OCC issued the ''Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities.''

the importance of management's credit-risk analysis and its use in examiner decisions concerning investment security risk ratings and classifications); and OCC 2002-19, "Supplemental Guidance, Unsafe and Unsound Investment Portfolio Practices" (which alerts banks to the potential risk to future earnings and capital from poor investment decisions made during periods of low levels of interest rates and emphasizes the importance of maintaining prudent credit, interest rate, and liquidity risk-management practices to control risk in the investment portfolio).

National banks must have in place an appropriate risk-management framework for the level of risk in their investment portfolios. Failure to maintain an adequate investment portfolio risk-management process, which includes understanding key portfolio risks, is considered an unsafe and unsound practice.

Having a strong and robust risk-management framework appropriate for the level of risk in an institution's investment portfolio is particularly critical for managing portfolio credit risk. A key role for management in the oversight process is to translate the board of directors' tolerance for risk into a set of internal operating policies and procedures that govern the institution's investment activities. Policies should be consistent with the organization's broader business strategies, capital adequacy, technical expertise, and risk tolerance. Institutions should ensure that they identify and measure the risks associated with individual transactions prior to acquisition and periodically after purchase. This can be done at the institutional, portfolio, or individual instrument level. Investment policies also should provide credit-risk concentration limits. Such limits may apply to concentrations relating to a single or related issuer, a geographical area, and obligations with similar characteristics. Safety-and-soundness principles warrant effective concentration risk-management programs to ensure that credit exposures do not reach an excessive level.

The aforementioned risk-management policies, principles, and due diligence processes should be commensurate with the complexity of the investment portfolio and the materiality of the portfolio to the financial performance and capital position of the institution. Investment review processes, following the pre-purchase analysis, may vary from institution to institution based on the individual characteristics of the portfolio, the nature and level of risk involved, and how that risk fits into the overall risk profile and operation of the institution. Investment portfolio reviews may be risk-based and focus on material positions or specific groups of investments or stratifications to enable analysis and review of similar risk positions.

As with pre-purchase analytics, some institutions may have the resources necessary to do most or all of their portfolio reviews internally. However, some may choose to rely on third parties for much of the analytical work. Third-party vendors offer risk analysis and data benchmarks that could be periodically reviewed against existing portfolio holdings to assess credit-quality changes over time. Holdings where current financial information or other key analytical data is unavailable should warrant more frequent analysis. High-quality investments generally will not require the same level of review as investments further down the credit-quality spectrum. However, any material positions or concentrations should be identified and assessed in more depth and more frequently, and any system should ensure an accurate and timely risk assessment and reporting process that informs the board of material changes to the risk profile and prompts action when needed. National banks should have investment portfolio review processes that effectively assess and manage the risks in the portfolio and ensure compliance with policies and risk limits. Institutions should reference existing regulatory guidance for additional supervisory expectations for investment portfolio risk-management practices.

LAWS, REGULATIONS, INTERPRETATIONS, AND ORDERS

Subject	*Laws*[1]	*Regulations*[2]	*Interpretations*[3]	*Orders*
State member banks are subject to same limitations and conditions for investments activities as national banks	24 (Seventh), 335	1, 208.21		
Federal financial institution regulatory agencies to remove references to, and requirements of reliance on, external credit ratings in any regulation that requires the assessment of the creditworthiness of a security or money market instrument.	15 USC 780			
Supervisory and risk expectations		1, 160		
Safety and soundness practices		1.5		

1. 12 USC, unless specifically stated otherwise.
2. 12 CFR, unless specifically stated otherwise.
3. *Federal Reserve Regulatory Service* reference.

INTRODUCTION

The Securities Act of 1933 requires that adequate and reliable information be made available about securities originally offered for sale to the public. The act requires registration of any securities sale with the Securities and Exchange Commission (SEC) unless it is specifically exempted. Section 4(2) of the act exempts "transactions by an issuer not involving any public offering" (referred to as a "private placement"). A private placement, also known as an unregistered offering, raises capital through the sale of securities to a single, or small number of, select investors.

Common participants in arranging a private placement include banks, mutual funds, insurance companies, pension funds, and hedge funds. The matching of a security issuer with investors is usually done by an individual, or firm, acting as either an agent or an adviser. In the agent relationship, the firm has authority to commit the security issuer. An adviser has no such power. Agents, usually investment bankers, participate in negotiations between the security issuer and investors, and their fee is dependent on their involvement. Agreements between the firm and all other parties to the transaction should specifically state with whom the firm is representing as an agent.

Regardless of whether the firm is agent or adviser, the firm should be aware of the SEC's Regulation D, "Rules Governing the Limited Offer and Sale of Securities Without Registration Under the Securities Act of 1933," (17 CFR 230.500). While the bank does not have to register private placement investments with the SEC, bank policies should address measures to comply with relevant SEC regulations, including Regulation D, which exempts certain transactions from the registration requirements of section 5 of the Securities Act of 1933.[1] Regulation D states

> Such transactions are not exempt from the antifraud, civil liability, or other provisions of the federal securities laws. Issuers are reminded of their obligation to provide such further material information, if any, as may be necessary to make the information required under Regulation D, in light of the circumstances under which it is furnished, not misleading.[2]

In addition, a bank's private placements policy should address any applicable state laws relating to the offer and sale of securities.

PRIVATE-PLACEMENT ACTIVITIES BY BANKS

Private placements have certain advantages and disadvantages for both investors and issuers. Compared to public offerings, private placements have fewer regulatory requirements. While private placements raise capital through the sale of securities, the issuer does not have to register the investment with the SEC. Therefore, the time and expense of registering a security with the SEC does not apply to private placements.

In a private placement, both investor and issuer can complete the transaction without being subject to regulatory and public scrutiny. Further, the process of underwriting the private placement is generally faster than a public offering, which allows the issuer to receive proceeds from the sale in less time. If an issuer is selling a bond, the issuer can bypass the expenses associated with obtaining a credit rating from a rating agency. Private placements are flexible, and investments can be tailored to meet the specific needs of the relevant parties. For example, an investor can make an investment for a specified length of time at a stated rate of return.

The major disadvantage of private placements to the investor is the general lack of a secondary market. Thus, the investor may be unable to liquidate the holding until maturity. Additionally, unlike registered offerings in which certain information is required to be disclosed, investors in private placements are generally on their own in obtaining the information they need to make an informed investment decision. Further, the SEC does not review private placements. For instance, a private placement does not require a prospectus and, in some cases, detailed financial information is not disclosed. Instead of a prospectus, a private placement memorandum can accompany a private placement. In general, the private placement memorandum is not publicly

1. 15 U.S.C. 77a et seq., as amended.

2. 17 CFR 230.500(a).

marketed. Given this lack of transparency in the private placement memorandum, investors need to recognize that the memo may not completely describe the investment and related risks. Therefore, investors need to fully understand the terms and risks of the investment. Thus, potential investors should perform their own risk assessment and request additional information as part of their pre-purchase due diligence.

There are also disadvantages to the issuer. A private placement may limit the amount of capital that may be raised since the number of potential investors is usually very small. Moreover, advisory and legal fees may also be high relative to the size of the issue.

In addition to investing in private placement securities, banks may also offer private placement services in either an agent or adviser capacity. In the "agent" relationship, the bank has authority to commit the issuer. Agents participate in negotiations between issuers and potential investors and assist in the actual placement of securities sold by the issuer. The agents often collect a fee based on a percentage of the securities placed. In contrast, in an "adviser" capacity, the bank does not have authority to commit the issuer. In general, advisers do not assist in the actual sale of the securities, their role being limited to advising the issuer on the structure and terms of the placement transaction.

RISK MANAGEMENT OF PRIVATE PLACEMENTS

A bank that offers private-placement services should establish risk management policies and procedures that address the types of risks arising from private placements. Like any other banking activity or function, a bank's board of directors has the responsibility for establishing the level of risk that the bank should take in engaging in private placements. Accordingly, the board of directors should approve the bank's overall business strategies and significant policies, including those related to managing risks. In turn, senior management is responsible for implementing strategies set by the board of directors in a manner that controls risks and that complies with statutes, and regulations on both a long-term and day-to-day basis. Once the risks are properly identified, the bank's policies and procedures should provide guidance on the day-to-day implementation of business strategies for private placement activity, including limits designed to prevent excessive and imprudent risks.

A bank's policy on private placements should cover the establishment of procedures, processes, and controls to mitigate fraudulent activities, self-dealing practices, or conflicts-of-interest. For example, a bank acting as adviser or agent assumes the risk of a potential conflict-of-interest charge whenever the proceeds from the placement are used to reduce a classified loan at the bank. Under this scenario, the bank should disclose relevant information about its business dealings with the issuer and financial condition of the issuer, especially if the issuer is borrowing from the bank and is experiencing financial difficulty. Although the bank may not commit funds in a private-placement transaction, the potential for financial loss or damage to its reputation does exist if the bank does not prudently deal with all parties to the transaction and fairly disclose all relevant information.

Banks engaged in private placement activities should establish procedures for conducting prudent pre-purchase analysis of securities. More information on conducting appropriate due diligence and pre-purchase analysis for investments to meet credit quality standards under 12 CFR part 1 are found in SR-12-15, "Investing in Securities without Reliance on Nationally Recognized Statistical Rating Organization Ratings."[3] Banks should develop procedures to provide timely ongoing monitoring of private-placement activities. Moreover, procedures should be established to detect any transactions that could have an adverse effect on the bank's other functions, such as loan or trust department activities.

SUPERVISORY CONSIDERATIONS

Examiners should understand the bank's involvement in private placement activities, determin-

3. Under the Federal Reserve Act (12 U.S.C. 335) and the Board's Regulation H (12 CFR 208.21), state member banks are subject to the same limitations and conditions with respect to the purchasing, selling, underwriting, and holding of investment securities and stock as national banks under the National Banking Act (12 U.S.C. 24 (Seventh)). When investing in securities, state member banks must comply with the provisions of the National Banking Act and the Office of the Comptroller of the Currency regulations in 12 CFR 1. In addition to this federal requirement, a state member bank may purchase, sell, underwrite, or hold securities and stock only to the extent permitted under applicable state law.

ing whether the bank acts as an investor, agent, or adviser. During the examination process, examiners should review and assess the adequacy of the bank's policies, practices, and procedures to manage private-placement activities. In reviewing the bank's private placement activities, examiners should assess bank staff's knowledge and expertise in this area. Examiners should also assess the bank's ability to comply with applicable statutes and regulations. In addition, examiners should determine whether the bank has incurred significant losses or has significant risk exposure as a result of participating in private placement activities.

1. To determine whether policies, procedures, and internal controls for private placement activities are appropriate.
2. To determine whether bank management implements the bank's policies and procedures.
3. To assess the adequacy of the bank's policies and procedures for pre-purchase and ongoing analysis of private placement activities.
4. To evaluate the overall effectiveness and quality of bank management in advising and completing private placements in compliance with statutes and regulations.
5. To initiate corrective action if policies, practices, procedures, or internal controls are deficient.

PRELIMINARY REVIEW

1. Based upon the evaluation of investment volume in private placements, or agent and advisory services, determine the scope of the examination.
2. Review prior examination reports, pre-examination memorandum, and file correspondence for an overview of any previously identified deficiencies.
3. Obtain a listing of any deficiencies noted in the latest review done by internal auditor, external auditors, other third parties, or regulators, and determine if corrections have been accomplished.
4. Obtain and review the following information from appropriate bank staff:
   - a list of the staff performing private placement agent or advisory services and their previous experience.
   - a list of investors that the bank normally deals with in placing private offerings and their stated investment requirements.
   - a copy of the bank's standard form agreements used in private placement transactions.
   - a list of private placements invested in, or served as agent or adviser for, by the bank since the last examination. Additional information includes
     - — name of issuer;
     - — name of investor(s), including banks;
     - — fee and how it was determined; and
     - — amount, rate, and maturity of issue.
   - a list of any funds managed by the bank or its trust department, subsidiaries or affiliates that have been used to purchase private placements advised by the bank or an affiliate.
   - a list of any borrowers whose loans were partially or fully repaid from the sale of private placements advised by the bank since the last examination.
   - a list of participations purchased or sold in loans that used funds from private placements advised by the bank.
5. Review the pertinent information obtained from the previous procedure and compare the information to the list of classified assets from the previous examination.
6. Review and assess the adequacy of applicable policies and procedures for private placement activities. Consider whether the policies and procedures
   - define objectives;
   - provide guidelines for fee determinations based on size and complexity of the transaction;
   - discuss payment of negotiated fees at various stages of the transaction;
   - define the capacity in which bank officers can act in negotiations (Note: An adviser will advise and assist a client, an agent has the authority to commit a client.)
   - recognize possible conflicts of interest and establish appropriate procedures regarding
     - — the purchase of bank-advised private placements with funds managed by the bank or an advisory affiliate;
     - — loans to investors to purchase private placements;
     - — use of proceeds of an advised placement to repay the issuer's debts to the bank; and
     - — dealings with unsophisticated investors who have other business relationships with the bank;
   - discuss bank management's level of review of each placement prior to completion;
   - direct officers to obtain certified financial statements from the seller and require distribution of certified financial statements to interested investors;
   - require officers to request a written statement of investment objectives or requirements from interested investors;
   - outline the need for management review to determine whether a placement is suitable for the investor; and
   - include appropriate pre-purchase and ongoing analysis of private placement securities purchased.
7. Assess the adequacy of pre-purchase and ongoing analysis conducted on private placement securities purchased.
8. Distribute the list of placements to the examiner assigned loan portfolio management to determine whether any loans were made to fund the investment in the private placement.

9. Review files related to a representative sample of all placement transactions and determine if the bank evaluates both the issuer and investor in a private placement transaction, including the suitability of the investment to the stated investment requirements of the investor.

10. Determine whether potential conflicts of interest exist between bank-advised placements and interests of directors and principal officers. Consider whether former banking relationships exist for both issuer and investor and whether fees charged for loans or paid on deposits are within normal bank policy.

11. As appropriate, discuss with bank management and prepare summaries in appropriate report form of
    - deficiencies in policies, practices, and internal controls.
    - any placement activities that do not comply with statutes and regulations or compromise the bank's safety and soundness.
    - recommended corrective action.

12. Update examination work papers with any information that will facilitate future examinations.

This section sets forth the June 29, 2011, "Interagency Supervisory Guidance of Counterparty Credit Risk Management" issued by the federal banking agencies.[1] The guidance discusses the critical aspects of effective management of counterparty credit risk (CCR), and it sets forth sound practices and supervisory expectations for the development of an effective CCR-management framework. CCR is the risk that the counterparty to a transaction could default or deteriorate in creditworthiness before the final settlement of a transaction's cash flows. Unlike the credit risk for a loan, when only the lending banking organization faces the risk of loss, CCR creates a bilateral risk of loss because the market value of a transaction can be positive or negative to either counterparty. The future market value of the exposure and the counterparty's credit quality are uncertain and may vary over time as underlying market factors change.

This CCR guidance is intended for use by banking organizations,[2] especially those with large derivatives portfolios, in setting their risk-management practices as well as by supervisors as they assess and examine such institutions' management of CCR. For other banking organizations without large derivatives portfolios, risk managers and supervisors should apply this guidance as appropriate, given the size, nature, and complexity of the CCR risk profile of the banking organization, although this guidance would generally not apply to community banking organizations.

CCR is a multidimensional form of risk, affected by both the exposure to a counterparty and the credit quality of the counterparty, both of which are sensitive to market-induced changes. It is also affected by the interaction of these risks—for example, the correlation[3] between an exposure and the credit spread of the counterparty, or the correlation of exposures among the banking organization's counterparties. Constructing an effective CCR-management framework requires a combination of risk-management techniques from the credit-, market-, and operational-risk disciplines.

This guidance reinforces sound governance of CCR-management practices, through prudent board and senior management oversight, management reporting, and risk-management functions. The guidance also elaborates on the sound practices for an effective CCR-management framework and associated characteristics of adequate systems infrastructure. It also covers risk-control functions, such as counterparty limits, margin practices, validating and backtesting models and systems, managing close-outs,[4] managing central counterparty exposures, and controlling legal and operational risks arising from derivatives activities.

CCR-management guidelines and supervisory expectations are delineated in various individual and interagency policy statements and guidance,[5] which remain relevant and applicable. This guidance offers further explanation and clarification, particularly in light of developments in CCR management. However, this guidance is not all-inclusive, and banking organizations should reference sound practices for CCR management, such as those advanced by industry, policymaking, and supervisory forums.[6] (See SR 11-10.)

1. The Board of Governors of the Federal Reserve System (FRB), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC). The former Office of Thrift Supervision (OTS) also participated in developing this guidance.

2. For the purposes of this CCR guidance, unless otherwise indicated, the term *banking organizations* is intended to refer to state member banks, state nonmember banks, national banks, federal savings associations, state-chartered savings associations, bank holding companies, and savings and loan holding companies. The U.S. branches and agencies of foreign banks are also considered to be banking organizations for purposes of this guidance.

3. In this guidance, "correlation" refers to any form of linear or nonlinear interrelationship or dependence between factors.

4. A close-out is the process undertaken by a banking organization following default of a counterparty to fully collect on all items due from that counterparty.

5. See, for example, the FFIEC "Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities," 63 *Fed. Reg.* 20191, April 23, 1998. Federal Reserve examination guidance on CCR is contained in SR-99-3, section 2126.3 of the *Bank Holding Company Supervision Manual* and section 2020.1 of the *Trading and Capital-Markets Activities Manual.*

6. Industry, policymaking, and supervisory groups include, but are not limited to, the Counterparty Risk Management Policy Group (CRMPG), Committee on Payment and Settlement Systems (CPSS), International Swaps and Derivatives Association (ISDA), Institute of International Finance (IIF), Group of Thirty (G30), Group of Twenty Finance Ministers and Central Bank Governors (G-20), International Organization of Securities Commissions (IOSCO), Senior Supervisors Group (SSG), and Basel Committee on Banking Supervision (BCBS). Documents produced by all of these groups were drawn upon in developing this guidance.

GOVERNANCE

Board and Senior Management Responsibilities

The board of directors or a designated board-level committee (board) should clearly articulate the banking organization's risk tolerance for CCR by approving relevant policies, including a framework for establishing limits on individual counterparty exposures and concentrations of exposures. Senior management should establish and implement a comprehensive risk-measurement and management framework consistent with this risk tolerance that provides for the ongoing monitoring, reporting, and control of CCR exposures.

Senior management should adhere to the board's established risk tolerance and should establish policies and risk-management guidelines appropriately. At a minimum, policies should outline CCR-management standards that are in conformance with this guidance. More specifically, they should address the subjects discussed in this document, such as risk measurement and reporting, risk-management tools, and processes to manage legal and operational risk. Policies should be detailed and contain a clear escalation process for review and approval of policy exceptions, especially those pertaining to transaction terms and limits.

Management Reporting

Banking organizations should report counterparty exposures to the board and senior management at a frequency commensurate with the materiality of exposures and the complexity of transactions. Reporting should include concentration analysis and CCR stress-testing results to allow for an understanding of exposures and potential losses under severe market conditions. Reports should also include an explanation of any measurement weaknesses or limitations that may influence the accuracy and reliability of the CCR risk measures.

Senior management should have access to timely, accurate, and comprehensive CCR reporting metrics, including an assessment of significant issues related to the risk-management aspects discussed in this guidance. They should review CCR reports at least monthly, with data that are no more than three weeks old. It is general practice for institutions to report the following:

- total counterparty credit risk aggregated on a firm-wide basis and at significant legal entities
- counterparties with the largest exposures, along with detail on their exposure amounts
- exposures to central counterparties (CCPs)
- significant concentrations, as outlined in this guidance
- exposures to weak or problem counterparties
- growth in exposures over time; as a sound practice, metrics should capture quarterly or monthly changes, supplemented (where relevant) by year-over-year trend data
- exposures from over-the-counter (OTC) derivatives; when they are material, additional product-class breakouts (for example, traditional lending, securities lending) should be included
- a sufficiently comprehensive range of CCR metrics, as discussed in the CCR metrics section
- a qualitative discussion of key risk drivers of exposures or conditions or factors that would fundamentally change the risk profile of CCR; an example would be assessment of changes in credit underwriting terms and whether they remain prudent

Risk-Management Function and Internal Audit

Risk Management

A banking organization's board and senior management should clearly delineate the respective roles of business lines versus risk management, both in terms of initiating transactions that have CCR and of ongoing CCR management. The board and senior management should ensure that the risk-management functions have adequate resources, are fully independent from CCR-related trading operations (in both activity and reporting), and have sufficient authority to enforce policies and to escalate issues to senior management and the board (independent of the business line).

Internal Audit

The board should direct internal audit to regularly assess the adequacy of the CCR-

management framework as part of the regular audit plan. Such assessments should include credit-line approval processes, credit ratings, and credit monitoring. Such an assessment should opine on the adequacy of the CCR infrastructure and processes, drawing where appropriate from individual business line reviews or other internal and external audit work. (See the relevant section of this guidance regarding the role of CCR model validation or review.) The board should review annual reports from internal audit and model validation or review, assessing the findings and confirming that management has taken appropriate corrective actions.

RISK MEASUREMENT

CCR Metrics

Given the complexity of CCR exposures (particularly regarding OTC derivatives), banking organizations should employ a range of risk-measurement metrics to promote a comprehensive understanding of CCR and how it changes in varying environments. Metrics should be commensurate with the size, complexity, liquidity, and risk profile of the CCR portfolio. Banking organizations typically rely on certain metrics as a primary means of monitoring, with secondary metrics used to create a more robust view of CCR exposures. Banking organizations should apply these metrics to single counterparty exposures, groups of counterparties (for example, by internal rating, industry, geographical region), and the consolidated CCR portfolio. Banking organizations should assess their largest exposures, for instance their top 20 exposures, using each primary metric.

Major dealers and large, sophisticated banking organizations with substantial CCR exposure should measure and assess

- current exposure (both gross and net of collateral);
- forward-looking exposure (that is, potential exposure);
- stressed exposure (broken out by market-risk factors and/or by scenario);
- aggregate and stressed credit valuation adjustment (CVA) as well as CVA factor sensitivities;
- additional relevant risk measures, such as (for credit derivatives) jump-to-default risk on the reference obligor, and economic capital usage;
- the largest exposures by individual business line and product types; and
- correlation risks, such as wrong-way risk, as well as the credit quality of collateral.

Refer to this section's Appendix A for definitions of basic metrics and descriptions of their purposes.

Aggregation of Exposures

Banking organizations should have the capacity to measure their exposure at various levels of aggregation (for example, by business line, legal entity, or consolidated by industry). Systems should be sufficiently flexible to allow for timely aggregation of all CCR exposures (that is, OTC derivatives, securities financing transactions (SFTs), and other presettlement exposures), as well as aggregation of other forms of credit risk to the same counterparty (for example, loans, bonds, and other credit risks). The following are sound CCR-aggregation principles:

- Counterparty-level current exposure and potential exposure should be calculated daily, based on the previous day's position data and any exchange of collateral.
- For each organizational level of aggregation, all trades should be included.
- There should be sufficient flexibility to aggregate exposure at varying levels of granularity, including industries, regions, families of products (for example, OTC derivatives, SFTs), or other groupings to identify concentrations.
- While banking organizations are not required to express all forms of risk in a common metric or basis, management should be able to view the various forms of exposures to a given counterparty in a single report and/or system. Specifically, this could include current outstanding exposure across different categories (e.g., current exposure for OTC derivatives and drawn-down lines of commitment for loans). Exposure reports should also include the size of settlement and clearing lines.
- Banking organizations should be consistent in their choice of currency and exchange rate, and take into account the validity and legal enforceability of any netting agreements they may have with a counterparty.
- Management should understand the specific approach used to aggregate exposures for any

given risk measure, in order to properly assess the results. For instance, some measures of risk (such as current exposure) may be readily added together, while others (such as potential exposure) are less meaningful when they are added to form an aggregate view of risk.
- Internal capital adequacy models should incorporate CCR.

Concentrations

Concentrated exposures are a significant concern, as CCR can contribute to sudden increases in credit exposure, which in turn can result in unexpectedly large losses in the event of counterparty default. Accordingly, banking organizations should have enterprise-wide processes to effectively identify, measure, monitor, and control concentrated exposures on both a legal entity and enterprise-wide basis.

Concentrations should be identified using both quantitative and qualitative means. An exposure or group of related exposures (for example, firms in the same industry), should be considered a concentration in the following circumstances: exposures (individually or collectively) exceed risk-tolerance levels established to ensure appropriate diversification; deterioration of the exposure could result in material loss; or deterioration could result in circumstances that are detrimental to the banking organization's reputation. All credit exposures should be considered as part of concentration management, including loans, OTC derivatives, names in bespoke and index CDO credit tranches, securities settlements, and money market transactions such as fed funds sold. Total credit exposures should include the size of settlement and clearing lines or other committed lines.

CCR-concentration management should identify, quantify, and monitor the following:

- Individual counterparties with large potential exposures, when those exposures are driven by a single market factor or transaction type. In these circumstances, banking organizations should supplement statistical measures of potential exposure with other measures, such as stress tests, that identify such concentrations and provide an alternative view of risks associated with close-outs.
- Concentrations of exposures to individual legal entities, as well as concentrations across affiliated legal entities at the parent entity level, or in the aggregate for all related entities.
- Concentrations of exposures to industries or other obligor groupings.
- Concentrations of exposures to geographic regions or country-specific groupings sensitive to similar macroeconomic shocks.
- Concentrations across counterparties when potential exposure is driven by the same or similar risk factors. For both derivatives and SFTs, banking organizations should understand the risks associated with crowded trades,[7] where close-out risk may be heightened under stressed market conditions.
- Collateral concentrations, including both risk concentrations with a single counterparty and risks associated with portfolios of counterparties. Banking organizations should consider concentrations of noncash collateral for all product lines covered by collateral agreements,[8] including collateral that covers a single counterparty exposure and portfolios of counterparties.[9]
- Collateral concentrations involving special purpose entities (SPEs). Collateral-concentration risk is particularly important for SPEs, because the collateral typically represents an SPE's paying capacity.
- Banking organizations should consider the full range of credit risks in combination with CCR to manage concentration risk, including risks from on- and off-balance-sheet activities, contractual and noncontractual risks, contingent and noncontingent risks, as well as underwriting and pipeline risks.

Stress Testing

Banking organizations with significant CCR exposures should maintain a comprehensive stress-testing framework, which is integrated

7. For purposes of this guidance, a "crowded trade" is a large balance of open trading positions in a given asset or group of assets relative to its daily trading volume, when other market participants have similar positions that would need to be liquidated should any adverse price change occur. Coincident sale of these assets by a large number of market participants could lead to significant price declines and dramatic increases in uncollateralized exposures.

8. Banking organizations should also track concentrations in volatile currencies.

9. This analysis is particularly important with repo-style transactions and other forms of SFTs for which the ability of market participants to liquidate large collateral positions may be difficult during periods of market turbulence.

into the banking organization's CCR management. The framework should inform the banking organization's day-to-day exposure and concentration management, and it should identify extreme market conditions that could excessively strain the financial resources of the banking organization. Regularly, but no less than quarterly, senior management should evaluate stress-test results for evidence of potentially excessive risk and take risk-reduction strategies as appropriate.

The severity of factor shocks should be consistent with the purpose of the stress test. When evaluating solvency under stress, factor shocks should be severe enough to capture historical extreme market environments and/or extreme-but-plausible stressed market conditions. The impact of such shocks on capital resources and earnings should be evaluated. For day-to-day portfolio monitoring, hedging, and management of concentrations, banking organizations should also consider scenarios of lesser severity and higher probability. When conducting stress testing, risk managers should challenge the strength of assumptions made about the legal enforceability of netting and the ability to collect and liquidate collateral.

A sound stress-testing framework should include the following:

- Measurement of the largest counterparty-level impacts across portfolios, material concentrations within segments of a portfolio (such as industries or regions), and relevant portfolio- and counterparty-specific trends.
- Complete trade capture and exposure aggregation across all forms of trading (not just OTC derivatives) at the counterparty-specific level, including transactions that fall outside of the main credit system. The time frame selected for trade capture should be commensurate with the frequency with which stress tests are conducted.
- Stress tests, at least quarterly, of principal market-risk factors on an individual basis (for example, interest rates, foreign exchange, equities, credit spreads, and commodity prices) for all material counterparties. Banking organizations should be aware that some counterparties may be material on a consolidated basis, even though they may not be material on an individual legal-entity basis.
- Assessment of nondirectional risks (for example, yield-curve exposures and basis risks) from multifactor stress-testing scenarios. Multifactor stress tests should, at a minimum, aim to address separate scenarios: severe economic or market events; significant decrease in broad market liquidity; and the liquidation of a large financial intermediary of the banking organization, factoring in direct and indirect consequences.
- Consideration, at least quarterly, of stressed exposures resulting from the joint movement of exposures and related counterparty creditworthiness. This should be done at the counterparty-specific and counterparty-group (for example, industry and region) level, and in aggregate for the banking organization. When CVA methodologies are used, banking organizations should ensure that stress testing sufficiently captures additional losses from potential defaults.[10]
- Basic stress testing of CVA to assess performance under adverse scenarios, incorporating any hedging mismatches.
- Concurrent stress testing of exposure and noncash collateral for assessing wrong-way risk.
- Identification and assessment of exposure levels for certain counterparties (for example, sovereigns and municipalities), above which the banking organization may be concerned about willingness to pay.
- Integration of CCR stress tests into firm-wide stress tests.[11]

Credit Valuation Adjustments

CVA refers to adjustments to transaction valuation to reflect the counterparty's credit quality. CVA is the fair-value adjustment to reflect CCR in valuation of derivatives. As such, CVA is the market value of CCR and provides a market-based framework for understanding and valuing the counterparty credit risk embedded in derivative contracts. CVA may include only the adjustment to reflect the counterparty's credit quality (a one-sided CVA or just CVA), or it may include an adjustment to reflect the banking organization's own credit quality. The latter is a two-sided CVA, or CVA plus a debt valuation

10. Exposure testing should include single-factor, multifactor, and material nondirectional risks.

11. CCR stress testing should be consistent with overall banking-organization-wide stress testing and follow the principles set forth in the "Principles for Sound Stress Testing Practices and Supervision" issued by the Risk Management and Modeling Group of the Basel Committee in May 2009.

adjustment (DVA). For the evaluation of the credit risk due to probability of default of counterparties, a one-sided CVA is typically used. For the evaluation of the value of derivatives transactions with a counterparty or the market risk of derivatives transactions, a two-sided CVA should be used.

Although CVA is not a new concept, its importance has grown, partly because of a change in accounting rules that requires banking organizations to recognize the earnings impact of changes in CVA.[12] During the 2007–2009 financial crisis, a large portion of CCR losses were because of CVA losses rather than actual counterparty defaults.[13] As such, CVA has become more important in risk management, as a mechanism to value, manage, and make appropriate hedging decisions, to mitigate banking organizations' exposure to the mark-to-market (MTM) impact of CCR.[14] The following are general standards for CVA measurement and use of CVA for risk-management purposes:

- CVA calculations should include all products and counterparties, including margined counterparties.
- The method for incorporating counterparty credit quality into CVA should be reasonable and subject to ongoing evaluation. CVA should reflect the fair value of the counterparty credit risk for OTC derivatives, and inputs should be based on current market prices when possible.
  - Credit spreads should be reflected in the calculation where available, and banking organizations should not overly rely on non-market-based probability of default estimates when calculating CVA.
  - Banking organizations should attempt to map credit quality to name-specific spreads rather than spreads associated with broad credit categories.
  - Any proxy spreads should reasonably capture the idiosyncratic nature of the counterparty and the liquidity profile.
  - The term structure of credit spreads should be reflected in the CVA calculation.
- The CVA calculation should incorporate counterparty-specific master netting agreements and margin terms; for example, the CVA calculation should reflect margin thresholds or minimum transfer amounts stated in legal documents.
- Banking organizations should identify the correlation between a counterparty's creditworthiness and its exposure to the counterparty, and seek to incorporate the correlation into their respective CVA calculation.

Management of CVA

CVA management should be consistent with sound risk-management practices for other material MTM risks. These practices should include the following:

- Business units engaged in trades related to CVA management should have independent risk-management functions overseeing their activities.
- Systems that produce CVA risk metrics should be subject to the same controls as used for other MTM risks, including independent validation or review of all risk models, including alternative methodologies.[15]
- Upon transaction execution, CVA costs should be allocated to the business unit that originates the transaction.
  - As a sound practice, the risk of CVA should be incorporated into the risk-adjusted return calculation of a given business.
  - CVA cost allocation provides incentive for certain parties to make prudent risk-taking decisions and motivates risk-takers to support risk mitigation, such as requiring strong collateral terms.
- Banking organizations should measure sensitivities to changes in credit- and market-risk factors to determine the material drivers of MTM changes. On a regular basis, but no less

12. See the Financial Accounting Standards Board's accounting literature pertinent to CVA in Accounting Standards Codification (ASC) Topic 820 (formerly FAS Statement 157). In addition, other transaction fair-value adjustments should be conducted—for example, those involving a banking organization's own credit risk or differences in funding costs based on whether transactions are collateralized or not.

13. Basel Committee on Banking Supervision, "Strengthening the Resilience of the Banking Sector—-Consultative Document," December 2009.

14. An accurate measure of CVA is critical to prudent risk-taking, as part of effectively understanding the risk-reward tradeoff in a given derivatives transaction. The more comprehensively CVA is measured, the more transparent the economics of a given transaction.

15. Liquidity in credit markets has varied significantly over time. As liquidity conditions change, banking organizations should calculate CVA using methodologies appropriate to the market pricing information available for each counterparty and transaction type.

frequently than quarterly, banking organizations should ensure that CVA MTM changes are sufficiently explained by these risk factors (for example, through profit and loss attribution for sensitivities and backtesting for value at risk (VaR)).
- Banking organizations hedging CVA MTM should gauge the effectiveness of hedges through measurements of basis risk or other types of mismatches. In this regard, it is particularly important to capture nonlinearities, such as the correlation between market and credit risk, and other residual risks that may not be fully offset by hedging.

CVA VaR

Banking organizations with material CVA should measure the risk of associated loss on an ongoing basis. In addition to stress tests of the CVA, banking organizations may develop VaR models that include CVA to measure potential losses. While these models are currently in the early stages of development, they may prove to be effective tools for risk-management purposes. An advantage of CVA VaR over more traditional CCR risk measures is that it captures the variability of the CCR exposure, the variability of the counterparty's credit spread, and the dependency between them.

Developing VaR models for CVA is significantly more complicated than developing VaR models for a banking organization's market-risk positions. In developing a CVA VaR model, a banking organization should match the percentile and time horizon for the VaR model to those appropriate for the management of this risk, and include all significant risks associated with changes in the CVA. For example, banking organizations may use the same percentile for CVA VaR as they use for market-risk VaR (for example, the 95th or 99th percentile). However, the time horizon for CVA VaR may need to be longer than for market risk (for example, one quarter or one year) because of the potentially illiquid nature of CVA. The following are important considerations in developing a CVA VaR model:

- All material counterparties covered by CVA valuation should be included in the VaR model.
- A CVA VaR calculation that keeps the exposure or the counterparty probability of default static is not adequate. It will not only omit the dependence between the two variables, but also the risk arising from the uncertainty of the fixed variable.
- CVA VaR should incorporate all forms of CVA hedging. Banking organizations and examiners should assess the ability of the VaR measure to accurately capture the types of hedging used by the banking organization.

Wrong-Way Risk

Wrong-way risk occurs when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty itself. Specific wrong-way risk arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty itself because of the nature of the transactions with the counterparty. General wrong-way risk arises when the probability of default of counterparties is positively correlated with general market-risk factors. Wrong-way risk is an important aspect of CCR that has caused major losses at banking organizations. Accordingly, a banking organization should have a process to systematically identify, quantify, and control both specific and general wrong-way risk across its OTC derivative and SFT portfolios.[16] To prudently manage wrong-way risk, banking organizations should

- maintain policies that formally articulate tolerance limits for both specific and general wrong-way risk, an ongoing wrong-way risk identification process, and the requirements for escalation of wrong-way risk analysis to senior management;
- maintain policies for identifying, approving, and otherwise managing situations when there is a legal connection between the counterparty and the underlying exposure or the associated collateral[17] (banking organizations should gen-

16. A standard way of quantifying general wrong-way risk is to design and apply stress scenarios that detect wrong-way risk in the portfolio, record counterparty exposures most affected by the scenarios, and assess whether the creditworthiness of such counterparties is also negatively affected by the scenario.

17. Examples of this situation are single-name credit derivatives when there is a legal relationship between the counterparty and the reference entity underlying the transaction, and financing transactions when the counterparty pledges an affiliate's security as collateral.

erally avoid such transactions because of their increased risk);
- perform wrong-way risk analysis for OTC derivatives, at least at the industry and regional levels; and
- conduct wrong-way risk analysis for SFTs on broad asset classes of securities (for example, government bonds, and corporate bonds).

SYSTEMS INFRASTRUCTURE CONSIDERATIONS

Banking organizations should ensure that systems infrastructure keeps up with changes in the size and complexity of their CCR exposures, and the OTC derivatives market in general. Systems should capture and measure the risk of transactions that may be subject to CCR as a fundamental part of the CCR-management framework.

Banking organizations should have strong operational processes across all derivatives markets, consistent with supervisory and industry recommendations.[18] Management should strive for a single comprehensive CCR-exposure measurement platform.[19] If not currently possible, banking organizations should minimize the number of system platforms and methodologies, as well as manual adjustments to exposure calculations. When using multiple exposure measurement systems, management should ensure that transactions whose future values are measured by different systems are aggregated conservatively.

To maintain a systems infrastructure that supports adequate CCR management, banking organizations should take the following actions:

Data Integrity and Reconciliation

- Deploy adequate operational resources to support reconciliations and related analytical and remediation processes.
- Reconcile positions and valuations with counterparties.
  - — Large counterparties should perform frequent reconciliations of positions and valuations (daily if appropriate).[20]
  - — For smaller portfolios with nondealer counterparties where there are infrequent trades, large dealers should ensure the data integrity of trade and collateral information on a regular (but not necessarily daily) basis, reconciling their portfolios according to prevailing industry standards.
- Reconcile exposure data in CCR systems with the official books and records of the financial institution.
- Maintain controls around obligor names at the point of trade entry, as well as reviews of warehoused credit data, to ensure that all exposures to an obligor are captured under the proper name and can be aggregated accordingly.
- Maintain quality control over transfer of transaction information between trade capture systems and exposure measurement systems.
- Harmonize netting and collateral data across systems to ensure accurate collateral calls and reflection of collateral in all internal systems. Banking organizations should maintain a robust reconciliation process to ensure that internal systems have terms that are consistent with those formally documented in agreements and credit files.
- Remediate promptly any systems weaknesses that raise questions about the appropriateness of the limits structure. If there are a significant number of limit excesses, this may be a symptom of system weaknesses, which should be identified and promptly remediated.
- Eliminate or minimize backlogs of unconfirmed trades.

Automation and Tracking

- Automate legal and operational information, such as netting and collateral terms. Banking organizations should be able to adjust exposure measurements, taking into account the enforceability of legal agreements.

18. Examples are recommendations made by the Senior Supervisors Group (a group comprised of senior financial supervisors from ten countries) and the Counterparty Risk Management Policy Group (a group that consists of major, internationally active commercial and investment banks, which works to promote enhanced practices in counterparty credit and market-risk management).

19. A single platform may, in practice, contain a number of separate systems and models. These would be considered a cohesive framework if they are operationally stable and accurate in risk estimation, particularly with regard to proper reflection of collateral and netting. A common programming language for these systems facilitates an effective measurement framework.

20. Large dealer counterparties should perform portfolio reconciliation on a daily basis, as set forth in relevant industry standards, such as the ISDA's "Collateralised Portfolio Reconciliation Best Operational Practices" (January 2010).

- Automate processes to track and manage legal documentation, especially when there is a large volume of legal agreements.
- Increase automation of margin processes[21] and continue efforts to expand automation of OTC derivatives post-trade processing. This should include automation of trade confirmations to reduce the lag between trade execution and legal execution.
- Maintain systems that track and monitor changes in credit terms and have triggers for relevant factors, such as net asset value, credit rating, and cross-default.
- Maintain default monitoring processes and systems.

Add-Ons

For large derivatives market participants, certain trades may be difficult to capture in exposure-measurement systems, and are therefore modeled outside of the main measurement system(s). The resulting exposures, commonly referred to as add-ons, are then added to the portfolio potential-exposure measure. In limited cases, the use of conservative add-on methodologies may be suitable, if the central system cannot reflect the risk of complex financial products. However, overreliance on add-on methodologies may distort exposure measures. To mitigate measurement distortions, banking organizations should take the following steps:

- Review the use of add-on methodologies at least annually. Current or planned significant trading activity should trigger efforts to develop appropriate modeling and systems, prior to or concurrent with these growth plans.
- Establish growth limits for products with material activities that continue to rely on add-ons. Once systems are improved to meet a generally accepted industry standard of trade capture, these limits can be removed.

21. Banking organizations should consider the recommendations in the "Standards of Electronic Exchange of OTC Derivative Margin Calls," issued by the ISDA's Collateral Committee on November 12, 2009.

RISK MANAGEMENT

Counterparty Limits

Meaningful limits on exposures are an integral part of a CCR-management framework, and these limits should be formalized in CCR policies and procedures. For limits to be effective, a banking organization should incorporate these limits into an exposure monitoring system independent of relevant business lines. It should perform ongoing monitoring of exposures against such limits, to ascertain conformance with these limits, and have adequate risk controls that require action to mitigate limit exceptions. Review of exceptions should include escalation to a managerial level that is commensurate with the size of the excess or nature of mitigation required. A sound limit system should include the following:

- Establishment and regular review of counterparty limits by a designated committee. Further, a banking organization should have a process to escalate limit approvals to higher levels of authority, depending on the size of counterparty exposures, credit quality, and tenor.
- Establishment of potential future exposure limits, as well as limits based on other metrics. It is a sound practice to limit the market risk arising through CVA, with a limit on CVA or CVA VaR. However, such limits do not eliminate the need to limit counterparty credit exposure with a measure of potential future exposure.
- Individual CCR limits should be based on peak exposures rather than expected exposures.
  - Peak exposures are appropriate for individual counterparty limit monitoring purposes because they represent the risk tolerance for exposure to a single counterparty.
  - Expected exposure is an appropriate measure for aggregating exposures across counterparties in a portfolio credit model, or for use within CVA.
- Consideration of risk factors such as the credit quality of the counterparty, tenor of the transactions, and the liquidity of the positions or hedges.
- Sufficiently automated monitoring processes to provide updated exposure measures at least daily.
- Monitoring of intraday trading activity for

conformance with exposure limits and exception policies. Such controls and procedures can include intraday-limit monitoring, trade procedures and systems that assess a trade's impact on limit utilization prior to execution, limit warning triggers at specific utilization levels, and restrictions by credit-risk management on allocation of full limits to the business lines.

Margin Policies and Practices

Collateral is a fundamental CCR mitigant. Indeed, significant stress events have highlighted the importance of sound margining practices. With this in mind, banking organizations should ensure that they have adequate margin and collateral "haircut"[22] guidelines for all products with CCR.[23] Accordingly, banking organizations should take the following actions:

- Maintain CCR policies that address margin practices and collateral terms, including, but not limited to
  - — processes to establish and periodically review minimum haircuts;
  - — processes to evaluate the volatility and liquidity of the underlying collateral. Banks should strive to ensure that haircuts on collateral do not decline during periods of low volatility; and
  - — controls to mitigate the potential for a weakening of credit standards from competitive pressure.
- Set guidelines for cross-product margining. Banking organizations offer cross-product-margining arrangements to clients to reduce required margin amounts. Guidelines to control risks associated with cross-product margining would include limiting the set of eligible transactions to liquid exposures and having procedures to resolve margin disputes.
- Maintain collateral-management policies and procedures to control, monitor, and report
  - — the extent to which collateral agreements expose a banking organization to collateral risks, such as the volatility and liquidity of the securities held as collateral;
  - — concentrations of less liquid or less marketable collateral asset classes;
  - — the risks of re-hypothecation or other reinvestment of collateral (both cash and noncash) received from counterparties, including the potential liquidity shortfalls resulting from the reuse of such collateral; and
  - — the CCR associated with the decision whether to require posted margin to be segregated. Organizations should perform a legal analysis concerning the risks of agreeing to allow cash to be commingled with a counterparty's own cash and of allowing a counterparty to rehypothecate securities pledged as margin.
- Maintain policies and processes for monitoring margin agreements involving third-party custodians. As with bilateral counterparties, banking organizations should
  - — identify the location of the account to which collateral is posted or from which it is received;
  - — obtain periodic account statements or other assurances that confirm the custodian is holding the collateral in conformance with the agreement; and
  - — understand the characteristics of the account where the collateral is held (for example, whether it is in a segregated account) and the legal rights of the counterparty or any third-party custodian regarding this collateral.

Validation of Models and Systems

A banking organization should validate its CCR models initially and on an ongoing basis. Validation of models should include an evaluation of the conceptual soundness and developmental evidence supporting a given model; an ongoing monitoring process that includes verification of processes and benchmarking; and an outcomes-analysis process that includes backtesting. Validation should identify key assumptions and potential limitations, and it should assess their possible impact on risk metrics. All components of models should be subject to validation along with their combination in the CCR system.

22. A *haircut* is the difference between the market value of an asset being used as collateral for a loan and the amount of money that a lender will advance against the asset.

23. See the guidelines issued by ISDA, the Securities Industry and Financial Markets Association (SIFMA), and the Managed Funds Association (MFA), including the "Market Review of OTC Derivative Bilateral Collateralization Practices (Release 2.0)" (March 2010), and "Best Practices for Collateral Management" (June 30, 2010).

Evaluating the conceptual soundness involves assessing the quality of the design and construction of the CCR models and systems, including documentation and empirical evidence that supports the theory, data, and methods used.

Ongoing monitoring confirms that CCR systems continue to perform as intended. This generally involves process verification, an assessment of model data integrity and systems operation, and benchmarking to assess the quality of a given model. Benchmarking is a valuable diagnostic tool in identifying potential weaknesses. Specifically, it is the comparison of a banking organization's CCR model estimates with those derived using alternative data, methods, or techniques. Benchmarking can also be applied to particular CCR model components, such as parameter-estimation methods or pricing models. Management should investigate the source of any differences in output, and determine whether benchmarking gaps indicate weakness in the banking organization's models.

Outcomes analysis compares model outputs to actual results during a sample period not used in model development. This is generally accomplished using backtesting. It should be applied to components of CCR models (for example, the risk-factor distribution and pricing model), the risk measures, and projected exposures. While there are limitations to backtesting, especially for testing the longer time-horizon predictions of a given CCR model, it is an essential component of model validation. Banking organizations should have a process for the resolution of observed model deficiencies detected by backtesting. This should include further investigation to determine the problem and appropriate course of action, including changing a given CCR model.

If the validation of CCR models and infrastructure systems is not performed by staff that is independent from the developers of the models, then an independent review should be conducted by technically competent personnel to ensure the adequacy and effectiveness of the validation. The scope of the independent review should include validation procedures for all components, the role of relevant parties, and documentation of the model and validation processes. This review should document its results, what action was taken to resolve findings, and its relative timeliness.

Senior management should be notified of validation and review results and should take appropriate and timely corrective actions to address deficiencies. The board should be apprised of summary results, especially unresolved deficiencies. In support of validation activities, internal audit should review and test models and systems validation as well as overall systems infrastructure as part of their regular audit cycle.

For more information on validation, please see this section's Appendix B.

Close-Out Policies and Practices

Banking organizations should have the ability to effectively manage counterparties in distress, including execution of a close-out. Policies and procedures outlining sound practices for managing a close-out should include the following:

- Requirements for hypothetical close-out simulations at least once every two years for one of the banking organization's most complex counterparties.
- Standards for the speed and accuracy with which the banking organization can compile comprehensive counterparty exposure data and net cash outflows. Operational capacity to aggregate exposures within four hours is a reasonable standard.
- The sequence of critical tasks, and decision-making responsibilities, needed to execute a close-out.
- Requirements for periodic review of documentation related to counterparty terminations, and confirmation that appropriate and current agreements that specify the definition of events of default and the termination methodology that will be used are in place.
  - Banking organizations should take corrective action if documents are not current, active, and enforceable.
  - Management should document their decision to trade with counterparties that are either unwilling or unable to maintain appropriate and current documentation.
- Established close-out methodologies that are practical to implement, particularly with large and potentially illiquid portfolios. Dealers should consider using the "close-out amount" approach for early termination upon default in interdealer relationships.[24]

24. Only for a definition of *close-out amount approach*, see the Counterparty Risk Management Policy Group III's report, "Containing Systemic Risk: Road to Reform" (August 6,

- A requirement that the banking organization transmit immediate instructions to its appropriate transfer agent(s) to deactivate collateral transfers, contractual payments, or other automated transfers contained in "standard settlement instructions" for counterparties or prime brokers that have defaulted on the contract or for counterparties or prime brokers that have declared bankruptcy.

MANAGING CENTRAL COUNTERPARTY EXPOSURES

A central credit counterparty (CCP) facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts, and typically requires all participants to be fully collateralized on a daily basis. The CCP thus effectively bears most of the counterparty credit risk in transactions, becoming the buyer for every seller and the seller to every buyer. Well-regulated and soundly managed CCPs can be an important means of reducing bilateral counterparty exposure in the OTC derivatives market. However, CCPs also concentrate risk within a single entity. Therefore, it is important that banking organizations centrally clear through regulated CCPs with sound risk-management processes and strong financial resources sufficient to meet their obligations under extreme stress conditions.

To manage CCP exposures, banking organizations should regularly, but no less frequently than annually, review the individual CCPs to which they have exposures. This review should include performing and documenting due diligence on each CCP, applying current supervisory or industry standards[25] (and any subsequent standards) as a baseline to assess the CCP's risk-management practices.

- For each CCP, an evaluation of its risk-management framework should, at a minimum, include membership requirements, guarantee fund contributions, margining practices, default-sharing protocols, and limits of liability.
- Banking organizations should also consider the soundness of the CCP's policies and procedures, including procedures for handling the default of a clearing member, obligations at post-default auctions, and post-default assignment of positions.
- Banking organizations should also maintain compliance with applicable regulatory requirements, such as ensuring contingent loss exposure remains within a banking organization's legal lending limit.

LEGAL AND OPERATIONAL RISK MANAGEMENT

Banking organizations should ensure proper control of, and access to, legal documentation and agreements. In addition, it is important that systems used to measure CCR incorporate accurate legal terms and provisions. The accessibility and accuracy of legal terms is particularly critical in close-outs, when there is limited time to review the collateral and netting agreements. Accordingly, banking organizations should

- Have a formal process for negotiating legal agreements. As a best practice, the process would include approval steps and responsibilities of applicable departments.
- At least annually, conduct a review of the legal enforceability of collateral and netting agreements for all relevant jurisdictions.
- Maintain policies on when it is acceptable to trade without a master agreement,[26] using metrics such as trading volume or the counterparty's risk profile.
  - — Trading without a master agreement may be acceptable in cases of minimal volume or when trading in jurisdictions where master agreements are unenforceable. As applicable, policies should outline required actions to undertake and monitor transactions without an executed master agreement.

2008), pp. 122–125. Also, ISDA has published a closeout amount protocol to aid in the adoption of the close-out amount approach.

25. For instance, see "Recommendations for Central Counterparties," a consultative report issued by the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions under the auspices of the Bank for International Settlements (March 2004).

26. The capital rules in the United States refer to master agreements. These include the Federal Reserve's "Risk-Based Capital Standards: Advanced Capital Adequacy Framework—Basel II," 12 CFR 208, Appendix F, and 12 CFR 225, Appendix G. For the FDIC, it is 12 CFR 325, Appendix D. For the OCC, see 12 CFR Part 3, Appendix C.

- Use commonly recognized dispute-resolution procedures.[27]
  - — Banking organizations should seek to resolve collateral disputes within recommended time frames.
  - — Senior management should receive reports listing material and aged disputes, as these pose significant risk.
- Include netting of positions in risk-management systems, only if there is a written legal review (either internally or externally) that expresses a high level of confidence that netting agreements are legally enforceable.
- Maintain ongoing participation in both bilateral and multilateral portfolio-compression efforts. Where feasible, banking organizations are encouraged to elect compression tolerances (such as post-termination factor sensitivity changes and cash payments) that allow the widest possible portfolio of trades to be terminated.
- Adopt and implement appropriate novation protocols.[28]

Legal Risk Arising from Counterparty Appropriateness[29]

While a counterparty's ability to pay should be evaluated when assessing credit risk, credit losses can also occur when a counterparty is unwilling to pay, which most commonly occurs when a counterparty questions the appropriateness of a contract. These types of disputes pose not only risk of a direct credit loss, but also risk of litigation costs and/or reputational damage. Banking organizations should maintain policies and procedures to assess client and deal appropriateness. In addition, banking organizations should

- Conduct initial and ongoing due diligence, evaluating whether a client is able to understand and utilize transactions with CCR as part of assessing the client's sophistication, investment objectives, and financial condition.
  - — For example, although some clients may be sophisticated enough to enter into a standardized swap, they may lack the sophistication to fully analyze the risks of a complex OTC deal.
  - — Banking organizations should be particularly careful to assess appropriateness of complex, long-dated, off-market, illiquid, or other transactions with higher reputational risk.
- Include appropriateness assessments in the new-product approval process. Such assessments should determine the types of counterparties acceptable for a new product, and what level of counterparty sophistication is required for any given product.
- Maintain disclosure policies for OTC derivative and other complex transactions to ensure that risks are accurately and completely communicated to counterparties.
- Maintain guidelines for determination of acceptable counterparties for complex derivatives transactions.

CONCLUSION ON COUNTERPARTY CREDIT-RISK MANAGEMENT

For relevant banking organizations, CCR management should be an integral component of the risk-management framework. When considering the applicability of specific guidelines and best practices set forth in this guidance, a banking organization's senior management and supervisors should consider the size and complexity of its securities and trading activities. Banking organizations should comprehensively evaluate existing practices against the standards in this guidance and implement remedial action as appropriate. A banking organization's CCR exposure levels and the effectiveness of its CCR management are important factors for a supervisor to consider when evaluating a banking organization's overall management, risk management, and credit- and market-risk profile.

APPENDIX A: GLOSSARY

This glossary describes commonly used CCR metrics. As discussed above, banking organizations should employ a suite of metrics commensurate with the size, complexity, liquidity, and

27. An example of such procedures would be the ISDA's "2009 Dispute Resolution Protocol" (September 2009).

28. An example would be the ISDA's novation protocol.

29. For guidance on counterparty appropriateness, see section 4033.1 of this manual; section 2128.09 in the *Bank Holding Company Supervision Manual*; section 2070 of the *Trading and Capital-Markets Activities Manual*; and SR-07-5, "Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities" (January 11, 2007).

risk profile of the organization's CCR portfolio. Major broker-dealer banking organizations should employ the full range of risk-measurement metrics to enable a comprehensive understanding of CCR and how it changes in varying environments. Banking organizations of lesser size and complexity should carefully consider which of these metrics they need to track as part of their exposure risk-management processes. At a minimum, all banking organizations should calculate current exposure and stress test their CCR exposures. Definitions marked with an asterisk (*) are from the Bank for International Settlements.

Exposure Metrics

Current exposure is the larger of zero, or the market value of a transaction or a portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in bankruptcy. Current exposure is often also called replacement cost. Current exposure may be reported gross or net of collateral. Current exposure allows banking organizations to assess their CCR exposure at any given time—that is, the amount currently at risk.

Jump-to-default (JTD) exposure is the change in the value of counterparty transactions upon the default of a reference name in CDS positions. This allows banking organizations to assess the risk of a sudden, unanticipated default before the market can adjust.

Expected exposure is calculated as average exposure to a counterparty at a date in the future. This is often an intermediate calculation for expected positive exposure or CVA. It can also be used as a measure of exposure at a common time in the future.

Expected positive exposure (EPE) is the weighted average over time of expected exposures when the weights are the proportion that an individual expected exposure represents of the entire time interval. Expected positive exposure is an appropriate measure of CCR exposure when measured in a portfolio credit-risk model.*

Peak exposure is a high percentile (typically 95 percent or 99 percent) of the distribution of exposures at any particular future date before the maturity date of the longest transaction in the netting set. A peak exposure value is typically generated for many future dates up until the longest maturity date of transactions in the netting set. Peak exposure allows banking organizations to estimate their maximum potential exposure at a specified future date, or over a given time horizon, with a high level of confidence. For collateralized counterparties, this metric should be based on a realistic close-out period, considering both the size and liquidity of the portfolio. Banking organizations should consider peak potential exposure when setting counterparty credit limits.*

Expected shortfall exposure is similar to peak exposure, but is the expected exposure conditional on the exposure being greater than some specified peak percentile. For transactions with very low probability of high exposure, the expected shortfall accounts for large losses that may be associated with transactions with high-tail risk.

Sensitivity to market risk factors is the change in exposure because of a given market-risk-factor change (for example, a position's change in price resulting from a 1 basis point change in interest rates). It provides information on the key drivers of exposure to specific counterparties and on hedging.

Stressed exposure is a forward-looking measure of exposure based on predefined market-factor movements (nonstatistically generated). These can include single-factor market shocks, historical scenarios, and hypothetical scenarios. Stressed exposure allows banking organizations to consider their counterparty exposure under a severe or stressed scenario. This serves as a supplemental view of potential exposure, and provides banking organizations with additional information on risk drivers. The best practice is to compare stressed exposure to counterparty credit limits.

CVA-Related Metrics

Credit valuation adjustment (CVA) is an adjustment to the mid-market valuation (average of the bid and asked price) of the portfolio of

trades with a counterparty. This adjustment reflects the market value of the credit risk resulting from any failure to perform on contractual agreements with a counterparty. This adjustment may reflect the market value of the credit risk of the counterparty or the market value of the credit risk of both the banking organization and the counterparty. CVA is a measure of the market value of CCR, incorporating both counterparty creditworthiness and the variability of exposure.*

CVA VaR is a measure of the variability of the CVA mark-to-market value and is based on the projected distributions of both exposures and counterparty creditworthiness. CVA VaR provides banking organizations with an estimate of the potential CVA mark-to-market loss, at a certain confidence interval and over a given time horizon.

CVA factor sensitivities is the mark-to-market change in CVA resulting from a given market-risk-factor change (for example, a position's change in price resulting from a 1 basis point change in credit spreads). CVA factor sensitivities allow banking organizations to assess and hedge the market value of the credit or market risks to single names and portfolios and permit banking organizations to monitor excessive build ups in counterparty concentrations.

Stressed CVA is a forward-looking measure of CVA mark-to-market value based on predefined credit- or market-factor movements (nonstatistically generated). These can include single-market-factor shocks, historical scenarios, and hypothetical scenarios. Stressed CVA serves as an informational tool and allows banking organizations to assess the sensitivity of their CVA to a potential mark-to-market loss under defined scenarios.

APPENDIX B: DETAIL ON MODEL VALIDATION AND SYSTEMS EVALUATION

A banking organization should validate its CCR models, initially and on an ongoing basis. Validation should include three components: (1) an evaluation of the conceptual soundness of relevant models (including developmental evidence); (2) an ongoing monitoring process that includes verification of processes and benchmarking; and (3) an outcomes-analysis process that includes backtesting. The validation should either be independent or subject to independent review.

Validation is the set of activities designed to give the greatest possible assurances of CCR models' accuracy and systems' integrity. Validation should also identify key assumptions and potential limitations and assess their possible impact on risk metrics. CCR models have several components:

- statistical models to estimate parameters, including the volatility of risk factors and their correlations
- simulation models to convert those parameters into future distributions of risk factors
- pricing models that estimate value in simulated scenarios
- calculations that summarize the simulation results into various risk metrics

All components of each model should be subject to validation, along with analysis of their interaction in the CCR system. Validation should be performed initially when a model first goes into production. Ongoing validation is a means of addressing situations where models have known weaknesses and ensuring that changes in markets, products, or counterparties do not create new weaknesses. Senior management should be notified of the validation results and should take corrective actions in a timely manner when appropriate.

A banking organization's validation process should be independent of the CCR model and systems development, implementation, and operation. Alternately, the validation should be subject to independent review, whereby the individuals who perform the review are not biased in their assessment because of involvement in the development, implementation, or operation of the processes or products. Individuals performing the reviews should possess the requisite technical skills and expertise to provide critical analysis, effective challenge, and appropriate recommendations. The extent of such reviews should be fully documented, sufficiently thorough to cover all significant model elements, and include additional testing of models or systems as appropriate. In addition, reviewers should have the authority to effectively challenge developers and model users, elevate concerns or findings as necessary, and either

have issues addressed in a prompt and substantial manner or reject a model for use by the banking organization.

Conceptual Soundness and Developmental Evidence

The first component of validation is evaluating conceptual soundness, which involves assessing the quality of the design and construction of CCR models. The evaluation of conceptual soundness includes documentation and empirical evidence supporting the theory, data, and methods used. The documentation should also identify key assumptions and potential limitations and assess their possible impact. A comparison to industry practice should be done to identify areas where substantial and warranted improvements can be made. All model components are subject to evaluation, including simplifying assumptions, parameter calibrations, risk-factor diffusion processes, pricing models, and risk metrics. Developmental evidence should be reviewed whenever the banking organization makes material changes in CCR models. Evaluating conceptual soundness includes independent evaluation of whether a model is appropriate for its purpose and whether all underlying assumptions, limitations, and shortcomings have been identified and their potential impact assessed.

Ongoing Monitoring, Process Verification, and Benchmarking

The second component of model validation is ongoing monitoring to confirm that the models were implemented appropriately and continue to perform as intended. This involves process verification, an assessment of models, and benchmarking to assess the quality of the model. Deficiencies uncovered through these activities should be remediated promptly.

Process verification includes evaluating data integrity and operational performance of the systems supporting CCR measurement and reporting. This should be performed on an ongoing basis and includes

- the completeness and accuracy of the transaction and counterparty data flowing through the counterparty exposure systems;
- reliance on up-to-date reviews of the legal enforceability of contracts and master netting agreements that govern the use of netting and collateral in systems measuring net exposures and the accuracy of their representations in the banking organization's systems;
- the integrity of the market data used within the banking organization's models, both as current values for risk factors and as sources for parameter calibrations; and
- the operational performance of the banking organization's counterparty exposure calculation systems, including the timeliness of the batch-run calculations, the consistent integration of data coming from different internal or external sources, and the synchronization of exposure, collateral management, and finance systems.

"Benchmarking" means comparing a banking organization's CCR measures with those derived using alternative data, methods, or techniques. It can also be applied to particular model components, such as parameter estimation methods or pricing models. It is an important complement to backtesting and is a valuable diagnostic tool in identifying potential weaknesses. Differences between the model and the benchmark do not necessarily indicate that the model is in error because the benchmark itself is an alternative prediction. It is important that a banking organization use appropriate benchmarks, or the exercise will be compromised. As part of the benchmarking exercise, the banking organization should investigate the source of the differences and whether the extent of the differences is appropriate.

Outcomes Analysis Including Backtesting

The third component of validation is outcomes analysis, which is the comparison of model outputs to actual results during a sample period not used in model development. Backtesting is one form of out-of-sample testing. Backtesting should be applied to components of a CCR model, for example the risk factor distribution and pricing model, as well as the risk measures and projected exposures. Outcomes analysis includes an independent evaluation of the design and results of backtesting to determine whether all material risk factors are captured and to

assess the accuracy of the diffusion of risk factors and the projection of exposures. While there are limitations to backtesting, especially for testing the longer horizon predictions of a CCR model, banking organizations should incorporate it as an essential component of model validation.

Typical examples of CCR models that require backtesting are expected exposure, peak exposure, and CVA VaR models. Backtesting of models used for measurement of CCR is substantially different than backtesting VaR models for market risk. Notably, CCR models are applied to each counterparty facing the banking organization, rather than an aggregate portfolio. Furthermore, CCR models should project the distribution over multiple dates and over long time horizons for each counterparty. These complications make the interpretation of CCR backtesting results more difficult than that for market risk. Because backtesting is critical to providing feedback on the accuracy of CCR models, it is particularly important that banking organizations exert considerable effort to ensure that backtesting provides effective feedback on the accuracy of these models.

Key elements of backtesting include the following activities:

- Backtesting programs should be designed to evaluate the effectiveness of the models for typical counterparties, key risk factors, key correlations, and pricing models. Backtesting results should be evaluated for reasonableness as well as for statistical significance. This may serve as a useful check for programming errors or cases in which models have been incorrectly calibrated.
- Backtesting should be performed over different time horizons. For instance, the inclusion of mean reversion parameters or similar time varying features of a model can cause a model to perform adequately over one time horizon, but perform very differently over a different time horizon. A typical large dealer should, at a minimum, perform backtesting over one day, one week, two weeks, one month, and every quarter out to a year. Shorter time periods may be appropriate for transactions under a collateral agreement when variation margin is exchanged frequently, even daily, or for portfolios that contain transactions that expire or mature in a short time frame.
- Backtesting should be conducted on both real counterparty portfolios and hypothetical portfolios. Backtesting on fixed hypothetical portfolios provides the opportunity to tailor backtesting portfolios to identify whether particular risk factors or correlations are modeled correctly. In addition, the use of hypothetical portfolios is an effective way to meaningfully test the predictive abilities of the counterparty exposure models over long time horizons. Banking organizations should have criteria for their hypothetical portfolios. The use of real counterparty portfolios evaluates whether the models perform on actual counterparty exposures, taking into account portfolio changes over time.

It may be appropriate to use backtesting methods that compare forecast distributions of exposures with actual distributions. Some CCR measures depend on the whole distribution of future exposures rather than a single exposure percentile—for example, expected exposure (EE) and expected positive exposure (EPE). For this reason, sole reliance on backtesting methods that count the number of times an exposure exceeds a unique percentile threshold may not be appropriate.

Exception counting remains useful, especially for evaluating peak or percentile measures of CCR, but these measures will not provide sufficient insight for expected exposure measures. Hence, banking organizations should test the entire distribution of future exposure estimates and not just a single percentile prediction.

Banking organizations should have policies and procedures in place that describe when backtesting results will generate an investigation into the source of observed backtesting deficiencies and when model changes should be initiated as a result of backtesting.

Documentation

Adequate validation and review are contingent on complete documentation of all material aspects of CCR models and systems. This should include all model components and parameter estimation or calibration processes. Documentation should also include the rationale for all material assumptions underpinning its chosen analytical frameworks, including the

choice of inputs; distributional assumptions; and weighting of quantitative and qualitative elements. Any subsequent changes to these assumptions should also be documented and justified.

The validation or independent review should be fully documented. Specifically, this would include results, the scope of work, conclusions and recommendations, and responses to those recommendations. This includes documentation of each of the three components of model validation, discussed above. Complete documentation should be done initially and updated over time to reflect ongoing changes and model performance. Ability of the validation (or review) to provide effective challenge should also be documented.

Internal Audit

A banking organization should have an internal audit function, independent of business-line management, which assesses the effectiveness of the model validation process. This assessment should ensure the following: proper validation procedures were followed for all components of the CCR model and infrastructure systems; required independence was maintained by validators or reviewers; documentation was adequate for the model and validation processes; and results of validation procedures are elevated, with timely responses to findings. Internal audit should also evaluate systems and operations that support CCR. While internal audit may not have the same level of expertise as quantitative experts involved in the development and validation of the model, they are particularly well suited to evaluate process verification procedures. If any validation or review work is outsourced, internal audit should evaluate whether that work meets the standards discussed in this section.

A bank operates as a securities dealer when it underwrites, trades, or deals in securities. These activities may be administered in a separately identifiable trading department or incorporated within the overall treasury department. The organizational structure will generally be a function of the level of activity and the importance of the activity as a product line. If a repetitive pattern of short-term purchases and sales demonstrates that the bank holds itself out to other dealers or investors as a securities dealer, the bank is trading, regardless of what department or section of the bank is engaged in the activity.

The authority under which a bank may engage in securities trading and underwriting is found in section 5136 of the Revised Statutes (12 USC 24 (seventh)). That authority is restricted by limitations on the percentage holding of classes of securities as found in 12 CFR 1.3. This regulation allows banks to deal, underwrite, purchase, and sell (1) type I securities without limit and (2) type II securities subject to a limit of 10 percent of capital and unimpaired surplus per issue. Banks are prohibited from underwriting or dealing in type III securities for their own accounts. See section 2020.1, ''Investment Securities and End-User Activities,'' for further information on types I, II, and III securities.

Banks are involved in three major types of securities transactions. First, the bank, acting as broker, buys and sells securities on behalf of a customer. These are agency transactions in which the agent (bank) assumes no substantial risk and is compensated by a prearranged commission or fee. A second type of securities transaction banks frequently execute is a ''riskless-principal'' trade. Upon the order of an investor, the dealer buys (or sells) securities through its own account, with the purchase and sale originating almost simultaneously. Because of the brief amount of time the security is held in the dealer's own account, exposure to market risks is limited. Profits result from dealer-initiated markup (the difference between the purchase and sale prices). Finally, as a dealer, the bank buys and sells securities for its own account. This is termed a principal transaction because the bank is acting as a principal, buying or selling qualified securities through its own inventory and absorbing whatever market gain or loss is made on the transaction.

The volume of bank dealer activity and the dealer's capacity in the transaction are critical to an examiner's assessment regarding the examination scope and the required examiner resources and expertise. Dealers engaging primarily in agency or riskless-principal transactions are merely accommodating customers' investment needs. Market risk will be nominal, and the key examination concern will be operational risk and efficiency. Active dealers generally carry larger inventory positions and may engage in some degree of proprietary trading. Their market-risk profile may be moderate to high.

Bank dealers' securities transactions involve customers and other securities dealers. The word ''customer,'' as used in this section, means an investor. Correspondent banks purchasing securities for an investment account would also be considered a customer. Transactions with other dealers are not considered customer transactions unless the dealer is buying or selling for investment purposes.

The following subsections include general descriptions of significant areas of bank trading and underwriting activities. Foreign exchange is covered in detail in the ''International'' sections of this manual. Additional bank dealer activities, particularly in derivative products, are extensively covered in the *Trading and Capital-Markets Activities Manual*. In addition, many money-center banks and larger regional banks have transferred dealing activities to separately capitalized holding company subsidiaries (known as underwriting affiliates). The *Bank Holding Company Supervision Manual* contains a separate section on nonbank subsidiaries engaged in underwriting and dealing in bank-ineligible securities.

OVERVIEW OF RISK

For bank dealer activities, risk is generally defined as the potential for loss on an instrument or portfolio. Significant risk can also arise from operational weakness and inadequate controls. Risk management is the process by which managers identify, assess, and control all risks associated with a financial institution's activities. The increasing complexity of the financial industry and the range of financial instruments banks use have made risk management more difficult to accomplish and evaluate.

The four fundamental elements for evaluating the risk-management process for bank dealer activities are—

- active board and management oversight,
- adequate risk-management policies and limits,
- appropriate risk measurement and management information systems, and
- comprehensive internal controls and audit procedures.

For risk management to be effective, an institution's board and senior management must be active participants in the process. They must ensure that adequate policies and risk-tolerance limits are developed for managing the risk in bank dealer activities, and they must understand, review, and approve these limits across all established product lines. For policies and limits to be effective and meaningful, risk measures, reports, and management information systems must provide management and the board with the information and analysis necessary to make timely and appropriate responses to changing conditions. Risk management must also be supported by comprehensive internal controls and audit procedures that provide appropriate checks and balances to maintain an ongoing process of identifying any emerging weaknesses in an institution's management of risk.[1] At a minimum, the effectiveness of the institution's policies, limits, reporting systems, and internal controls must be reviewed annually.

In assessing the adequacy of the above elements at individual institutions, examiners should consider the nature and volume of a bank's dealer activities and its overall approach toward managing the various types of risks involved. The sophistication or complexity of policies and procedures used to manage risk depends on the bank dealer's chosen products, activities, and lines of business. Accordingly, examiners should expect risk-management activities to differ among institutions.

As a financial institution's product offerings and geographic scope expand, examiners must review the risk-management process not only by business line, but on a global, consolidated basis. In more sophisticated institutions, the role of risk management is to identify the risks associated with particular business activities and to aggregate summary data into generic components, ultimately allowing exposures to be evaluated on a common basis. This methodology enables institutions to manage risks by portfolio and to consider exposures in relationship to the institution's global strategy and risk tolerance.

A review of the global organization may reveal risk concentrations that are not readily identifiable from a limited, stand-alone evaluation of a branch, agency, Edge Act institution, nonbank subsidiary, or head office. Consolidated risk management also allows the institution to identify, measure, and control its risks, while giving necessary consideration to the breakdown of exposure by legal entity. Sometimes, if applicable rules and laws allow, identified risks at a branch or subsidiary may be offset by exposures at another related institution. However, risk management across separate entities must be done in a way that is consistent with the authorities granted to each entity. Some financial institutions and their subsidiaries may not be permitted to hold, trade, deal, or underwrite certain types of financial instruments unless they have received special regulatory approval. Examiners should ensure that a financial institution only engages in those activities for which it has received regulatory approval. Furthermore, examiners should verify that the activities are conducted in accordance with any Board conditions or commitments attached to the regulatory approval.

Ideally, an institution should be able to identify its relevant generic risks and should have measurement systems in place to quantify and control these risks. While it is recognized that not all institutions have an integrated risk-management system that aggregates all business activities, the ideal management tool would incorporate a common measurement denominator. Risk-management methodologies in the marketplace and an institution's scope of business are continually evolving, making risk management a dynamic process. Nonetheless, an institution's risk-management system should always be able to identify, aggregate, and control all risks posed by underwriting, trading, or dealing in securities that could have a significant impact on capital or equity.

Trading and market-risk limits should be customized to address the nature of the products

1. Existing policies and examiner guidance on various topics applicable to the evaluation of risk-management systems can be found in SR-93-69, "Examining Risk Management and Internal Controls for Trading Activities of Banking Organizations." Many of the managerial and examiner practices contained in this document are fundamental and are generally accepted as sound practices for trading activities.

and any unique risk characteristics. Common types of limits include earnings-at-risk limits, stop-loss limits, limits on notional amounts (both gross and duration-weighted), maturity limits, and maturity-gap limits. The level of sophistication needed within the limit matrix will depend on the type of instrument involved and the relative level of trading activity. Straightforward notional and tenor limits may be adequate for most dealers; however, dealers involved in a wide array of products and more complex transactions will need stronger tools to measure and aggregate risk across products.

In general, risk from trading and dealing activities can be broken down into the following categories:

- Market or price risk is the exposure of an institution's financial condition to adverse movements in the market rates or prices of its holdings before such holdings can be liquidated or expeditiously offset. It is measured by assessing the effect of changing rates or prices on either the earnings or economic value of an individual instrument, a portfolio, or the entire institution.
- Funding-liquidity risk refers to the ability to meet investment and funding requirements arising from cash-flow mismatches.
- Market-liquidity risk refers to the risk of being unable to close out open positions quickly enough and in sufficient quantities at a reasonable price.
- Credit risk is the risk that a counterparty to a transaction will fail to perform according to the terms and conditions of the contract, thus causing the security to suffer a loss in cash-flow or market value. Because securities settlements are typically "delivery vs. payment" and settlement periods are relatively short, securities transactions do not involve a significant level of counterparty credit risk. Repurchase transactions, securities lending, and money market transactions, however, involve significantly higher levels of credit risk if not properly controlled. As a result, credit risk is discussed in greater detail in the subsections addressing these products. Credit risk can also arise from positions held in trading inventory. Although U.S. government and agency securities do not generally involve credit risk, other securities (for example, municipal and corporate securities) carried in inventory can decline in price due to a deterioration in credit quality.
- Clearing or settlement risk is (1) the risk that a counterparty who has received a payment or delivery of assets defaults before delivery of the asset or payment or (2) the risk that technical difficulties interrupt delivery or settlement despite the counterparty's ability or willingness to perform.
- Operations and systems risk is the risk of human error or fraud, or the risk that systems will fail to adequately record, monitor, and account for transactions or positions.
- Legal risk is the risk that a transaction cannot be consummated as a result of some legal barrier, such as inadequate documentation, a regulatory prohibition on a specific counterparty, non-enforceability of bilateral and multilateral close-out netting, or collateral arrangements in bankruptcy.

The *Trading and Capital-Markets Activities Manual* contains a comprehensive discussion of these risks, including examination objectives, procedures, and internal control questionnaires by risk category.

GOVERNMENT AND AGENCY SECURITIES

The government securities market is dominated by a number of investment banks, broker-dealers, and commercial banks known as primary dealers in government securities. These dealers make an over-the-counter market in most government and federal-agency securities. Primary dealers are authorized to deal directly with the Open Market Desk of the Federal Reserve Bank of New York. As market makers, primary dealers quote bid-ask prices on a wide range of instruments, and many publish daily quotation sheets or provide live electronic data feeds to larger customers or other dealers.

Government securities trading inventories are generally held with the objective of making short-term gains through market appreciation and dealer-initiated markups. Common factors that affect the markup differential include the size of a transaction, the dealer efforts extended, the type of customer (active or inactive), and the nature of the security. Markups on government securities generally range between 1/32 and 4/32 of a point. Long-maturity issues or derivative products may have higher markups due to the higher risk and potentially larger volatility that may be

inherent in these products.

According to industry standards, payments for and deliveries of U.S. government and most agency securities are settled one business day following the trade date, although government dealers and customers can negotiate same-day or delayed settlement for special situations.

When-Issued Trading

A significant potential source of risk to dealers involves "when-issued" (WI) trading in government securities. WI trading is the buying and selling of securities in the one- to two-week interim between the announcement of an offering and the security auction and settlement. Although the vast majority of transactions settle on the next business day, WI trading results in a prolonged settlement period. This could increase both the market risk and counterparty credit risk associated with trading these instruments. The prolonged settlement period also provides an opportunity for a dealer to engage in a large volume of off-balance-sheet trading without having to fund the assets or cover the short positions. In essence, WI trading allows the dealers to create securities. If the overall level of WI trading is significant in relation to the size of the issue, the resulting squeeze on the market could increase volatility and risk. Given these potential risk characteristics, WI trading should be subject to separate sublimits to cap the potential exposure.

Short Sales

Another area of U.S. government securities activity involves short-sale transactions. A short sale is the sale of a security that the seller does not own at the time of the sale. Delivery may be accomplished by buying the security or by borrowing the security. When the security delivered is borrowed, the short seller likely will ultimately have to acquire the security in order to satisfy its repayment obligation. The borrowing transaction is collateralized by a security (or securities) of similar value or cash (most likely the proceeds of the short sale). Reverse repurchase transactions are also used to obtain the security needed to make delivery on the security sold short. Carrying charges on borrowed government securities should be deducted from the short sale and purchase spread to determine net profit. Short sales are conducted to (1) accommodate customer orders, (2) obtain funds by leveraging existing assets, (3) hedge the market risk of other assets, or (4) allow a dealer to profit from a possible future decline in market price by purchasing an equivalent security at a later date at a lower price.

Government Securities Clearing

Securities-clearing services for the bulk of U.S. government securities transactions and many federal-agency securities transactions are provided by the Federal Reserve as part of its electronic securities-transfer system. The various Federal Reserve Banks will wire-transfer most government securities between the book-entry safekeeping accounts of the seller and buyer. The Federal Reserve's systems are also used to facilitate security borrowings, loans, and pledges.

Government Securities Act

In response to the failures of a number of unregulated government securities dealers between 1975 and 1985, Congress passed the Government Securities Act of 1986 (GSA). GSA established, for the first time, a federal system for the regulation of the entire government securities market, including previously unregulated brokers and dealers. The primary goal of GSA was to protect investors and ensure the maintenance of a fair, honest, and liquid market.

The GSA granted the Department of the Treasury (Treasury) authority to develop and implement rules for transactions in government and agency securities effected by government securities brokers or dealers (that is, securities firms as well as other financial institutions), and to develop and implement regulations relating to the custody of government securities held by depository institutions. The rules were intended to prevent fraudulent and manipulative acts and practices and to protect the integrity, liquidity, and efficiency of the government securities market. At the same time, the rules were designed to preclude unfair discrimination among brokers, dealers, and customers. Enforcement of the rules for the GSA is generally carried out by an institution's primary regulatory organization.

The rules for the GSA had the most significant effect on those entities that were not previously subject to any form of federal registration and regulation. These entities included not only firms registered as government securities brokers or dealers but also firms registered as brokers or dealers trading in other securities and financial products. For the first time, the government securities activities of these entities were subject to the discipline of financial responsibility, customer protection, recordkeeping, and advertising requirements. For nonbank dealers, this regulation is enforced by a self-regulatory organization, the Financial Industry Regulatory Authority (FINRA), which conducts routine examinations under the oversight of the Securities and Exchange Commission (SEC).

The provisions of the GSA that had the most significant effect on government securities brokers and dealers (both bank and nonbank broker-dealers) relate to hold-in-custody repurchase agreement rules. Congress targeted this area because of abuses that had resulted in customer losses. Several requirements to strengthen customer protection were imposed: (1) written repurchase agreements must be in place, (2) the risks of the transactions must be disclosed to the customer, (3) specific repurchase securities must be allocated to and segregated for the customer, and (4) confirmations must be made and provided to the customer by the end of the day on which a transaction is initiated and on any day on which a substitution of securities occurs. For a more detailed description of the rules for the GSA requirements, see the procedures for the examination of government securities activities issued by the Board of Governors of the Federal Reserve System, or 17 CFR 400–450 for the actual text of the regulations.

Registration Exemptions

Most banks acting as government securities brokers or dealers are required to file a form known as a G-FIN. This form details the bank's capacity, the locations where government securities activities are performed, and the persons responsible for supervision. However, certain bank government securities activities are exempt from the filing requirements. Banks handling only U.S. savings bond transactions or submitting tender offers on original issue U.S. Treasury securities are exempt from registration.

Limited government securities brokerage activities are also exempt from registration under certain circumstances. Banks that engage in fewer than 500 government securities transactions annually (excluding savings bond transactions and Treasury tender offers) are exempt. Similarly, banks are exempt if they deal with a registered broker-dealer under a "networking" arrangement, assuming they meet the following conditions: (1) the transacting broker must be clearly identified, (2) bank employees perform only clerical or administrative duties and do not receive transaction-based compensation, and (3) the registered broker-dealer receives and maintains all required information on each customer. Exempt networking arrangements must be fully disclosed to the customer. Finally, banks are exempt from registration requirements if their activities are limited to purchases and sales in a fiduciary capacity or purchases and sales of repurchase or reverse repurchase agreements.

The preceding exemptions provide relief from registration, but exempt banks must comply (if applicable) with regulations addressing custodial holdings for customers (17 CFR 450). Additionally, banks effecting repurchase/reverse repurchase agreements must comply with repurchase-transaction requirements detailed in 17 CFR 403.5(d).

MUNICIPAL SECURITIES

Municipal securities are debt obligations issued by state and local governments and certain agencies and authorities. There are two broad categories of municipal bonds: general obligation bonds and revenue bonds. General obligation bonds (GOs) are backed by the full faith and credit and taxing authority of the government issuer. General obligation bonds are either limited or unlimited tax bonds. Limited tax bonds are issued by government entities whose taxing authority is limited to some extent by law or statute. For instance, a local government may face restrictions on the level of property taxes it can levy on property owners. State and local entities may also issue special tax bonds, which are supported by a specific tax. For instance, a highway project may be financed by a special gasoline tax levied to pay for the bonds. Unlimited tax bonds are issued by government

entities that are not restricted by law or statute in the amount of taxes they can levy; however, there may be some political limitations.

Municipal revenue bonds are backed by a specific project or government authority, and they are serviced by fees and revenues paid by users of the government entity. Revenue bonds are backed by public power authorities, nonprofit hospitals, housing authorities, transportation authorities, and other public and quasi-public entities.

Effective March 13, 2000, well-capitalized state member banks were authorized by the Gramm-Leach-Bliley Act (GLB Act) to deal in, underwrite, purchase, and sell municipal revenue bonds without any limitations based on the bank's capital. (See 12 USC 24 (seventh).) Previously, banks were limited to only underwriting, dealing in, or investing in, without limitation, general obligation municipal bonds backed by the full faith and credit of an issuer with general powers of taxation. Member banks could invest in, but not underwrite or deal in, municipal revenue bonds, but the purchases and sales of such investment securities for any obligor were limited to 10 percent of a member bank's capital and surplus. As a result of the GLB Act amendment, municipal revenue bonds are the equivalent of type I securities for well-capitalized state member banks.[2] (See SR-01-13.) Banks that are not well capitalized may engage in more limited municipal securities activities relating to type II and type III securities. For example, banks may also deal in, underwrite, or invest in revenue bonds that are backed by housing, university, or dormitory projects.

In addition to municipal bonds, state and local governments issue obligations to meet short-term funding needs. These obligations are normally issued in anticipation of some specific revenue. The types of debt issued include tax-anticipation notes (TANs), revenue-anticipation notes (TRANs), grants-anticipation notes (GANs), bond-anticipation notes (BANs), commercial paper, and others.

Because of the large number and diverse funding needs of state and local governments (over 50,000 state and local governments have issued debt in the United States), there is a wide variety of municipal securities. Some municipal security issues have complex structures that require an increased level of technical expertise to evaluate. As with all areas of banking, dealers who invest in complex instruments are expected to understand the characteristics of the instruments and how these instruments might affect their overall risk profile. While there are some large issuers, like the states of New York and California, most issuers are small government entities that place modest amounts of debt. Many of these issues are exempt from federal, state, and local income taxes; these exemptions, in part, determine the investor base for municipal bonds.

The customer base for tax-exempt municipal securities is investors who benefit from income that is exempt from federal income tax. This group includes institutional investors, such as insurance companies, mutual funds, and retail investors, especially individuals in high income-tax brackets.

Credit Risk

Municipal securities activities involve differing degrees of credit risk depending on the financial capacity of the issuer. Larger issuers of municipal securities are rated by nationally recognized rating agencies (Moody's, S&P, etc.). Other municipalities achieve an investment-grade rating through the use of credit enhancements, usually in the form of a standby letter of credit issued by a financial institution. Banks are also involved in underwriting and placing nonrated municipal securities. Nonrated issues are typically small and are placed with a limited number of investors. Liquidity in the secondary market is limited, and bank dealers rarely carry nonrated issues in trading inventory.

Management should take steps to limit undue concentrations of credit risk arising from municipal-security underwriting and dealing. Exposure to nonrated issuers should be approved through the bank's credit-approval process with appropriate documentation to support the issuer's financial capacity. Activity in nonrated issues outside the bank's target or geographic market should also be avoided. In addition,

2. The Office of the Comptroller of the Currency published final amendments to its investment securities regulation (12 CFR 1) on July 2, 2001. (See 66 *Fed. Reg.* 34784.)

exposure should be aggregated on a consolidated basis, taking into account additional credit risk arising from traditional banking products (loans, letters of credit, etc.).

Municipal Securities Rulemaking Board

The Securities Act Amendments of 1975 (15 USC 78o-4) extended a comprehensive network of federal regulation to the municipal securities markets. Pursuant to the act, municipal securities brokers and dealers are required to register with the SEC. The act also created a separate, self-regulatory body, the Municipal Securities Rulemaking Board (MSRB), to formulate working rules for the regulation of the municipal securities industry. The Federal Reserve is required to ensure compliance with those rules as they apply to state member banks.

A bank engaged in the business of buying and selling municipal securities must register with the SEC as a municipal securities dealer if it is involved in—

- underwriting or participating in a syndicate or joint account for the purpose of purchasing securities;
- maintaining a trading account or carrying dealer inventory; or
- advertising or listing itself as a dealer in trade publications, or otherwise holding itself out to other dealers or investors as a dealer.

Generally, a bank that buys and sells municipal securities for its investment portfolio or in a fiduciary capacity is not considered a dealer.

If a bank meets the SEC's criteria for registering as a municipal securities dealer, it must maintain a separately identifiable department or division involved in municipal securities dealing that is under the supervision of officers designated by the bank's board of directors. These designated officers are responsible for municipal securities dealer activities and should maintain separate records.

The Federal Reserve conducts a separate examination of the municipal securities dealer activities in banks that engage in such activities. This examination is designed to ensure compliance with the rules and standards formulated by the MSRB. For a complete description of the activities of a municipal securities dealer and detailed procedures performed by the Federal Reserve examiners, see the *Municipal Securities Dealer Bank Examination Manual* issued by the Board of Governors of the Federal Reserve System.

REPURCHASE AGREEMENTS AND SECURITIES LENDING

Repurchase agreements (repos) play an important role in the securities markets. A repo is the simultaneous agreement to sell a security and repurchase it at a later date. Reverse repos are the opposite side of the transaction, securities purchased with a later agreement to resell. From the dealer's perspective, a repo is a financing transaction (liability), and a reverse repo is a lending transaction (asset). Overnight repos are a one-day transaction; anything else is referred to as a "term repo." Approximately 80 percent of the repo market is overnight. Although any security can be used in a repurchase transaction, the overwhelming majority of transactions involve government securities.

Securities dealers use repos as an important source of liquidity. The majority of government securities trading inventory will typically be financed with repos. Reverse repos are used to obtain securities to meet delivery obligations arising from short positions or from the failure to receive the security from another dealer. Reverse repos also are an effective and low-risk means to invest excess cash on a short-term basis.

The repo rate is a money market rate that is lower than the federal funds rate due to the collateralized nature of the transaction. Opportunities also arise to obtain below-market-rate financing. This situation arises when demand exceeds supply for a specific bond issue and it goes on "special." Dealers who own the bond or control it under a reverse repo transaction can earn a premium by lending the security. This premium comes in the form of a below-market-rate financing cost on a repo transaction.

Many of the larger dealers also engage in proprietary trading of a matched book, which consists of a moderate to large volume of offsetting repos and reverse repos. The term "matched book" is misleading as the book is rarely perfectly matched. Although profit may be derived from the capture of a bid/ask spread on matched transactions, profit is more often

derived from maturity mismatches. In a falling-rate environment, traders lend long (reverse repos) and borrow short (repos). It is more difficult to profit in rising-rate environments because of the shape of the yield curve, which is usually upward-sloping. The overall size of the matched book and the length of the maturity mismatches will generally decline in a rising environment. Matched books are also used to create opportunities to control securities that may go on special, resulting in potential profit opportunities. Dealers engaging in matched-book trading provide important liquidity to the repo market.

Risk in a matched book should be minimized by establishing prudent limits on the overall size of the book, size of maturity mismatches, and restrictions on the maximum tenor of instruments. The overall risk of a matched book is usually small in relation to other trading portfolios. Maturity mismatches are generally short-term, usually 30 to 60 days, but may extend up to one year. Risk can be quickly neutralized by extending the maturity of assets or liabilities. Financial instruments (futures and forward rate agreements) can also be used to reduce risk.

Securities dealers may also engage in ''dollar-roll'' transactions involving mortgage-backed securities, which are treated as secured financings for accounting purposes. The ''seller'' of the security agrees to repurchase a ''substantially identical'' security from the ''buyer,'' rather than the same security. Many of the supervisory considerations noted above for repurchase agreements also apply to dollar-roll transactions. However, if the security to be repurchased is not substantially identical to the security sold, the transaction generally should be accounted for as a sale and not as a financing arrangement. The accounting guidance for ''substantially identical'' is described in American Institute of Certified Public Accountants (AICPA) Statement of Position 90-3, which generally requires debt instruments to have the same primary obligor or guarantor, the same form and type, the identical contractual interest rate, the same maturity or weighted average maturity, and other factors.

In addition, securities dealers may engage in securities lending or borrowing transactions. In substance, these transactions are very similar to repo transactions except the transactions have no stated maturity. The transactions are conducted through open-ended ''loan'' agreements that may be terminated on short notice by the lender or borrower. Although lending transactions have historically been centered in corporate debt and equity obligations, the market increasingly involves loans of large blocks of U.S. government and federal-agency securities. To participate in this market, a bank may lend securities held in its investment account or trading account. Like repos, securities are lent to cover fails (securities sold but not available for delivery) and short sales. Collateral for the transactions can consist of other marketable securities or standby letters of credit; however, the large majority of transactions are secured by cash. Investors are willing to lend securities due to the additional investment income that can be earned by investing the cash collateral. When a securities loan is terminated, the securities are returned to the lender and the collateral to the borrower.

Credit Risk

Since repurchase agreements and securities lending transactions are collateralized, credit risk is relatively minor if properly controlled. Some dealers have underestimated the credit risk associated with the performance of the counterparty and have not taken adequate steps to ensure their control of the securities serving as collateral. The market volatility of the securities held as collateral can also add to the potential credit risk associated with the transaction.

As an added measure of protection, dealers require customers to provide excess collateral. This excess is referred to as ''margin.'' The size of the margin will be a function of the volatility of the instrument serving as collateral and the length of the transaction. In addition to initial margin, term repos and security lending arrangements require additional margin if the value of the collateral declines below a specified level. Excess margin is usually returned to the counterparty if the value of the collateral increases. A daily ''mark-to-market'' or valuation procedure must be in place to ensure that calls for additional collateral are made on a timely basis. The valuation procedures should be independent of the trader and take into account the value of accrued interest on debt securities. It is important to point out that credit risk can arise from both asset transactions (reverse repos and securities borrowed) and liability transactions (repos and securities lent) because of market fluctua-

tions in collateral provided and received. Dealers should take steps to ensure that collateral provided is not excessive.

Policies and procedures should be in place to ensure transactions are conducted only with approved counterparties. Credit-limit approvals should be based on a credit analysis of the borrower. An initial review should be performed before establishing a relationship, with periodic reviews thereafter. Credit reviews should include an analysis of the bor-rower's financial statement, capital, management, earnings, business reputation, and any other relevant factors. Analyses should be performed in an independent department of the lender institution, by persons who routinely perform credit analyses. Analyses performed solely by the person managing the repo or securities lending programs are not sufficient. Credit and concentration limits should take into account other extensions of credit by other departments of the bank or affiliates. Procedures should be established to ensure that credit and concentration limits are not exceeded without proper authorization from management.

Other Uses and Implications of Securities Lending

In addition to lending their own securities, financial institutions have become increasingly involved in lending customers' securities held in custody, safekeeping, trust, or pension accounts. These activities are typically organized within the bank's trust department. Not all institutions that lend securities or plan to do so have relevant experience. Because the securities available for lending often greatly exceed the demand, inexperienced lenders may be tempted to ignore commonly recognized safeguards. Bankruptcies of broker-dealers have heightened regulatory sensitivity to the potential for problems in this area.

Fees received on securities loans are divided between the custodial institution and the customer account that owns the securities. In situations involving cash collateral, part of the interest earned on the temporary investment of cash is returned to the borrower and the remainder is divided between the lender institution and the customer account that owns the securities.

In addition to a review of controls, examiners should take steps to ensure that cash collateral is invested in appropriate instruments. Cash should be invested in high-quality, short-term money market instruments. Longer-term floating-rate instruments may also be appropriate; however, illiquid investments and products with customized features (for example, structured notes with imbedded options) should be avoided. Several banks have reported significant losses associated with inappropriate investments in securities lending areas.

Securities-Lending Capacity

Securities lending may be done in various capacities and with differing associated liabilities. It is important that all parties involved understand in what capacity the lender institution is acting. The relevant capacities are described below.

Principal

A lender institution offering securities from its own account is acting as principal. A lender institution offering customers' securities on an undisclosed basis is also considered to be acting as principal.

Agent

A lender institution offering securities on behalf of a customer-owner is acting as an agent. To be considered a bona fide or ''fully disclosed'' agent, the lending institution must disclose the names of the borrowers to the customer-owners and the names of the customer-owners to the borrowers (or give notice that names are available upon request). In all cases, the agent's compensation for handling the transaction should be disclosed to the customer-owner. Undisclosed agency transactions, that is, ''blind brokerage'' transactions in which participants cannot determine the identity of the contra party, are treated as if the lender institution were the principal.

Directed Agent

A lender institution that lends securities at the

direction of the customer-owner is acting as a directed agent. The customer directs the lender institution in all aspects of the transaction, including to whom the securities are loaned, the terms of the transaction (rebate rate and maturity/call provisions on the loan), acceptable collateral, investment of any cash collateral, and collateral delivery.

Fiduciary

A lender institution that exercises discretion in offering securities on behalf of and for the benefit of customer-owners is acting as a fiduciary. For supervisory purposes, the underlying relationship may be as agent, trustee, or custodian.

Finder

A finder brings together a borrower and a lender of securities for a fee. Finders do not take possession of the securities or collateral. Delivery of securities and collateral is directly between the borrower and the lender, and the finder does not become involved. The finder is simply a fully disclosed intermediary.

MONEY MARKET INSTRUMENTS

In addition to bank-eligible securities activities, banks may engage in a substantial volume of trading in money market instruments. Federal funds, banker's acceptances, commercial paper, and certificates of deposit are forms of money market instruments. While these instruments may be used as part of the overall funding strategy, many firms actively engage in discretionary or proprietary trading in these instruments. As in matched-book repo activities, profits from trading money market instruments are derived from the bid/ask spread on matched transactions and the net interest spread from maturity mismatches.

This activity may result in overall money market arbitrage. Arbitrage is the coordinated purchase and sale of the same security or its equivalent, for which there is a relative price imbalance in the market. The objective of such activity is to obtain earnings by taking advantage of changing yield spreads. Arbitrage can occur with items such as Eurodollar CDs, banker's acceptances, and federal funds, and with financial instruments such as futures and forwards.

Although the risk of money market trading is relatively straightforward, the potential risk can be significant based on the volume of trading and size of the mismatches. Despite the potential risk, these activities may offer attractive profit opportunities if effectively controlled. Short-term interest-rate markets are very liquid, and risk can be quickly neutralized by changing the maturity profile of either assets or liabilities. Financial instruments (such as futures and forward rate agreements) can also be an effective tool to manage risk. Money market trading may be managed as a separate product line or may be integrated with trading in other interest-rate products (such as swaps, caps, or floors). Examiners should take steps to ensure that appropriate limits are in place for money market trading, including restrictions on aggregate notional size, the size of maturity mismatches, and the maximum tenor of instruments.

Federal Funds

Commercial banks actively use the federal funds market as a mechanism to manage fluctuations in the size and composition of their balance sheet. Federal funds are also an efficient means to manage reserve positions and invest excess cash on a short-term basis. Although transactions are generally unsecured, they can also be secured. The majority of transactions are conducted overnight; however, term transactions are also common. Federal funds trading will often involve term transactions in an attempt to generate positive net interest spread by varying the maturities of assets and liabilities.

Banks have traditionally engaged in federal funds transactions as principal, but an increasing number of banks are conducting business as agent. These agency-based federal funds transactions are not reported on the agent's balance sheet. Dealer banks may also provide federal funds clearing services to their correspondent banks.

Banker's Acceptances

Banker's acceptances are time drafts drawn on

and accepted by a bank. They are the customary means of effecting payment for merchandise sold in import-export transactions, as well as a source of financing used extensively in international trade. Banker's acceptances are an obligation of the acceptor bank and an indirect obligation of the drawer. They are normally secured by rights to the goods being financed and are available in a wide variety of principal amounts. Maturities are generally less than nine months. Acceptances are priced like Treasury bills, with a discount figured for the actual number of days to maturity based on a 360-day year. The bank can market acceptances to the general public but must guarantee their performance.

Commercial Paper

Commercial paper is a generic term that is used to describe short-term, unsecured promissory notes issued by well-recognized and generally sound corporations. The largest issuers of commercial paper are corporations, bank holding companies, and finance companies, which use the borrowings as a low-cost alternative to bank financing. Commercial paper is exempt from registration under the Securities Act of 1933 if it meets the following conditions:

- prime quality and negotiable
- not ordinarily purchased by the general public
- issued to facilitate current operational business requirements
- eligible for discounting by a Federal Reserve Bank
- maturity does not exceed nine months

Actively traded commercial paper is ordinarily issued in denominations of at least $100,000 and often in excess of $1 million. Commercial paper issuers usually maintain unused bank credit lines to serve as a source of back-up liquidity or contingency financing, principally in the form of standby letters of credit. Major commercial paper issuers are rated by nationally recognized rating agencies (Moody's, S&P, and others). Other issuers achieve higher ratings through the use of a credit enhancement, usually in the form of a standby letter of credit issued by a financial institution.

Based on Supreme Court rulings, commercial paper was considered a security for purposes of the former Glass-Steagall Act. As a result, banks were generally prohibited from underwriting and dealing in commercial paper. Despite this restriction, banks participated in this market in an "agency capacity." When establishing a commercial paper dealership, many of the larger banks pursued business through an aggressive interpretation of an agency-transaction role. In practice, bank dealers engage in riskless-principal or best-efforts placement of commercial paper. Taking this logic a step further, others actively engage in competitive bidding and intraday distribution of newly issued paper. Because the paper settles on a same-day basis, the transactions are never part of the official end-of-day records of the bank. Although this technical point has been the subject of discussion, the practice has not been subject to regulatory challenge.

Commercial paper may be issued as an interest-bearing instrument or at a discount. Market trades are priced at a current yield, net of accrued interest due the seller or, if the commercial paper was issued at a discount, at a discount figured for the actual number of days to maturity based on a 360-day year.

The sale of commercial paper issued by bank affiliates must conform to legal restrictions and avoid conflicts of interest. Each certificate and confirmation should disclose the facts that the commercial paper is not a deposit and is not insured by the Federal Deposit Insurance Corporation.

Certificates of Deposit

Negotiable certificates of deposit (CDs) issued by money-center banks are actively traded in denominations of $100,000 to $1 million. Interest generally is calculated on a 360-day year and paid at maturity. Secondary-market prices are computed based on current yield, net of accrued interest due the seller. Eurodollar CDs trade like domestic CDs except their yields are usually higher and their maturities are often longer.

Credit-Risk and Funding Concentrations

In addition to market risk, money market policies and guidelines should recognize the credit risk

inherent in these products. Federal funds sold and deposit placements are essentially unsecured advances. To avoid undue concentrations of credit risk, activity with these products should be limited to approved counterparties. Limits should be established for each prospective counterparty. Tenor limits should also be considered to reduce the potential for credit deterioration over the life of the transaction. The size of limits should be based on both anticipated activity and the counterparty's financial capacity to perform. The credit analysis should be performed by qualified individuals in a credit department that is independent from the money market dealing function. In assessing the creditworthiness of other organizations, institutions should not rely solely on outside sources, such as standardized ratings provided by independent rating agencies, but should perform their own analysis of a counterparty's or issuer's financial strength. At a minimum, limits should be reassessed and credit analyses updated annually. Once established, limits should be monitored with exceptions documented and approved by the appropriate level of senior management. Exposure should also be aggregated on a consolidated basis with any other credit exposure arising from other product areas. Exposure to foreign bank counterparties should also be aggregated by country of domicile to avoid country-risk concentrations. The limit structure should be reviewed to ensure compliance with the requirements of Regulation F, Limitations on Interbank Liabilities, which places prudent limits on credit exposure to correspondent banks.

Maintaining a presence in the wholesale funding markets requires a strong reputation and increases potential liquidity risk. The prolonged use of a large volume of purchased funds to support a money market trading operation could also reduce the capacity to tap this market, if needed, for core funding. Guidelines should be in place to diversify sources of funding. Contingency plans should include strategies to exit or reduce the profile in these markets if the situation warrants.

OPERATIONS AND INTERNAL CONTROLS

A bank dealer's operational functions should be designed to regulate the custody and movement of securities and to adequately account for trading transactions. Because of the dollar volume and speed of trading activities, operational inefficiencies can quickly result in major problems.

Sound Practices for Front- and Back-Office Operations

Bank dealer activities vary significantly among financial institutions, depending on the size and complexity of the trading products; trading, back-office, and management expertise; and the sophistication of systems. As a result, practices, policies, and procedures in place in one institution may not be necessary in another. The adequacy of internal controls requires sound judgment on the part of the examiner. The following is a list of policies and procedures that should be reviewed:

- Every organization should have comprehensive policies and procedures in place that describe the full range of bank dealer activities performed. These documents, typically organized into manuals, should at a minimum address front- and back-office operations; reconciliation guidelines and frequency; revaluation and accounting guidelines; descriptions of accounts; broker policies; a code of ethics; and the risk-measurement and -management methods, including a comprehensive limit structure.
- Every institution should have existing policies and procedures to ensure the segregation of duties among the trading, control, and payment functions.
- Revaluation sources should be independent from the traders for accounting purposes, risk oversight, and senior management reporting, although revaluation of positions may be conducted by traders to monitor positions.
- Trader and dealer telephone conversations should be taped to facilitate the resolution of disputes and to serve as a valuable source of information to auditors, managers, and examiners.
- Trade tickets and blotters (or their electronic equivalents) should be timely and complete to allow for easy reconciliation and for appropriate position and exposure monitoring. The volume and pace of trading may warrant virtually simultaneous creation of these records in some cases.

- Computer hardware and software applications must have the capacity to accommodate the current and projected level of trading activity. Appropriate disaster-recovery plans should be tested regularly.
- Every institution should have a methodology to identify and justify any off-market transactions. Ideally, off-market transactions would be forbidden.
- A clear institutional policy should exist for personal trading. If such trading is permitted at all, procedures should be established to avoid even the appearance of conflicts of interest.
- Every institution should ensure that the management of after-hours and off-premises trading, if permitted at all, is well documented so that transactions are not omitted from the automated blotter or the bank's records.
- Every institution should ensure that staff is both aware of and complies with internal policies governing the trader-broker relationship.
- Every institution that uses brokers should monitor the patterns of broker usage, be alert to possible undue concentrations of business, and review the list of approved brokers at least annually.
- Every institution that uses brokers should establish a policy that minimizes name substitutions of brokered transactions. All such transactions should be clearly designated as switches, and relevant credit authorities should be involved.
- Every institution that uses brokers for foreign-exchange transactions should establish a clear statement forbidding the lending or borrowing of brokers' points as a method to resolve discrepancies.
- Every organization should have explicit compensation policies to resolve disputed trades for all traded products. Under no circumstances should "soft-dollar" (the exchange of services in lieu of dollar compensation) or off-the-books compensation be permitted for dispute resolution.
- Every institution should have know-your-customer policies, and they should be understood and acknowledged by trading and sales staff.
- The designated compliance officer should perform a review of trading practices at least annually. In institutions with a high level of trading activity, interim reviews may be warranted.
- The organization should have an efficient confirmation-matching process that is fully independent from the dealing function. Documentation should be completed and exchanged as close to completion of a transaction as possible.
- Auditors should review trade integrity and monitoring on a schedule in accordance with its appropriate operational-risk designation.
- Organizations that have customers who trade on margin should establish procedures for collateral valuation and segregated custody accounts.

Fails

In some cases, a bank may not receive or deliver a security by settlement date. "Fails" to deliver for an extended time or a substantial number of cancellations are sometimes characteristic of poor operational control or questionable trading activities.

Fails should be controlled by prompt reporting and follow-up procedures. The use of multi-copy confirmation forms enables operational personnel to retain and file a copy by settlement date and should allow for prompt fail reporting and resolution.

Revaluation

The frequency of independent revaluation should be driven by the level of an institution's trading activity. Trading operations with high levels of activity may need to perform daily revaluation; however, it is important to note that independent revaluations are less critical when inventory is turning over quickly or end-of-day positions are small. In these situations, the majority of profit and loss is realized rather than unrealized. Only unrealized profit and loss on positions carried in inventory are affected by a revaluation. At a minimum, every institution should conduct an independent revaluation at the end of each standard accounting period (monthly or quarterly). There will be situations when certain securities will be difficult to price due to lack of liquidity or recent trading activity. If management relies on trader estimates in these situa-

tions, a reasonableness test should be performed by personnel who are independent from the trading function. A matrix-pricing approach may also be employed. This involves the use of prices on similar securities (coupon, credit quality, and tenor) to establish market prices.

Control of Securities

Depository institutions need to adopt procedures to ensure that ownership of securities is adequately documented and controlled. While this documentation and control once involved taking physical possession of the securities either directly or through a third-party custodian, the securities markets are quickly moving to a book-entry system. In this context, safekeeping is more of a concept than a reality. As the markets change, documenting the chain of ownership becomes the primary mechanism to prevent losses arising from a counterparty default. This documentation involves the matching of incoming and outgoing confirmations and frequent reconcilements of all accounts holding securities (Federal Reserve, customer, custodian, and other dealers). When the dealer holds securities on behalf of its customers, similar safeguards also need to be in place. Although this documentation process can be burdensome, it is necessary to protect a dealer's interest in securities owned or controlled. Many active dealers have automated the reconcilement and matching process. This reduces the potential for human error and increases the likelihood that exceptions can be uncovered and resolved quickly.

Because of the relatively short periods of actual ownership associated with repurchase agreements, potential losses could be significant if prudent safeguards are not followed. Significant repo volume or matched-book trading activities only heighten this concern. To further protect their interests, dealers should enter into written agreements with each prospective repurchase-agreement counterparty. Although the industry is moving toward standardized master agreements, some degree of customization may occur. The agreements should be reviewed by legal counsel for their content and compliance with established minimum documentation standards. In general, these agreements should specify the terms of the transaction and the duties of both the buyer and seller. At a minimum, provisions should cover the following issues:

- acceptable types and maturities of collateral securities
- initial acceptable margin for collateral securities of various types and maturities
- margin maintenance, call, default, and sellout provisions
- rights to interest and principal payments
- rights to substitute collateral
- individuals authorized to transact business on behalf of the depository institution and its counterparty

Written agreements should be in place before commencing activities.

TRADING AND CAPITAL-MARKETS ACTIVITIES MANUAL

The *Trading and Capital-Markets Activities Manual*, developed by the Federal Reserve System, is a valuable tool to help examiners understand the complex and often interrelated risks arising from capital-markets activities. The products addressed in the previous subsections and their associated risks are covered in greater detail in the manual.

As noted in the preceding sections, and further addressed in the *Trading and Capital-Markets Activities Manual*, other trading instruments could be included in the bank dealer or money market trading operation. Financial instruments such as futures and forward rate agreements are often used to modify or hedge the risk associated with cash instruments (dealer inventory and money market positions). The bank dealer may also be involved in other instruments including asset-backed securities (mortgage-backed and consumer-receivable-backed). Other departments of the bank may also use securities products as part of an unrelated trading activity. For example, interest-rate-swap traders often use cash bonds to hedge or modify market-risk exposure. In this capacity, the swap desk would be a customer of the government securities dealer. These overlaps in product focus and usage make it critical for examiners to understand the organizational structure and business strategies before establishing examination scope.

OTHER ISSUES

Intercompany Transactions

Examiners should review securities and repurchase-agreement transactions with affiliates to determine compliance with sections 23A and 23B of the Federal Reserve Act. Money market transactions may also be subject to limitations under section 23A; however, these restrictions generally do not apply to transactions between bank subsidiaries that are80 percent or more commonly owned by a bank holding company. Intercompany transactions between securities underwriting affiliates and their bank affiliates should be carefully reviewed to ensure compliance with Board operating standards and sections 23A and 23B.

Agency Relationships

Many dealer banks engage in securities transactions only in an agency capacity. Acting as an agent means meeting customers' investment needs without exposing the firm to the price risk associated with dealing as principal. Risk is relatively low as long as appropriate disclosures are made and the bank does not misrepresent the nature or risk of the security.

Agency-based federal funds transactions are also becoming more common. By serving only as an agent to facilitate the transaction, a bank can meet its correspondent's federal funds needs without inflating the balance sheet and using capital. Examiners should review agency-based

money market transactions to ensure that the transactions are structured in a manner that insulates the bank from potential recourse, either moral or contractual. If legal agreements are not structured properly, the courts could conclude that the agent bank was acting a principal. In this situation, the loss could be recognized by the agent bank, not its customer.

Although no single feature can determine whether an agency relationship really exists, the courts have recognized a variety of factors in distinguishing whether the persons to whom "goods" were transferred were buyers or merely agents of the transferor. Although some of these distinguishing factors may not apply to federal-funds transactions because they involve the transfer of funds rather than material goods, some parallels can be drawn. An agency relationship would appear to encompass, although not necessarily be limited to, the following elements:

- The agent bank must agree to act on behalf of the seller of the federal funds ("seller") and not on its own behalf.
- The agent should fully disclose to all parties to the transaction that it is acting as agent on behalf of the seller and not on its own behalf.
- The seller, not the agent bank, must retain title to the federal funds before their sale to a purchasing institution.
- The seller, not the agent bank, must bear the risk of loss associated with the federal-funds sale.
- The agent bank's authority in selling federal funds and accounting for these sales to the seller should be controlled by the seller or by some guidelines to which the seller has agreed. The agent bank should sell only to those banks stipulated on a list of banks approved, reviewed, and confirmed periodically by the seller bank.
- The agent bank should be able to identify the specific parties (sellers and purchasers) to a federal-funds sale and the amount of each transaction for which the agent has acted.
- The agent bank's compensation should generally be based on a predetermined fee schedule or percentage rate (for example, a percentage based on the number or size of transactions). The agent should generally not receive compensation in the form of a spread over a predetermined rate that it pays to the seller. (If the agent bank's compensation is in the form of a spread over the rate it pays to the seller, this situation would appear to be more analogous to acting as a principal and suggests that the transactions should be reported on the "agent's" balance sheet.)

By structuring agency agreements to include provisions that encompass these factors and by conducting agency activities accordingly, agent banks can lower the possibility that they would be considered a principal in the event of a failure of a financial institution that had purchased funds through the agent. Generally, as a matter of prudent practice, each bank acting as an agent should have written agreements with principals encompassing the above elements and have a written opinion from legal counsel as to the bona fide nature of the agency relationships.

Selling through an agent should not cause a bank to neglect a credit evaluation of the ultimate purchasers of these funds. Under the more traditional mode of conducting federal-funds transactions, banks sell their federal funds to other banks, which in many instances are larger regional correspondents. These correspondent banks in turn may resell the federal funds to other institutions. Since the correspondent is acting as a principal in these sales, the banks selling the funds to the correspondent are generally not concerned about the creditworthiness of those purchasing the federal funds from the correspondent/principal. Rather, the original selling banks need to focus solely on the creditworthiness of their correspondent banks, with which they should be quite familiar.

However, when conducting federal-funds sales through an agent, selling banks, in addition to considering the financial condition of their agent, should also subject the ultimate purchasing banks to the same type of credit analysis that would be considered reasonable and prudent if the seller banks were lending directly to the ultimate borrowers rather than through agents. Banks selling federal funds through agents should not relinquish their credit-evaluation responsibilities to their agent banks.

REPORTING

Securities held for trading purposes and the income and expense that results from trading activities should be isolated by specific general ledger or journal accounts. The balances in those accounts should be included in the

appropriate reporting categories for regulatory reporting.

Instructions for the Consolidated Report of Condition and Income (call report) require that securities, derivative contracts, and other items held in trading accounts be reported consistently at market value, or at the lower of cost or market value, with unrealized gains and losses recognized in current income. For further detail, refer to the glossary section of the call report instructions under "trading account." With either method, the carrying values of trading-security inventories should be evaluated periodically (monthly or quarterly), based on current market prices. The increase or decrease in unrealized appreciation or depreciation resulting from that revaluation should be credited or charged to income. Periodic independent revaluation is the most effective means of measuring the trading decisions of bank management.

For reporting purposes, the trading department's income should include not only revaluation adjustments, but also profits and losses from the sale of securities, and other items related to the purchase and sale of trading securities. Interest income from trading assets, salaries, commissions, and other expenses should be excluded from trading income for reporting purposes; however, these items should be considered by management when evaluating the overall profitability of the business.

When the lender institution is acting as a fully disclosed agent, securities-lending activities need not be reported on the call report. However, lending institutions offering indemnification against loss to their customer-owners should report the associated contingent liability gross in Schedule RC-L as "other significant commitments and contingencies."

Recordkeeping and Confirmation Rules

Regulation H contains rules establishing uniform standards for bank recordkeeping, confirmation, and other procedures in executing securities transactions for bank customers. The regulation applies, in general, to those retail commercial activities where the bank effects securities transactions at the direction and for the account of customers. The purpose of the rules is to ensure that purchasers of securities are provided adequate information concerning a transaction and that adequate records and controls are maintained for securities transactions. Under the rules, banks are required to maintain certain detailed records concerning securities transactions, to provide written confirmations to customers under certain circumstances, and to establish certain written policies and procedures. The requirements generally do not apply to banks that make 200 or fewer securities transactions a year for customers (exclusive of transactions in U.S. government and agency obligations) and to transactions subject to the requirements of the MSRB.

Due Bills

A "due bill" is an obligation that results when a firm sells a security or money market instrument and receives payment, but does not deliver the item sold. Due bills issued should be considered as borrowings by the issuing firm, and alternatively, due bills received should be considered as lending transactions. Dealers should not issue due bills as a means of obtaining operating funds or when the underlying security can be delivered at settlement. Customers of the dealer enter transactions with an implicit understanding that securities transactions will be promptly executed and settled unless there is a clear understanding to the contrary. Consequently, dealers should promptly disclose the issuance of a due bill to a customer when funds are taken but securities or money market instruments are not delivered to the customer. Such disclosure should reference the applicable transaction; state the reason for the creation of a due bill; describe any collateral securing the due bill; and indicate that to the extent the market value of the collateral is insufficient, the customer may be an unsecured creditor of the dealer.

Due bills that are outstanding for more than three days and are unsecured could be construed as funding and should be reported as "liabilities for borrowed monies" on the call report. These balances are subject to reserve requirements imposed by Regulation D.

ESTABLISHING SCOPE

Obtaining an overview of the organization, management structure, products offered, and control

environment is a critical step in the examination process. Based on this assessment, an examiner should determine the appropriate resources and skill level. In situations where an institution is active in either the government or municipal securities markets, it is essential to allocate additional resources for GSA and MSRB compliance. The assigned examiners should be familiar with the provisions of GSA and MSRB as well as with the related examination procedures. For active proprietary trading units, it is important to assign examiners who have a reasonable working knowledge of the concepts outlined in the *Trading Activities Manual*.

1. To determine if the policies, practices, procedures, and internal controls regarding bank dealer activities are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the trading portfolio for credit quality and marketability.
4. To determine the scope and adequacy of the audit compliance functions.
5. To determine compliance with applicable laws and regulations.
6. To ensure investor protection.
7. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of law or regulations have been noted.

1. If selected for implementation, complete or update the Bank Dealer Activities section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest review done by internal/external auditors from the examiner assigned "Internal Control," and determine if corrections have been accomplished.
4. Request that the bank provide the following schedules:
   a. An aged schedule of securities that have been acquired as a result of underwriting activities.
   b. An aged schedule of trading account securities and money market instruments held for trading or arbitrage purposes. Reflect commitments to purchase and sell securities and all joint account interests.
   c. A schedule of short-sale transactions.
   d. An aged schedule of due bills.
   e. A list of bonds borrowed.
   f. An aged schedule of "fails" to receive or deliver securities on unsettled contracts.
   g. A schedule of approved securities borrowers and approved limits.
   h. A schedule of loaned securities.
   i. A schedule detailing account names and/or account numbers of the following customer accounts:
      - Own bank trust accounts.
      - Own bank permanent portfolio.
      - Affiliated banks' permanent portfolio accounts.
      - Personal accounts of employees of other banks.
      - Accounts of brokers or other dealers.
      - Personal accounts of employees of other brokers or dealers.
   j. A list of all joint accounts entered into since the last examination.
   k. A list of underwriting since the last examination and whether such securities were acquired by negotiation or competitive bid.
   l. A list of all financial advisory relationships.
5. Agree balances of appropriate schedules to general ledger and review reconciling items for reasonableness.
6. Determine the extent and effectiveness of trading policy supervision by:
   a. Reviewing the abstracted minutes of meetings of the board of directors and/or of any appropriate committee.
   b. Determining that proper authorization for the trading officer or committee has been made.
   c. Ascertaining the limitations or restrictions on delegated authorities.
   d. Evaluating the sufficiency of analytical data used in the most recent board or committee trading department review.
   e. Reviewing the methods of reporting by department supervisors and internal auditors to ensure compliance with established policy and law.
   f. Reaching a conclusion about the effectiveness of director supervision of the bank's trading policy. Prepare a memo for the examiner assigned "Duties and Responsibilities of Directors" stating your conclusions. All conclusions should be supported by factual documentation.

   (Before continuing, refer to steps 14 and 15. They should be performed in conjunction with the remaining examination steps.)

7. Ascertain the general character of underwriting and direct placement activities and the effectiveness of department management by reviewing underwriter files and ledgers, committee reports and offering statements to determine:
   a. The significance of underwriting activities and direct placements of type III securities as reflected by the volume of sales and profit or loss on operations. Compare current data to comparable prior periods.
   b. Whether there is a recognizable pattern in:
      - The extent of analysis of material

information relating to the ability of the issuer to service the obligation.
- Rated quality of offerings.
- Point spread of profit margin for unrated issues.
- Geographic distribution of issuers.
- Syndicate participants.
- Bank's trust department serving as corporate trustee, paying agent and transfer agent for issuers.
- Trustee, paying agent and transfer agent business being placed with institutions that purchase a significant percentage of the underwriter or private placement offering.

c. The volume of outstanding bids. Compare current data to comparable prior periods.
d. The maturity, rated quality and geographic distribution of takedowns from syndicate participations.
e. The extent of transfer to the bank's own or affiliated investment or trading portfolios or to trust accounts and any policies relating to this practice.

8. Determine the general character of trading account activities and whether the activities are in conformance with stated policy by reviewing departmental reports, budgets and position records for various categories of trading activity and determining:
   a. The significance of present sales volume compared to comparable prior periods and departmental budgets.
   b. Whether the bank's objectives are compatible with the volume of trading activity.
9. Review customer ledgers, securities position ledgers, transaction or purchase and sales journals and analyze the soundness of the bank's trading practices by:
   a. Reviewing a representative sample of agency and contemporaneous principal trades and determining the commission and price mark-up parameters for various sizes and types of transactions.
   b. Selecting principal transactions that have resulted in large profits and determining if the transaction involved:
      - ''Buy-backs'' of previously traded securities.
      - Own bank or affiliated bank portfolios.
      - A security that has unusual quality and maturity characteristics.
   c. Reviewing significant inventory positions taken since the prior examination and determining if:
      - The quality and maturity of the inventory position was compatible with prudent banking practices.
      - The size of the position was within prescribed limits and compatible with a sound trading strategy.
   d. Determining the bank's exposure on offsetting repurchase transactions by:
      - Reviewing the maturities of offsetting re-po and reverse re-po agreements to ascertain the existence, duration, amounts and strategy used to manage unmatched maturity ''gaps'' and extended (over 30 days) maturities.
      - Reviewing records since the last examination to determine the aggregate amounts of:
        — Matched repurchase transactions.
        — Reverse re-po financing extended to one or related firms(s).
      - Performing credit analysis of significant concentrations with any single or related entity(ies).
      - Reporting the relationship of those concentrations to the examiners assigned ''Concentration of Credits'' and ''Funds Management.''
10. Determine the extent of risk inherent in trading account securities which have been in inventory in excess of 30 days and:
    a. Determine the dollar volume in extended holdings.
    b. Determine the amounts of identifiable positions with regard to issue, issuer, yield, credit rating, and maturity.
    c. Determine the current market value for individual issues which show an internal valuation mark-down of 10 percent or more.
    d. Perform credit analyses on the issuers of non-rated holdings identified as significant positions.
    e. Perform credit analyses on those issues with valuation write-downs considered significant relative to the scope of trading operations.
    f. Discuss plans for disposal of slow moving inventories with management and determine the reasonableness of those plans in light of current and projected market trends.
11. Using an appropriate technique, select issues

from the schedule of trading account inventory. Test valuation procedures by:

a. Reviewing operating procedures and supporting workpapers and determining if prescribed valuation procedures are being followed.
b. Comparing bank prepared market prices, as of the most recent valuation date, to an independent pricing source (use trade date "bid" prices).
c. Investigating any price differences noted.

12. Using an appropriate technique, select transactions from the schedule of short sales and determine:
    a. The degree of speculation reflected by basis point spreads.
    b. Present exposure shown by computing the cost to cover short sales.
    c. If transactions are reversed in a reasonable period of time.
    d. If the bank makes significant use of due-bill transactions to obtain funds for its banking business:
        - Coordinate with the examiner assigned "Review of Regulatory Reports" to determine if the bank's reports of condition reflect due bill transactions as "liabilities for borrowed money."
        - Report amounts, duration, seasonal patterns and budgeted projections for due bills to the examiner assigned "Funds Management."
13. If the bank is involved in agency-based federal funds activity:
    a. At the beginning or in advance of each examination of a banking organization which has been acting as an agent in the purchase and sale of federal funds for other institutions, examiners should obtain certain information which will help them determine the nature and extent of this activity. The information should include:
        - A brief description of the various types of agency relationships (i.e., involving federal funds or other money market activities) and the related transactions.
        - For each type of agency relationship, copies of associated forms, agency agreements, documents, reports and legal opinions. In addition, if the banking organization has documented its analysis of the risks associated with the activity, a copy of the analysis should be requested by the examiner.
        - For each type of agency relationship, a summary of the extent of the activity including:
            — The number of institutions serviced as principals.
            — The size range of the institutions (i.e., institutions serviced have total assets ranging from $_____ to $_____).
            — General location of sellers and purchasers serviced under agency relationships (i.e., New York State, Midwest, etc.)
            — Estimate of average daily volume of federal funds or money market instruments purchased and sold under agency relationships and the high and low volume over the period since the last examination inquiry (or since activity was begun, if more recent).
            — Names of individuals in the bank that are responsible for these agency relationships.
        - A historical file of this information should be maintained in order to determine the nature, extent and growth of these activities over time.
    b. Once the examination work in this area has been started, the examiner should attempt to discern any situation, activity or deficiency in this area that might suggest that an agency relationship does *not* actually exist. A negative response to the following examination guidelines section dealing with agency agreements may signal such a deficiency. In addition, any other money market agency relationships that involve new or unusual financial transactions should be evaluated to determine the nature of the risks involved and compliance, to the extent applicable, with the guidelines.
    c. The examiner should determine that the banking organization's written policies, procedures, and other documentation associated with this activity are consistent with the Federal Reserve System's Examination Guidelines. If the bank does not have written policies the examiner should strongly advise that they be developed due to the complex nature of this activity and the potential risks associated with it.
    d. After reviewing the policies, procedures,

and appropriate documentation, the examiner should be able to respond positively to the following questions:

- Banking organizations acting as *agents in the sale of federal funds*[1]
  - — Has this form of activity been approved by the board of directors?
  - — Are the bank's individual agency arrangements and transactions:
    - supported by written agency agreements, and
    - reviewed and approved by appropriate officers?
  - — Do the written agency agreements that support this activity include provisions indicating that (a negative answer may indicate that the bank is not in fact an agent):
    - the agent bank will be acting *on behalf of the original or principal seller of federal funds ("seller")* in conducting these activities and not on the agent bank's own behalf?
    - the agency relationship will be fully disclosed to all banks involved in the transactions?
    - the seller, and not the agent bank, must retain legal title to the federal funds before they are sold to a third party bank?
    - the seller, and not the agent bank, bears the risk of loss?
    - the agent bank's authority in selling federal funds and in accounting for this activity to the seller should be controlled by the seller or by standards to which it has agreed? To implement this, does the agreement or its attachments include the following seller-approved items:
      1. lists of banks to whom the agent may sell federal funds,[2] and
      2. limits on the amounts that can be sold to these banks?
  - — Does the agent have a written opinion from its legal counsel as to the bona fide nature of the agency relationship?
  - — Does the accounting and reporting system of the agent bank *enable* it to account for the federal funds transactions on a period basis (i.e., at least weekly) to the sellers? (Although more frequent accounting may not be required by the sellers, the agent on any day should have the capacity to identify for the seller the banks to whom the seller's funds have been sold.)
  - — Does the agent's accounting system identify *each bank* which has purchased federal funds from a particular seller bank and include (at least) the following information for *each bank* in which the funds are being invested?[3]
    - information to clearly identify the name and location of the bank (or other entity)
    - amount of federal funds sold and amount of interest earned
    - terms of transaction, and maturity date
    - lending limits agreed to
  - — Does the agent bank actually disclose to banks or other organizations that are part of these agency-based transactions that it is acting as agent?
  - — Is the agent bank's compensation in the form of a predetermined fee schedule or percentage rate based, for example, on the size of transactions, as opposed to compensation in the form of a spread over the rate that it pays to the seller bank? (If the agent bank's compensation is in the form of a spread over the rate it pays to the selling bank, this situation would appear to be more akin to acting as an intermediary and suggests that the

1. Although it is conceivable that a purchaser could engage an agent to *obtain* federal funds on its behalf, these guidelines focus primarily on situations where the seller has engaged an agent to sell federal funds on its behalf because the associated risks of such transactions are borne by the sellers and their agents.

2. Seller banks could conceivably design their lists of approved banks to encompass a large number of financially sound institutions and still be considered to be fulfilling this supervisory requirement.

3. The entities referred to as "ultimate purchasers" or "ultimate borrowers" are those that have the *responsibility to repay* the original seller bank, and not any intervening agents that may pass on the federal funds to these purchasers.

transactions should be reported on its balance sheet.)

- Banking organizations that are involved in agency-based federal funds relationships as *sellers*
  - — Does the bank support its transactions with written agency agreements?
  - — Does the seller bank evaluate the credit worthiness of the ultimate borrowers of federal funds and establish limits for each and are these limits periodically reviewed at least every six months?[3,4]
  - — Does the bank periodically (i.e., at least weekly) receive an accounting from the agent which includes the following information for *each bank* to whom the seller bank's federal funds were sold?
    - information to identify name and location of bank
    - amount of federal funds sold and interest earned
    - federal funds sales limits agreed to (if the seller bank is a principal)
  - — Is the bank's management and board of directors aware of and have they approved the agency relationship?
- Do internal and/or external auditors periodically review the policies, procedures, and internal controls associated with this activity and the activity's impact on the earnings and financial condition of the banking organization? Is their evaluation reported to management? (Applies to banks acting as *agents* in the sale of federal funds, *and* those banks involved as *sellers* of federal funds.)
- In addition to the items considered above, the examiner should determine what the impact of these transactions has been on the bank's earnings and financial condition. If the impact has been negative, or if the answer to any of the above questions is negative, the examiner should discuss these matters with bank management and seek remedial action.

14. Analyze the effectiveness of operational controls by reviewing recent cancellations and fail items that are a week or more beyond settlement date and determine:
    a. The amount of extended fails.
    b. The planned disposition of extended fails.
    c. If the control system allows a timely, productive follow-up on unresolved fails.
    d. The reasons for cancellations.
    e. The planned disposition of securities that have been inventoried prior to the recognition of a fail or a cancellation.
15. Determine compliance with applicable laws, rulings, and regulations by performing the following for:
    a. *12 CFR 1.3—Eligible Securities:*
       - Review inventory schedules of underwriting and trading accounts and determine if issues whose par value is in excess of 10 percent of the bank's captial and unimpaired surplus are type I securities.
       - Determine that the total par value of type II investments does not exceed 10 percent of the bank's capital and unimpaired surplus, based on the combination of holdings and permanent portfolio positions in the same securities.
       - Elicit management's comments and review underwriting records on direct placement of type III securities, and determine if the bank is dealing in type III securities for its own account by ascertaining if direct placement issues have been placed in own bank or affiliated investment portfolios or if underwriting proceeds were used to reduce affiliate loans.
    b. *Section 23A of the Federal Reserve Act (12 USC 371(c) and 375)—Preferential Treatment:* Obtain a list of domestic affiliate relationships and a list of directors and principal officers and their business interests from appropriate examiners and determine whether transactions, include securities clearance services, involving affiliates, insiders or their interests are on terms less favorable to the bank than those transactions involving unrelated parties.
    c. *Regulation D (12 CFR 204.2)—Due Bills:*

4. This requirement is intended to mean that seller banks should conduct the type of credit analysis that would be considered reasonable and prudent for a direct federal funds activity (i.e., those federal funds activities not conducted through agents).

- Review outstanding due bills and determine if:
  - — The customer was informed that a due bill would be issued instead of the purchased security.
  - — Safekeeping receipts are sent to safekeeping customers only after the purchased security has been delivered.
- Review due bills outstanding over three business days and determine if they are collateralized or properly reserved.
- Review collateralized due bills and determine if the liability is secured by securities of the same type and of comparable maturity and with a market value at least equal to that of the security that is the subject of the due bill.

d. *Regulation H (12 CFR 208.8(k))—Recordkeeping and Confirmation Requirements:* If the bank effects securities transactions at the direction and for the account of customers, determine if it is in compliance with this regulation by substantiating Internal Control questions 24–35.

16. Test for unsafe and unsound practices and possible violations of the Securities Exchange Act of 1934 by:
    a. Reviewing customer account schedules of own bank and affiliated bank permanent portfolios, trusts, other broker-dealers, employees of own or other banks and other broker-dealers. Use an appropriate technique to select transactions and compare trade prices to independently established market prices as of the date of trade.
    b. Reviewing transactions, including U.S. government tender offer subscription files, involving employees and directors of own or other banks and determine if the funds used in the transactions were misused bank funds or the proceeds of reciprocal or preferential loans.
    c. Reviewing sales to affiliated companies to determine that the sold securities were not subsequently repurchased at an additional mark-up and that gains were not recognized a second time.
    d. Reviewing commercial paper sales journals or confirmations to determine if the bank sells affiliate commercial paper. If so, determine if:
       - The bank sells affiliate-issued commercial paper to institutions and financially sophisticated individuals only.
       - Sales are generally denominated in amounts of $25,000 or more.
       - Each sale confirmation discloses that the affiliate-issued commercial paper is not an insured bank deposit.
    e. Reviewing securities position records and customer ledgers with respect to large volume repetitive purchase and sales transactions and:
       - Independently testing market prices of significant transactions which involve the purchase and resale of the same security to the same or related parties.
       - Investigating the purchase of large blocks of securities from dealer firms just prior to month end and their subsequent resale to the same firm just after the beginning of the next month.
    f. Reviewing lists of approved dealer firms and determining that the approval of any firm that handles a significant volume of agency transactions is based on competitive factors rather than deposit relationships.
    g. Reviewing customer complaint files and determining the reasons for such complaints.
17. Discuss with an appropriate officer and prepare report comments concerning:
    a. The soundness of trading objectives, policies and practices.
    b. The degree of legal and market risk assumed by trading operations.
    c. The effectiveness of analytical, reporting and control systems.
    d. Violations of law.
    e. Internal control deficiencies.
    f. Apparent or potential conflicts of interest.
    g. Other matters of significance.
18. Reach a conclusion regarding the quality of department management and state your conclusions on the management brief provided by the examiner assigned "Management Assessment."
19. Update workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices and procedures regarding bank dealer activities. The bank's system should be documented in a complete, concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

This section applies to all bank dealer activities except those involving municipal securities, which are reviewed as part of a separate and distinct Municipal Bond Dealer Examination.

SECURITIES UNDERWRITING TRADING POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written securities underwriting/trading policies that:
   a. Outline objectives?
   b. Establish limits and/or guidelines for:
      - Price mark-ups?
      - Quality of issues?
      - Maturity of issues?
      - Inventory positions (including when issued (WI) positions)?
      - Amounts of unrealized loss on inventory positions?
      - Length of time an issue will be carried in inventory?
      - Amounts of individual trades or underwriter interests?
      - Acceptability of brokers and syndicate partners?
   c. Recognize possible conflicts of interest and establish appropriate procedures regarding:
      - Deposit and service relationships with municipalities whose issues have underwriting links to the trading department?
      - Deposit relationships with securities firms handling significant volumes of agency transactions or syndicate participations?
      - Transfers made between trading account inventory and investment portfolio(s)?
      - The bank's trust department acting as trustee, paying agent, and transfer agent for issues which have an underwriting relationship with the trading department?
   d. State procedures for periodic, monthly or quarterly, valuation of trading inventories to market value or to the lower of cost or market price?
   e. State procedures for periodic independent verification of valuations of the trading inventories?
   f. Outline methods of internal review and reporting by department supervisors and internal auditors to insure compliance with established policy?
   g. Identify permissible types of securities?
   h. Ensure compliance with the rules of fair practice that:
      - Prohibit any deceptive, dishonest or unfair practice?
      - Adopt formal suitability checklists?
      - Monitor gifts and gratuities?
      - Prohibit materially false or misleading advertisements?
      - Adopt a system to determine the existence of possible control relationships?
      - Prohibit the use of confidential, nonpublic information without written approval of the affected parties?
      - Prohibit improper use of funds held on another's behalf?
      - Allocate responsibility for transactions with own employees and employees of other dealers?
      - Require disclosure on all new issues?
   i. Provide for exceptions to standard policy?
2. Are the underwriting/trading policies reviewed at least quarterly by the board to determine their adequacy in light of changing conditions?
3. Is there a periodic review by the board to assure that the underwriting/trading department is in compliance with its policies?

OFFSETTING RESALE AND REPURCHASE TRANSACTIONS

4. Has the board of directors, consistent with its duties and responsibilities, adopted written offsetting repurchase transaction policies that:
   a. Limit the aggregate amount of offsetting repurchase transactions?
   b. Limit the amounts in unmatched or extended (over 30 days) maturity transactions?
   c. Determine maximum time gaps for unmatched maturity transactions?
   d. Determine minimumly acceptable interest rate spreads for various maturity transactions.
   e. Determine the maximum amount of funds to be extended to any single or related firms through reverse re-po transactions, involving unsold (through forward sales) securities?
   f. Require firms involved in reverse re-po transactions to submit corporate resolutions stating the names and limits of individuals, who are authorized to commit the firm?
   g. Require submission of current financial information by firms involved in reverse re-po transactions?
   h. Provide for periodic credit reviews and approvals for firms involved in reverse re-po transactions?
   i. Specify types of acceptable offsetting repurchase transaction collateral (if so, indicate type _____).
5. Are written collateral control procedures designed so that:
   a. Collateral assignment forms are used?
   b. Collateral assignments of registered securities are accompanied by powers of attorney signed by the registered owner?
      - Registered securities are registered in bank or bank's nominee name when they are assigned as collateral for extended maturity (over 30 days) reverse re-po transactions?
   c. Funds are not disbursed until reverse re-po collateral is delivered into the physical custody of the bank or an independent safekeeping agent?
   d. Funds are only advanced against predetermined collateral margins or discounts?
      - If so, indicate margin or discount percentage _____.
   e. Collateral margins or discounts are predicated upon:
      - The type of security pledged as collateral?
      - Maturity of collateral?
      - Historic and anticipated price volatility of the collateral?
      - Maturity of the reverse re-po agreements?
   f. Maintenance agreements are required to support predetermined collateral margin or discount?
   g. Maintenance agreements are structured to allow margin calls in the event of collateral price declines?
   h. Collateral market value is frequently checked to determine compliance with margin and maintenance requirements (if so, indicate frequency _____)?

CUSTODY AND MOVEMENT OF SECURITIES

*6. Are the bank's procedures such that persons do not have sole custody of securities in that:
   a. They do not have sole physical access to securities?
   b. They do not prepare disposal documents that are not also approved by authorized persons?
   c. For the security custodian, supporting disposal documents are examined or adequately tested by a second custodian?
   d. No person authorizes more than one of the following transactions: execution of trades, receipt and delivery of securities, and collection or disbursement of payment?
7. Are securities physically safeguarded to prevent loss, unauthorized disposal or use? And:
   a. Are negotiable securities kept under dual control?
   b. Are securities counted frequently, on a surprise basis, reconciled to the securities record, and the results of such counts reported to management?

c. Does the bank periodically test for compliance with provisions of its insurance policies regarding custody of securities?
d. For securities in the custody of others:
   - Are custody statements agreed periodically to position ledgers and any differences followed up to a conclusion?
   - Are statements received from brokers and other dealers reconciled promptly, and any differences followed up to a conclusion?
   - Are positions for which no statements are received confirmed periodically, and stale items followed up to a conclusion?

8. Are trading account securities segregated from other bank owned securities or securities held in safekeeping for customers?

*9. Is access to the trading securities vault restricted to authorized employees?

10. Do withdrawal authorizations require countersignature to indicate security count verifications?

11. Is registered mail used for mailing securities, and are adequate receipt files maintained for such mailings (if registered mail is used for some but not all mailings, indicate criteria and reasons)?

12. Are prenumbered forms used to control securities trades, movements and payments?

13. If so, is numerical control of prenumbered forms accounted for periodically by persons independent of those activities?

14. Do alterations to forms governing the trade, movement, and payment of securities require:
    *a. Signature of the authorizing party?
    b. Use of a change of instruction form?

15. With respect to negotiability of registered securities:
    a. Are securities kept in non-negotiable form whenever possible?
    b. Are all securities received, and not immediately delivered, transferred to the name of the bank or its nominee and kept in non-negotiable form whenever possible?
    c. Are securities received checked for negotiability (endorsements, signature, guarantee, legal opinion, etc.) and for completeness (coupons, warrants, etc.) before they are placed in the vault?

RECORDS MAINTENANCE

16. Does the bank maintain:
    a. Order tickets which include:
       - Capacity as principal or agent?
       - If order is firm or conditional?
       - Terms, conditions or instructions and modifications?
       - Type of transaction (purchase or sale)?
       - Execution price?
       - Description of security?
       - Date and time of order receipt?
       - Date and time of execution?
       - Dealer's or customer's name?
       - Delivery and payment instructions?
       - Terms, conditions, date and time of cancellation of an agency order?
    b. Customer confirmations:
       - Bank dealer's name, address and phone number?
       - Customer's name?
       - Designation of whether transaction was a purchase from or sale to the customer?
       - Par value of securities?
       - Description of securities, including at a minimum:
         — Name of issuer?
         — Interest rate?
         — Maturity date?
         — Designation, if securities are subject to limited tax?
         — Subject to redemption prior to maturity (callable)?
         — Designation, if revenue bonds and the type of revenue?
         — The name of any company or person in addition to the issuer who is obligated, directly or indirectly, to pay debt service on revenue bonds? (In the case of more than one such obligor, the phrase "multiple obligors" will suffice.)
         — Dated date, if it affects price or interest calculations?
         — First interest payment date, if other than semi-annual?
         — Designation, if securities are "fully registered" or "registered as principal"?
         — Designation, if securities are "pre-refunded"?

  - Designation, if securities have been "called," maturity date fixed by call notice and amount of call price?
  - Denominations of bearer bonds, if other than denominations of $1,000 and $5,000 par value?
  - Denominations of registered bonds, if other than multiples of $1,000 par value up to $100,000 par value?
  - Denominations of municipal notes?
- Trade date and time of execution, or a statement that time of execution will be furnished upon written request of the customer?
- Settlement date?
- Yield and dollar price? Only the dollar price need to be shown for securities traded at par.
  - For transactions in callable securities effected on a yield basis, the resulting price calculated to the lowest of price to call premium, par option (callable at par) or to maturity, and if priced to premium call or par option, a statement to that effect and the call or option date and price used in the calculation?
- Amount of accrued interest?
- Extended principal amount?
- Total dollar amount of transaction?
- The capacity in which the bank dealer effected the transaction:
  - As principal for own account?
  - As agent for customer?
  - As agent for a person other than the customer?
  - As agent for both the customer and another person (dual agent)?
- If a transaction is effected as agent for the customer or as dual agent:
  - Either the name of the contra-party or a statement that the information will be furnished upon request?
  - The source and amount of any commission or other remuneration to the bank dealer?
- Payment and delivery instructions?
- Special instructions, such as:
  - "Ex-legal" (traded without legal opinion)?
  - "Flat" (traded without interest)?
  - "In default" as to principal or interest?

c. Dealer confirmations:
- Bank dealer's name, address and telephone number?
- Contra-party identification?
- Designation of purchase from or sale to?
- Par value of securities?
- Description of securities, including at a minimum:
  - Name of issuer?
  - Interest rate?
  - Maturity date?
  - Designation, if securities are limited tax?
  - Subject to redemption prior to maturity (callable)?
  - Designation, if revenue bonds and the type of revenue?
  - Dated date, if it affects price or interest calculations?
  - First interest payment date, if other than semi-annual?
  - Designation, if securities are "fully registered" or "registered as principal"?
  - Designation, if securities are "pre-refunded"?
  - Designation, if securities have been "called," maturity date fixed by call notice and amount of call price?
  - Denominations of bearer bonds, if other than denominations of $1,000 and $5,000 par value?
  - Denominations of registered bonds, if other than multiples of $1,000 par value up to $100,000 par value?
- CUSIP number, if assigned (effective January 1, 1979)?
- Trade date?
- Settlement date?
- Yield to maturity and resulting dollar price? Only the dollar price need be shown for securities traded at par or on a dollar basis.
  - For transactions in callable securities effected on a yield basis, the resulting price calculated to the lowest of price to call premium, par option (callable at par) or to maturity?

— If applicable, the fact that securities are priced to premium call or par option and the call or option date and price used in the calculation?
- Amount of accrued interest?
- Extended principal amount?
- Total dollar amount of transaction?
- Payment and delivery instructions?
- Special instructions, such as:
  — "Ex-legal" (traded without legal opinion)?
  — "Flat" (traded without interest)?
  — "In default" as to principal or interest?

d. Purchase and sale journals or blotters which include:
- Trade date?
- Description of securities?
- Aggregate par value?
- Unit dollar price or yield?
- Aggregate trade price?
- Accrued interest?
- Name of buyer or seller?
- Name of party received from or delivered to?
- Bond or note numbers?
- Indication if securities are in registered form?
- Receipts or disbursements of cash?
- Specific designation of "when issued" transactions?
- Transaction or confirmation numbers recorded in consecutive sequence to insure that transactions are not omitted?
- Other references to documents of original entry?

e. Short sale ledgers which include:
- Sale price?
- Settlement date?
- Present market value?
- Basis point spread?
- Description of collateral?
- Cost of collateral or cost to acquire collateral?
- Carrying charges?

f. Security position ledgers, showing separately for each security positioned for the bank's own account:
- Description of the security?
- Posting date (either trade or settlement date, provided posting date is consistent with other records of original entry)?
- Aggregate par value?
- Cost?
- Average cost?
- Location?
- Count differences classified by the date on which they were discovered?

g. Securities transfer or validation ledgers which include:
- Address where securities were sent?
- Date sent?
- Description of security?
- Aggregate par value?
- If registered securities:
  — Present name of record?
  — New name to be registered?
- Old certificate or note numbers?
- New certificate or note numbers?
- Date returned?

h. Securities received and delivered journals or tickets which include:
- Date of receipt or delivery?
- Name of sender and receiver?
- Description of security?
- Aggregate par value?
- Trade and settlement dates?
- Certificate numbers?

i. Cash or wire transfer receipt and disbursement tickets which include:
- Draft or check numbers?
- Customer accounts debited or credited?
- Notation of the original entry item that initiated the transaction?

j. Cash or wire transfer journals which additionally include:
- Draft or check reconcilements?
- Daily totals of cash debits and credits?
- Daily proofs?

k. Fail ledgers which include:
- Description of security?
- Aggregate par value?
- Price?
- Fail date?
- Date included on fail ledger?
- Customer or dealer name?
- Resolution date?
- A distinction between a customer and a dealer fail?
- Follow-up detail regarding efforts to resolve the fail?

l. Securities borrowed and loaned ledgers which include:
- Date of transaction?
- Description of securities?

- Aggregate par value?
- Market value of securities?
- Contra-party name?
- Value at which security was loaned?
- Date returned?
- Description of collateral?
- Aggregate par value of collateral?
- Market value of collateral?
- Collateral safekeeping location?
- Dates of periodic valuations?

m. Records concerning written or oral put options, guarantee and repurchase agreements which include:
- Description of the securities?
- Aggregate par value?
- Terms and conditions of the option, agreement or guarantee?

n. Customer account information which includes:
- Customer's name and residence or principal business address?
- Whether customer is of legal age?
- Occupation?
- Name and address of employer? And:
  — Whether customer is employed by a securities broker or dealer or by a municipal securities dealer?
- Name and address of beneficial owner or owners of the account if other than customer? And:
  — Whether transactions are confirmed with such owner or owners?
- Name and address of person(s) authorized to transact business for a corporate, partnership or trusteed account? And:
  — Copy of powers of attorney, resolutions or other evidence of authority to effect transactions for such an account?
- With respect to borrowing or pledging securities held for the accounts of customers:
  — Written authorization from the customer authorizing such activities?
- Customer complaints including:
  — Records of all written customer complaints?
  — Record of actions taken concerning those complaints?

o. Customer and the bank dealer's own account ledgers which include:
- All purchases and sales of securities?
- All receipts and deliveries of securities?
- All receipts and disbursements of cash?
- All other charges or credits?

p. Records of syndicates' joint accounts or similar accounts formed for the purchase of municipal securities which include:
- Underwriter agreements? And:
  — Description of the security?
  — Aggregate par value of the issue?
- Syndicate or selling group agreements? And:
  — Participants' names and percentages of interest?
  — Terms and conditions governing the formation and operation of the syndicate?
  — Date of closing of the syndicate account?
  — Reconcilement of syndicate profits and expenses?
- Additional requirements for syndicate or underwriting managers which include:
  — All orders received for the purchase of securities from the syndicate or account, except bids at other than the syndicate price?
  — All allotments of securities and the price at which sold?
  — Date of settlement with the issuer?
  — Date and amount of any good faith deposit made with the issuer?

q. Files which include:
- Advertising and sales literature
- Prospectus delivery information?

r. Internal supervisory records which include:
- Account reconcilement and follow-up?
- Profit analysis by trader?
- Sales production reports?
- Periodic open position reports computed on a trade date or when issued basis?
- Reports of own bank credit extensions used to finance the sale of trading account securities?

PURCHASE AND SALES TRANSACTIONS

17. Are all transactions promptly confirmed in writing to the actual customers or dealers?
18. Are confirmations compared or adequately tested to purchase and sales memoranda and reports of execution of orders, and any differences investigated and corrected (including approval by a designated responsible employee)?
    a. Are confirmations and purchase and sale memoranda checked or adequately tested for computation and terms by a second individual?
19. Are comparisons received from other dealers or brokers compared with confirmations, and any differences promptly investigated?
    a. Are comparisons approved by a designated individual (if so, give name _____)?

CUSTOMER AND DEALER ACCOUNTS

20. Do account bookkeepers periodically transfer to different account sections or otherwise rotate posting assignments?
21. Are letters mailed to customers requesting confirmation of changes of address?
22. Are separate customer account ledgers maintained for:
    - Employees?
    - Affiliates?
    - Own bank's trust accounts?
23. Are customer inquiries and complaints handled exclusively by designated individuals who have no incompatible duties?

RECORDKEEPING AND CONFIRMATION REQUIREMENTS FOR CUSTOMER SECURITIES TRANSACTIONS (REGULATION H)

24. Are chronological records of original entry containing an itemized daily record of all purchases and sales of securities maintained?
25. Do the original entry records reflect:
    a. The account or customer for which each such transaction was effected?
    b. The description of the securities?
    c. The unit and aggregate purchase or sale price (if any)?
    d. The trade date?
    e. The name or other designation of the broker-dealer or other person from whom purchased or to whom sold?

    If the bank has had an average of 200 or more securities transactions per year for customers over the prior three-calendar-year period, exclusive of transactions in U.S. government and federal agency obligations, answer questions 26, 27 and 28.

26. Does the bank maintain account records for each customer which reflect:
    a. All purchases and sales of securities?
    b. All receipts and deliveries of securities?
    c. All receipts and disbursements of cash for transactions in securities for such account?
    d. All other debits and credits pertaining to transactions in securities?
27. Does the bank maintain a separate memorandum (order ticket) of each order to purchase or sell securities (whether executed or cancelled) which includes:
    a. The account(s) for which the transaction was effected?
    b. Whether the transaction was a market order, limit order, or subject to special instructions?
    c. The time the order was received by the trader or other bank employee responsible for affecting the transaction?
    d. The time the order was placed with the broker-dealer, or if there was no broker-dealer, the time the order was executed or cancelled?
    e. The price at which the order was executed?
    f. The broker-dealer used?
28. Does the bank maintain a record of all broker-dealers selected by the bank to effect securities transactions and the amount of commissions paid or allocated to each such broker during the calendar year?
29. Does the bank, subsequent to effecting a securities transaction for a customer, mail or otherwise furnish to such customer either a copy of the confirmation of a broker-dealer relating to the securities transaction or a written trade confirmation

of a broker-dealer relating to the securities transaction or a written trade confirmation prepared by the bank?

30. If customer notification is provided by furnishing the customer with a copy of the confirmation of a broker-dealer relating to the transaction, and if the bank is to receive remuneration from the customer or any other source in connection with the transaction, and the remuneration is not determined pursuant to a written agreement between the bank and the customer, does the bank also provide a statement of the source and amount of any remuneration to be received?
31. If customer notification is provided by furnishing the customer with a trade confirmation prepared by the bank, does the confirmation disclose:
    a. The name of the bank?
    b. The name of the customer?
    c. Whether the bank is acting as agent for such customer, as principal for its own account, or in any other capacity?
    d. The date of execution and a statement that the time of execution will be furnished within a reasonable time upon written request of such customer?
    e. The identity, price and number of shares of units (or principal amount in the case of debt securities) of such securities purchased or sold by such customer?
32. For transactions which the bank effects in the capacity of agent, does the bank, in addition to the above, disclose:
    a. The amount of any remuneration received or to be received, directly or indirectly, by any broker-dealer from such customer in connection with the transaction?
    b. The amount of any remuneration received or to be received by the bank from the customer and the source and amount of any other remuneration to be received by the bank in connection with the transaction, unless remuneration is determined pursuant to a written agreement between the bank and the customer?
    c. The name of the broker-dealer used. Where there is no broker-dealer, the name of the person from whom the security was purchased or to whom it was sold, or the fact that such information will be furnished within a reasonable time upon written request?
33. Does the bank maintain the above records and evidence of proper notification for a period of at least three years?
34. Does the bank furnish the written notification described above within five business days from the date of the transaction, or if a broker-dealer is used, within five business days from the receipt by the bank of the broker-dealer's confirmation? If not, does the bank use one of the alternative procedures described in Regulation H?
35. Unless specifically exempted in Regulation H, does the bank have established written policies and procedures ensuring:
    a. That bank officers and employees who make investment recommendations or decisions for the accounts of customers, who particpate in the determination of such recommendations or decisions, or who, in connection with their duties, obtain information concerning which securities are being purchased or sold or recommended for such action, report to the bank, within 10 days after the end of the calendar quarter, all transactions in securities made by them or on their behalf, either at the bank or elsewhere in which they have a beneficial interest (subject to certain exemptions)?
    b. That in the above required report the bank officers and employees identify the securities purchased or sold and indicate the dates of the transactions and whether the transactions were purchases or sales?
    c. The assignment of responsibility for supervision of all officers or employees who (1) transmit orders to or place orders with broker-dealers, or (2) execute transactions in securities for customers?
    d. The fair and equitable allocation of securities and prices to accounts when orders for the same security are received at approximately the same time and are placed for execution either individually or in combination?
    e. Where applicable, and where permissible under local law, the crossing of buy and sell orders on a fair and equitable basis to the parties to the transaction?

OTHER

36. Are the preparation, additions, and posting of subsidiary records performed and/or adequately reviewed by persons who do not also have sole custody of securities?
37. Are subsidiary records reconciled, at least monthly, to the appropriate general ledger accounts and are reconciling items adequately investigated by persons who do not also have sole custody of securities?
38. Are fails to receive and deliver under a separate general ledger control?
    a. Are fail accounts periodically reconciled to the general ledger, and any differences followed up to a conclusion?
    b. Are periodic aging schedules prepared (if so, indicate frequency _____)?
    c. Are stale fail items confirmed and followed up to a conclusion?
    d. Are stale items valued periodically and, if any potential loss is indicated, is a particular effort made to clear such items or to protect the bank from loss by other means?
39. With respect to securities loaned and borrowed positions:
    a. Are details periodically reconciled to the general ledger, and any differences followed up to a conclusion?
    b. Are positions confirmed periodically (if so, indicate frequency _____)?
40. Is the compensation of all department employees limited to salary and a non-departmentalized bonus or incentive plan?
    a. Are sales representatives' incentive programs based on sales volume and not department income?

CONCLUSION

41. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
42. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

OVERVIEW

This section will help the examiner perform two separate, but related, functions:

- evaluate the depth and scope of the formalized policies and procedures the bank uses to manage and control its loan portfolio
- form an overview of the performance of the entire lending operation by consolidating the results of the examination programs from the various lending departments

BANK LOAN POLICY

The purpose of a bank's lending policy is to establish the authority, rules, and framework to operate and administer its loan portfolio effectively, that is, to ensure profitability while managing risk. The policy serves as a framework to set basic standards and procedures in a clear and concise manner. The policy's guidelines should be derived from a careful review of internal and external factors that affect the institution, such as the bank's market position, historical experience, present and prospective trade area, probable future loan and funding trends, facilities, staff capabilities, and technology. Such guidelines, however, must be void of any discriminatory policies or practices.

The complexity and scope of the lending policy and procedures should be appropriate to the size of the institution and the nature of its activities and should be consistent with prudent banking practices and relevant regulatory requirements. Examiners should keep in mind that a loan policy that is appropriate for one bank is not necessarily suitable for another bank. Each bank's policy will differ, given the institution's strategic goals and objectives, coupled with factors such as economic conditions, the experience and ability of the lending personnel, and competition. The policy should be reviewed at least annually to ensure that it is not outdated or ineffective, remains flexible, and continues to meet the needs of the community. Changes in federal and other regulatory requirements, including limitations involving insider transactions, also must be incorporated into the policy.

The policy should be broad and not overly restrictive. If carefully formulated and administered by senior management, and clearly communicated and understood through each level of the organization, it greatly helps bank management (1) maintain sound credit-underwriting standards; (2) control and manage risk; (3) evaluate new business opportunities; and (4) identify, administer, and collect problem loans.

The lending policy must clearly state the philosophies and principles that govern safe and sound banking practices and procedures, as well as the mission and objectives of the particular institution. Throughout this manual, considerable emphasis is placed on formal written policies established by the board of directors that management can implement, administer, and amplify. The board of directors, in discharging its duty to both depositors and shareholders, must ensure that loans in the bank's portfolio are made based on the following three objectives:

- to grant loans on a sound and collectible basis
- to invest the bank's funds profitably for the benefit of shareholders and the protection of depositors
- to serve the legitimate credit needs of the bank's community

The written loan policy is the cornerstone for sound lending and loan administration. An adequate loan policy promotes—

- a bank's business and lending philosophy, despite changes in management;
- stability, as it provides a reference for lenders;
- clarity, to minimize confusion concerning lending guidelines; and
- sound objectives for evaluating new business opportunities.

The loan policy should define who will receive credit, what type, and at what price, as well as what credit documentation will be permitted or required. Other internal factors to be addressed include who will grant the credit and in what amount, as well as what organizational structure will ensure compliance with the bank's guidelines and procedures. Because loan authority is spread throughout the organization, the bank must have an efficient internal review and

reporting system to monitor adherence to established guidelines. This system should adequately inform the directorate and senior management of how policies are being carried out and should provide them with sufficient information to evaluate the performance of lending officers and the condition of the loan portfolio.

The loan policy should establish (1) what information will be required from the borrower during the application process, (2) what information the borrower will be required to submit while the credit remains outstanding, and (3) which bank personnel are responsible for obtaining the information. In addition, the policy should specify who is responsible for reviewing the adequacy of loan documentation and for citing and correcting documentation exceptions. A high level of documentation exceptions indicates a deficiency in the bank's policy, procedures, monitoring, or enforcement.

A loan policy will differ from loan procedures. A policy represents a plan, guiding principle, or course of action designed to establish a framework for handling decisions, actions, and other matters, thereby influencing them. A procedure is a set of established methods or steps for performing a task. The lending policy should include issues relevant to all departments of the bank. Written procedures approved and enforced in various departments should be referenced in the bank's general lending policy. The policy must be flexible enough to allow for fast adaptation to changing conditions in the bank's earning assets mix and trade area.

Components of a Sound Lending Policy

As mentioned previously, a bank's loan policy should be appropriate to its size and complexity. Sound loan policy generally is based on the components described below.

Allowance for loan and lease losses. A sound lending policy establishes a systematic loan-review program to detect and identify problem loans and other portfolio weaknesses. (See the "Credit Risk Review" subsection for more information.) Guidelines and methodologies need to be established to determine the adequacy of the bank's allowance for loan and lease losses (ALLL), and they should be based on a conservative analysis of the risk in the loan portfolio. This analysis should ensure that an appropriate ALLL is maintained. The 2006 Interagency Policy Statement on the Allowance for Loan and Lease Losses[1] stipulates that federally insured depository institutions (IDIs) must maintain an ALLL at an appropriate level to absorb estimated credit losses associated with the loan and lease portfolio.

Examiners must evaluate management's estimate of losses existing in the bank's loan portfolio as well as the methodologies and procedures used in making and documenting the estimate. That evaluation provides the basis for determining the appropriateness and reasonableness of a bank's ALLL.

Collections and charge-offs. The lending policy should define the criteria and procedures for reporting relevant information concerning delinquent obligations to the board of directors. The policy should establish the mechanism for presenting problem loans to the directorate. Reports submitted to the board of directors should include sufficient detail for it to determine the risk factor, loss potential, and alternative courses of action. The policy should outline a follow-up collection notice procedure that is systematic and progressively stronger. Guidelines should be established to ensure that all accounts are presented to and reviewed by the board of directors or a board committee for charge-off.

Concentrations of credit. The lending policy should encourage both diversification within the portfolio and a balance between maximum yield and minimum risk. Concentrations of credit depend heavily on a key factor, and when weaknesses develop in that key factor, every individual loan within the concentration is affected. The directorate should evaluate the additional risk involved in various concentrations and determine which concentrations should be avoided or limited. The lending policy also should establish thresholds for acceptable concentrations of credit and require that all concentrations be reviewed and reported to the board on a periodic basis.

Institutions that have effective controls to manage and reduce undue concentrations over time need not refuse credit to sound borrowers simply because of the borrower's industry or geographic location. This principle applies to prudent loan renewals and rollovers, as well as

1. See SR-06-17 and SR-01-17. *See also,* SR-20-12, for more information on the allowance for credit losses.

to new extensions of credit that are underwritten in a sound manner. (See the "Concentrations of Credit" section for further details.)

Consumer and equal credit opportunity laws. Compliance with the many consumer-related statutes and regulations requires complex and detailed policies and procedures that should be addressed in a separate policy. However, the loan policy should require adherence to the Federal Reserve's Regulation B, 12 CFR 202, which implements the Equal Credit Opportunity Act. This regulation prohibits creditors from discriminating against loan applicants on the basis of age, race, color, religion, national origin, sex, marital status, or receipt of income from public assistance programs. As additional prohibitions are added under the regulation, they should be incorporated into the policy. Also, the loan policy should include a requirement that the bank give applicants a written notification of rejection of a loan application, a statement of the applicant's rights under the Equal Credit Opportunity Act, and a statement either of the reasons for rejection or of the applicant's right to such information.

Credit files. Obtaining and maintaining complete and accurate information on every relevant detail of a borrower's financial condition is essential to approving credit in a safe and sound manner. The loan policy should establish what information will be required from the borrower during the application process and what information the borrower will be required to submit while the credit remains outstanding. Credit files should be maintained on all borrowing relationships, regardless of size, with the exception of the latitude provided by the Interagency Policy Statement on Documentation of Loans. A current credit file should provide the loan officer, loan committee, and internal and external reviewers with all information necessary to analyze the credit before it is granted and to monitor and evaluate the credit during its life. Such information should (1) identify the borrower's business or occupation; (2) document the borrower's past and current financial condition; (3) state the purposes of all loans granted to the borrower, the sources of repayment, and the repayment programs; and (4) identify the collateral and state its value and the source of the valuation.

Credit files should include all financial statements, credit reports, collateral-inspection documents, reference letters, past loan applications, memoranda, correspondence, and appraisals. In many cases, particularly those involving real estate loans, appraisals and other collateral documentation may be maintained in a separate collateral file.

Documentation requirements will vary according to the type of loan, borrower, and collateral. For example, a bank may not require financial statements from borrowers whose loans are fully secured by certificates of deposit it issues. In a more general sense, information requirements between amortizing consumer loans and commercial or real estate loans vary greatly. More specific examples of the types and frequency of financial information often obtained for various types of credit are detailed in the following paragraphs.

For many consumer installment and residential mortgage loan borrowers, the borrowers' financial information generally is collected only at the time of loan application. The underwriting process for these types of loans emphasizes factors such as the borrower's income and job stability, credit history, and debt load, as well as the loan-to-value requirements for obtained collateral.

In factoring and other asset-backed lending activities, while financial information is a significant part of the underwriting process, collateral is the key component of the lending decision. Close monitoring of the collateral's existence, value, and marketability are essential to sound underwriting of these types of loans.

For typical commercial, commercial real estate, and agricultural loans, significant emphasis is placed on the financial strength, profitability, and cash flow of the core business for loan repayment. Close monitoring of the business's financial condition and profitability throughout the life of the loan is key to the sound administration of these types of credits. Other pertinent information requirements, such as collateral-inspection documentation for agricultural credits or lease/rental information for income-producing commercial real estate credits, may also be necessary to properly administer these loans. As part of the sound underwriting process for these loans, a bank may include loan covenants requiring the business to maintain financial soundness, submit periodic financial statements, and provide other needed information.

As a practice, a bank should not ask for information it does not need to adequately

underwrite and monitor the quality of its loans. With proper use of loan covenants, a bank can protect its right to receive additional or more frequent information if a borrower's financial condition deteriorates or collateral values decline. When determining the financial and other information to request from the borrower, bankers should consider the requirements of the underwriting process for particular types of loans and the repayment risks. A bank's loan policy should clearly delineate the type and frequency of such information requirements.

The lending policy also should define the financial-statement requirements for businesses and individuals at various borrowing levels. Specifically, requirements for audited, unaudited, annual, or interim balance sheets; income and cash-flow statements; statements of changes in capital accounts; and supporting notes and schedules should be included, as appropriate. In addition, the lending policy should require external credit checks as appropriate, at the inception of the loan and during periodic updates. The loan policy should be written so that credit-data exceptions would be a violation of the policy.

Distribution by category. Limitations based on aggregate percentages of total loans in commercial, real estate, consumer, or other categories are common. Aggregate percentages for loans to deposits, assets, and capital (with regard to concentrations of credit) would provide guidance for effective portfolio management. Such policies are beneficial but should allow for deviations, with the approval by the board or a board committee. This allows credit to be distributed in response to the community's changing needs. During times of heavy loan demand in one category, an inflexible loan-distribution policy would cause that category to be slighted in favor of another.

Exceptions to the loan policy. A lending policy should require loan officers to present credits they believe are fundamentally sound and worthy of consideration, even though they may not conform with the bank's written lending policy or procedures. The reason for the exception should be detailed in writing and submitted for approval to a designated authority. The directors' loan committee or a similar body should review and approve all exceptions at reasonable intervals. The frequency of exceptions granted may indicate a lessening of underwriting standards on the one hand, or a need to adjust the policy to allow flexibility within safe and sound parameters on the other. The underlying reasons behind frequently granted exceptions should be assessed, and appropriate recommendations should be made accordingly.

Financing other real estate. If the bank wants to finance a parcel of other real estate that it owns, special accounting rules may apply. Consequently, the lending policy should include an outline of certain provisions of Financial Accounting Standards Board (FASB) Statement No. 66, "Accounting for Sales of Other Real Estate."

Geographic limits. A bank's trade area should be clearly delineated and consistent with defined Community Reinvestment Act (CRA) criteria. Loan officers and directors should be fully aware of specific geographic limitations for lending purposes. The bank's defined trade area should not be so large that, given its resources, the bank cannot properly and adequately monitor and administer its credits. A sound loan policy restricts or discourages loan approval for customers outside the trade area. The bank's primary trade area should be distinguished from any secondary trade area, which is especially important for new banks. Specific restrictions or exceptions should be listed separately.

Lender liability. Banking organizations must be careful that their actions to make, administer, and collect loans—including assessing and controlling environmental liability—cannot be construed as taking an active role in the management or day-to-day operations of the borrower's business. Such actions could lead to potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). (See the "Environmental Liability" subsection.)

Limitation on aggregate outstanding loans. Banks should establish guidelines limiting the total amount of loans outstanding in relation to other balance-sheet accounts. This type of control over the loan portfolio usually is expressed relative to deposits and total assets. In setting such limitations, various factors, such as the credit demands of the community, the volatility of deposits, and the credit risks involved, must be considered.

Loan authority. The lending policy should establish limits for all lending officers and ensure controls are in place to monitor compliance with the bank's legal lending limit. An individual officer's lending limit is usually based on his or her experience, tenure, and past adherence to the bank's loan policy. Lending limits also should be set for group authority, thereby allowing a combination of officers or a committee to approve larger loans than the members would be permitted to approve individually. The loan policy should describe the manner in which loans will be approved and ultimately reported to the board of directors, as well as the frequency of any loan committee meetings, as applicable.

Loan pricing. Interest rates on loans should be sufficient to cover (1) the cost of the funds loaned, (2) the bank's loan services (including general overhead), and (3) probable losses—while providing for a reasonable profit margin. In setting interest rates a bank considers the costs for its various loan products. Periodic review allows rates to be adjusted in response to changes in costs, competitive factors, or risks of a particular type of extension of credit. Specific guidelines for other relevant factors, such as compensating-
balance requirements and fees on commitments, are also germane to pricing credit.

Loan purchases and sales. If sufficient loan demand exists, lending within the bank's trade area is safer and less expensive than purchasing paper from a dealer or a correspondent bank. Direct lending promotes customer relationships, serves the credit needs of customers, and develops additional business. Occasionally, a bank may not be able to advance a loan to a customer for the full amount requested because of individual state lending limitations or other reasons. In such situations, the bank may extend credit to a customer up to its internal or legal lending limit and sell a participation to a correspondent bank for the amount exceeding the bank's lending limit or the amount it wishes to extend on its own. Generally, such sales arrangements are established before the credit is ultimately approved. These sales should be on a nonrecourse basis by the bank, and the originating and purchasing banks should share in the risks and contractual payments on a pro rata basis. Selling or participating out portions of loans to accommodate the credit needs of customers promotes goodwill and enables a bank to retain customers who might otherwise seek credit elsewhere.

Conversely, many banks purchase loans or participate in loans originated by others. In some cases, such transactions are conducted with affiliates or members of a chain-banking organization, with the goal of benefiting the whole organization. A purchasing bank may also wish to supplement its loan portfolio when loan demand is weak. In still other cases, a bank may purchase or participate in a loan to accommodate an unrelated originating bank with which it has an ongoing business relationship.

Purchasing or selling loans, if done properly, can have a legitimate role in a bank's overall asset and liability management and can contribute to the efficient functioning of the financial system. In addition, these activities help a bank diversify its risks and improve its liquidity.

Banks should avoid purchases of loans that generate unacceptable concentrations of credit. Such concentrations may arise solely from the bank's purchases, or they may arise when loans or participations purchased are aggregated with loans originated and retained by the purchasing bank. The policy should state the limits (1) for the aggregate amount of loans purchased from and sold to any one outside source and (2) of all loans purchased and sold. It should also establish limits for the aggregate amount of loans to particular types of industries. The extent of contingent liability, holdback and reserve requirements, and the manner in which loans will be handled and serviced should be clearly defined. In addition, the policy should require that loans purchased from another source be evaluated in the same manner as loans originated by the bank itself. Guidelines should be established for the type and frequency of credit and other information the bank needs to obtain from the originating institution to keep itself continually updated on the status of the credit. Guidelines should also be established for supplying complete and regularly updated credit information to the purchasers of loans originated and sold by the bank.

Prohibition on asset purchases or sales. The Dodd-Frank Act amended the Federal Deposit Insurance Act (FDIA) to impose a prohibition on asset purchases and between an IDI and an executive officer, director, or principal shareholder of the IDI, and any related interest of such person, unless the transaction is on market

terms. In addition, if the asset purchase or sale represents more than 10 percent of the IDI's capital stock and surplus, the transaction must be approved in advance by a majority of the members of the board of directors of the IDI who do not have an interest in the transaction. See section 18(z) of the FDIA, as amended by the Dodd-Frank Act, section 615(a).

Loans to employees, officers, directors, principal shareholders, and their related interests. Loans to insiders are strictly defined in federal statutes and require close supervision to ensure compliance. Federal and state statutes provide the basis for defining insider loans, and they specify requirements and limitations that should be incorporated in the policy. (See the Federal Reserve's Regulation O, 12 CFR 215.)

The policy should ensure, through a system of controls over authority and funding, that transactions and extensions of credit to insiders are legally permissible and that they are made on substantially the same terms and conditions as those prevailing at the time for comparable transactions with other borrowers. Furthermore, the policy should contain guidelines for loans to employees who are not subject to the provisions of Regulation O.

Maximum maturities. Loans should be granted with realistic repayment plans, with the maturity related to the anticipated source of repayment, the purpose of the loan, and the useful life of the collateral. For term loans, a lending policy should state the maximum number of months over which loans may be amortized. Specific procedures should be developed for situations requiring balloon payments and modification of original loan terms. If the bank requires a cleanup (out-of-debt) period for lines of credit, it should be stated explicitly.

Maximum ratio of loan amount to collateral value. The loan policy should set forth procedures for ordering, preparing, and reviewing appraisals for real or personal property pledged as collateral. The bank's lending policy should outline guidelines for appraisals or internal evaluations, including regulatory requirements, and, in the case of renewals or extensions, procedures for possible reappraisals or re-evaluations. Acceptable types of appraisals or evaluations should be outlined. Circumstances requiring the use of in-house staff appraisers instead of fee appraisers should be identified. Maximum loan-to-value ratios and the methods of valuation to be used for various types of collateral should be detailed. (See the "Real Estate Loans" and "Real Estate Construction Loans" sections for further details.)

The maximum ratio of loan amount to the market value of pledged securities is restricted by the Federal Reserve's Regulation U, 12 CFR 221. The lending policy should set forth margin requirements for all types of securities acceptable as collateral. Margin requirements should be related to the marketability of the security, that is, whether it is actively traded, over the counter, or closely held. The policy also should assign responsibility and set a frequency for periodic pricing of the collateral.

Prohibitions against tying arrangements. The most common types of tying arrangements are those where a bank product or consideration for a bank product is conditioned upon obtaining another product from the bank or an affiliate. Section 106 of the Bank Holding Company Act Amendments of 1970 generally prohibits a bank from tying a product or service to any of its other products or services, including those offered by its affiliates.[2] Examiners should ascertain that member banks have not extended credit voluntarily or involuntarily based on impermissible tying arrangements.

Types of loans. The lending policy should state the types of loans management considers desirable or prohibited. It also should set forth guidelines for extensions-of-credit types such as commercial loans; real estate loans; secured and unsecured loans; and off-balance-sheet activities, such as letters of credit and loan commitments. The decision about the types of loans granted should be based on the expertise of the lending officers, the deposit structure of the bank, and the community's anticipated credit demands. Credits involving complex structures or repayment arrangements, or loans secured by collateral that requires more-than-normal monitoring, should be avoided unless the bank has the personnel, policies, controls, and systems necessary to administer such advances properly. Types of credits that have caused an abnormal loss to the bank should be identified, scrutinized, and controlled within the framework of stated policy. A bank also should consider its overall

2. For more information, see this manual's section entitled, "Regulation Y: Prohibitions Against Tying Arrangements."

exposure to term lending relative to its stable funds.

Continued rigorous credit-risk assessment during favorable economic conditions. Internal processes and requirements for loan-underwriting decisions should be consistent with the nature, size, and complexity of the banking organization's activities and with the institution's lending policies. Any departures therefrom can have serious consequences for institutions of all sizes. Departures can be evident in three pivotal and related areas:

1. *An undue reliance on optimistic outlooks for prospective borrowers and for continued favorable economic and financial market conditions.* A long and continuing economic expansion can lead banks to more frequently base their decision to lend on a very optimistic assessment of the borrower's operating prospects. Timely principal repayment may often be based on the assumption that the borrower will have ready access to financial markets in the future. Such reliance, especially if across a significant volume of loans, is not consistent with sound credit-risk management. Undue reliance on continued favorable economic conditions can be demonstrated by—

   - dependence on very rapid growth in a borrower's revenue as the "most likely" case;
   - heavy reliance on favorable collateral appraisals and valuations that may not be sustainable over the longer term;
   - greater willingness to make loans without scheduled amortization before the loan's final maturity; or
   - ready willingness to waive violations of key covenants, release collateral, or guarantee requirements, or even to restructure loan agreements, without corresponding concessions on the part of the borrower on the assumption that a favorable environment will allow the borrower to recover quickly.

   Among the adverse effects of undue reliance on a favorable economy is the possibility of delay in properly identifying problem loans. Timely identification of problem loans is critical for providing a full awareness of the institution's risk position, informing management and directors of that position, taking steps to mitigate risk, and properly assessing the adequacy of the allowance for credit losses and capital.[3]

   Underlying a banking organization's (BO) overly optimistic assessment of a borrower's prospects may be an overreliance on its continued ready access to financial markets on favorable terms. Examples of overreliance include the following:

   - explicit reliance on future, public market debt or equity offerings or on other sources of refinancing as the ultimate source of principal repayment, which presumes that market liquidity and the appetite for such instruments will be favorable at the time that the facility is to be repaid
   - ambiguous or poorly supported BO analysis of the repayment sources of the loan's principal (This results in an implicit reliance, for repayment, on some realization of the implied market valuation of the borrower (for example, through refinancing, asset sales, or some form of equity infusion) and presumes, as above, that markets will be receptive to such transactions at the time that the facility is to be repaid.)
   - measuring a borrower's leverage (for example, debt-to-equity) based solely on the market capitalization of the firm without regard to "book" equity, and thereby implicitly assuming that currently unrealized appreciation in the value of the firm can be readily realized if needed
   - more generally, extending bank loans with a risk profile that more closely resembles that of an equity investment and under circumstances in which additional bank credit or default are the borrower's only resort if favorable expectations are not met

   As a result of this overreliance, some banking organizations may find themselves with a potentially significant concentration of credit exposure that is at risk to a possible reversal in financial markets. Turmoil in financial markets, however, may contribute to signifi-

3. With respect to these issues, see SR-98-25, "Sound Credit Risk Management and the Use of Internal Credit Risk Rating Systems at Large Banking Organizations." As discussed therein, the Federal Reserve's guidance on credit-risk management and mitigation covers both loans and other forms of on- and off-balance-sheet credit exposure.

cant liquidity pressures in some sectors of the economy and prevent ready access to financial markets by certain borrowers. Moreover, there is no assurance that any such market turmoil will quickly resolve itself. Under these circumstances, a borrower's ability to raise new funds in public debt or equity markets to repay maturing bank loans is far from guaranteed.

2. *Insufficient consideration of stress testing.* An institution's lending policies should prescribe meaningful stress testing of the prospective borrower's ability to meet its obligations. Failure to recognize the potential for adverse events—whether specific to the borrower or its industry (for example, a change in the regulatory climate or the emergence of new competitors) or to the economy as a whole (for example, a recession)—can prove costly to a banking organization.

   Mechanical reliance on threshold financial ratios (and the "cushion" they imply) is generally not sufficient, particularly for complex loans and loans to leveraged borrowers or others that must perform exceptionally well to meet their financial obligations successfully. Scenario analysis specific to the borrower, its industry, and its business plan is critical to identify the key risks of a loan. Such analysis should have a significant influence on both the decision to extend credit at all and, if credit is extended, on decisions on appropriate loan size, repayment terms, collateral or guarantee requirements, financial covenants, and other elements of the loan's structure.

   When properly conducted, meaningful stress testing includes assessing the effect on the borrower when the following situations or events occur:

   - unexpected reductions or reversals in revenue growth, including shocks to revenue of the type (or types) and magnitude that would normally be experienced during a recession
   - unfavorable movements in market interest rates, especially for firms with high debt burdens
   - unplanned increases in capital expenditures due to technological obsolescence or competitive factors
   - deterioration in the value of collateral, guarantees, or other potential sources of principal repayment
   - adverse developments in key product or input markets
   - reversals in or reduced access by the borrower to public debt and equity markets

   Proper stress testing typically incorporates an evaluation of the borrower's alternatives for meeting its financial obligations under each scenario, including asset sales, access to alternative funding or refinancing, or ability to raise new equity. In particular, the evaluation should focus not only on the borrower's ability to meet near-term interest obligations, but also on its ability to repay the principal of the obligation.

3. *Weakening of key internal controls in the lending process.* An institution's lending policy should require the use of adequate internal controls within the lending process. Internal controls such as loan review or credit audit are critical for maintaining proper incentives for bank staff to be rigorous and disciplined in their credit analysis and lending decisions. A bank's credit analyses, loan terms and structures, credit decisions, and internal rating assignments should be reviewed in detail by experienced and independent loan-review staff. These reviews provide both motivation for better credit discipline within an institution and greater comfort for examiners—and management—that internal policies are being followed and the institution continues to adhere to sound lending practice.

   Economic prosperity and relatively low levels of problem loans and credit losses should not encourage institutions to dramatically or suddenly reduce staff resources or portfolio coverage for the loan-review function. Likewise, thorough reviews of individual loans should continue. When economic prosperity and relatively low levels of problem loans and credit losses exist, there may be increasing internal pressure within the institution to reduce loan-review staff, to conduct more limited loan portfolio reviews, and to perform less thorough reviews of individual loans. Although some useful efficiencies may be desired, the danger is that the scope and depth of loan-review activities may be reduced beyond prudent levels over a

longer horizon. If reduced too far, the integrity of the lending process and the discipline of identifying unrealistic assumptions and discerning problem loans in a timely fashion may deteriorate, particularly as a result of a downturn in a credit cycle.

Other. Management should establish appropriate policies, procedures, and information systems to ensure that the impact of the bank's lending activities on its interest-rate exposure is carefully analyzed, monitored, and managed. In this regard, consideration should also be given to off-balance-sheet instruments that may be associated with lending arrangements, including commitments, letters of credit, or swaps. (See this manual's section on "Contingent Claims from Off-Balance-Sheet Credit Activities" for further details.)

Under the provisions of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) and the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), a financial institution is required to develop, adopt, and maintain policies, procedures, and guidelines consistent with safe and sound banking practices. The federal banking agencies have issued interagency guidelines based on the provisions. Taken together, these guidelines should strengthen supervision of financial institutions and provide guidance in developing and maintaining policies:

- Regulation H—subpart E, 12 CFR 208.50–51
- Regulation Y—subpart G, 12 CFR 225.61–67
- Uniform Standards of Professional Appraisal Practice promulgated by the Appraisal Standards Board of the Appraisal Foundation
- Interagency Appraisal and Evaluation Guidelines (See SR-10-16.)
- Interagency Policy Statement for Loan and Lease Losses (See SR-06-17.)
- Interagency Policy Statement on Supervisory Initiatives/Credit Availability (See SR-93-30.)
- Interagency Policy Statement on Documentation of Loans (See SR-93-26.)
- Regulation Y, section 225.7 "Tying Restrictions" (12 CFR 225.7.)

An institution's policies and procedures as they relate to interagency statements should be reviewed as part of the examination of the institution's overall lending activities.

GUIDANCE ON PRIVATE STUDENT LOANS WITH GRADUATED REPAYMENT TERMS AT ORIGINATION

Interagency[4] guidance[5] was issued on January 29, 2015, to provide financial institutions with principles applicable to private student loans that have graduated repayment terms. Financial institutions that originate private student loans may offer borrowers graduated repayment terms in addition to fixed amortizing terms at the time of loan origination. Graduated repayment terms are structured to provide for lower initial monthly payments that gradually increase. Refer to SR-15-2/CA-15-1 and its attachment.

Loan agreements include a grace period[6] to help with the post-education transition, the agencies and the State Liaison Committee recognize that students leaving higher education programs may prefer more flexibility to transition into the labor market because of a number of factors, such as competitive job markets, traditionally low entry-level salaries, and higher student debt loads. Graduated repayment terms may align borrowers' income levels with loan repayment requirements, provide flexibility to repay the debt sooner if borrowers' incomes increase more quickly than projected, and help long-term probability of full repayment.

Financial institutions that originate private student loans with graduated repayment terms should prudently underwrite the loans in a manner consistent with safe and sound lending practices. Financial institutions should provide disclosures that clearly communicate the timing and the amount of payments to facilitate a borrower's understanding of the loan's terms and features.

4. The agencies consist of the Board of Governors of the Federal Reserve System, Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation, National Credit Union Administration, and Office of the Comptroller of the Currency.

5. In implementing this guidance, the agencies will examine financial institutions consistent with their respective authorities.

6. A grace period is the allotted amount of time during which borrowers are not expected to make payments on student loans after initially leaving higher education programs or dropping below half-time enrollment status.

PROHIBITIONS AGAINST TYING ARRANGEMENTS

Among other things, section 106 of the Bank Holding Company Act Amendments of 1970 (section 106) prohibits a bank from conditioning the availability or price of one product on a requirement that the customer also obtain another product from the bank or an affiliate of the bank.[7] The statute is intended to prevent banks from using their ability to offer bank products in a coercive manner to gain a competitive advantage in markets for other products and services. Although section 106 prohibits banks from imposing certain types of tying arrangements on their customers, the statute also expressly permits banks to engage in other forms of tying and authorizes the Board to grant additional exceptions to the statute's prohibitions by regulation or order. For more information on section 106, see this manual's section, "Regulation Y: Prohibitions Against Tying Arrangements."

LOAN ADMINISTRATION

Loan administration is a term that refers to several aspects of lending. It can be used to describe the entire credit-granting process, as well as the monitoring of various lending activities, such as ensuring that loans remain adequately collateralized, properly graded, and appropriately serviced (administered). The servicing of an extension of credit involves tasks ranging from obtaining current financial information to sending out renewal notices and preparing loan agreements. In addition to facilitating the entire lending process, the individual tasks also serve as controls (checks and balances) over the lending activities. Given the wide breadth of responsibilities that the loan-administration function encompasses, its organizational structure varies with the size and sophistication of the bank. In larger banks, responsibilities for the various components of loan administration are usually assigned to different departments, while in smaller institutions, a few individuals might handle several of the functional areas. For example, a large bank's independent credit department may be responsible for analyzing borrowers' financial information, making a determination or recommendation as to the quality of the loan (its risk rating or grade), or obtaining/following up on credit-related information and documentation. On the other hand, smaller banks may assign each of these tasks to individual loan officers.

Examiners will encounter many different organizational structures for loan administration. Therefore, when considering the safety and soundness of a bank, they should determine whether it has effective and appropriate internal controls in place. The assessment of loan administration and related internal controls involves evaluating the bank's operations by reviewing the—

- efficiency and effectiveness of loan-administration operations;
- ability of the different components to safeguard assets, primarily loans and leases;
- adequacy of the management information systems and the accuracy of their reporting;
- adequacy and accuracy of its loan-review function (discussed in the next subsection); and
- compliance with prescribed management policies and procedures as well as applicable statutes and regulations.

For the components of loan administration to function appropriately, management must understand and demonstrate that it recognizes the importance of controls. This includes not only establishing appropriate policies and procedures but also enforcing them and ensuring that the bank's organizational structure is suitable for its size and complexity. Managers should emphasize integrity and ethical values, as well as hire competent staff. In addition, the following factors positively influence loan-administration control:

- a board of directors and/or senior management that takes an active role in monitoring lending policies and practices
- a reporting system that provides the bank with the information needed to manage the lending function and make sound credit decisions
- a well-defined lending-approval and -review system that includes established credit limits; limits and controls over the types of loans made and their minimum collateral requirements (for example, loan-to-collateral-value ratios); limits on maturities of loans; and policies on interest rates, pricing, and fee charges

7. 12 U.S.C. 1972.

- an independent loan-review function that identifies and evaluates existing and potential problem loans in a timely manner
- an independent reporting system that notifies appropriate personnel when financial information, insurance policies, or other loan documentation needs to be obtained
- a system of procedures that correct documentation exceptions

Loan administration is responsible for mitigating the operational risks associated with loan-related transactions, such as approving credit, disbursing loan proceeds, receiving loan payments, recording accrued interest and fee income, posting to subsidiary ledgers, and reconciling subsidiary and general ledgers. Typically, employees working with these types of activities have the capability to transfer funds between accounts on the bank's and the customer's behalf, which opens up an area of potential abuse. Additional potential areas for unethical employee behavior include the maintenance of loan notes and related documentation, as well as the credit and collateral files on borrowers. The bank must ensure it has adequate controls in place to avoid any improprieties; controls might include having separate departments for loan activities within a large organizational structure or rotating and/or segregating loan duties in smaller community banks. Some specific issues related to these responsibilities are described below.

Applications and Loan-Approval Process

The bank should have written policies and procedures for obtaining and reviewing loan applications and for ensuring sufficient borrower information (both financial and collateral-related) is required and analyzed in support of the loan approval. Approvals should be made in accordance with the bank's written guidelines and should also address the disbursal of loan proceeds. Additional issues that bank policies and procedures should address include—

- the requirement that loan commitments be in writing;
- requirements for letters of credit;
- the requirement for an annual review of borrowers, including a reassessment of the appropriateness of credit lines; and
- the requirement for a process for extending or renewing loans and credit lines.

Exceptions to the bank's written policies and procedures should reflect the appropriate level of approval and should be documented in writing.

Account Records

Bank staff should compare the approved terms for new and renewed extensions of credit (amount, maturity, interest rate, payment schedule) to the note or loan agreement for accuracy. The former should then be compared with the trial balance, if it is automated. If a manual system is used, the approved amount of the extension of credit should be checked against deposit tickets to ensure the correct amount was transferred to the borrower's account. Adjustments to loan accounts or accrued interest receivable accounts should be checked and tested by an individual independent of the loan-processing area. Subsidiary records should be routinely reconciled with the appropriate general ledger accounts.

Payments

Regardless of the type of payment, principal, interest, or fee, certain controls are necessary to ensure the effectiveness of operations, as well as the safeguarding of bank assets. An individual who cannot originate loan entries should perform an independent test of interest, commissions, and fee computations to confirm their accuracy. Payment notices should be prepared by someone other than a loan teller. In addition, loan officers should be prohibited from processing loan payments. Payments received by mail, tellers, or other departments should be separate from the loan-recording function. Supervisory approvals should be required for processing payments that are less than the amount contractually due, pertain to delinquent loans, are received irregularly, or involve waiving late fees. Collection notices should also be handled by someone not associated with loan processing.

Credit File Documentation

The bank should establish and maintain credit files for all borrowers. The bank's written loan policy should detail the minimum acceptable amount of information to be included in a borrower's credit file. The credit file should contain information on the extension of credit that identifies its purpose, source of repayment, repayment terms, and disposition of loan proceeds. Additionally, information should be on file relating to and/or analyzing the borrower's financial condition, including tax returns as appropriate; collateral, its valuation and related hazard insurance; the loan officer's contact with the borrower; and other pertinent documents, such as guarantor information, loan agreements, and loan covenant check sheets. Banks should maintain this information to support their evaluation of the borrower's creditworthiness and to leave a paper trail for auditors. The bank should also implement a file documentation tickler system to help bank personnel obtain updated information on borrowers, thereby facilitating continuous assessment and monitoring of credit risk.

Collateral Records

Banks should maintain appropriate documentation on collateral received from and released to borrowers, which should be consistent with the underlying loan agreements. Negotiable collateral, such as stock certificates, should be maintained under dual control in a fireproof vault. The receiving and releasing of collateral to customers should be handled by individuals other than those who make entries in the collateral register. The bank should issue a receipt to customers for each item of collateral it is holding in safekeeping. Signed customer receipts should be obtained and filed after the collateral is released.

Management Information Systems

Management information systems, an increasingly important component of the loan administration function, allow a bank to manage its lending decisions more efficiently and effectively. Whether the bank uses a computerized or manual system to manage its loan portfolio, the following types of information should be readily available and routinely reviewed by management:

- total loans and commitments
- loans in excess of existing credit limits
- new extensions of credit, credit renewals, and restructured credits
- a listing of all delinquent and/or nonaccrual loans
- credits adversely graded or requiring special attention
- credits to insiders and their related interests
- credits not in compliance with bank policies as well as applicable statutes and regulations
- specific lending activity aspects, including automated financial statement spreads of borrowers and analyses of the bank's credit exposure by type, geographic areas, collateral, and large employers

CREDIT RISK REVIEW SYSTEMS

An effective credit risk review function is integral to the safe and sound operation of every insured depository institution. The internal credit risk review function should not be merely an after-the-fact, loan-by-loan review, but a process to detect weaknesses in the various levels of an institution's credit approval and monitoring system. This manual's section, "Credit Risk Review Systems," provides more information on practices and principles for developing and maintaining a credit risk review function consistent with safe and sound credit risk management practice. See also SR-20-13.

Examination Scope Guidance

An effective loan review function can greatly assist examiners in their review of the bank's loan portfolio. The examination process should evaluate the internal loan-review function by assessing the scope and depth of the review and the quality of the output. While examiners should not rely entirely on the bank's findings, they can limit the scope of their loan examination by developing a comfort level with the bank's internal loan-review function. To determine the reliability, if any, of the internal loan-review function, examiners should assess the adequacy of management's ability to identify problem loans. Two issues should be evaluated in this regard: timeliness and accuracy. The

first issue deals with the ability of loan review to distinguish a problem loan and/or borrower from a nonproblem one when it initially becomes a problem. The second issue deals with the accuracy of loan review in identifying the severity of the problem. The Extent that examiners rely on an internal loan-review function depends upon their comfort level with the bank in the aforementioned regard.

The examiner will be able to determine the degree to which the bank's loan review function can be relied upon by reviewing prior examination criticisms, as well as management's response to them, and a sufficient sample of the bank's portfolio. Whether the borrower being reviewed as a part of the sampling process is a pass or nonpass credit, examiners should consider narrowing the scope of the pass credits included in the loan examination if they concur with the bank's risk ratings. However, examiners still should continue their analysis of all "nonpass" credits due to their importance to the adequacy of the ALLL.

NONACCRUAL LOANS

Loans and lease-financing receivables are to be placed on nonaccrual status if (1) principal or interest has been in default for 90 days or more, unless the loan is both well secured and in the process of collection; (2) payment in full of principal or interest is not expected; or (3) they are maintained on a cash basis because the financial condition of the borrower has deteriorated.

Definition of "well secured" and "in the process of collection"—An asset is "well secured" if it is secured (1) by collateral in the form of liens on or pledges of real or personal property, including securities, that have a realizable value sufficient to discharge the debt (including accrued interest) in full or (2) by the guarantee of a financially responsible party. An asset is "in the process of collection" if collection of the asset is proceeding in due course either (1) through legal action, including judgment enforcement procedures, or (2) in appropriate circumstances, through collection efforts not involving legal action, which are reasonably expected to result in repayment of the debt or in its restoration to a current status in the near future. For the purposes of applying the above third test for nonaccrual status, the date on which an asset reaches nonaccrual status is determined by its contractual terms that principal or interest has been in default for a period of 90 days or more, unless the asset is both well secured and in the process of collection. If the principal or interest on an asset becomes due and remains unpaid for 90 days or more on a date that falls between report dates, the asset should be placed in nonaccrual status as of the date it becomes 90 days past due. It should remain in nonaccrual status until it meets the following exception criteria for restoration to accrual status described below. (Any state statute, regulation, or rule that imposes more stringent standards for nonaccrual of interest should take precedence over this instruction.)

Exceptions—A loan does *not* need to be placed on nonaccrual status if (1) the criteria for accrual of income under the interest method specified in Accounting Standards Council (ASC) Subtopic 310-30, Receivables—Loans and Debt Securities Acquired with Deteriorated Credit Quality (formerly AICPA Statement of Position 03-3, "Accounting for Certain Loans or Debt Securities Acquired in a Transfer"), are met for a purchased impaired loan or debt security accounted for in accordance with that subtopic, regardless of whether the loan or debt security had been maintained in nonaccrual status by its seller; (2) the criteria for amortization specified in AICPA Practice Bulletin No. 6 are met with respect to a loan or other debt instrument accounted for in accordance with that Practice Bulletin that was acquired at a discount from an unaffiliated third party, including those that the seller has maintained on nonaccrual status; or (3) the loan is a consumer loan or secured by a one- to four-family residential property. However, the bank may elect to carry these loans on a nonaccrual status. Also, if a bank has a significant consumer or residential mortgage loan portfolio in relation to its total loans and tier 1 capital, a thorough review of the delinquency status should be performed to ensure that the bank has not materially misstated its financial condition and earnings.

Treatment of Cash Payments and Criteria for the Cash-Basis Treatment of Income—When a bank places a loan on nonaccrual status, it must consider how to account for subsequent payments. When the collectibility of the remaining book balance of a loan on nonaccrual status is uncertain, any payments received must be

applied to reduce the recorded investment in the asset or principal to the extent necessary to eliminate such doubt. Placing an asset on nonaccrual status does not require a charge-off, in whole or in part, of the asset's principal. However, *any identified losses* must be charged off.

When a loan is on nonaccrual status, some or all of the cash interest payments received may be treated as interest income on a cash basis, as long as the remaining recorded balance of the asset after the charge-off, if any, is deemed fully collectible.[8] A bank's determination of the collectibility of an asset's remaining book balance must be supported by a current, well-documented credit evaluation of the borrower's financial condition and repayment prospects.

When recognition of interest income on a cash basis is appropriate, the amount of income recognized should be limited to what would have been accrued on the loan's remaining book balance at the contractual rate. Any cash interest payments received over this limit (and not applied to reduce the loan's remaining book balance) should be recorded as recoveries of prior charge-offs until these charge-offs have been fully recovered. (A bank should have a well-defined policy governing the treatment of interest income and the charge-off of accrued interest receivables.)

Treatment of Previously Accrued But Uncollected Interest—When a bank places a loan on nonaccrual status, its policy should address an appropriate treatment of previously accrued but uncollected interest. One method is to reverse all previously accrued but uncollected interest against appropriate income and balance-sheet accounts. For interest accrued in the current accounting period, the entry is made directly against the interest income account. For prior accounting periods, if accrued-interest provisions to the ALLL were not made, the amount of accrued but uncollected interest should be charged against current earnings. Also for prior accounting periods when provisions to the ALLL for possible loss of interest had been made, the bank generally reverses the accrued but uncollected interest by charging the ALLL to the extent of those specific provisions. Generally accepted accounting principles do not require the write-off of previously accrued interest if principal and interest are ultimately protected by sound collateral values. A bank is expected to have a well-defined policy, subject to examiner review, governing the write-off of accrued interest.

Treatment of Multiple Extensions of Credit to One Borrower—As a general rule, nonaccrual status for an asset should be determined by assessing its collectibility, repayment ability, and performance. Thus, when one loan to a borrower is placed in nonaccrual status, a bank does not automatically have to place all of that borrower's other extensions of credit in nonaccrual status. The bank should evaluate its other extensions of credit to that borrower to determine if one or more of them also should be placed in nonaccrual status.

Restoration to Accrual Status—As a general rule, a nonaccrual loan may be restored to accrual status when (1) its principal and interest are no longer past due and unpaid, and the bank expects repayment of the remaining principal and interest, or (2) when it otherwise becomes well secured and in the process of collection. Before restoring a loan to accrual status, the bank should consider the borrower's prospects for continuing future contractual payments. If reasonable doubt exists, reinstatement may not be appropriate.

To meet the first test, the bank must have received payment of the past-due principal and interest, unless (1) the loan has been formally restructured and qualifies for accrual status under the restructured terms; (2) the asset is a purchased impaired loan or debt security accounted for in accordance with ASC Subtopic 310-30 and it meets the criteria for accrual of income under the interest method specified therein; or (3) the asset has been acquired at a discount (due to uncertainty about the amounts or timing of future cash flows) from an unaffiliated third party and meets the amortization criteria (that is, accretion of discount) specified in AICPA Practice Bulletin No. 6 or the borrower has resumed

8. An asset in nonaccrual status that is subject to the cost recovery method required by former AICPA Practice Bulletin No. 6 or ASC Subtopic 325-40, Investments–Other—Beneficial Interests in Securitized Financial Assets (formerly Emerging Issues Task Force Issue No. 99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets"), should follow that method for reporting purposes. In addition, when a purchased impaired loan or debt security that is accounted for in accordance with ASC Subtopic 310-30 has been placed on nonaccrual status, the cost recovery method should be used, when appropriate.

paying contractual interest and principal payments on the loan, even if the past-due amount has not been brought fully current. These loans may be returned to accrual status provided two criteria are met: (1) all principal and interest amounts contractually due (including arrearages) are reasonably assured of repayment within a reasonable period, and (2) the borrower has a sustained period of repayment performance (generally a minimum of six months) in accordance with the contractual terms.

Until the loan is restored to accrual status, cash payments received must be treated according to the criteria stated above. In addition, after a formal restructuring, if the loan that has been returned to accrual status later meets the criteria for placement in nonaccrual status (as a result of past-due status based on its modified terms or for any other reason), the asset must be placed on nonaccrual status.

Treatment of Nonaccrual Loans with Partial Charge-Offs—GAAP and regulatory reporting requirements do not explicitly address whether partial charge-offs associated with a nonaccrual loan (that has not been formally restructured) must be fully recovered before a loan can be restored to accrual status.

According to Call Report instructions, restoration to accrual status is permitted when (1) the loan has been brought fully current with respect to principal and interest and (2) the bank expects the loan's full contractual balance (including any amounts charged off), plus interest, will be fully collectible under the terms of the loan. Thus, to return a partially charged-off loan that has been brought fully current to accrual status, the bank should determine if it expects to receive the full amount of principal and interest called for by the loan's terms.

When the contractual principal and interest of a loan have been brought fully current, and the borrower's financial condition and repayment prospects have improved so that the full contractual principal (including any amounts charged off) and interest is expected to be repaid, the loan may be restored to accrual status *without* having to first recover the charge-off. Conversely, this treatment would be inappropriate when the charge-off indicates continuing doubt about the collectibility of principal or interest.

The reasons for restoring a partially charged-off loan to accrual status must be documented. These actions should be supported by a current, well-documented credit evaluation of the borrower's financial condition and prospects for full repayment of contractual principal (including any amounts charged off) and interest. This documentation will be subject to review by examiners.

Examiner Review—Some states have promulgated regulations or adopted policies for nonaccrual of interest on delinquent loans that may differ from the above procedures. In these cases, the bank should comply with the more restrictive policy. The examiner should ensure that the bank is complying with such guidelines. In all cases, each bank should formulate its own policies to ensure that net income is not being overstated. These policies are subject to examiner review.

RESTRUCTURED OR RENEGOTIATED "TROUBLED" DEBT

In a "troubled-debt restructuring," a bank grants a borrower concessions for economic or legal reasons related to a borrower's financial difficulties that it would not otherwise consider. Renegotiated "troubled" debt includes (1) the transfer from the borrower to the bank of real estate, receivables from third parties, other assets, or an equity interest in the borrower in full or partial satisfaction of the loan; (2) modification of loan terms, such as a reduction of the stated interest rate, principal, or accrued interest, or an extension of the maturity date for new debt with similar risk; or (3) a combination of the above. A loan extended or renewed at a stated rate equal to the current interest rate for new debt with similar risk is not considered renegotiated debt. For further information, see the instructions for the Reports of Condition and Income; and ASC Subtopic 310-40, Receivables—Troubled Debt Restructurings by Creditors (formerly FASB Statement No. 15, "Accounting by Debtors and Creditors for Troubled Debt Restructurings," as amended by FASB Statement No. 114, "Accounting by Creditors for Impairment of a Loan"). All loans whose terms have been modified in a troubled debt restructuring must be evaluated for impairment under ASC topic 310, "Receivables." Under ASC Topic 310, a measuring of impairment on a troubled loan using the present value of future cash flows should be discounted at the effective interest rate

of the original loan (that is, before the restructuring).[9]

A bank should develop a policy for renegotiated troubled debt to ensure that such items are identified, monitored, and properly accounted for and controlled. These restructurings should occur infrequently. If not, the bank is probably experiencing significant problems. Before troubled-debt concessions are made to a borrower, it is a good practice to have the transactions receive prior approval of the board of directors or a board committee. All these transactions should be reported to the board of directors upon enactment.

Bankers may be involved in formally restructuring loans when borrowers experience financial difficulties or in light of the borrower's condition and repayment prospects.[10] These actions, if consistent with prudent lending principles and supervisory practices, can improve a bank's collection prospects. GAAP and regulatory reporting requirements provide a reporting framework that may alleviate some of the lender's concerns about working constructively with borrowers experiencing financial difficulties.

The interagency policy statement on credit availability, issued March 1, 1991, clarifies a number of supervisory policies on restructured-loan issues. Two of these clarifications indicate that when certain criteria are met, (1) nonaccrual assets can be restored to accrual status when subject to formal restructurings in accordance with ASC Subtopic 310-40 and (2) restructurings that yield a market rate of interest would not have to be included in restructured loan amounts reported in the years following the restructuring. These clarifications, which are consistent with GAAP, have been fully incorporated into the instructions for the Reports of Condition and Income (Call Reports).

Restructurings

A loan or other debt instrument that has been formally restructured to ensure repayment and performance need not be maintained in nonaccrual status. In deciding whether to return an asset to accruing status, payment performance that had been sustained for a reasonable time before the restructuring may be considered. For example, a loan may have been restructured, in part, to reduce the amount of the borrower's contractual payments. It may be that the amount and frequency of payments under the restructured terms do not exceed those of the payments that the borrower had made over a sustained period within a reasonable time before the restructuring. In this situation, if the lender is reasonably assured of repayment and performance according to the modified terms, the loan can be immediately restored to accrual status.

A period of sustained performance, whether before or after the date of the restructuring, is very important in determining whether there is reasonable assurance of repayment and performance. In certain circumstances, other information may be sufficient to demonstrate an improvement in the borrower's condition or in economic conditions that may affect the borrower's ability to repay. This information may reduce the need to rely on the borrower's performance to date in assessing repayment prospects. For example, if the borrower has obtained substantial and reliable sales, lease, or rental contracts or if other important developments are expected to significantly increase the borrower's cash flow and debt-service capacity and strength, then the borrower's commitment to repay may be sufficient. A preponderance of such evidence may be sufficient to warrant returning a restructured loan to accrual status. The restructured terms must reasonably ensure performance and full repayment.

It is imperative that the reasons for restoring restructured debt to accrual status be documented. A restoration should be supported by a current, well-documented evaluation of the bor-

9. FASB 118 amended FASB 114 to allow creditors to use existing methods for recognizing interest income on impaired loans. This statement also clarifies the existing accounting for in-substance foreclosure. Under the impairment standard and related amendments to FASB 15, a collateral-dependent real estate loan (that is, a loan for which repayment is expected to be provided solely by the underlying collateral) would be reported as OREO only if the lender has taken possession of the collateral. For other collateral-dependent real estate loans, loss recognition would be based on the fair value of the collateral if foreclosure is probable. However, these loans would no longer be reported as OREO. Rather, they would remain in the loan category. In light of the significance of these changes to accounting standards, the Federal Reserve is reevaluating regulatory disclosure and nonaccrual requirements and expects to issue revised policies at a later date. (See SR-93-30 (FIS).) FASB 15 is also amended by FASB statements 71, 111, 121, 141, 145, and 149. (See FASB's current text.)

10. For further guidance on loan restructuring and workout arrangements, refer to the Statement on Working with Mortgage Borrowers that was issued by the Federal Reserve and the other federal financial institution regulatory agencies (see SR-07-6).

rower's financial condition and prospects for repayment. This documentation will be reviewed by examiners.

The formal restructuring of a loan or other debt instrument should be undertaken in ways that will improve the likelihood that the credit will be repaid in full in accordance with reasonably restructured repayment terms. A restructured loan may not be restored to accrual status unless there is reasonable assurance of repayment and performance under its modified terms in accordance with a reasonable repayment schedule. Regulatory reporting requirements and GAAP do *not* require a banking organization that restructures a loan to grant excessive concessions, forgive principle, or take other steps not commensurate with the borrower's ability to repay to use the reporting treatment specified in ASC Subtopic 310-40 (formerly FASB Statement No. 15). Furthermore, the restructured terms may include prudent contingent payment provisions that permit an institution to obtain appropriate recovery of concessions granted in the restructuring, if the borrower's condition substantially improves.

Moreover, while restructured debt that qualifies for accrual status and yields a market rate of interest must be disclosed as a troubled debt in the year of the restructuring, it need not be disclosed in subsequent years.

Reporting Guidance on Loan Fees and Interest

The accounting standards for nonrefundable fees and costs associated with lending, committing to lend, and purchasing a loan or group of loans are set forth in ASC Subtopic 310-20, Receivables—Nonrefundable Fees and Other Costs (formerly FASB Statement No. 91, "Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Cost of Leases"). In general, this statement says loan-origination fees should be deferred and recognized over the life of the related loan as an adjustment of yield. The statement applies to all types of loans, as well as to debt securities (but not to loans or securities carried at fair value if the changes in fair value are included in earnings), and to all types of lenders. For further information, see the instructions for preparing the Call Report.

PROBLEM ASSET DISPOSAL THROUGH EXCHANGES

Financial institutions explore strategies to dispose of or reduce nonperforming assets and other real estate owned (OREO). Some of these strategies include so-called "asset exchanges," whereby third parties or marketing agents have offered to purchase problem assets from institutions and replace them with performing assets. Such transactions, if properly executed with reputable counterparties and when they are subjected to the appropriate level of due diligence, may achieve the objective of reducing nonperforming assets on financial institutions' balance sheets. Other less structured transactions may present significant risk to institutions and could compromise their safety and soundness.

The guidance in this section highlights the potential risks associated specifically with transactions which may reduce problem assets in the short term, but where a lack of appropriate, up-front due diligence may result in heightened risks over the longer term. In addition, inappropriate assumptions used in determining the fair value of the purchased assets may result in institutions being required to recognize losses shortly after inception of the transaction.

Third parties or marketing agents may offer to purchase problem assets from institutions and replace them with performing assets to help institutions diversify their loan portfolios. Institutions may perceive that asset exchange transactions offer the potential to increase interest income, reduce the level of real estate concentrations, enhance liquidity, and reduce the stress on capital. Nevertheless, these transactions may pose significant risks. Sellers could be exchanging problem assets for purportedly performing assets (acquired assets) that were recorded at values in excess of fair value. See SR-11-15.

Risk-Management Considerations

Asset exchanges may expose institutions to significant risks, which management should assess before entering into such transactions. Management should focus not only on the immediate or short-term benefits of a transaction, but should determine its long-term effect on the institution's balance sheet and loss exposure. Management should also determine how these

risks align with the institution's overall risk-management strategy.

In undertaking due diligence on these types of transactions, management should assess the risks and provide evidence of its analysis, taking into account—

- the reported benefits to the institution from the transfer. This assessment should address whether the transaction would actually enable the institution to transfer significant risk associated with the problem assets.
- the economic costs and benefits of the transaction. This should include the economic benefits accruing to the marketing agent; the marketing agent's responsibilities and liabilities; and the loss position, including recourse, of each participant if either the ceded assets or acquired assets do not perform as anticipated.
- the servicing responsibilities attached to the acquired assets. If the institution assumes servicing responsibilities for the acquired assets, the institution should evaluate and show evidence that it has the capacity and infrastructure in place, as well as appropriate risk controls, to service the acquired assets.
- the transaction's compliance with the risk-tolerance and risk-mitigation policies established by the institution's board of directors, including the overall strategy for managing or reducing problem assets.
- the appropriate accounting treatment in accordance with U.S. generally accepted accounting principles (GAAP). Specific issues with regard to the appropriate accounting treatment include, but are not limited to, the following:
  - When specific loans are identified for inclusion in exchange transactions and the institution decides to sell the loans, they should be transferred to a "held-for-sale" account at the lower of cost or fair value with losses recognized through earnings. Any reduction in value should be reflected as a write-down of the recorded investment resulting in a new cost basis. The sale of these loans should occur at an appropriate fair value.
  - Newly acquired assets should be recorded at an appropriate fair value.
- a review of the marketing agent. This should include, but not be limited to, an assessment of the agent's financial strength, including its ability to provide credit enhancement if it is required in the transaction.
- the relationship between the marketing agent and any entity providing services for the transaction, with particular attention paid to possible cross-ownership or other related-party relationships.
- an independent valuation by a reputable and experienced third-party valuation expert of the assets being acquired. The party that performs the valuation should be independent of the marketing agent and the institution selling the performing assets. The use of outside resources does not relieve management of its responsibility to ensure that fair-value estimates are measured in accordance with GAAP.[11] Management should sufficiently understand the bases for the measurement and valuation techniques used by outside parties to determine the appropriateness of these techniques, the underlying inputs and assumptions, and the resulting fair-value measurements.[12]
- the acquiring institution's experience, skills, personnel, and risk-management capabilities to manage the newly acquired assets, especially if the assets are in business segments or geographical areas that are different from the institution's own.

Supervisory Responsibilities

It is not necessary to scope a specific review of these transactions into routine examination activities, particularly when there is no evidence that a bank has engaged in such transactions. Reserve Banks nevertheless should be aware of indications of possible asset exchange transactions as part of their routine monitoring of financial institutions between examinations. Examiners should hold ongoing discussions with an institution's management as part of the supervision process if examiners become aware that the institution is considering these types of transactions. Monitoring activities should focus on financial statement changes commonly associated with asset exchanges, internal risk-management reports, and other documents received on a routine basis. Indicators that asset exchanges might have taken place include—

11. Fair-value measurements are determined based on assumptions that market participants would use in valuing the assets. This should include a risk premium reflecting the amount market participants would demand because of the risk (uncertainty) in the cash flows.

12. Examples of significant inputs and assumptions include, but are not limited to, default probabilities, current loan-to-value ratios, loss severities, and prepayment speeds.

- asset sales at (or very near) book values, with either no loss recognized or a gain on recovery of a prior write-down recognized. It is unusual for a third party to buy problem assets at higher than the selling institution's book value at the time of the sale.
- board minutes showing discussion of strategies designed to achieve material reductions in problem assets.
- material loan sales and purchases involving the same counterparty, on or around the same date.
- significant reductions in the institution's nonperforming loan totals without attendant losses. The motivation for asset exchanges is to reduce problem assets, but this may be difficult to do in the current economic environment without realizing significant losses.
- purchase of a large portfolio of loans that are outside the institution's traditional markets and/or are inconsistent with the institution's business strategies or lending and investment policies.
- purchase at (or near) par of a large portfolio of loans that, while currently performing, have high-risk characteristics (e.g., are outside generally accepted underwriting standards for this type of credit) that indicate they may not continue to perform in accordance with their contractual terms.
- large net loan or asset growth during a short period. Because asset exchanges nearly always involve an institution purchasing more assets than it is selling, it is common for the balance sheet to grow rapidly as a result of the asset exchange transaction.

Supervisory Actions

If examiners observe an institution engaging in asset exchanges, they should determine whether the appropriate risk-management measures have been considered and if management has used appropriate valuations in accordance with GAAP. Important findings should be noted in the examination report and, as appropriate, plans for remedial action discussed with management. Given the concern regarding both safety-and-soundness issues as well as the appropriate valuation practices, Reserve Banks should contact the appropriate Board staff analyst to discuss the asset exchange transaction.

TRANSFER OF LOW-QUALITY LOANS OR OTHER ASSETS

Section 23A of the Federal Reserve Act (FRA), 12 U.S.C. 371c, prohibits bank purchases of low-quality assets from an affiliate. In addition to the statutory provisions of section 23A, the Board approved the issuance of Regulation W, which became effective April 1, 2003, implementing changes to sections 23A and 23B of the FRA.

Low-quality loans include those classified or specially mentioned at the most recent examination or loans that would most likely be classified or specially mentioned if subjected to a review. In addition, low-quality loans include 30-day past-due loans, nonaccrual loans, loans on which the terms have been renegotiated because of a borrower's poor financial condition, and any other loans the examiner believes are questionable. Other assets of questionable quality include depreciated or subinvestment-grade securities and other real estate. A low-quality asset shall not be acceptable as collateral for a loan or extension of credit to, or guarantee, acceptance, or letter of credit issued on behalf of an affiliate. Furthermore, a low-quality asset cannot be involved in a loan participation or an asset swap.

The transfer of low-quality loans or other assets from one depository institution to another may raise supervisory concerns. These transfers may be made to avoid detection and classification during regulatory examinations and may be accomplished through participation, purchases/sales, and asset swaps with other affiliated or nonaffiliated financial institutions. Examiners should be alert to situations in which an institution's intention appears to be concealing low-quality assets to avoid examiners' scrutiny and possible classification.

During bank examinations, examiners are requested to identify situations when low-quality assets have been transferred between the institution being examined and another depository institution. The transfer of assets to avoid supervisory review is a highly improper and unsound banking practice and, if an affiliate is involved, is a violation of section 23A of the Federal Reserve Act. If necessary, it should be addressed through formal supervisory enforcement action.

Any transfers of low-quality or questionable assets should be brought to the attention of

Reserve Bank supervisory personnel. In turn, these individuals should notify the local offices of primary federal and state regulators (if applicable) of the other depository institutions involved in the transaction. For example, Reserve Banks should notify the primary federal and state regulators (if applicable) of any depository institution to which a state member bank or holding company is transferring or has transferred low-quality loans. Reserve Banks should also notify the primary federal and state regulators (if applicable) of any depository institution from which a state member bank or holding company is acquiring or has acquired low-quality loans. This procedure applies to transfers involving savings and loan associations, savings banks, and commercial banking organizations.

If the examiner determines a permissible transfer of assets was undertaken, he or she should ensure the assets have been properly recorded at fair market value on the books of the acquiring institution. If the transfer involved the parent holding company or a nonbank affiliate, the examiner should determine if the transaction also was recorded properly on the affiliate's books.[13]

Whenever asset transfers occur, examiners should determine whether the assets in question were independently and completely evaluated for conformance with bank policy and procedures. Examiners should be guided by the inspection procedures outlined in section 2020.7.2 of the *Bank Holding Company Supervision Manual* and the examination procedures in section 6070.3 of this manual.

ENVIRONMENTAL LIABILITY

Banks may be liable for cleaning up hazardous substance contamination under both federal and state environmental liability statutes. This liability can arise through a bank's ownership or acquisition of real estate, in its role as a creditor, or in a fiduciary role. Banks may also be exposed to environmental liability indirectly through the increased possibility that a borrower's creditworthiness may be impaired by a liability to pay for cleanup of contaminated property, even if the property does not secure bank debt.

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the federal superfund statute, authorizes the Environmental Protection Agency (EPA) to clean up hazardous waste sites and to recover costs associated with the cleanup from entities specified in the statute. While the superfund statute is the primary federal law dealing with hazardous substance contamination, numerous other federal and state statutes establish environmental liability that could place banks at risk.

CERCLA defines who is subject to liability for the costs of cleaning up hazardous substance contamination. The definition includes ". . . the owner and operator of a vessel or a facility, (or) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of. . . ."[14] Under the statute, a person or entity that transports or arranges to transport hazardous substances can also be held liable for cleaning up contamination.

The superfund statute imposes a standard of strict liability, which means the government does not have to prove that the owners or operators knew about or caused the hazardous substance contamination in order for them to be liable for the cleanup costs. Moreover, liability under the statute is joint and several, which allows the government to seek recovery of the entire cost from any individual party that is liable for those costs under CERCLA.

CERCLA provides an exemption for secured creditors in the definition of "owner and operator" by stating that these terms do not include ". . . a person, who, without participating in the management of a vessel or facility, holds indicia of ownership primarily to protect his security interest in the vessel or facility."[15] However, this exception has not provided banks with an effective defense from liability because courts have limited its applicability. Specifically, courts have held that some lenders' actions to protect their security interests have resulted in the bank "participating in the management of a vessel or facility," thereby voiding the exemption. Additionally, once the title to a foreclosed property passes to the bank, some courts have held that the exemption no longer applies and that the bank is liable under the superfund statute as an "owner" of the property. Under some circumstances, CERCLA may exempt landowners who acquire property without knowing about existing conditions (the "innocent landowner

13. See section 6070.1 of this manual.

14. CERCLA, section 107(a).

15. CERCLA, section 101(20)(A).

defense"). However, the courts have applied a stringent standard to qualify for this defense. Since the statute provides little guidance as to what constitutes the appropriate timing and degree of due diligence to successfully employ this exemption, banks should exercise caution before relying on it.

Overview of Environmental Hazards

Environmental risk can be characterized as adverse consequences that result from generating or handling hazardous substances or from being associated with the aftermath of contamination.

Hazardous substance contamination is most often associated with industrial or manufacturing processes that involve chemicals as ingredients or waste products. For years, these types of hazardous substances were frequently disposed of in landfills or dumped on industrial sites. However, hazardous substances are also found in many other lines of business. The following examples demonstrate the diverse sources of hazardous substances, but by no means cover them all:

- farmers and ranchers (fuel, fertilizers, herbicides, insecticides, and feedlot runoff)
- dry cleaners (various cleaning solvents)
- service station and convenience store operators (underground storage tanks)
- fertilizer and chemical dealers and applicators (storage and transportation of chemicals)
- lawn care businesses (application of lawn chemicals)
- trucking firms (transportation of substances such as fuel or chemicals)

Environmental liability has had the greatest impact on the real estate industry. Not only has land itself been contaminated with toxic substances, construction methods for projects such as commercial buildings have used materials that have been subsequently determined to be hazardous—resulting in significant declines in project values. For example, asbestos was commonly used in commercial construction from the 1950s to the late 1970s. Asbestos has since been found to be a health hazard and now, in many cases, must be removed or its effects abated by enclosing or otherwise sealing off the contaminated areas.

Another common source of hazardous substance contamination is underground storage tanks. Leaks from these tanks not only contaminate the surrounding ground, but often flow into ground water and travel a significant distance from the original contamination site. As contamination spreads to other sites, cleanup costs escalate.

Effect on Banks—A bank may encounter losses from environmental liability through direct ownership, lending and trust activities, or mergers or acquisitions of borrowers. The greatest risk to a bank is the possibility of being held solely liable for costly environmental cleanups. Under the doctrine of joint and several liability, a bank may find itself solely responsible for cleaning up a contaminated site at a cost that exceeds any outstanding loan balance or property value.

Direct Ownership

A bank may be held liable for the cleanup of hazardous substance contamination in situations when it—

- takes title to property through foreclosure or acquires property to satisfy debts previously contracted;
- owns or acquires for future expansion premises that have been contaminated by hazardous substances; or
- owns, acquires, or merges with another entity involved in activities that might result in a finding of environmental liability.

Lending Activity—While real estate loans present the greatest risk, almost any type of loan, unsecured or secured, can expose a bank to the effects of environmental liability. A borrower who is required to pay for the cleanup of a contaminated property may be unable to provide the necessary funds both to remove contaminated materials and to service the debt. Even if the bank does not have a security interest in the borrower's real estate, it must be aware that significant cleanup costs could threaten the borrower's solvency and net worth (and jeopardize the collection of working-capital or equipment loans). If the loan is secured by the contaminated real estate, the bank may find that the property value has declined dramatically, depending on the degree of contamination. In determining whether to foreclose, the bank must

compare the estimated cleanup costs against the value of the collateral. In many cases, this estimated cost has been well in excess of the outstanding loan balance, and the bank has elected to abandon its security interest in the property and charge off the loan. This situation occurs because some courts have not allowed banks that have foreclosed on a property to avail themselves of the secured-creditor exemption. These rulings have been based on a strict reading of the superfund statute that provides the exemption to "security interests" only.

A bank may also expose itself to environmental liability in its role as a secured or unsecured creditor if it involves bank personnel or contractors engaged by the bank in day-to-day management of the facility or takes actions designed to make the contaminated property salable, possibly resulting in further contamination.

Bank Premises—Banks may also be exposed to environmental liability for property held as bank premises. A review of historical uses of properties to be acquired for relocation or future expansion should provide insight into the likelihood that contamination may have occurred and whether additional steps may be warranted.

Mergers and Acquisitions of Borrowers—Borrowers may face environmental risk through the activities of subsidiaries or by merging with or acquiring other companies whose activities result in environmental liability. Some courts have held that for the purposes of determining liability under the superfund statute, the corporate veil may not protect parent companies that participate in the day-to-day operations of their subsidiaries from environmental liability and court-imposed cleanup costs. Additionally, borrowers and, ultimately, banks can be held liable for contamination that occurred before they owned or used the real estate.

Protection Against Environmental Liability

Banks may avoid or mitigate potential environmental liability by having sound policies and procedures designed to identify, assess, and control environmental liability. The following discussion briefly describes methods that banks may employ to minimize potential environmental liability.

Loan policies and procedures should address methods for identifying potential environmental problems relating to credit requests. The loan policy should describe an appropriate degree of due diligence investigation required for credit requests. Borrowers in high-risk industries or localities should be investigated more stringently than borrowers in low-risk industries or localities.

After a loan is granted, periodic credit analysis of the borrower's ability to repay should include an assessment of environmental risk. If the credit is secured by real property collateral, the bank should remain aware of the property's uses and the potential environmental risk associated with those uses. Even if the credit is not secured by real property, periodic credit reviews should determine whether repayment prospects may be jeopardized by any activities that might expose the borrower to environmental liability.

The first step in identifying environmental risk is an environmental review. These reviews may be performed by loan officers or others. They typically identify past uses of the property; evaluate regulatory compliance, if applicable; and identify potential problems. The reviewer should interview persons familiar with present and past uses of the facility and property, review relevant records and documents, and inspect the site.

When the environmental review reveals possible hazardous substance contamination, an environmental assessment or audit may be required. Environmental assessments are made by personnel trained in identifying potential environmental hazards and provide a more thorough inspection of the facility and property. Environmental audits differ markedly from environmental assessments because independent environmental engineers are employed to investigate the property in great detail. Engineers test for hazardous substance contamination, which might require collecting and analyzing air samples, surface soil samples, or subsurface soil samples or drilling wells to sample ground water.

Other measures some banks use to help identify and minimize environmental liability to the bank include obtaining indemnities from borrowers for any cleanup costs incurred by the bank and writing affirmative covenants into loan agreements (and attendant default provisions) that require the borrower to comply with all applicable environmental regulations. Although these measures may provide some aid in identi-

fying and minimizing potential environmental liability, their effectiveness depends on the financial strength of the borrower and does not represent a substitute for environmental reviews, assessments, and audits.

Banks must be careful that any policies and procedures undertaken to assess and control environmental liability cannot be construed as taking an active role in the management or day-to-day operations of the borrower's business. Some activities that courts could consider active participation in the management of the borrower's business and that could subject the bank to potential liability include—

- having bank employees serve as members of the borrower's board of directors or actively participate in board decisions,
- assisting in day-to-day management and operating decisions, and
- actively determining management changes.

These considerations are especially important when the bank is actively involved in loan workouts or debt restructuring.

LOAN PROBLEMS

The failure of directors to establish a sound lending policy, require management to establish adequate written procedures, and monitor and administer the lending function within established guidelines has resulted in substantial problems for many institutions. Loan problems may be caused by a number of factors affecting the bank or its borrowers. For a discussion of the indicators of troubled commercial real estate loans, see the real estate loan sections of this manual. The major sources and causes of problem credits are explained below.

Competition—Competition among banks for size and community influence may result in compromising credit principles and making or acquiring unsound loans. The ultimate cost of unsound loans always outweighs temporary gains in growth and influence.

Complacency—The following items manifest complacency and should always be guarded against:

- lack of adequate supervision of long-term and familiar borrowers
- dependence on oral information the borrower furnished in lieu of reliable and verifiable financial data
- optimistic interpretation of known credit weaknesses based on past survival of recurrent hazards and distress
- ignorance or disregard of warning signs about the borrower, economy, region, industry, or other related factors

Compromise of credit principles. For various reasons, bank management may grant loans carrying undue risks or unsatisfactory terms, with full knowledge of the violation of sound credit principles. The reasons management may compromise basic credit principles include timidity in dealing with individuals with dominating personalities or influential connections, friendships, or personal conflicts of interest. Self-dealing, salary incentives, and bonuses based on loan portfolio growth, as well as competitive pressures, may also lead to a compromise of credit principles.

Failure to obtain or enforce repayment agreements. Loans granted without a clear repayment agreement are, at the very least, a departure from fundamental banking principles. These loans are likely to become significant problems. A more common problem, but just as undesirable, occurs when the bank and borrower agree on repayment or progressive liquidation of a loan, but the bank fails to collect the principal payments when and how it should. A study of loan losses will show that, in many cases, amortization never equaled the principal payments the borrower agreed to make. Good lending and good borrowing both require consistent liquidation.

Incomplete credit information. Complete credit information is necessary to make a reasonable and accurate determination of a borrower's financial condition and repayment capacity. Adequate and comparative financial statements, operating statements, and other pertinent statistical data should be available. Other essential information, such as the purpose of the borrowing and the intended plan and repayment source, progress reports, inspections, and memoranda of outside information and loan conferences, should be contained in the bank's credit files. The lack of adequate credit information can limit management's ability to react quickly and effectively when problems develop.

Lack of supervision. Many loans that are sound at their inception develop into problems and losses because of ineffective supervision. This lack of supervision usually results from a lack of knowledge about the borrower's affairs over the lifetime of the loan.

Overlending. In one sense, overlending could come under the heading of technical incompetence. However, overlending is a weakness found in some lenders that are otherwise competent. Loans beyond the borrower's reasonable capacity to repay are unsound. Nowhere are technical competence and credit judgment more important than in determining a sound borrower's safe, maximum loan level.

Poor selection of risks. When banks are willing to assume more-than-normal risk levels, they often experience serious loan problems. The following general loan types may fall within the category of poor risk selection:

- loans in which the bank advances an excessive proportion of the required capital relative to the borrower's equity investment
- loans based more on the expectation of successfully completing a business transaction than on the existing net worth and repayment capacity
- loans for the speculative purchase of securities or goods
- loans collateralized by marketable assets carried without adequate margins of security
- loans made for other benefits, such as control of large deposit balances in the bank, instead of sound net worth, collateral, or repayment capacity
- loans secured solely by the nonmarketable stock of a local corporation, made in conjunction with loans directly to that corporation (The bank may consider itself forced to finance the corporation far beyond warranted limits to avoid loss on a loan that relies on the corporation's stock.)
- loans predicated on collateral of uncertain liquidation value (A moderate amount of these loans, when recognized by bank management as subject to inherent weakness, may cause few problems. However, the bank can encounter trouble if this practice becomes the rule.)

Revenue-driven lending. The loan portfolio is usually a bank's most important revenue-producing asset. The earnings factor, however, must never compromise sound credit judgment and allow credits carrying undue risks or unsatisfactory repayment terms to be granted. Unsound loans usually cost far more than the revenue they produce.

Self-Dealing. Self-dealing is found in many serious problem banks. Self-dealing often takes the form of an overextension of credit on an unsound basis to directors or principal shareholders, or to their related interests, who have improperly used their positions to obtain funds in the form of unjustified loans (or sometimes as fees, salaries, or payments for goods or services). Officers, who hold their positions at the pleasure of the board, may be pressured to approve loan requests by insiders that, coming from customers, would have been rejected. In that situation, management may attempt to defend unsound loans or other self-dealing practices by bank insiders.

Technical incompetence. All able and experienced bankers should possess the technical ability to analyze financial statements and to obtain and evaluate other credit information. When this ability is absent, unwarranted losses are certain to develop. Credit incompetence of management should be discussed promptly with the board of directors.

INSIDER LENDING

The Federal Reserve Board's Regulation O (12 CFR 215) implements many of the laws pertaining to extensions of credit by banks to their insiders. Regulation O was issued pursuant to sections 22(g) and 22(h) of the Federal Reserve Act. Regulation O is designed to mitigate the potential for conflicts of interest and self-dealing by individuals who may be in a position to influence a bank's lending decisions. For more information, see this manual's section, "Regulation O: Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks."

EXAMINATION OF THE LENDING FUNCTION

Banks are expected to clearly delineate their lending objectives, policies, and procedures in writing. Lending practices are then expected to

adhere to policies and procedures, with exceptions properly justified and documented. The complexity and scope of a bank's lending policy and procedures should be appropriate to the bank's size and the nature of its activities, and they should be consistent with prudent banking practices and relevant regulatory requirements.

Historically, examiners have primarily identified loan-portfolio-management concerns through a detailed review of credits and credit documentation. This approach remains valid, but it must be combined with a full evaluation of a bank's lending objectives, policy, and procedures. Therefore, the scope of each examination should encompass a review of the bank's lending policy and procedures and an assessment of how lending practices adhere to the policy and procedures.

When conducting a review of loan portfolio management, examiners should pay particular attention to management's approach to and handling of the following:

- monitoring of lending practices by individual lending officers
- identification of concentrations of credit
- documentation of credit and collateral exceptions
- identification of problem credits
- accounting for nonaccrual loans and for renegotiated and restructured loans
- collection of past-due loans

In addition, examiners should be aware of any evidence of self-dealing in lending transactions.

An examiner's final assessment of a bank's lending function should consider the adequacy of internal policy and procedures, the effectiveness of management oversight and control, and the overall quality of the loan portfolio. Moreover, consideration should be given to all pertinent internal and external factors, including the continuity of management; bank's historical lending experience; and current and projected economic condition for the bank's market area, particularly for any industries in which the bank has concentrations of credit.

Supervisors and examiners should watch for indications of insufficiently rigorous risk assessment. In particular, examiners should be alert to circumstances indicating excessive reliance on strong economic conditions and robust financial markets, such as (1) borrowers whose financial capacity is inadequate to service their debts or (2) inadequate stress testing. Examiners also should be attentive when reviewing an institution's assessment and monitoring of credit risk to ensure that undue reliance on favorable conditions does not lead the institution to delay recognition of emerging weaknesses in some loans.[16]

If examiners observe significant and undue reliance on favorable assumptions about borrowers or the economy and about financial markets more generally—or observe that this reliance has slowed the institution's recognition of loan problems—they should carefully consider downgrading, under the applicable supervisory rating framework, an institution's risk-management, management, or asset-quality ratings (or all three). If those assumptions are deemed sufficiently significant to the institution, examiners should also consider downgrading its capital adequacy rating. Similarly, if supervisors or examiners find that loan-review activities or other internal-control and risk-management processes have been weakened by staff turnover, failure to commit sufficient resources, or inadequate training, such findings should be considered in supervisory ratings as well.

When developing their findings, examiners should review internal risk-management loan-review systems, conduct sufficient loan reviews, and perform transaction testing of the lending function to determine accurately the quality of bank loan portfolios and other credit exposures. If deficiencies in lending practices or credit discipline are indicated as a result of the pre-examination risk assessment or of performing the examination, sufficient supervisory resources should be committed to in-depth reviews, including transaction testing. Adequate, in-depth reviews and transaction testing should be performed to ensure that the Reserve Bank achieves a full understanding of the nature, scope, and implications of the deficiencies.

Important findings should be noted in the examination or report. Plans for remedial actions should be discussed with bank management and the boards of directors, as appropriate. In addition, any identified weaknesses or deficiencies that could adversely affect affiliated insured depository institutions should be conveyed to the insured institution's primary federal or state supervisor.

16. Examiners should recognize that an increase in classified or special-mention loans is not per se an indication of lax lending standards. Examiners should review and consider the nature of such increases and surrounding circumstances as they reach their conclusions about the asset quality and risk management of an institution.

1. Is the audit or independent review function adequate?
2. Are information and communication systems adequate and accurate?
3. Does management accurately identify, monitor, and reserve for credit risk?
4. Is portfolio quality satisfactory, considering trends in past dues, nonaccruals, charge-offs, adverse classifications, and the overall risk profile?
5. Is the volume of other real estate (ORE) and repossessed assets manageable and the ORE portfolio adequately administered and controlled?
6. Do the board and senior management effectively supervise this area?

PRELIMINARY REVIEW

1. Review prior examination reports, prior examination work papers, the examination planning memorandum, audit reports, and file correspondence for an overview of any previously identified lending concerns. 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) for loans and leases, repossessed assets, or ORE.
2. Review internal and external audit reports, and assess the audit scope.
3. Review internal and external loan review reports, as well as other reports provided by third parties.
4. Discuss with management any planned changes, such as changes in lending philosophy, portfolio composition, new products, pricing strategies. Determine whether current and planned lending strategies are consistent with the strategic plan.
5. Review and assess presentations to the loan committee and the board as well as information in the loan committee and board meeting minutes.
6. Obtain and analyze information used by management to supervise the loan portfolio. This information may include
   - organizational charts;
   - written policies and procedures;
   - problem loan and watch list reports;
   - delinquency and nonperforming asset reports;
   - concentration reports;
   - ALLL analysis or ACL analysis for loans and leases;
   - modified or restructured loan reports;
   - significant charge-offs or concentrations of charge-offs (by industry or types of borrowers) since the prior examination; and
   - portfolio stress test reports and documentation, if applicable.
7. Review the composition of the loan portfolio by type, dollar volume, and percentage of capital. Determine whether specialty-lending areas exist, including any new loan types, and assign responsibility for completing appropriate reviews. Refer to individual loan reference modules for additional procedures.
8. Based on the findings and risk identified in the preliminary assessment of the loan review program, select an appropriate loan sample.
9. Determine the volume of other real estate and the change in volume since the prior examination.
10. Determine the volume of repossessed assets and the change in volume since the prior examination.

AUDIT OR INDEPENDENT REVIEW[1]

11. Determine whether the audit program is sufficient to obtain reasonable assurance that
    - the ALLL or ACL for loans and leases is appropriate and is determined in accordance with generally accepted accounting principles (GAAP);
    - loan review practices reasonably identify portfolio risk;
    - loan portfolio quality is properly monitored and reported;
    - nonperforming loans are appropriately placed on nonaccrual status;
    - loan modifications are properly identified as troubled debt restructurings, when applicable; and
    - management complies with applicable laws and regulations, such as state legal lending limits and the Federal Reserve Board's Regulation O.
12. 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
    - recommend corrective action when warranted;
    - verify that corrective action commitments are implemented;
    - assess separation of duties, internal controls, and supervision of lending activities;

1. Coordinate with the examiners who review the internal audit function.

- determine compliance with policies, procedures, and regulatory requirements; and
- assess the adequacy, accuracy, and timeliness of reports to senior management and the board.

INFORMATION AND COMMUNICATION SYSTEMS

13. 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 senior management. Reports may include the following types of information:
    - analysis of the appropriateness of the ALLL or ACL for loans and leases;
    - level and trends of classified loans;
    - level and trends of past due and nonaccrual loans;
    - watch list;
    - foreclosures and repossessions;
    - insider borrowings;
    - kiting suspects;
    - overdrafts;
    - participations;
    - internal and external audit results;
    - loan review results;
    - portfolio composition; and
    - unfunded commitments.
14. Review the effectiveness and accuracy of the system for aggregating related credit exposures.
15. Analyze growth trends by volume and loan type, and determine whether actual data mirrors budgeted growth or strategic plans.
16. Review the accuracy of accounting for loan transfers and participations. Consider partial sales and recourse arrangements.
17. Determine whether procedures and practices for placing loans on nonaccrual status agree with Call Report instructions.
18. Determine whether procedures and practices regarding troubled debt restructurings (TDR) agree with Call Report instructions.
19. Validate the accuracy of the Call Report where necessary.

IDENTIFYING, MONITORING, AND RESERVING FOR CREDIT RISK

Loan Review

20. 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, approval, and servicing. An effective loan review system generally accomplishes the following objectives:
    - promptly identifies loans with actual and potential credit weaknesses so that timely action can be taken to strengthen credit quality and minimize losses;
    - appropriately validates and, if necessary, adjusts risk ratings, especially for those loans with potential or well-defined credit weaknesses that may jeopardize repayment;
    - identifies relevant trends that affect the quality of the loan portfolio and highlights segments of the loan portfolio that are potential problem areas;
    - assesses the adequacy of and adherence to internal credit policies and loan administration procedures and monitors compliance with applicable laws and regulations;
    - evaluates the activities of lending personnel and management, including their compliance with lending policies and the quality of their loan approval, monitoring, and risk assessment;
    - provides management and the board with an objective, independent, and timely assessment of the quality of the loan portfolio; and
    - provides management with accurate and timely credit quality information for financial and regulatory reporting purposes, including the determination of appropriate ACL for loans and leases or ALLL, as applicable.
21. Determine whether the watch list is regularly updated by management and reviewed by the board.
22. 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.

ALLOWANCE FOR CREDIT LOSSES ON LOANS AND LEASES[2]

Methodology

23. Determine the methodology or methodologies used to measure the expected collectability of loans, and consider whether management maintains supporting documentation for the assumptions and estimates used. Methodologies include
    - loss-rate;
    - weighted-average-remaining-maturity (WARM);
    - probability of default/loss given default (PD/LGD);
    - roll-rate;
    - discounted cash flow;
    - a method that uses aging schedules;
    - fair value of the collateral (required for all collateral-dependent loans); and
    - another reasonable method to estimate expected credit losses.
24. Assess the methodology or methodologies used in determining an appropriate ACL for loans and leases. Determine whether the complexity and scope of the ACL evaluation process for loans and leases and the loan review system are appropriate given the institution's risk profile and complexity of lending activities. Consider whether management provides for the following:
    - an effective loan review system and controls;
    - data-capture and loan-reporting systems that provide meaningful information regarding portfolio risks to support and document the estimates of an appropriate ACL for loans and leases for regulatory reporting requirements and, if applicable, financial statement and disclosure requirements;
    - resources to appropriately evaluate loss-estimation models before they are implemented (when applicable) and to modify model assumptions as needed;
    - processes that support the determination and maintenance of an appropriate level for the ACL for loans and leases that are based on a comprehensive, well-documented, and consistently applied analysis of the loan and lease portfolio and off-balance-sheet credit exposures;
    - procedures for an independent third party to review and validate the ACL methodology for loans and leases;
    - processes for determining the appropriate historical period(s) to use as the basis for estimating expected credit losses and approaches for adjusting historical credit loss information to reflect differences in loan specific characteristics as well as current conditions and reasonable and supportable forecasts that are different from conditions existing in the historical period(s);
    - procedures to incorporate relevant internal and external factors that significantly affect collectability over reasonable and supportable forecast periods as well as to apply appropriate reversion techniques to periods beyond reasonable and supportable forecast periods;
    - processes for determining and revising the appropriate techniques and periods to revert to historical credit loss information when the contractual term of loans and leases or off-balance-sheet credit exposures extends beyond the reasonable and supportable forecast period(s);
    - processes for segmenting the loan and lease portfolio for estimating expected credit losses and periodically evaluating the segments to determine whether the loans and leases continue to share similar risk characteristics; and
    - policies and procedures for the prompt write-off of loans and leases, or portions of loans and leases, when available information confirms the loans and leases to be uncollectible, consistent with regulatory reporting requirements.
25. Evaluate the criteria management uses to segment loans by similar risk characteristics. GAAP requires expected losses to be evaluated collectively when loans share similar risk characteristics. If a loan does not share similar risk characteristics with other loans, expected credit losses for that loan should be evaluated individually. Examples of risk characteristics include but are not limited to:
    - internal or external credit scores or credit ratings;

2. Use procedures 23-34 to assess the ACL for loans and leases methodology for institutions that have adopted ASU 2016-013, and use procedures 23a-34a to assess the ALLL methodology for institutions that have not adopted ASU 2016-013.

- risk ratings or classifications;
- loan type;
- collateral type;
- size;
- effective interest rate;
- term;
- geographical location;
- borrower industry; and
- vintage.

26. Evaluate the policies and procedures for the ACL for loans and leases, and assess the loss estimation method(s) used to arrive at estimates of the ACL for loans and leases, including the documentation supporting management's assumptions, valuations, and judgments. Determine whether management appropriately considers historical loss information, current conditions, and reasonable and supportable forecasts that are relevant to assessing the collectability of cash flows, including significant qualitative factors that affect the collectability of the loan and lease portfolio.
27. Determine the basis for evaluating groups of loans under ASC Subtopic 326-20 (CECL).[3]
    - Evaluate the calculation of historical loss rates for each segment.[4]
    - Review the time period and the method of calculation (e.g., simple average, weighted average) for reasonableness and consistency.[5]
    - Consider whether the historical loss information may need to be adjusted for differences in current loan specific characteristics, such as differences in underwriting standards, portfolio mix, or when historical credit terms do not reflect the contractual terms of the loans being evaluated as of the reporting date.
    - Consider the effect of new loan products or newly expanded markets.[6]
    - Consider how segmentation methods and historical loss-rate calculations reflect the extent to which current conditions and reasonable and supportable forecasts differ from the conditions that existed during the historical loss period.
    - Consider management's process for evaluating contractual terms of loans, considering expected prepayments.[7]
28. Determine whether management considered all significant factors relevant to the expected collectability of the loan and lease portfolio as of the reporting date and maintains documentation sufficient to support all material adjustments. Appropriate documentation generally addresses all material factors that are relevant to the institution at the reporting date.[8] Qualitative or environmental factors may include
    - the nature and volume of the loans and leases;
    - the existence, growth, and effect of concentrations of credit;
    - the volume and severity of past due loans, the volume of nonaccrual loans, and the volume and severity of adversely classified or graded loans;
    - the value of the underlying collateral for loans that are not collateral-dependent;
    - the institution's lending policies and procedures, including changes in underwriting standards and collections, charge-off, and recovery practices;
    - the quality of the institution's credit review system;
    - the experience, ability, and depth of the lending, collection, and other relevant

3. Adjustments to historical loss information may be positive or negative, quantitative or qualitative, and are supported by relevant data (e.g., changes in unemployment rates, delinquency, or other factors associated with the loans).

4. The granularity of segmentation and the method used to calculate loss rates affects 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.

5. Historical loss information may be based on internal information, external information, or a combination of both.

6. Historical loss rates for new products or loans in a new market may not be reliable given lack of seasoning or market awareness.

7. Renewals, extensions, and modifications are excluded from the contractual term of a loan for purposes of estimating the ACL for loans and leases unless there is a reasonable expectation of executing a troubled debt restructuring or the renewal and extension options are part of the original or modified contract and are not unconditionally cancellable by the institution.

8. Historical credit losses (or even recent trends in losses) generally do not, by themselves, form a sufficient basis to determine the appropriate level of the ACL for loans and leases. Management should consider the need to qualitatively adjust expected credit loss estimates for information not already captured in the loss estimation process. These qualitative factor adjustments may increase or decrease management's estimate of expected credit losses. Adjustments should not be made for information that has already been considered and included in the loss estimation process.

management and staff;
- the effect of other external factors, such as the regulatory, legal, and technological environments; competition; and events, such as natural disasters; and
- actual and expected changes in international, national, regional, and local economic and business conditions and developments in which the institution operates that affect the collectability of the loan and lease portfolio.

29. Determine how management estimates credit losses on a group of loans with similar risk characteristics when the institution does not have loss experience of its own for such a loan group.[9]
30. Confirm that loans evaluated individually are not included in a collective assessment of expected credit losses.
31. When the contractual term of a loan or lease extends beyond the reasonable and supportable period, determine whether management reverts to historical loss information, or an appropriate proxy, for those periods beyond the reasonable and supportable forecast period (often referred to as the reversion period).
32. If the ACL for loans and leases includes an *unallocated* amount, determine whether it conforms to GAAP and is properly documented and supported.
33. Where appropriate, determine whether the assessment of an appropriate level for the ACL for loans and leases includes an estimate of losses from transfer risk associated with cross-border lending activities.
34. Determine whether the ACL evaluation process for loans and leases is completed at least quarterly, and evaluate the documentation maintained to support management's assumptions, valuations, and judgments.

Methodology

23a. Assess the methodology used in determining the appropriate ALLL and consider whether it includes portfolio segmentation and impairment analysis for individually evaluated loans. (Refer to ASC Subtopic 450-20 and ASC Topic 310.) Determine whether the complexity and scope of the ALLL evaluation process and loan review system are appropriate given the institution's risk profile and complexity of lending activities. Consider the following:
- the effectiveness of the 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 methodology is based on a comprehensive, adequately documented, and consistently applied analysis of the loan and lease portfolio;
- management promptly charges off loans, or portions of loans, that are uncollectible; and
- an independent third party periodically reviews and validates the ALLL methodology.

24a. Evaluate the criteria management uses to select loans for individual evaluation under ASC Topic 310, such as
- Loans or relationships above a dollar threshold. If management uses a dollar threshold, assess the threshold in relation to average loan balances, concentrations, or other factors that would cause the loans to be more significant to the institution;
- Loans or relationships on the Watch List or adversely classified Substandard or Doubtful. If selection criteria do not include loans rated Substandard or Doubtful, assess the rationale for the decision; and
- Loans or relationships past due or on nonaccrual status.

25a. Determine the methodology used by management to measure impairment on loans (within the scope of ASC Topic 310) that are individually evaluated and determined to be impaired, and consider whether management 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

9. An institution may not have a loss history if the product is new or the institution is a de novo organization.

collateral dependent; or
- the fair value of collateral method.[10]

26a. 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.

27a. Determine how management treats[11]
- loans individually evaluated for impairment under ASC Topic 310 that are determined not to be impaired; and
- individually evaluated loans determined to be impaired that are measured with zero impairment (i.e., no allowance is established when measured for impairment under ASC Topic 310).

28a. Determine the basis for evaluating groups of loans under ASC Subtopic 450-20.[12]
- Ensure that assets are adequately stratified into groups based on one or more risk characteristics.
- Evaluate the historical loss-rate calculation for each segment.
- Review the time period and the calculation method (e.g., simple average, weighted average) for reasonableness and consistency.
- Consider the effect of new loan products or newly expanded markets.[13]
- Consider how segmentation methods and historical loss-rate calculations reflect qualitative or environmental factors necessary to reflect current conditions and expectations.

29a. Determine whether management considers relevant qualitative and environmental factors and maintains documentation sufficient to support material adjustments. Appropriate documentation generally addresses material factors that are likely to cause estimated losses to differ from historical losses. Qualitative or environmental factors may 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;[14]
- 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 concentrations of credit; and
- the effect of external factors, such as competition or legal and regulatory requirements.

30a. Determine how management 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.[15]

31a. Confirm that management does not include loans measured for impairment under ASC 310 in the estimated credit losses under ASC Subtopic 450-20, even if the ASC Topic 310 impairment measurement was zero.

32a. If the ALLL includes an *unallocated* amount, determine whether it conforms to

10. For Call Report purposes, the impairment of an impaired collateral-dependent loan must be measured using the fair value of collateral method.

11. Examiners should determine that management 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 evaluated under ASC Topic 310 but is not impaired by definition, it should be included in the ASC Subtopic 450-20 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 Subtopic 450-20, even if no ASC Topic 310 allowance is established.

12. Adjustments for qualitative or environmental factors, which may be positive or negative, are typically made to reflect current conditions and expectations as of the balance sheet date 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.

13. Historical loss rates for a general segment may not be accurate for new products or loans in a new market that are included in the general segment.

14. Credit loss and recovery experience may vary significantly depending on the business cycle.

15. An institution may not have a loss history if the product is new or the institution is a de novo organization.

GAAP and is properly documented and supported.

33a. Where appropriate, determine whether the assessment of an appropriate level for the ALLL includes an estimate of losses from transfer risk associated with cross-border lending activities.

34a. Determine whether the ALLL evaluation process is completed at least quarterly and evaluate the documentation maintained to support management's assumptions, valuations, and judgments.[16]

LEVEL OF THE ALLL OR ACL FOR LOANS AND LEASES

35. Evaluate the level of the ALLL or ACL for loans and leases.
    - Determine whether the ALLL or ACL for loans and leases is appropriate based on a review of the institution's methodology coupled with examination findings as they relate to
      - — loan classifications and internal watch list ratings;
      - — effectiveness and reliability of the loan review system;
      - — level and trend of past due and nonaccrual loans;
      - — historical recovery of loan charge-offs;
      - — lending policies and procedures, such as underwriting, collection, and charge-off and recovery practices; and
      - — changes in the business cycle that necessitate qualitative or environmental factor adjustments to historical loss rates.
    - Consider reviewing applicable ratios as a preliminary check on the reasonableness of the ALLL or ACL for loans and leases.[17]
      - — Evaluate trends compared to historical experience (e.g., the relationship of the ALLL or ACL for loans and leases to adversely classified or graded loans, past due and nonaccrual loans, total loans, and historical gross and net charge-offs).
      - — Analyze changes in key ratios from prior periods, assess the directional consistency of the ALLL or ACL for loans and leases in relation to these changes, and assess the appropriateness and reasonableness of the ALLL or ACL for loans and leases based on the collectability of the institution's loan portfolio in the current environment.
    - If the institution's loan review system is effective and the methodology for determining an appropriate ALLL or ACL for loans and leases is acceptable, compare the result of the institution's methodology to the actual ALLL or ACL for loans and leases balance. Ensure that the ALLL or ACL amount for loans and leases reported in the institution's regulatory reports and financial statements reconciles to the ALLL or ACL analysis for loans and leases. Assess the reasons for material differences.
    - Assess management's estimated credit losses, and, if necessary, consider the need for additional provision expenses based on examination findings. Consider whether
      - — the loan review system is substantially inaccurate;
      - — the bank is lending in stressed market conditions;
      - — credit administration and underwriting weaknesses have not been timely identified or addressed; or
      - — examination results reflect significant loan quality deterioration.

PORTFOLIO QUALITY

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

37. Review overdraft protection, large items, uncollected funds, and check kiting reports for irregular activity. Pay particular atten-

16. Refer to the 2001 Final Interagency Policy Statement on ALLL Methodologies and Documentation for Banks and Savings Institutions as well as the 2006 Interagency Policy Statement on ALLL. However, sole use of ratio analysis is insufficient for determining an appropriate level for the ALLL or ACL for loans and leases.

17. Ratio analysis can be a supplemental check on the reasonableness of management's assumptions and analysis. However, sole use of ratio analysis is insufficient for determining an appropriate level for the ALLL or ACL for loans and leases.

tion to overdrafts of bank insiders and insiders of other banks.

38. Evaluate the level and trend of past due ratios for each type of credit, and determine which loan categories pose elevated risk.
39. Review and analyze purchased loan participations for appropriate accounting[18] treatment, due diligence, creditworthiness, underwriting quality, and recourse provisions. Consider
    - whether these credits are *internally* classified at the originating institution or other participation holders (when the information is available); and
    - whether these credits are adversely classified in regulatory examination reports at the originating institution and other participation holders *(this information cannot be shared with management)*.
40. If the institution has acquired other institutions or loan portfolios, analyze the effect these purchases have had on the bank's portfolio composition and risk profile.
41. Determine whether it appears any loans were sold prior to the examination to another institution or to the holding company to avoid criticism by examiners.
42. Determine whether the institution has any borrowing relationships that qualify as Shared National Credits and assign classifications accordingly.
43. Evaluate the level and trend of classified loans and the effect on the institution's credit risk profile.

MANAGERIAL EFFECTIVENESS

Procedures and Practices

44. Determine whether loan and executive officers consistently follow the institution's lending policies and practices.
45. Review the loan approval process and determine whether loan presentations include adequate analysis of the following items:
    - loan purpose;
    - repayment sources (primary and secondary) 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.
46. Determine whether the 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 credit assessment includes a review of credit reports to identify other outstanding debts or contingent liabilities.
    - Assess whether the 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 management identifies and reviews contingent liabilities.
    - Evaluate the 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.
    - Determine whether the global cash flow analysis considers all relevant parties to the transaction.
47. Determine whether management uses financial and reporting covenants. If so, evaluate how covenants are tracked and monitored, and whether management enforces them or regularly waives them.

Applicable Statutes and Regulation

48. Determine the institution's regulatory and internal lending limits, and assess management's compliance with the limits.

18. Refer to the definition of Transfers of Financial Assets in the Call Report glossary for additional information.

49. Review transactions with affiliates for compliance with section 23A of the Federal Reserve Act.[19]
50. Review extensions of credit to insiders for compliance with the Federal Reserve Board's Regulation O.
51. Review management's compliance with the anti-tying provisions of section 106 of the Bank Holding Company Act Amendments of 1970 (12 U.S.C. 1972), which prohibits extensions of credit conditioned on the borrower obtaining or providing any additional credit, property, or service to or from the institution or its holding company.
52. Determine whether management complies with applicable laws and regulations for loans secured by stock. Items to consider include
    - loans secured by the bank's own stock;[20]
    - loans to purchase or carry margin stock;[21] and
    - management's familiarity with the Lost and Stolen Securities program (SEC Rule 240.17f1) and measures it has taken to minimize exposure on loans secured by stock. Refer to the securities information center webpage for further guidance.
53. Review and assess the management's compliance with applicable real estate lending and appraisal regulations.

CREDIT ADMINISTRATION

54. Assess management's actions to correct criticisms noted in prior examination reports, recent loan review reports, and recent internal and external audits.
55. Evaluate management's effectiveness at reacting to changing economic, industry, and regulatory environments.
56. Evaluate the composition of the loan committee. Determine whether members are independent and qualified.

OTHER LOAN RELATED ITEMS

Other Real Estate

57. 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 real estate taxes; and
    - disposal of the parcel (who, when, how), if applicable.
58. 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.
59. Evaluate the quality of the portfolio and classify parcels accordingly.

Repossessed Assets

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

19. 12 U.S.C. 371 (c) defines covered transactions; sets quality, terms, and collateral requirements; and places aggregate limits on such activities.

20. 12 U.S.C. 83, section 5201 of the Revised Statutes and section 9 of the Federal Reserve Act prohibit an institution from making a loan secured by its own stock.

21. If secured directly or indirectly by margin stock, Federal Reserve Board's Regulation U is applicable.

Non-Ledger Assets

61. Determine whether appropriate approval authorities and levels of review are in place given the volume and magnitude of charge-offs.
62. Ascertain whether audit practices are sufficient given the volume and magnitude of charge-offs.[22]
    - Auditors typically determine the validity 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 is typically 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 responsible for the 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 charge-offs over a certain amount.
63. Determine that appropriate efforts are made to collect charged-off assets.

22. Coordinate with the examiners who review the internal audit function.

An effective credit risk review function is integral to the safe and sound operation of every insured depository institution. In May 2020, the Office of the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation, and the National Credit Union Administration (collectively, the agencies) issued guidance for credit risk review. See 85 *Federal Register* 33,278 (June 1, 2020) and SR-20-13, "Interagency Guidance on Credit Risk Review Systems." To assist institutions in the creation and operation of such functions, the guidance for credit risk review describes a broad set of practices and principles for developing and maintaining a credit risk review function consistent with safe and sound credit risk-management practices and the *Interagency Guidelines Establishing Standards for Safety and Soundness* (safety and soundness guidelines).[1] However, the guidance for credit risk review does not establish any requirements or rules, nor does it mandate implementation of a specific system or prescribe specific actions with which institutions must comply.

The guidance discusses sound management of credit risk, a system of independent, ongoing credit review, and appropriate communication regarding the performance of the institution's loan portfolio to its management and board of directors. This guidance for credit risk review is relevant to all institutions supervised by the agencies and replaces attachment 1 of the 2006 Interagency Policy Statement on the Allowance for Loan and Lease Losses. The nature of credit risk review systems typically varies based on an institution's size, complexity, loan types, risk profile, and risk-management practices. The remainder of this section conveys the Interagency Guidance on Credit Risk Review Systems with the exception of some references that were removed because they do not pertain to institutions for which the Federal Reserve is the primary regulator.

1. For state member banks, see 12 CFR part 208, appendix D-1.

INTERAGENCY GUIDANCE ON CREDIT RISK REVIEW SYSTEMS

Introduction

The safety and soundness guidelines underscore the critical importance of credit risk review and set safety and soundness standards for insured depository institutions to establish a system for independent, ongoing credit risk review, and for appropriate communication to their management and boards of directors.[2] The credit review guidance, which aligns with the safety and soundness guidelines, is appropriate for all institutions and describes a broad set of practices that can be used either within a dedicated unit or across multiple units throughout an institution to form a credit risk review system that is consistent with safe and sound lending practices.[3] This manual section presents guidance which outlines principles that an institution should consider in developing and maintaining an effective credit risk review system.

Overview of Credit Risk Review Systems

The nature of credit risk review systems varies based on an institution's size, complexity, loan types, risk profile, and risk-management practices.[4] For example, in smaller or less complex

2. For foreign banking organization branches, agencies, or subsidiaries not operating under single governance in the United States, the U.S. risk committee would serve in the role of the board of directors for purposes of this guidance.

3. For purposes of this guidance, regulated institutions are those supervised by the following agencies: The Board of Governors of the Federal Reserve System (Board), the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), and the Office of the Comptroller of the Currency (OCC).

4. The credit risk review function is not intended to be performed by an institution's internal audit function. However, as discussed in the agencies' March 2003 *Interagency Policy Statement on the Internal Audit Function and its Outsourcing* (2003 policy statement), some institutions coordinate the internal audit function with several risk monitoring functions, such as the credit risk review function. The 2003 policy statement states that coordination of credit risk review with the internal audit function can facilitate the reporting of material risk and control issues to the audit committee, increase the overall effectiveness of these monitoring functions, better utilize available resources, and enhance the institution's ability to comprehensively manage risk. How-

institutions, a credit risk review system may include qualified members of the staff, including loan officers, other officers, or directors, who are independent of the credits being assessed. In larger or more complex institutions, a credit risk review system may include components of a dedicated credit risk review function that are independent of the institution's lending function.[5] A credit risk review system may also include various responsibilities assigned to credit underwriting, loan administration, a problem loan workout group, or other organizational units of an institution. Among other responsibilities, these groups may administer the internal problem loan reporting process, maintain the integrity of the credit risk rating process, confirm that timely and appropriate changes are made to risk ratings, and support the quality of information used to estimate the allowance for credit losses (ACL) or the allowance for loan and lease losses (ALLL), as applicable. Additionally, some or all of the credit risk review function may be performed by a qualified third party.

Regardless of the structure, an effective credit risk review system accomplishes the following objectives:

- Promptly identifies loans with actual and potential credit weaknesses so that timely action can be taken to strengthen credit quality and minimize losses.
- Appropriately validates and, if necessary, adjusts risk ratings, especially for those loans with potential or well-defined credit weaknesses that may jeopardize repayment.
- Identifies relevant trends that affect the quality of the loan portfolio and highlights segments of those portfolios that are potential problem areas.
- Assesses the adequacy of and adherence to internal credit policies and loan administration procedures and monitors compliance with applicable laws and regulations.
- Evaluates the activities of lending personnel and management, including compliance with lending policies and the quality of their loan approval, monitoring, and risk assessment.
- Provides management and the board of directors with an objective, independent, and timely assessment of the overall quality of the loan portfolio.
- Provides management with accurate and timely credit quality information for financial and regulatory reporting purposes, including the determination of an appropriate ACL or ALLL, as applicable.

Credit Risk Rating (or Grading) Framework

The foundation for any effective credit risk review system is accurate and timely risk ratings to assess credit quality and identify or confirm problem loans. An effective credit risk rating framework includes the monitoring of individual loans and retail credit portfolios, or segments thereof, with similar risk characteristics. An effective framework also provides important information on the collectability of each portfolio for use in the determination of an appropriate ACL or ALLL, as applicable. Further, an effective framework generally places primary reliance on the lending staff to assign accurate and timely risk ratings and identify emerging loan problems. However, given the importance of the credit risk rating framework, the lending personnel's assignment of risk ratings is typically subject to review by qualified and independent: (1) peers, managers, or loan committee(s); (2) part-time or full-time employee(s); (3) internal departments staffed with credit review specialists; or (4) external credit review consultants. A risk rating review that is independent of the lending function and approval process can provide a more objective assessment of credit quality.[6]

ever, an effective internal audit function maintains the ability to independently audit the credit risk review function. (The NCUA was not an issuing agency of the 2003 policy statement.)

5. Credit risk review may be referred to as loan review, credit review, asset quality review, or another name as chosen by an institution. The role of, expectations for, and scope of credit risk review as discussed in this guidance are distinct from the roles, expectations, and scope of work performed by other groups within an institution that are also responsible for monitoring, managing, and reporting credit risk. Examples may be those involved with lending functions, independent risk management, loan work outs, and accounting. Each institution indicates in its own policies and procedures the specific roles and responsibilities of these different groups, including separation of duties. A credit risk review unit, or individuals serving in that role, can rely on information provided by other units in developing its own independent assessment of credit risk in loan portfolios, but the credit risk review unit critically evaluates such information to maintain its own view, as opposed to relying exclusively on such information.

6. Small or rural institutions that have few resources or

An effective credit risk rating framework includes the following attributes:

- a formal credit risk rating system in which the ratings reflect the risk of default and credit losses, and for which a written description of the credit risk framework is maintained, including a discussion of the factors used to assign appropriate risk ratings to individual loans and retail credit portfolios, or segments thereof, with similar risk characteristics;[7]
- identification or grouping of loans that warrant the special attention of management or other designated "watch lists" of loans that management is more closely monitoring;[8]
- clear explanation of why particular loans warrant the special attention of management or have received an adverse risk rating;
- evaluation of the effectiveness of approved workout plans;
- a method for communicating direct, periodic, and timely information to the institution's senior management and the board of directors or appropriate board committee on the status of loans identified as warranting special attention or adverse classification, and the actions taken by management to strengthen the credit quality of those loans; and
- evaluation of the institution's historical loss experience for each of the groups of loans with similar risk characteristics into which it has segmented its loan portfolio.[9]

Elements of an Effective Credit Risk Review System

An effective credit risk review system starts with a written credit risk review policy that is reviewed and typically approved at least annually by the institution's board of directors or appropriate board committee to evidence its support of, and commitment to, maintaining an effective system.[10] Effective policies include a description of the overall risk rating framework and establish responsibilities for loan review based on the portfolio being assessed. An effective credit risk review policy addresses the following elements, described in more detail below: the qualifications and independence of credit risk review personnel; the frequency, scope, and depth of reviews; the review of findings and follow-up; and communication and distribution of results.

Qualifications of Credit Risk Review Personnel

An effective credit risk review function is staffed with personnel who are qualified based on their level of education, experience, and extent of formal credit training. Qualified personnel are knowledgeable in both sound lending practices and the institution's lending guidelines for the types of loans offered by the institution. The level of experience and expertise for all personnel involved in the credit risk review process is expected to be commensurate with the nature of the risk and complexity of the portfolios. In addition, qualified credit risk review personnel possess knowledge of relevant laws, regulations, and supervisory guidance.

employees may adopt modified credit risk review procedures and methods to achieve a proper degree of independence. For example, in the review process, such an institution may use qualified members of the staff, including loan officers, other officers, or directors, who are not involved with originating or approving the specific credits being assessed and whose compensation is not influenced by the assigned risk ratings. It is appropriate to employ such modified procedures when more robust procedures and methods are impractical. Institution management and the board, or a board committee, should have reasonable confidence that the personnel chosen will be able to conduct reviews with the needed independence despite their position within the loan function.

7. A bank or savings association may have a credit risk rating framework that differs from the framework for loan classifications used by the federal banking agencies. Such banks and savings associations should maintain documentation that translates their risk ratings into the regulatory classification framework used by the federal banking agencies. This documentation will enable examiners to reconcile the totals for the various loan classifications or risk ratings under the institution's system to the federal banking agencies' categories contained in the Uniform Agreement on the Classification and Appraisal of Securities Held by Depository Institutions Attachment 1 - Classification Definitions (SR-13-18).

8. In addition to loans designated as "watch list," this identification typically includes loans rated special mention, substandard, doubtful, or loss.

9. In particular, institutions with large and complex loan portfolios typically maintain records of their historical loss experience for credits in each of the categories in their risk rating framework. For banks and savings associations, these categories are either those used by, or those that can be translated into those used by, the federal banking agencies.

10. See 12 CFR part 208, appendix D-1 (Board).

Independence of Credit Risk Review Personnel

An effective credit risk review system incorporates both the initial identification of emerging problem loans by loan officers and other line staff, and an assessment of loans by personnel independent of the credit approval process. Placing primary responsibility on loan officers, risk officers, and line staff is important for continuous portfolio analysis and prompt identification and reporting of problem loans. Because of frequent contact with borrowers, loan officers and line staff can usually identify potential problems before they become apparent to others. However, institutions should be careful to avoid over-reliance on loan officers and line staff for identification of problem loans. An independent assessment of risk is achieved when personnel who perform the loan review do not have control over the loan and are not part of or influenced by individuals associated with the loan approval process.

While a larger institution may establish a separate department staffed with credit review specialists, cost and volume considerations may not justify such a system in a smaller institution. For example, in the review process, smaller institutions may use an independent committee of outside directors or qualified members of the staff, including loan officers, other officers, or directors, who are not involved with originating or approving the specific credits being assessed and whose compensation is not influenced by the assigned risk ratings. Whether or not the institution has a dedicated credit risk review department, it is prudent for the credit risk review function to report directly to the institution's board of directors or a committee thereof, consistent with safety and soundness standards. Senior management may be responsible for appropriate administrative functions provided such an arrangement does not compromise the independence of the credit risk review function.

The institution's board of directors, or a committee thereof, may outsource the credit risk review function to an independent third party.[11] However, the responsibility for maintaining a sound credit risk review system remains with the institution's board of directors. In any case, institution personnel who are independent from the lending function typically assess risks, develop the credit risk review plan, and verify appropriate follow-up of findings. Outsourcing of the credit risk review function to the institution's external auditor may raise additional independence considerations.[12]

Frequency of Reviews

An effective credit risk review system provides for review and evaluation of an institution's significant loans, loan products, or groups of loans typically annually, on renewal, or more frequently when internal or external factors indicate a potential for deteriorating credit quality or the existence of one or more other risk factors. The credit risk review function can also provide useful continual feedback on the effectiveness of the lending process in order to identify any emerging problems. Ongoing or periodic review of an institution's loan portfolio is particularly important to the estimation of ACLs or the ALLL because loss expectations may change as the credit quality of a loan changes. Use of key risk indicators or performance metrics by credit risk review management can support adjustments to the frequency and scope of reviews.

Scope of Reviews

Comprehensive and effective reviews cover all segments of the loan portfolio that pose significant credit risk or concentrations, and other loans that meet certain institution-specific criteria. A properly designed scope considers the current market conditions or other external factors that may affect a borrower's current or future ability to repay the loan. Establishment of an appropriate review scope also helps ensure that the sample of loans selected for review, or portfolio segments selected for review, is representative of the portfolio as a whole and provides reasonable assurance that any credit quality deterioration or unfavorable trends are identified. An effective credit risk review function also considers industry standards for credit risk review coverage consistent with the institution's size, complexity, loan types, risk profile, and risk-management practices and helps to

11. For supervisory guidance related to outside service providers, refer to SR-13-19/CA-13-21, "Guidance on Managing Outsourcing Risk," issued by the Board on December 5, 2013.

12. See note 4.

verify whether the review scope is appropriate. The institution's board of directors or appropriate board committee typically approves the scope of the credit risk review on an annual basis or whenever significant interim changes are made in order to adequately assess the quality of the current portfolio. An effective scope of credit risk review is risk-based and typically includes

- loans over a predetermined size;
- a sufficient sample of smaller loans, new loans, and new loan products;
- loans with higher risk indicators, such as low credit scores, high credit lines, or those credits approved as exceptions to policy;
- segments of loan portfolios, including retail, with similar risk characteristics, such as those related to borrower risk (e.g., credit history), transaction risk (e.g., product and/or collateral type), or other risk factors as appropriate;
- segments of the loan portfolio experiencing rapid growth;
- exposures from non-lending activities that also pose credit risk;
- past due, nonaccrual, renewed, and restructured loans;
- loans previously adversely classified and loans designated as warranting the special attention of the institution's management;[13]
- loans to insiders or related parties (for more information see Regulation O, 12 CFR 215 and this manual's section on Regulation O);
- loans to affiliates (for more information see Regulation W, 12 CFR 223 and this manual's sections on Regulation W); and
- loans constituting concentrations of credit risk and other loans affected by common repayment factors.

Depth of Transaction or Portfolio Reviews

Loans and portfolio segments selected for review are typically evaluated for

- credit quality, soundness of underwriting and risk identification, borrower performance, and adequacy of the sources of repayment;
  - when applicable, this evaluation includes the appropriateness of automated underwriting and credit scoring, including prudent use of overrides as well as the effectiveness of account management strategies, collections, and portfolio management activities in managing credit risk;
- reasonableness of assumptions;
- creditworthiness of guarantors or sponsors;
- sufficiency of credit and collateral documentation;
- proper lien perfection;
- proper approvals consistent with internal policies;
- adherence to loan agreement covenants;
- adequacy of, and compliance with, internal policies and procedures (such as those related to nonaccrual and classification or risk rating policies), laws, and regulations;
- the appropriateness of credit loss estimation for those credits with significant weaknesses including the reasonableness of assumptions used, and the timeliness of charge-offs; and
- the accuracy of risk ratings and the appropriateness and timeliness of the identification of problem loans by loan officers.

Review of Findings and Follow-Up

An important activity of an effective credit risk review system is the discussion of the review findings, including all noted deficiencies, identified weaknesses, and any existing or planned corrective actions (including time frames for correction) with appropriate loan officers, department managers, and senior management. An effective system includes processes for all noted deficiencies and weaknesses that remain unresolved beyond the scheduled time frames for correction to be promptly reported to senior management and the board of directors or appropriate board committee.

It is important to resolve risk rating differences between loan officers and loan review personnel according to a pre-arranged process. That process may include formal appeals procedures and arbitration by an independent party or may require default to the assigned classification or risk rating that indicates lower credit quality. If credit risk review personnel conclude that a loan or loan portfolio is of a lower credit quality than is perceived by the portfolio management staff, the lower classification or risk rating typically prevails unless internal parties identify additional information sufficient to obtain the concurrence of the independent reviewer or arbiter on the higher credit quality classification or risk rating.

13. See note 8.

Communication and Distribution of Results

Personnel involved in the credit risk review process typically prepare a list of all loans (and portfolio segments) reviewed, the date of review, and a summary analysis that substantiates the risk ratings assigned to the loans reviewed. Effective communication also typically involves providing results of the credit risk reviews to the board of directors or appropriate board committee quarterly.[14] Comprehensive reporting includes comparative trends that identify significant changes in the overall quality of the loan portfolio, the adequacy of, and adherence to, internal policies and procedures, the quality of underwriting and risk identification, compliance with laws and regulations, and management's response to substantive criticisms or recommendations. Such comprehensive reporting provides the board of directors or appropriate board committee with insight into the portfolio and the responsiveness of management and facilitates timely corrective action of deficiencies.

14. An effective credit risk review system provides for informing the board of directors or appropriate board committee more frequently than quarterly when material adverse trends are noted. When an institution conducts loan file reviews less frequently than quarterly, the board or appropriate board committee will typically receive results on other credit risk review activities quarterly.

The Federal Reserve and the other federal banking and thrift regulatory agencies (the agencies)[1] issued the Interagency Guidance on Nontraditional Mortgage Product Risks on September 29, 2006. The guidance addresses both risk-management and consumer disclosure practices that institutions[2] should employ to effectively manage the risks associated with closed-end residential mortgage products that allow borrowers to defer repayment of principal and, sometimes, interest (referred to as nontraditional mortgage loans). (See SR-06-15.)

Residential mortgage lending has traditionally been a conservatively managed business with low delinquencies and losses and reasonably stable underwriting standards. However, during the past few years consumer demand has been growing, particularly in high-priced real estate markets, for nontraditional mortgage loans. These mortgage products include such products as "interest-only" mortgages, where a borrower pays no loan principal for the first few years of the loan, and "payment-option" adjustable-rate mortgages (ARMs), where a borrower has flexible payment options with the potential for negative amortization.[3]

While some institutions have offered nontraditional mortgages for many years with appropriate risk management and sound portfolio performance, the market for these products and the number of institutions offering them has expanded rapidly. Nontraditional mortgage loan products are now offered by more lenders to a wider spectrum of borrowers; these borrowers may not otherwise qualify for more traditional mortgage loans and may not fully understand the risks associated with nontraditional mortgage loans.

Many of these nontraditional mortgage loans are underwritten with less stringent income and asset verification requirements (reduced documentation) and are increasingly combined with simultaneous second-lien loans.[4] Such risk layering, combined with the broader marketing of nontraditional mortgage loans, exposes financial institutions to increased risk relative to traditional mortgage loans.

Given the potential for heightened risk levels, management should carefully consider and appropriately mitigate exposures created by these loans. To manage the risks associated with nontraditional mortgage loans, management should—

- ensure that loan terms and underwriting standards are consistent with prudent lending practices, including consideration of a borrower's repayment capacity;
- ensure that consumers have sufficient information to clearly understand loan terms and associated risks prior to making a product choice; and
- recognize that many nontraditional mortgage loans, particularly when they have risk-layering features, are untested in a stressed environment. As evidenced by experienced institutions, these products warrant strong risk-management standards, capital levels commensurate with the risk, and an allowance for loan and lease losses (ALLL) that reflects the collectibility of the portfolio. The Federal Reserve expects institutions to effectively assess and manage the risks associated with nontraditional mortgage loan products.[5]

Institutions should use the guidance to ensure that risk-management practices adequately address these risks. Risk-management processes, policies, and procedures in this area will be carefully scrutinized. Institutions that do not adequately manage these risks will be asked to take remedial action.

This guidance focuses on the higher risk elements of certain nontraditional mortgage products, not the product type itself. Institutions with sound underwriting, adequate risk management,

1. The Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Office of Thrift Supervision, and the National Credit Union Administration.

2. The term *institution(s)* is used in the interagency guidance. As used in this section, *institutions* applies to Federal Reserve-supervised state member banks and their subsidiaries, and bank holding companies and their nonbank subsidiaries.

3. Interest-only and payment-option ARMs are variations of conventional ARMs, hybrid ARMs, and fixed-rate products. Refer to the appendix for additional information on interest-only and payment-option ARM loans. This guidance does not apply to reverse mortgages; home equity lines of credit (HELOCs), other than as discussed in the Simultaneous Second-Lien Loans section; or fully amortizing residential mortgage loan products.

4. Refer to the appendix for additional information on reduced documentation and simultaneous second-lien loans.

5. Refer to the Interagency Guidelines Establishing Standards for Safety and Soundness in 12 CFR 208, appendix D-1.

and acceptable portfolio performance will not be subject to criticism merely for offering such products.

NONTRADITIONAL MORTGAGE LOAN TERMS AND UNDERWRITING STANDARDS

When an institution offers nontraditional mortgage loan products, underwriting standards should address the effect of a substantial payment increase on the borrower's capacity to repay when loan amortization begins. Underwriting standards should also comply with the Federal Reserve's real estate lending standards and appraisal regulations and associated guidelines.[6]

Central to prudent lending is the internal discipline to maintain sound loan terms and underwriting standards despite competitive pressures. Institutions are strongly cautioned against ceding underwriting standards to third parties that have different business objectives, risk tolerances, and core competencies. Loan terms should be based on a disciplined analysis of potential exposures and compensating factors to ensure that risk levels remain manageable.

Qualifying Borrowers for Nontraditional Loans

Payments on nontraditional loans can increase significantly when the loans begin to amortize. Commonly referred to as *payment shock*, this increase is of particular concern for payment-option ARMs where the borrower makes minimum payments that may result in negative amortization. Some institutions manage the potential for excessive negative amortization and payment shock by structuring the initial terms to limit the spread between the introductory interest rate and the fully indexed rate. Nevertheless, an institution's qualifying standards should recognize the potential impact of payment shock, especially for borrowers with high loan-to-value (LTV) ratios, high debt-to-income (DTI) ratios, and low credit scores. Recognizing that an institution's underwriting criteria are based on multiple factors, an institution should consider these factors jointly in the qualification process and potentially it may develop a range of reasonable tolerances for each factor. However, the criteria should be based upon prudent and appropriate underwriting standards, considering both the borrower's characteristics and the product's attributes.

For all nontraditional mortgage loan products, an institution's analysis of a borrower's repayment capacity should include an evaluation of the borrower's ability to repay the debt by final maturity at the fully indexed rate,[7] assuming a fully amortizing repayment schedule.[8] In addition, for products that permit negative amortization, the repayment analysis should be based upon the initial loan amount plus any balance increase that may accrue from the negative amortization provision.[9]

Furthermore, the analysis of repayment capacity should avoid overreliance on credit scores as a substitute for income verification in the underwriting process. The higher a loan's credit risk, either from loan features or borrower characteristics, the more important it is to verify

6. Refer to 12 CFR 208.51 subpart E and appendix C and 12 CFR 225 subpart G.

7. The fully indexed rate equals the index rate prevailing at origination plus the margin that will apply after the expiration of an introductory interest rate. The index rate is a published interest rate to which the interest rate on an ARM is tied. Some commonly used indices include the 1-Year Constant Maturity Treasury Rate (CMT), the 6-Month London Interbank Offered Rate (LIBOR), the 11th District Cost of Funds (COFI), and the Moving Treasury Average (MTA), a 12-month moving average of the monthly average yields of U.S. Treasury securities adjusted to a constant maturity of one year. The margin is the number of percentage points a lender adds to the index value to calculate the ARM interest rate at each adjustment period. In different interest-rate scenarios, the fully indexed rate for an ARM loan based on a lagging index (for example, the MTA rate) may be significantly different from the rate on a comparable 30-year fixed-rate product. In these cases, a credible market rate should be used to qualify the borrower and determine repayment capacity.

8. The fully amortizing payment schedule should be based on the term of the loan. For example, the amortizing payment for a loan with a 5-year interest-only period and a 30-year term would be calculated based on a 30-year amortization schedule. For balloon mortgages that contain a borrower option for an extended amortization period, the fully amortizing payment schedule can be based on the full term the borrower may choose.

9. The balance that may accrue from the negative amortization provision does not necessarily equate to the full negative amortization cap for a particular loan. The spread between the introductory or "teaser" rate and the accrual rate will determine whether a loan balance has the potential to reach the negative amortization cap before the end of the initial payment-option period (usually five years). For example, a loan with a 115 percent negative amortization cap but only a small spread between the introductory rate and the accrual rate may reach a 109 percent maximum loan balance before the end of the initial payment-option period, even if only minimum payments are made. The borrower could be qualified based on this lower maximum loan balance.

the borrower's income, assets, and outstanding liabilities.

Collateral-Dependent Loans

Institutions should avoid the use of loan terms and underwriting practices that may heighten the need for a borrower to rely on the sale or refinancing of the property once amortization begins. Loans to individuals who do not demonstrate the capacity to repay, as structured, from sources other than the collateral pledged are generally considered unsafe and unsound.[10] Institutions that originate collateral-dependent mortgage loans may be subject to criticism, corrective action, and higher capital requirements.

Risk Layering

Institutions that originate or purchase mortgage loans that combine nontraditional features, such as interest-only loans with reduced documentation or a simultaneous second-lien loan, face increased risk. When features are layered, an institution should demonstrate that mitigating factors support the underwriting decision and the borrower's repayment capacity. Mitigating factors could include higher credit scores, lower LTV and DTI ratios, significant liquid assets, mortgage insurance, and other credit enhancements. While higher pricing is often used to address elevated risk levels, it does not replace the need for sound underwriting.

Reduced Documentation

Institutions increasingly rely on reduced documentation, particularly unverified income, to qualify borrowers for nontraditional mortgage loans. Because these practices essentially substitute assumptions and unverified information for analysis of a borrower's repayment capacity and general creditworthiness, they should be used with caution. As the level of credit risk increases, the Federal Reserve expects an institution to more diligently verify and document a borrower's income and debt-reduction capacity.

Clear policies should govern the use of reduced documentation. For example, stated income should be accepted only if there are mitigating factors that clearly minimize the need for direct verification of repayment capacity. For many borrowers, institutions generally should be able to readily document income using recent W-2 statements, pay stubs, or tax returns.

Simultaneous Second-Lien Loans

Simultaneous second-lien loans reduce owner equity and increase credit risk. Historically, as combined loan-to-value ratios rise, so do defaults. A delinquent borrower with minimal or no equity in a property may have little incentive to work with a lender to bring the loan current and avoid foreclosure. In addition, second-lien HELOCs typically increase borrower exposure to increasing interest rates and monthly payment burdens. Loans with minimal or no owner equity generally should not have a payment structure that allows for delayed or negative amortization without other significant risk-mitigating factors.

Introductory Interest Rates

As a marketing tool for payment-option ARM products, many institutions offer introductory interest rates set well below the fully indexed rate. When developing nontraditional mortgage product terms, an institution should consider the spread between the introductory rate and the fully indexed rate. Since initial and subsequent monthly payments are based on these low introductory rates, a wide initial spread means that borrowers are more likely to experience negative amortization, severe payment shock, and an earlier-than-scheduled recasting of monthly payments. Institutions should minimize the likelihood of disruptive early recastings and extraordinary payment shock when setting introductory rates.

Lending to Subprime Borrowers

Mortgage programs that target subprime borrowers through tailored marketing, underwriting standards, and risk selection should follow the applicable interagency guidance on subprime

10. A loan will not be determined to be "collateral-dependent" solely through the use of reduced documentation.

lending.[11] Among other things, the subprime guidance discusses circumstances under which subprime lending can become predatory or abusive. Institutions designing nontraditional mortgage loans for subprime borrowers should pay particular attention to this guidance. They should also recognize that risk-layering features in loans to subprime borrowers may significantly increase risks for the institution and the borrower.

Non-Owner-Occupied Investor Loans

Borrowers financing non-owner-occupied investment properties should qualify for loans based on their ability to service the debt over the life of the loan. Loan terms should reflect an appropriate combined LTV ratio that considers the potential for negative amortization and maintains sufficient borrower equity over the life of the loan. Further, underwriting standards should require evidence that the borrower has sufficient cash reserves to service the loan, considering the possibility of extended periods of property vacancy and the variability of debt service requirements associated with nontraditional mortgage loan products.

PORTFOLIO AND RISK-MANAGEMENT PRACTICES

Institutions should ensure that risk-management practices keep pace with the growth and changing risk profile of their nontraditional mortgage loan portfolios and changes in the market. Active portfolio management is especially important for institutions that project or have already experienced significant growth or concentration levels. Institutions that originate or invest in nontraditional mortgage loans should adopt more robust risk-management practices and manage these exposures in a thoughtful, systematic manner. To meet these expectations, institutions should—

- develop written policies that specify acceptable product attributes, production and portfolio limits, sales and securitization practices, and risk-management expectations;
- design enhanced performance measures and management reporting that provide early warning for increasing risk;
- establish appropriate ALLL levels that consider the credit quality of the portfolio and conditions that affect collectibility; and
- maintain capital at levels that reflect portfolio characteristics and the effect of stressed economic conditions on collectibility. Institutions should hold capital commensurate with the risk characteristics of their nontraditional mortgage loan portfolios.

Nontraditional Mortgage Loan Policies

An institution's policies for nontraditional mortgage lending activity should set acceptable levels of risk through its operating practices, accounting procedures, and policy exception tolerances. Policies should reflect appropriate limits on risk layering and should include risk-management tools for risk-mitigation purposes. Further, an institution should set growth and volume limits by loan type, with special attention for products and product combinations in need of heightened attention due to easing terms or rapid growth.

Concentrations in Nontraditional Mortgage Products

Institutions with concentrations in nontraditional mortgage products should have well-developed monitoring systems and risk-management practices. Monitoring systems should keep track of concentrations in key portfolio segments such as loan types, third-party originations, geographic area, and property occupancy status. Concentrations also should be monitored by key portfolio characteristics such as non-owner-occupied investor loans and loans with (1) high combined LTV ratios, (2) high DTI ratios, (3) the potential for negative amortization, (4) credit scores of borrowers below established thresholds, and (5) risk-layered features. Further, institutions should consider the effect of employee incentive programs that could produce higher concentrations of nontraditional mortgage loans. Concentrations that are not effectively managed will be subject

11. See SR-99-6, Subprime Lending and its attachment, Interagency Guidance on Subprime Lending, March 1, 1999, and SR-01-4, Subprime Lending and its attachment, interagency Expanded Guidance for Subprime Lending Programs, January 31, 2001.

to elevated supervisory attention and potential examiner criticism to ensure timely remedial action.

Controls

An institution's quality control, compliance, and audit procedures should focus on mortgage lending activities posing high risk. Controls to monitor compliance with underwriting standards and exceptions to those standards are especially important for nontraditional loan products. The quality control function should regularly review a sample of nontraditional mortgage loans from all origination channels and a representative sample of underwriters to confirm that policies are being followed. When control systems or operating practices are found deficient, business-line managers should be held accountable for correcting deficiencies in a timely manner.

Since many nontraditional mortgage loans permit a borrower to defer principal and, in some cases, interest payments for extended periods, institutions should have strong controls over accruals, customer service, and collections. Policy exceptions made by servicing and collections personnel should be carefully monitored to confirm that practices such as re-aging, payment deferrals, and loan modifications are not inadvertently increasing risk. Customer service and collections personnel should receive product-specific training on the features and potential customer issues with these products.

Third-Party Originations

Institutions often use third parties, such as mortgage brokers or correspondents, to originate nontraditional mortgage loans. Institutions should have strong systems and controls in place for establishing and maintaining relationships with third parties, including procedures for performing due diligence. Oversight of third parties should involve monitoring the quality of originations so that they reflect the institution's lending standards and compliance with applicable laws and regulations.

Monitoring procedures should track the quality of loans by both origination source and key borrower characteristics. This will help institutions identify problems such as early payment defaults, incomplete documentation, and fraud. If problems involving appraisals, loan documentation, credit, or consumer complaints are discovered, the institution should take immediate action. Remedial action could include more thorough application reviews, more frequent re-underwriting, and even termination of the third-party relationship.

Risk Management of Secondary-Market Activity

The sophistication of an institution's secondary-market risk-management practices should be commensurate with the nature and volume of activity. Institutions with significant secondary-market activities should have comprehensive, formal strategies for managing risks.[12] Contingency planning should include how the institution will respond to reduced demand in the secondary market.

While third-party loan sales can transfer a portion of the credit risk, an institution remains exposed to reputation risk when credit losses on sold mortgage loans or securitization transactions exceed expectations. As a result, an institution may determine that it is necessary to repurchase defaulted mortgages to protect its reputation and maintain access to the markets. In the Federal Reserve's view, the repurchase of mortgage loans beyond the selling institution's contractual obligation is implicit recourse. Under the risk-based capital rules, a repurchasing institution would be required to maintain risk-based capital against the entire pool or securitization.[13] Institutions should familiarize themselves with these guidelines before deciding to support mortgage loan pools or buying back loans in default.

Management Information and Reporting

Reporting systems should allow management to detect changes in the risk profile of its nontraditional mortgage loan portfolio. The structure and content should allow the isolation of key

12. Refer to SR-02-16, dated May 23, 2002, Interagency Questions and Answers on Capital Treatment of Recourse, Direct Credit Substitutes, and Residual Interests in Asset Securitizations and its attachment.

13. Refer to 12 CFR 208 and 225, appendix A, III.B.3.

loan products, risk-layering loan features, and borrower characteristics. Reporting should also allow management to recognize deteriorating performance in any of these areas before it has progressed too far. At a minimum, information should be available by (1) loan type (for example, interest-only mortgage loans and payment-option ARMs); (2) risk-layering features (for example, payment-option ARMs with stated income and interest-only mortgage loans with simultaneous second-lien mortgages); (3) underwriting characteristics (for example, LTV, DTI, and credit score); and (4) borrower performance (for example, payment patterns, delinquencies, interest accruals, and negative amortization).

Portfolio volume and performance should be tracked against expectations, internal lending standards, and policy limits. Volume and performance expectations should be established at the subportfolio and aggregate portfolio levels. Variance analyses should be performed regularly to identify exceptions to policies and prescribed thresholds. Qualitative analysis should occur when actual performance deviates from established policies and thresholds. Variance analysis is critical to the monitoring of a portfolio's risk characteristics and should be an integral part of establishing and adjusting risk-tolerance levels.

Stress Testing

Based on the size and complexity of their lending operations, institutions should perform sensitivity analysis on key portfolio segments to identify and quantify events that may increase risks in a segment or the entire portfolio. The scope of the analysis should generally include stress tests on key performance drivers such as interest rates, employment levels, economic growth, housing value fluctuations, and other factors beyond the institution's immediate control. Stress tests typically assume rapid deterioration in one or more factors and attempt to estimate the potential influence on default rates and loss severity. Stress testing should aid an institution in identifying, monitoring, and managing risk, as well as developing appropriate and cost-effective loss-mitigation strategies. The stress testing results should provide direct feedback in determining underwriting standards, product terms, portfolio concentration limits, and capital levels.

Capital and the Allowance for Loan and Lease Losses

Institutions should establish an appropriate ALLL for the estimated credit losses inherent in their nontraditional mortgage loan portfolios. They should also consider the higher risk of loss posed by layered risks when establishing their ALLL.

Moreover, institutions should recognize that their limited performance history with these products, particularly in a stressed environment, increases performance uncertainty. Capital levels should be commensurate with the risk characteristics of the nontraditional mortgage loan portfolios. Lax underwriting standards or poor portfolio performance may warrant higher capital levels.

When establishing an appropriate ALLL and considering the adequacy of capital, institutions should segment their nontraditional mortgage loan portfolios into pools with similar credit-risk characteristics. The basic segments typically include collateral and loan characteristics, geographic concentrations, and borrower qualifying attributes. Segments could also differentiate loans by payment and portfolio characteristics, such as loans on which borrowers usually make only minimum payments, mortgages with existing balances above original balances, and mortgages subject to sizable payment shock. The objective is to identify credit quality indicators that affect collectibility for ALLL measurement purposes. In addition, understanding characteristics that influence expected performance also provides meaningful information about future loss exposure that would aid in determining adequate capital levels.

Institutions with material mortgage banking activities and mortgage servicing assets should apply sound practices in valuing the mortgage servicing rights for nontraditional mortgages. The valuation process should follow generally accepted accounting principles and use reasonable and supportable assumptions.[14]

CONSUMER PROTECTION ISSUES

While nontraditional mortgage loans provide flexibility for consumers, the Federal Reserve is

14. See SR-03-4, dated February 25, 2003, Interagency Advisory on Mortgage Banking and its attachment, which has the same title.

concerned that consumers may enter into these transactions without fully understanding the product terms. Nontraditional mortgage products have been advertised and promoted based on their affordability in the near term; that is, their lower initial monthly payments compared with traditional types of mortgages. In addition to apprising consumers of the benefits of nontraditional mortgage products, institutions should take appropriate steps to alert consumers to the risks of these products, including the likelihood of increased future payment obligations. This information should be provided in a timely manner—before disclosures may be required under the Truth in Lending Act or other laws—to assist the consumer in the product selection process.

Concerns and Objectives

More than traditional ARMs, mortgage products such as payment-option ARMs and interest-only mortgages can carry a significant risk of payment shock and negative amortization, neither of which may be fully understood by consumers. For example, consumer payment obligations may increase substantially at the end of an interest-only period or upon the ''recast'' of a payment-option ARM. The magnitude of these payment increases may be affected by factors such as the expiration of promotional interest rates, increases in the interest-rate index, and negative amortization. Negative amortization also results in lower levels of home equity as compared with a traditional amortizing mortgage product. When borrowers go to sell or refinance the property, they may find that negative amortization has substantially reduced or eliminated their equity in the property—even when the property has appreciated. The concern that consumers may not fully understand these products is exacerbated by marketing and promotional practices that emphasize potential benefits without also providing clear and balanced information about material risks.

In light of these considerations, communications with consumers, including advertisements, oral statements, promotional materials, and monthly statements, should provide clear and balanced information about the relative benefits and risks of these products, including the risks of payment shock and of negative amortization. Clear, balanced, and timely communication to consumers of the risks of these products will provide consumers with useful information at crucial decision-making points, such as when they are shopping for loans or deciding which monthly payment amount to make. Such communication should help minimize potential consumer confusion and complaints, foster good customer relations, and reduce legal and other risks to the institution.

Legal Risks

Institutions that offer nontraditional mortgage products must ensure that they do so in a manner that complies with all applicable laws and regulations. With respect to the disclosures and other information provided to consumers, applicable laws and regulations include the following:

- Truth in Lending Act (TILA) and its implementing regulation, Regulation Z
- Section 5 of the Federal Trade Commission Act (FTC Act)

TILA and Regulation Z contain rules governing disclosures that institutions must provide for closed-end mortgages (1) in advertisements, (2) with an application,[15] (3) before loan consummation, and (4) when interest rates change. Section 5 of the FTC Act prohibits unfair or deceptive acts or practices.[16]

Other federal laws, including the fair-lending laws and the Real Estate Settlement Procedures Act (RESPA), also apply to these transactions. Moreover, the Federal Reserve notes that the sale or securitization of a loan may not affect an institution's potential liability for violations of TILA, RESPA, the FTC Act, or other laws in connection with its origination of the loan. State laws, including laws regarding unfair or deceptive acts or practices, also may apply.

Recommended Practices

Recommended practices for addressing the risks

15. These program disclosures apply to ARM products and must be provided at the time an application is provided or before the consumer pays a nonrefundable fee, whichever is earlier.

16. The Board of Governors enforces this provision under the FTC Act and section 8 of the Federal Deposit Insurance Act. See the joint Board and FDIC guidance titled Unfair or Deceptive Acts or Practices by State-Chartered Banks, March 11, 2004.

raised by nontraditional mortgage products include the following:[17]

Communications with Consumers

When promoting or describing nontraditional mortgage products, institutions should provide consumers with information that is designed to help them make informed decisions when selecting and using these products. Meeting this objective requires appropriate attention to the timing, content, and clarity of information presented to consumers. Thus, institutions should provide consumers with information at a time that will help consumers select products and choose among payment options. For example, institutions should offer clear and balanced product descriptions when (1) a consumer is shopping for a mortgages (such as when the consumer makes an inquiry to the institution about a mortgage product and receives information about nontraditional mortgage products) or (2) when marketing relating to nontraditional mortgage products is provided by the institution to the consumer. Clear and balanced information should not be offered by the institution only upon the submission of an application or at consummation.[18] The provision of such information would serve as an important supplement to the disclosures currently required under TILA and Regulation Z as well as other laws.[19]

Promotional Materials and Product Descriptions

To assist other consumers in their product selection decisions, promotional materials and other product descriptions should provide information about the costs, terms, features, and risks of nontraditional mortgages (including information about the matters discussed below).

Payment Shock. Institutions should apprise consumers of potential increases in payment obligations for these products, including circumstances in which interest rates or negative amortization reach a contractual limit. For example, product descriptions could state the maximum monthly payment a consumer would be required to pay under a hypothetical loan example once amortizing payments are required and the interest rate and negative amortization caps have been reached.[20] Such information also could describe when structural payment changes will occur (for example, when introductory rates expire or when amortizing payments are required) and what the new payment amount would be or how it would be calculated. As applicable, these descriptions could indicate that a higher payment may be required at other points in time due to factors such as negative amortization or increases in the interest-rate index.

Negative Amortization. When negative amortization is possible under the terms of a nontraditional mortgage product, consumers should be apprised of the potential for increasing principal balances and decreasing home equity, as well as other potential adverse consequences of negative amortization. For example, product descriptions should disclose the effect of negative amortization on loan balances and home equity, and could describe the potential consequences to the consumer of making minimum payments that cause the loan to negatively amortize. (One possible consequence is that it could be more difficult to refinance the loan or to obtain cash upon a sale of the home.)

Prepayment Penalties. If the institution may impose a penalty in the event that the consumer prepays the mortgage, consumers should be alerted to this fact and to the need to ask the lender about the amount of any such penalty.

Cost of Reduced Documentation Loans. If an institution offers both reduced and full documen-

17. Institutions should review the recommendations relating to mortgage lending practices set forth in other supervisory guidance from their respective primary regulators, as applicable, including guidance on abusive lending practices.

18. Institutions also should strive to (1) focus on information important to consumer decision making; (2) highlight key information to make it more prominent; (3) employ a user-friendly and readily navigable format for presenting the information; and (4) use plain language, with concrete and realistic examples. Comparative tables and information describing key features of available loan products, including reduced documentation programs, also may be useful for consumers who are considering the nontraditional mortgage products and other loan features described in this guidance.

19. Institutions may not be able to incorporate all of the practices recommended in this guidance when advertising nontraditional mortgages through certain forms of media, such as radio, television, or billboards. Nevertheless, institutions should provide clear and balanced information about the risks of these products in all forms of advertising.

20. Consumers also should be apprised of other material changes in payment obligations, such as balloon payments.

tation loan programs and there is a pricing premium attached to the reduced documentation program, consumers should be alerted to this fact.

Monthly Statements on Payment-Option ARMs. Monthly statements that are provided to consumers on payment-option ARMs should provide information that enables consumers to make informed payment choices, including an explanation of each payment option available and the impact of that choice on loan balances. For example, the monthly payment statement should contain an explanation, as applicable, next to the minimum payment amount that making this payment would result in an increase to the consumer's outstanding loan balance. Payment statements also could provide the consumer's current loan balance, what portion of the consumer's previous payment was allocated to principal and to interest, and, if applicable, the amount by which the principal balance increased. Institutions should avoid leading payment-option ARM borrowers to select a nonamortizing or negatively amortizing payment (for example, through the format or content of monthly statements).

Practices to Avoid. Institutions also should avoid practices that obscure significant risks to the consumer. For example, if an institution advertises or promotes a nontraditional mortgage by emphasizing the comparatively lower initial payments permitted for these loans, the institution also should provide clear and comparably prominent information alerting the consumer to the risks. Such information should explain, as relevant, that these payment amounts will increase, that a balloon payment may be due, and that the loan balance will not decrease and may even increase due to the deferral of interest or principal payments. Similarly, institutions should avoid promoting payment patterns that are structurally unlikely to occur.[21] Such practices could raise legal and other risks for institutions, as described more fully above.

Institutions also should avoid such practices as (1) giving consumers unwarranted assurances or predictions about the future direction of interest rates (and, consequently, the borrower's future obligations); (2) making one-sided representations about the cash savings or expanded buying power to be realized from nontraditional mortgage products in comparison with amortizing mortgages; (3) suggesting that initial minimum payments in a payment-option ARM will cover accrued interest (or principal and interest) charges; and (4) making misleading claims that interest rates or payment obligations for these products are "fixed."

Control Systems

Institutions should develop and use strong control systems to monitor whether actual practices are consistent with their policies and procedures relating to nontraditional mortgage products. Institutions should design control systems to address compliance and consumer information concerns as well as the safety and soundness considerations discussed in this guidance. Lending personnel should be trained so that they are able to convey information to consumers about product terms and risks in a timely, accurate, and balanced manner. As products evolve and new products are introduced, lending personnel should receive additional training, as necessary. Lending personnel should be monitored to determine whether they are following these policies and procedures. Institutions should review consumer complaints to identify potential compliance, reputation, and other risks. Attention should be paid to appropriate legal review and to using compensation programs that do not improperly encourage lending personnel to direct consumers to particular products.

With respect to nontraditional mortgage loans that an institution makes, purchases, or services using a third party, such as a mortgage broker, correspondent, or other intermediary, the institution should take appropriate steps to mitigate risks relating to compliance and consumer information concerns discussed in this guidance. These steps would ordinarily include, among other things, (1) conducting due diligence and establishing other criteria for entering into and maintaining relationships with such third parties, (2) establishing criteria for third-party compensation designed to avoid providing incentives for originations inconsistent with this guidance, (3) setting requirements for agree-

21. For example, marketing materials for payment-option ARMs may promote low predictable payments until the recast date. Such marketing should be avoided in circumstances in which the minimum payments are so low that negative amortization caps would be reached and higher payment obligations would be triggered before the scheduled recast, even if interest rates remain constant.

ments with such third parties, (4) establishing procedures and systems to monitor compliance with applicable agreements, bank policies, and laws, and (5) implementing appropriate corrective actions in the event that the third party fails to comply with applicable agreements, bank policies, or laws.

APPENDIX
(Terms Used in This Document)

Interest-Only Mortgage Loan. An interest-only mortgage loan refers to a nontraditional mortgage in which, for a specified number of years (for example, three or five years), the borrower is required to pay only the interest due on the loan, during which time the rate may fluctuate or may be fixed. After the interest-only period, the rate may be fixed or it may fluctuate based on the prescribed index and payments, including both principal and interest.

Payment-Option ARM. A payment-option ARM is a nontraditional adjustable-rate mortgage that allows the borrower to choose from a number of different payment options. For example, each month, the borrower may choose a minimum payment option based on a "start" or introductory interest rate, an interest-only payment option based on the fully indexed interest rate, or a fully amortizing principal and interest payment option based on a 15- or 30-year loan term, plus any required escrow payments. The minimum payment option can be less than the interest accruing on the loan, resulting in negative amortization. The interest-only option avoids negative amortization but does not provide for principal amortization. After a specified number of years, or if the loan reaches a certain negative amortization cap, the required monthly payment amount is recast to require payments that will fully amortize the outstanding balance over the remaining loan term.

Reduced Documentation. Reduced documentation is a loan feature that is commonly referred to as "low doc/no doc," "no income/no asset," "stated income," or "stated assets." For mortgage loans with this feature, an institution sets reduced or minimal documentation standards to substantiate the borrower's income and assets.

Simultaneous Second-Lien Loan. A simultaneous second-lien loan is a lending arrangement where either a closed-end second lien or a home equity line of credit is originated simultaneously with the first-lien mortgage loan, typically in lieu of a higher down payment.

1. To ascertain if the bank has adequate risk-management processes, policies, and procedures to address the risk associated with its nontraditional mortgage loans.
2. To evaluate whether the bank's nontraditional mortgage loan terms are supported by a disciplined analysis of its potential exposures versus the mitigating factors that ensure that risk levels are adequately managed.
3. To determine if the underwriting standards for nontraditional mortgage loans comply with the Federal Reserve's real estate lending standards and appraisal regulations and associated guidelines.
4. To evaluate whether the bank's management carefully considers and appropriately assesses and mitigates the risk exposures created by the nontraditional mortgage loans by ensuring that—
   a. its loan terms and underwriting standards are consistent with prudent lending practices, including consideration of a borrower's repayment capacity;
   b. its nontraditional mortgage loan products have strong risk-management standards, capital levels commensurate with the risk, and an allowance for loan and lease losses that reflects the collectibility of the portfolio; and
   c. its consumers have sufficient information to clearly understand the loan terms and associated risks prior to making a nontraditional mortgage loan product choice.
5. To determine if the bank has borrower qualification criteria that include an evaluation of a borrower's repayment capacity and ability to repay the debt—the full amount of the credit extended, including any balance increase that may accrue from negative amortization—by the final maturity date at the fully indexed rate.

Nontraditional Mortgages—Associated Risks Examination Procedures

Effective date May 2007

Section 2043.3

RISK MITIGATION

1. Assess the bank's management procedures to mitigate the risk created by nontraditional mortgage products. Determine that—
   a. underwriting standards and terms are consistent with prudent lending practices, including consideration of each borrower's repayment capacity;
   b. products are supported by strong risk-management standards, capital levels that are commensurate with their risk, and an allowance for loan and lease losses that reflects the collectiblity of the portfolio; and
   c. borrowers have sufficient information to clearly understand the terms of their loans and their associates risks.

UNDERWRITING STANDARDS

1. Determine if the bank's underwriting standards—
   a. address the effect of a substantial payment increase on the borrower's capacity to repay when loan amortization begins,
   b. comply with the Federal Reserve's real estate lending standards and appraisal regulations and associated guidelines, and
   c. require that loan terms are based on a disciplined analysis of potential exposures and mitigating factors, which will ensure that risk levels remain manageable.
2. Verify that the bank's nontraditional mortgage loan qualification standards recognize the potential impact of payment shock (particularly for borrowers with high loan-to-value (LTV) ratios, high debt-to-income (DTI) ratios, and low credit scores).
3. Ascertain that the analysis of a borrower's repayment capacity includes—
   a. an evaluation of the borrower's ability to repay the debt by final maturity at the fully indexed rate, assuming a fully amortizing repayment schedule,
   b. a repayment schedule that is based on the initial loan amount plus any balance increase that may accrue from a negative amortization provision, and
   c. avoiding an overreliance on credit scores as a substitute for income verification or a reliance on the sale or refinancing of the property (pledged as collateral) when amortization begins.
4. Determine whether originated or purchased mortgage loans that combine nontraditional features (such as interest-only loans with reduced documentation and second-lien loans) have mitigating factors (that is, higher credit scores, lower LTVs and DTI repayment ratios, significant liquid assets, mortgage insurance, or other credit enhancements) that support the underwriting decisions and the borrower's repayment capacities.
5. Verify that the bank has clear loan underwriting policies governing the use of—
   a. reduced documentation of the borrower's financial capacity (for example, non- verification of reported income when the borrower's income can be documented based on recent W-2 statements, pay stubs, or tax returns);
   b. minimal or no owner's equity for second-lien home equity lines of credit (such loans generally should not have a payment structure allowing for delayed or negative amortization without other significant risk-mitigating factors);
   c. introductory interest rates (banks should minimize the likelihood of disruptive early recastings and extraordinary payment shock when setting introductory rates);
   d. subprime lending (adherence to the interagency guidance on subprime lending);[1] and
   e. non-owner-occupied investor loans (qualifications should be based on the borrower's ability to service the debt over the life of the loan, which would include a combined LTV ratio that considers negative amortization and sufficient borrower equity, and continuing cash reserves).

PORTFOLIO AND RISK-MANAGEMENT PRACTICES

1. If the bank originates or invests in nontraditional mortgage loans, determine if more

1. See SR-01-4 and SR-99-6.

robust risk-management practices have been adopted to manage the exposures.

a. Verify that there are appropriate written lending policies that have been adopted and are being used and monitored, specifying acceptable product attributes, production and portfolio limits (growth and volume limits by loan type), sales and securitization practices, and risk-management expectations (acceptable levels of risk).
b. Determine if enhanced performance measures have been designed and if there is management reporting that provides an early warning for increasing risk.
c. Find out if the appropriate levels for the allowance for loan and lease losses (ALLL) have been established that consider the credit quality of the portfolio and the conditions that affect collectibility.
d. Evaluate whether adequate capital is maintained at levels that reflect portfolio characteristics and the effect of stressed economic conditions on collectibility.
e. Determine if capital is held commensurate with the risk characteristics of the bank's nontraditional mortgage loan portfolios.

2. If the bank has concentrations in nontraditional mortgage products, determine if there are—
   a. well-developed monitoring systems and risk-management practices that monitor and keep track of concentrations in key portfolio segments, such as by loan type, third-party originations, geographic area, and property occupancy status, and
   b. systems that also monitor key portfolio characteristics: non-owner-occupied investor loans and loans with (1) high combined LTV ratios, (2) high DTI ratios, (3) the potential for negative amortization, (4) credit scores of borrowers that are below established thresholds, and (5) risk-layered features.
3. Determine if the bank has adequate quality controls as well as compliance and audit procedures that focus on mortgage lending activities posing high risk.
   a. Determine if the bank has strong internal controls over accruals, customer service, and collections.
   b. Verify that policy exceptions made by servicing and collections personnel are carefully monitored and that practices such as re-aging, payment deferrals, and loan modifications are not inadvertently increasing risk.
   c. Find out if the quality control function regularly reviews (1) a sample of nontraditional mortgage loans from all origination channels and (2) a representative sample of underwriters confirming that underwriting policies are followed.
4. Bank oversight of third-party originators—
   a. determine if the bank has strong systems and controls in place for establishing and maintaining relationships with third-party nontraditional mortgage loan originators, including procedures for due diligence, and
   b. find out if the oversight of third- party mortgage loan origination lending practices includes monitoring the quality of originations (that is, the quality of origination sources, key borrower characteristics, appraisals, loan documentations, and credit repayment histories) so that they are reflective of the bank's lending standards and in compliance with applicable laws and regulations.
5. Determine if the bank's risk-management practices are commensurate with the nature, volume, and risk of its secondary-market activities.
   a. Find out if there are comprehensive formal strategies for managing the risks arising from significant secondary-market activities.
   b. Ascertain if contingency planning includes how the bank will respond to a decline in loan demand in the secondary market.
   c. Determine if there were any repurchases of defaulted mortgages and if the bank complies with its risk-based capital guidelines.
6. Evaluate the appropriateness of management information and reporting systems for the level and nature of the bank's mortgage lending activity.
   a. Verify that the reporting allows management to detect changes in the risk profile, or deteriorating performance, of its nontraditional mortgage loan portfolio.
   b. Determine if management information is reported and available by loan type, risk-layering features, underwriting characteristics, and borrower performance.
   c. Find out if—
      1) portfolio volume and performance are

tracked against expectations, internal lending standards, and policy limits;

2) volume and performance expectations are established at the subportfolio and aggregate portfolio levels;
3) variance analyses are regularly performed to identify exceptions to policies and prescribed thresholds; and
4) qualitative analyses are performed when actual performance deviates from established policies and thresholds.

d. Determine if the bank, based on the size and complexity of its lending operations, performs sensitivity analysis on its key portfolio segments to identify and quantify events that may increase its risks in a segment or the entire portfolio.
e. Verify that the scope of the sensitivity analysis includes stress tests on key performance drivers such as interest rates, employment levels, economic growth, housing value fluctuations, and other factors beyond the bank's immediate control.
f. Find out if the stress testing results provide direct feedback for determining underwriting standards, product terms, portfolio concentration limits, and capital levels.
g. Determine if the bank has established an appropriate ALLL for the estimated credit losses and commensurate capital levels for the risk inherent in its nontraditional mortgage loan portfolios (considering the higher risk of loss posed by the layered risks).
h. If the bank has material mortgage banking activities and mortgage servicing assets—
   a. evaluate whether sound practices were applied in valuing the mortgage servicing rights for its nontraditional mortgages and
   b. ascertain if the valuation process followed the nontraditional mortgage and other interagency guidance and generally accepted accounting principles, and whether reasonable and supportable assumptions were used.

Nontraditional Mortgages—Associated Risks Internal Control Questionnaire

Effective date May 2007

Section 2043.4

Review the bank's internal controls, policies, procedures, and practices for making and servicing nontraditional mortgage loans. The bank's internal control system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used, and other pertinent information.

RISK MANAGEMENT AND RISK MITIGATION

1. Are there procedures established to control, limit, and monitor the authorization of nontraditional mortgage loan transactions and to establish the appropriate supervision and preliminary review of nontraditional mortgage loan decisions?
2. For nontraditional mortgage loans, is there an appropriate separation of the employees' duties involving (1) the authorizing, executing, recording, and adjusting of loans, (2) receiving payments, (3) reconciling the accounts, and (4) maintaining clear title to, and custody of, pledged collateral—all to safeguard against the possible misappropriation of the bank's funds?
3. Has the bank's management developed risk-mitigation procedures for nontraditional mortgage products? If so, do the risk-mitigation procedures—
   a. set forth underwriting standards and terms that are consistent with prudent lending practices, including the consideration of each borrower's repayment capacity, third-party credit reports, pledged collateral valuations, and regularly timed follow-up reviews thereon?
   b. require that nontraditional mortgage products be supported by appropriate supervisory oversight and review, strong risk-management standards, capital levels that are commensurate with their risk, and an adequate allowance for loan and lease losses (ALLL) that reflects the collectibility of the portfolio?
   c. require that borrowers be provided with sufficient information so they can clearly understand the terms of their loans and their associated risks?

UNDERWRITING STANDARDS

1. Do the bank's underwriting standards—
   a. appropriately address and assess the effect of a substantial payment increase in the borrower's capacity to repay when loan amortization begins?
   b. establish practices consistent with the Federal Reserve's real estate lending standards and appraisal regulations and associated guidelines?
   c. require that loan terms be based on a disciplined analysis of potential exposures and mitigating factors, which will ensure that risk levels will remain manageable?
2. Does the bank's nontraditional mortgage loan qualification standards recognize the potential impact of payment shock, particularly for borrowers with high loan-to-value (LTV) ratios, high debt-to-income (DTI) ratios, and low credit scores?
3. Does the analysis of a borrower's repayment capacity include—
   a. an evaluation of the borrower's ability to repay the debt by final maturity at the fully indexed rate, assuming a fully amortizing repayment schedule?
   b. a repayment schedule that is based on the initial loan amount plus any balance increase that may accrue from a negative amortization provision?
   c. an avoidance of overreliance on credit scores as a substitute for income verification or reliance on the sale or refinancing of the property when amortization begins?
4. Do originated or purchased mortgage loans that combine nontraditional features (such as interest-only loans with reduced documentation and second-lien loans) have mitigating factors (that is, higher credit scores, lower LTVs and DTI repayment ratios, significant liquid assets, mortgage insurance, or other credit enhancements) that support the underwriting decisions and the borrower's repayment capacities?
5. Are there clear bank loan underwriting policies governing the use of—
   a. reduced documentation of the borrower's financial capacity (for example, non-

verification of reported income when the borrower's income can be documented based on recent W-2 statements, pay stubs, or tax returns)?

b. minimal or no owner's equity for second-lien home equity lines of credit (such loans generally should not have a payment structure allowing for delayed or negative amortization without other significant risk-mitigating factors)?

c. introductory interest rates (banks should minimize the likelihood of disruptive early recastings and extraordinary payment shock when setting introductory rates)?

d. subprime lending (including underwriting policies that are consistent with the interagency guidance on subprime lending)[1]?

e. non-owner-occupied investor loans (the qualifications should be based on the borrower's ability to service the debt over the life of the loan, which would include a combined LTV ratio that would consider negative amortization and sufficient borrower equity, and continuing cash reserves)?

PORTFOLIO AND RISK-MANAGEMENT PRACTICES

1. If the bank originates or invests in nontraditional mortgage loans—
   a. has the bank adopted risk-management practices to keep pace with the growth and changing risk profile of its nontraditional loan portfolio?
   b. are there appropriate bank-adopted (and monitored) written lending policies in use that specify—
      - acceptable product attributes?
      - production and portfolio limits (growth and volume limits by loan type)?
      - sales and securitization practices?
      - risk-management expectations (acceptable levels of risk)?
   c. have enhanced performance measures been designed and is there management reporting that will provide an early warning of increasing risk?
   d. are there appropriate ALLL levels established that consider the credit quality of the portfolio and the conditions that affect collectibility?
   e. is the bank's capital maintained at a level that is adequate and commensurate with the characteristics of its nontraditional mortgage loan portfolio, including the effect of stressed economic conditions on the collectibility of such loans?
2. If the bank has concentrations in nontraditional mortgage products, are there—
   a. well-developed monitoring systems and risk-management practices that monitor and keep track of concentrations in key portfolio segments, such as by loan type, third-party originations, geographic area, and property occupancy status?
   b. systems that also monitor key portfolio characteristics: non-owner-occupied investor loans and loans with (1) high combined LTV ratios, (2) high DTI ratios, (3) the potential for negative amortization, (4) credit scores of borrowers that are below established thresholds, and (5) risk-layered features?
3. Does the bank have adequate quality controls, including an independent internal loan review staff, that will consider and review loan documentation and other compliance and audit procedures that focus on mortgage lending activities posing high risk? Are there—
   a. strong internal controls over accruals, customer service, and collections?
   b. reviews of policy exceptions, conducted by servicing and collections personnel, which are carefully monitored, and are practices such as re-aging, payment deferrals, and loan modifications regularly reviewed to ensure that they are not inadvertently increasing risk?
   c. regular reviews conducted by the quality control function that focus on (1) a sample of nontraditional mortgage loans from all origination channels and (2) a representative sample of underwriters to confirm that underwriting policies are followed?
4. Bank oversight of third-party originators—
   a. Does the bank have strong internal systems and controls in place for establishing and maintaining relationships with third-party nontraditional mortgage loan originators, including procedures for due diligence?

1. See SR-01-4 and SR-99-6.

b. Are there staff designated to provide bank oversight of third-party mortgage loan origination lending practices, which include the monitoring of the quality of originations (that is, the quality of origination sources, key borrower characteristics, appraisals, loan documentations, and credit repayment histories) to ensure that the originations (1) reflect adherence to the bank's lending standards and (2) compliance with applicable laws and regulations?

5. Are the bank's risk-management practices for nontraditional mortgage loans commensurate with the nature, volume, and risk of its secondary-market activities? If so, are there—
   a. comprehensive formal strategies for managing the risks arising from significant secondary-market activities?
   b. bank contingency plans that include how the bank will respond to a decline in loan demand in the secondary market?
   c. repurchases of defaulted mortgages and, if so, is the bank in compliance with its riskbased capital guidelines?

MANAGEMENT INFORMATION SYSTEM

1. Are the bank's management information system (MIS) and reports appropriate for the level and nature of the bank's nontraditional mortgage lending activity?
2. Do the systems and reports allow management to detect changes in the risk profile of, or deteriorating performance in, its nontraditional mortgage loan portfolio?
3. For the bank's nontraditional loan portfolio, is management information reported and available by loan type, risk-layering features, underwriting characteristics, and borrower performance?
4. Is the bank's nontraditional mortgage portfolio's—
   a. volume and performance tracked against expectations, internal lending standards, and policy limits?
   b. volume and performance expectations established at the sub portfolio and aggregate portfolio levels?
   c. variance analyses regularly performed to identify exceptions to policies and prescribed thresholds?
   d. qualitative analyses performed when actual performance deviates from established policies and thresholds?
5. Does the bank's MIS provide reports consisting of a trial balance of the borrower's loan balances, and an aged trial balance (based on the borrower's loan repayment terms), for the entire loan portfolio (the totals of which agree with the bank's respective general ledger balance[s]), but with nontraditional mortgage loan balances segregated and subtotaled (or totaled)?
6. Does the bank, based on the size and complexity of its lending operations, perform sensitivity analysis on its key portfolio segments to identify and quantify events that may increase its risks in a segment or the entire portfolio?
7. Does the scope of the sensitivity analysis include stress tests on key performance drivers such as interest rates, employment levels, economic growth, housing value fluctuations, and other factors beyond the bank's immediate control?
8. Do the stress testing results provide direct feedback for determining underwriting standards, product terms, portfolio concentration limits, and capital levels?
9. Has the bank established and maintained an appropriate ALLL for the estimated credit losses on nontraditional mortgage loans?
10. Do designated supervisory personnel periodically review adjustments to, and of, past due and charged-off nontraditional mortgage loans to confirm that appropriate actions have been taken, including collections and recoveries?
11. Does the bank have commensurate capital levels for the risk inherent in its nontraditional mortgage loan portfolios (considering the higher risk of loss posed by the layered risks)?
12. If the bank has material mortgage banking activities and mortgage servicing assets—
    a. has it evaluated whether sound practices were applied in valuing the mortgage servicing rights for its nontraditional mortgages?
    b. does the bank's valuation process follow the nontraditional mortgage and other interagency guidance and generally accepted accounting principles, and have reasonable and supportable assumptions been used?

CONCLUSION

1. With respect to the bank's management of its nontraditional mortgage loan portfolio, is there adequate separation of duties, proper authorization of transactions and activities, adequate documents and records, physical control over assets and records, and independent checks on performance?
2. Have any responses to the forgoing information revealed any significant deficiencies and weaknesses in the bank management's system of internal controls over its nontraditional mortgage loan portfolio—weaknesses that effect controls over risk management and assessment, the reliability of financial reporting, the accounting information and communication system, efficiency and effectiveness of operations, compliance with laws and regulations, and monitoring of internal control performance?
3. Are there any internal control deficiencies in areas that are not covered within this questionnaire that impair any controls? Explain any additional examination procedures that are, or would be, necessary to draw conclusions about the adequacy of the internal controls over the bank's nontraditional mortgage loans.
4. Based on an overall evaluation, as evidenced by your answers to the foregoing questions, are internal controls over the bank's nontraditional mortgage loans adequate or inadequate?

LOAN-BROKERAGE AND -SERVICING ACTIVITIES

Loan-brokerage and -servicing activities are undertaken by mortgage banking enterprises and the mortgage banking operations of commercial banks. Mortgage banking activities consist primarily of two separate but related activities: (1) the origination or acquisition of mortgage loans and the sale of the loans to permanent investors and/or (2) the subsequent long-term servicing of the loans. A mortgage banking enterprise usually retains the right to service mortgage loans it sells to permanent investors. An enterprise's right to service mortgage loans other than its own is an intangible asset that may be acquired separately. The rights to service mortgage loans are purchased and sold frequently. Mortgage loans are acquired to sell to permanent investors from a variety of sources, including applications received directly from borrowers (in-house originations), purchases from brokers, purchases from investors, and conversions of various forms of interim financing to permanent financing. A service fee, usually based on a percentage of the outstanding principal balance of the mortgage loan, is received for performing loan-administration functions. When servicing fees exceed the cost of performing servicing functions, the existing contractual right to service mortgage loans has economic value.

A number of bank services may result in assets and liabilities that do not have to be entered on the general ledger. These services are considered off-balance-sheet activities and may include the origination, sale, and servicing of various loans. Servicing and accounting activities cover functions related initially to recording the loan, collecting and recording payments, and reporting loan transactions and balances (including reporting past due loans). Unlike the other activities in this section, servicing and accounting activities are not directly related to credit risk. However, some aspects of accounting and servicing activities, such as the accounting system's ability to produce accurate past due loan reports, indirectly contribute to controlling credit risk. Also, poorly designed or ineffective servicing and accounting activities can contribute to increased risk in areas besides credit, such as fraud and insider abuse.

The origination, sale, and servicing of various types of loans usually have been associated with mortgage loans. But increasingly, origination and servicing activities have also been observed in government-guaranteed loans (or portions thereof), consumer loans, and commercial loans. Improper management and control of these activities by the servicer presents certain supervisory concerns. If the bank servicer is continually originating additional loans to be serviced, the bank may find itself responsible for servicing more loans than it can prudently manage. Failure to properly administer loans may lead to legal or financial liabilities that could adversely affect the bank's capital.

ACCOUNTING GUIDANCE

The following accounting pronouncements issued by the Financial Accounting Standards Board (FASB) apply to mortgage banking activities:

- FAS 5, Accounting for Contingencies
- FAS 65, Accounting for Certain Mortgage Banking Activities
- FAS 91, Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases
- FAS 115, Accounting for Certain Investments in Debt and Equity Securities (paragraph 7 was amended by FAS 140)
- FAS 133, Accounting for Derivative Instruments and Hedging Activities (amended by FAS 140)
- FAS 134, Accounting for Mortgage-Backed Securities Retained After the Securitization of Mortgage Loans Held for Sale by a Mortgage Banking Enterprise
- FAS 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities
- FAS 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities
- FAS 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities
- FAS 154, Accounting Changes and Error Corrections

The accounting standards for nonrefundable fees and costs associated with lending, committing to lend, and purchasing a loan or group of loans are set forth in FASB Statement No. 91, "Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases," (FAS 91). A summary of the statement follows. The statement applies to all types of loans as well as to debt securities (but not to loans or debt securities carried at market value if the changes in market value are included in earnings) and all types of lenders.

Nonrefundable loan fees paid by the borrower to the lender may have many different names, such as origination fees, points, placement fees, commitment fees, application fees, management fees, restructuring fees, and syndication fees. FAS 91 applies to both a lender and a purchaser and should be applied to individual loan contracts. Aggregation of similar loans for purposes of recognizing net fees or costs, purchase premiums, or discounts is permitted under certain circumstances specified in FAS 91, or if the result does not differ materially from the amount that would have been recognized on an individual loan-by-loan basis. In general, FAS 91 specifies the following:

- Loan-origination fees should be deferred and recognized over the life of the related loan as an adjustment of yield (interest income). Once a bank adopts FAS 91, recognizing a portion of loan fees as revenue to offset all or part of origination costs in the reporting period in which a loan is originated is no longer acceptable.
- Certain direct loan-origination costs specified in FAS 91 should be deferred and recognized over the life of the related loan as a reduction of the loan's yield. Loan-origination fees and related direct loan-origination costs for a given loan should be offset and only the net amount deferred and amortized.
- Direct loan-origination costs should be offset against related commitment fees, and the net amounts should be deferred except for
  - — commitment fees (net of costs) when the likelihood that the commitment will be exercised is remote; in these cases, the fees should generally be recognized as service-fee income on a straight-line basis over the loan-commitment period, and
  - — retrospectively determined fees, which are recognized as service-fee income when the amount of the fees are determined.

All other commitment fees (net of costs) are to be deferred over the entire commitment period and recognized as an adjustment of yield over the related loan's life or, if the commitment expires unexercised, recognized in income upon expiration of the commitment.

- Loan-syndication fees should be recognized by the bank managing a loan syndication (the syndicator) when the syndication is complete unless a portion of the syndication loan is retained. If the yield on the portion of the loan retained by the syndicator is less than the average yield to the other syndication participants after considering the fees passed through by the syndicator, the syndicator should defer a portion of the syndication fee to produce a yield on the portion of the loan retained that is not less than the average yield on the loans held by the other syndication participants.
- Loan fees, certain direct loan-origination costs, and purchase premiums and discounts on loans are to be recognized as an adjustment of yield generally by the interest method based on the contractual term of the loan. However, if the bank holds a large number of similar loans for which prepayments are probable and if the timing and amount of prepayments can be reasonably estimated, the bank may consider estimates of future principal prepayments in the calculation of the constant effective yield necessary to apply the interest method. Fees should not be recognized over the estimated average life of a group of loans.

Examiners should review the extent and nature of servicing activities to ensure that they are conducted in a safe and sound manner. Loan-origination fees and related direct loan-origination costs of loans held for sale should be accounted for in accordance with FAS 91, as discussed above. Improper practices should be criticized.

RISK MANAGEMENT AND THE VALUATION AND HEDGING OF MORTGAGE-SERVICING ASSETS ARISING FROM MORTGAGE BANKING ACTIVITIES

A bank's board of directors and senior management are expected to take into account the potential exposure of both earnings and capital to changes in a bank's mortgage banking assets and operations under expected and stressed market conditions. Banks are expected to have comprehensive documentation that adequately substantiates and validates the carrying values of its mortgage-servicing assets (MSAs) and the underlying assumptions used to derive those values. The analyses and processes should be fully documented to support the amortization and timely recognition of impairment of the bank's MSAs. (See SR-03-4.)

The guidance that follows focuses on the risks associated with these aspects of mortgage banking: valuation and modeling processes, hedging activities, management information systems, and internal audit processes. When banks originate mortgage loans, they often sell the loans into the secondary market. Yet banks often retain and recognize the servicing of those MSAs, which are complex and volatile assets that are subject to interest-rate risk. MSAs can become impaired as interest rates fall and borrowers refinance or prepay their mortgage loans. This impairment can lead to earnings volatility and the erosion of capital, if the risks inherent in the MSAs are not properly hedged.

When accounting for MSAs, banks are expected to follow FAS 140, which requires the following accounting treatment for servicing assets (including MSAs):[1]

- initially record servicing assets at fair value, presumably the price paid if purchased, or at their allocated carrying amount based on relative fair values if retained in a sale or securitization;[2]
- amortize servicing assets in proportion to, and over the period of, estimated net servicing income; and
- stratify servicing assets based on one or more of the predominant risk characteristics of the underlying financial assets, assess the strata for impairment based on fair value, and report them on the balance sheet at the lower of unamortized cost or fair value through the use of valuation allowances.

Fair value is defined in FAS 140 as the amount at which an asset could be bought or sold in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets for similar assets provide the best evidence of fair value and must be used as the basis for the measurement, if available. If quoted market prices are not available, the estimate of fair value must be based on the best information available. The estimate of fair value must consider prices for similar assets and the results of valuation techniques to the extent available.

Examination Concerns on the Valuation of Mortgage-Servicing Assets

Banks involved in mortgage-servicing operations should use market-based assumptions that are reasonable and supportable in estimating the fair value of servicing assets. Specifically, bulk, flow, and daily MSA/loan pricing activities observed in the market should be evaluated to ensure that a bank's MSA valuation assumptions are reasonable and consistent with market activity for similar assets. Many banks also use models to estimate the fair value of their MSAs and substantiate their modeled estimate of MSA fair value by comparing the model output with general or high-level peer surveys. Such a comparison, however, is often performed without adequate consideration of the specific attributes of the bank's own MSAs.

Examiners should consider the following concerns as an indication that additional scrutiny is necessary:

1. Further guidance on the accounting for servicing assets and liabilities can be found in the instructions for the Reports of Condition and Income (Call Report); FAS 140 FASB Staff Implementation Guide; and the AICPA Statement on Auditing Standards 101, "Auditing Fair Value Measurements and Disclosures."

2. FAS 140 indicates, "Typically, the benefits of servicing are expected to be more than adequate compensation to a servicer for performing the servicing, and the contract results in a servicing asset. However, if the benefits of servicing are not expected to adequately compensate a servicer for performing the servicing, the contract results in a servicing liability."

- The use of unsupported prepayment speeds, discount rates, and other assumptions in MSA valuation models.
  - — Assumptions are unsupported when they are not benchmarked to market participants' assumptions and the bank's actual portfolio performance across each product type.
- Questionable, inappropriate, or unsupported items in the valuation models (examples include retention benefits,[3] deferred tax benefits, captive reinsurance premiums, and income from cross-selling activities).
  - — The inclusion of these items in the MSA valuation must be appropriate under generally accepted accounting principles (GAAP) and must also be consistent with what a willing buyer would pay for the mortgage-servicing contract. For example, when the inclusion of retention benefits as part of the MSA valuation is not adequately supported with market data, such inclusion will result in an overstatement of reported mortgage-servicing assets. Therefore, the inclusion will be deemed an unsafe and unsound practice.
- Disregard of comparable market data coupled with overreliance on peer-group surveys as a means of supporting assumptions and the fair value of MSAs.
  - — Management may use survey data for comparative purposes; however, such data are not a measure of or substitute for fair value.
- Frequent changing of assumptions from period-to-period for no compelling reason, and undocumented policies and procedures relating to the MSA valuation process and oversight of that process.
- Inconsistencies in the MSA valuation assumptions used in valuation, bidding, pricing, and hedging activities as well as, where relevant, in mortgage-related activities in other aspects of a bank's business.
- Poor segregation of duties from an organizational perspective between the valuation, hedging, and accounting functions.
- Failure to properly stratify MSAs for impairment-testing purposes.
  - — FAS 140 requires MSAs to be stratified based on one or more of the predominant risk characteristics of the underlying mortgage loans. Such characteristics may include financial asset type, size, interest rate, origination date, term, and geographic location. Banks are expected to identify a sufficient number of risk characteristics to adequately stratify each MSA and provide for a reasonable and valid impairment assessment. Stratification practices that ignore predominant risk characteristics are a supervisory concern.
- Inadequate amortization of the remaining cost basis of MSAs, particularly during periods of high prepayments.
  - — Inadequate amortization often occurs because prepayment models are not adequately calibrated to periods of high prepayments. When these models underestimate runoff, the amount and period of estimated net servicing income are overstated.
- Continued use of a valuation allowance for the impairment of a stratum of MSAs when repayment of the underlying loans at a rate faster than originally projected indicates the existence of an impairment for which a direct write-down should be recorded.
- Failure to assess actual cash-flow performance. (The actual cash flows received from the serviced portfolio must be established in order to determine the benefit of MSAs to the bank.)
- Failure to validate or update models for new information.
  - — Inaccuracies in valuation models can result in erroneous MSA values and affect future hedging performance. Models should be inventoried and periodically revalidated, including an independent assessment of all key assumptions.

RISK MANAGEMENT OF MORTGAGE BANKING ACTIVITIES

The Federal Reserve expects state member banks to perform mortgage banking operations in a safe and sound manner. Management should ensure that detailed policies and procedures are in place to monitor and control mortgage banking activities, including loan production, pipeline (unclosed loans) and warehouse (closed loans) administration, secondary-market transactions, servicing operations, and management

3. Retention benefits arise from the portion of the serviced portfolio that is expected to be refinanced with the bank in the future.

(including hedging) of mortgage-servicing assets. Reports and limits should focus on key risks, profitability, and proper accounting practices.

MSAs possess interest rate-related option characteristics that may weaken a bank's earnings and capital strength when interest rates change. Accordingly, banks engaged in mortgage banking activities should consider all aspects of the federal banking agencies' policy on interest-rate risk.[4] In addition, banks with significant mortgage banking operations or mortgage-servicing assets should incorporate these activities into their critical planning processes and risk-management oversight. The planning process should include careful consideration of how the mortgage banking activities affect the bank's overall strategic, business, and asset-liability plans. Risk-management considerations include the potential exposure of both earnings and capital to changes in the value and performance of mortgage banking assets under expected and stressed market conditions. Furthermore, a bank's board of directors should establish limits on investments in mortgage banking assets and evaluate and monitor such investment concentrations (on the basis of both asset and capital levels) on a regular basis.

During examinations of mortgage banking activities, examiners should review mortgage banking policies, procedures, and management information systems to ensure that the directors, managers, and auditors are adequately addressing the following matters.

Valuation and Modeling Processes

- Comprehensive documentation standards for all aspects of mortgage banking, including mortgage-servicing assets.
  - In particular, management should substantiate and validate the initial carrying amounts assigned to each pool of MSAs and the underlying assumptions as well as the results of periodic reviews of each asset's subsequent carrying amount and fair value. The validation process should compare actual performance with predicted performance. Management should ensure proper accounting treatment for MSAs on a continuing basis.
- MSA impairment analyses that use reasonable and supportable assumptions.
  - Analyses should employ realistic estimates of adequate compensation,[5] future revenues, prepayment speeds, market-servicing costs, mortgage-default rates, and discount rates. Fair values should be based on market prices and underlying valuation assumptions for transactions in the marketplace involving similar MSAs. Management should avoid relying solely on peer-group surveys or the use of unsupportable assumptions. The Federal Reserve encourages banks to obtain periodic third-party valuations by qualified market professionals to support the fair values of their MSAs and to update internal models.
- Comparison of assumptions used in valuation models to the bank's actual experience in order to substantiate the value of MSAs.
  - Management should measure the actual performance of MSAs by analyzing gross monthly cash flows of servicing assets relative to the assumptions and projections used in each quarterly valuation. In addition, a comparison of the first month's actual cash received on new MSAs with the projected gross cash flows can help validate the reasonableness of initial MSA values prior to the impact of prepayments and discount rates. This analysis is a critical tool in understanding the profitability of mortgage servicing to a bank; however, it is not a substitute for the estimation of the fair value of MSAs under GAAP.
- Review and approval of results and assumptions by management.
  - Given the sensitivity of the MSA valuation to changes in assumptions and valuation policy, any such changes should be reviewed and approved by management and, where appropriate, by the board of directors.
- Comparison of models used throughout the company including valuation, hedging, pricing, and bulk acquisition.
  - Companies often use multiple models and assumption sets in determining the values

4. See SR-96-13, Joint Agency Policy Statement on Interest Rate Risk (June 26, 1996), and the Interest Rate Risk Management section.

5. As defined in FAS 140, "adequate compensation" is "the amount of benefits of servicing (i.e., revenues from contractually specified servicing fees, late charges, and other ancillary sources) that would fairly compensate a substitute servicer should one be required, which includes the profit that would be demanded in the marketplace."

for MSAs depending on their purpose—pricing versus valuation. Any inconsistencies between these values should be identified, supported, and reconciled.

- Appropriate amortization practices.
  — Amortization of the remaining cost basis of MSAs should reflect actual prepayment experience. Amortization speeds should correspond to and be adjusted to reflect changes in the estimated remaining net servicing income period.
- Timely recognition of impairment.
  — Banks must evaluate MSAs for impairment at least quarterly to ensure amounts reported in the call report[6] are accurately stated. Banks will generally be expected to record a direct write-down of MSAs when, and for the amount by which, any portion of the unamortized cost of a mortgage-servicing asset is not likely to be recovered in the future.

Mortgage Banking Hedging Activities

- Systems to measure and control interest-rate risk.
  — Hedging activities should be well developed and communicated to responsible personnel. Successful hedging systems will mitigate the impact of prepayments on MSA values and the effects of interest-rate risk in the mortgage pipeline and warehouse.
- Approved hedging products and strategies.
  — Management should ensure appropriate systems and internal controls are in place to oversee hedging activities, including monitoring the effectiveness of hedging strategies and reviewing concentrations of hedge instruments and counterparties.
- Hedge accounting policies and procedures.
  — Banks should ensure their hedge accounting methods are adequately documented and consistent with GAAP.

Management Information Systems

- Accurate financial reporting systems, controls, and limits.
  — At a minimum, the board should receive information on hedged and unhedged positions, mark-to-market analyses, warehouse aging, the valuation of MSAs, various rate shock-scenario and risk exposures, the creation of economic value, and policy exceptions whenever material exposure to MSAs exists.
- Systems that track quality-control exceptions.
  — Quality-control reports should be analyzed to determine credit quality, loan characteristics and demographics, trends, and sources of problems. Sound quality-control programs are also beneficial in the early detection of deteriorating production quality and salability as well as in the prevention and detection of fraudulent activities.
- Systems that track and collect required mortgage loan documents.
  — Management should ensure adequate control processes are in place for both front-end-closing and post-closing loan documents. If mortgages are not properly documented, a bank may be forced to hold unsold mortgages for extended periods or repurchase mortgages that have been sold. Further, management should ensure that adequate analyses are performed and allowances are established for estimated probable losses arising from documentation deficiencies on closed loans.
- Systems that monitor and manage the risks associated with third-party originated loans.
  — Banks often originate loans through broker and correspondent channels. Management should ensure that prudent risk-management systems are in place for broker and correspondent approvals and ongoing monitoring, including controls on the appraisal and credit-underwriting process of third-party originated loans. Adequate due diligence of third-party relationships is necessary to help prevent the origination of loans that are of poor credit quality or are fraudulent. Delegated underwriting to brokers or correspondents warrants close supervision from senior management.

Internal Audit

- Adequate internal audit coverage.
  — Because of the variety of risks inherent in mortgage banking activities, internal audi-

6. Schedule RC-M, Memoranda, Item 2a.

tors should evaluate the risks of and controls over their bank's mortgage banking operations. They should report audit findings, including identified control weaknesses, directly to the audit committee of the board or to the board itself. Board and management should ensure that internal audit staff possess the necessary qualifications and expertise to review mortgage banking activities or obtain assistance from qualified external sources.

INTERAGENCY ADVISORY ON ACCOUNTING AND REPORTING FOR COMMITMENTS TO ORIGINATE AND SELL MORTGAGE LOANS

On May 3, 2005, the Federal Reserve, Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, and the former Office of Thrift Supervision issued an "Interagency Advisory on Accounting and Reporting for Commitments to Originate and Sell Mortgage Loans." The advisory provides guidance on the appropriate accounting and reporting for commitments to

- originate mortgage loans that will be *held for resale,* and
- sell mortgage loans under mandatory-delivery and best-efforts contracts.

The advisory discusses the characteristics that should be considered in determining whether mandatory-delivery and best-efforts contracts are derivatives and the accounting and regulatory reporting treatment for both commitments to originate mortgage loans that will be held for resale and those loan-sales agreements that meet the definition of a derivative. The advisory also addresses the guidance that should be considered in determining the fair value of derivatives.

A financial institution is expected to account for and report derivative loan commitments and forward loan-sales commitments as derivatives in accordance with GAAP, which includes the use of valuation techniques that are reasonable and supportable in the determination of fair value. An institution's failure to account for and report derivative loan commitments and forward loan-sales commitments in regulatory reports in accordance with GAAP may be an unsafe and unsound practice. To view the entire contents of the advisory, see SR-05-10, "Accounting and Reporting for Commitments to Originate and Sell Mortgage Loans."

Mortgage Banking
Examination Procedures
Effective date November 2020

Section 2044.3

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 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." 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 over-reliance 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 examina-

tion 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.
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 this manual's section on Loan Portfolio Management⟩.
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 infor-

mation 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 typical *cally 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 underwrit-

ers (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 speculative 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 assump-

tions 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 interest-only 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. Consider the guidance in 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 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 this manual that cover the 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) 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;

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

- 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 bank-
   ing 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 capital rules. Follow and apply the applicable guidance and procedures in this manual's section on "Assessment of Capital Adequacy" and "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.

This section provides supervisory and accounting guidance for examiners to use in their examination and review of a bank's creation and use of loan participation agreements. Additional guidance, research, and information on loan participations and loan participation agreements will be developed and considered for future issuance and implementation.

A loan participation is an agreement that transfers a stated ownership interest in a loan to one or more other banks, groups of banks, or other entities. The transfer represents an ownership interest in an individual financial asset. The lead bank retains a partial interest in the loan, holds all loan documentation in its own name, services the loan, and deals directly with the customer for the benefit of all participants. Banks should ensure that comprehensive participation agreements with originating institutions are in place for each loan facility before they consider purchasing any participating interest.

Many banks purchase loans or participate in loans originated by others. In some cases, such transactions are conducted with affiliates, groups of banks, or members of a chain-banking organization. Alternatively, a purchasing bank may also wish to supplement its loan portfolio when loan demand is weak. In still other cases, a bank may purchase or participate in a loan to accommodate another unrelated bank with which it has established an ongoing business relationship.

Purchasing or selling loans, if done properly, can have a legitimate role in a bank's overall asset and liability management and can contribute to the efficient functioning of the financial system. In addition, these activities help a bank diversify its risks and improve its liquidity.

BOARD POLICIES ON LOAN PARTICIPATIONS

Banks should have sufficient board-approved policies in place that govern their loan participation activities. At a minimum, the policy should include (1) the requirements for entering into a loan participation agreement, (2) limits for the aggregate amount of loans purchased from and sold to an outside source, (3) limits of all loans purchased and sold, (4) limits for the aggregate amount of loans to particular industries, (5) comprehensive participation agreements with originating banks, (6) complete analysis and documentation of the credit quality of obligations purchased, (7) an analysis of the value and lien status of the collateral, (8) appraisal guidelines, (9) the maintenance of full independent credit information on the borrower throughout the term of the loan, (10) guidelines for the timely transfer of all financial and nonfinancial credit information to participant banks, and (11) collection procedures.

LOAN PARTICIPATION AGREEMENT

A loan participation agreement may enable a smaller bank (the lead bank or transferor) to originate a large loan in excess of its legal lending limit. Participating banks that have an ownership interest are able to offset low local loan demand or invest in large loans without the burden of servicing the loan or incurring origination costs. A loan participation agreement may also allow the originating bank to facilitate and grant a larger loan without causing it to have a concentration of credit (i.e., enabling risk diversification) or an impairment of its liquidity position. The participation agreement should contain provisions that require the originating bank to transfer, in a timely manner, all financial and nonfinancial credit information to the participant banks upon the loan's origination and throughout the term of the loan. The agreement should specify the allocation of payments, losses, and expenses. It should also state that a participating bank has the right to perform its own independent review of the transaction. The agreement should contain no language indicating that the lead bank is a "lender" or that a participating bank is a "borrower." The purchase of loan participations without a comprehensive agreement could be viewed as an unsafe and unsound banking practice.

ACCOUNTING FOR LOAN PARTICIPATIONS

A loan participation agreement is usually structured to allow the participation transaction to receive sale treatment of a portion of the loan by the originating bank even though the

participation agreement may restrict the purchaser when reselling its interest in the loan, subject to certain conditions.[1] Sale treatment is achieved by structuring the loan participation agreement so that interests sold to a purchaser meet the definition of a "participating interest" and the transaction satisfies all conditions for transfer of control over the interests. In general, FAS 166 (paragraph 8B) briefly defines a participating interest as a portion of a financial asset that

1. conveys proportionate ownership rights with equal priority to each participating interest holder.
2. involves no recourse (other than standard representations and warranties) to, or subordination by, any participating interest holder.
3. does not entitle any participating interest holder to receive cash before any other participating interest holder.

A transfer of a participating interest in an entire financial asset in which the transferor surrenders control over those interests is to be accounted for as a sale if and only if *all the following conditions* are met:

1. The transferred financial assets have been isolated from the transferor—put presumptively beyond the reach of the transferor and its creditors, even in bankruptcy or other receivership.[2]
2. Each purchaser has the right to pledge or exchange the interests it received, and no condition both constrains the purchaser from taking advantage of its right to pledge or exchange and provides more than a trivial benefit to the transferor.
3. The transferor does *not* maintain effective control over the interests.[3]

STRUCTURING THE LOAN PARTICIPATION AGREEMENT

The written participation agreement should consider contingent events such as a defaulting borrower, the lead bank becoming insolvent, or a party to the participant arrangement that is not performing as expected. The agreement should clearly state the limitations the originator or participants impose on each other and any rights that the parties retain. The participation agreement should clearly include

- the obligation of the lead bank to furnish timely credit information and to notify the parties of significant changes in the borrower's status;
- a requirement that the lead bank consult with the participants prior to any proposed change to the loan, guarantee, or security agreements, or taking any action when the borrower defaults;
- the lead bank's and participants' specific rights if the borrower defaults;
- the resolution procedures to be followed when the lead bank or participants
  - do not agree on the procedures to be taken when the borrower defaults and/or;
  - have potential conflicts when the borrower defaults on more than one loan;
- provisions for terminating the agency relationship between the lead bank and the participants upon events such as insolvency, breach of duty, negligence, or misappropriation by one of the parties to the agreement.

Some participation agreements may allocate

1. Three sale recognition conditions denote the transferor's surrender of control under Financial Accounting Standards (FAS) 166, "Accounting for Transfers of Financial Assets" (an amendment of FAS 140). Those conditions must be met in order for the originator (transferor) to account for the transfer of the financial assets to the participating transferee as a sale. When a loan participation is accounted for as a sale, the seller (transferor) removes the participated interest in the loan from its financial statements. FAS 166 applies to both the transferor (seller) of the participated assets and the transferee (purchaser). (See the complete text of FAS 166 (paragraphs 8B and 9) that defines a "participating interest" and the conditions for sale recognition). See also the reporting instructions for the FFIEC Consolidated Reports of Condition and Income (FFIEC 031) (bank Call Report).

2. Transferred financial assets are isolated in bankruptcy or other receivership only if the transferred financial assets would be beyond the reach of the powers of a bankruptcy trustee or other receiver for the transferor or any of its consolidated affiliates included in the financial statements being presented.

3. Examples of a transferor's effective control over the transferred financial assets include (a) an agreement that both entitles and obligates the transferor to repurchase or redeem the financial asset (or its third-party beneficial interests) before its maturity, (b) an agreement that provides the transferor with both the unilateral ability to cause the holder to return specific financial assets and a more-than-trivial benefit attributable to that ability, other than through a cleanup call, or (c) an agreement that permits the transferee to require the transferor to repurchase the transferred financial assets at a price that is so favorable to the transferee that it is probable that the transferee will require the transferor to repurchase them.

payments using a method other than a pro rata sharing based on each participant's ownership interest. The first principal payment could be applied based on the participant's ownership interest while the remaining payments would be applied according to the lead bank's ownership interest. In this situation, the participation agreement should specify that if a borrower defaults, the participants would share subsequent payments and collections in proportion to their ownership interest at the time of default.[4]

A participation agreement may provide that the lead bank, as the originating lender, allow a participating bank to resell, but the lead bank reserves the right to call at any time from whoever holds the ownership interest. The lead bank can then enforce the call option by cutting off or restricting the flow of interest at the call date.[5] In this situation, the lead bank, as originating lender, has retained effective control over the participation; such a call option precludes sale accounting treatment by the transferor. The transaction, therefore, should be accounted for as a secured borrowing.

INDEPENDENT CREDIT ANALYSIS

A bank that acquires a loan participation should regularly perform a rigorous credit analysis on its loan participation as if it had originated the loan. Due to the indirect relationship that a participating bank has with a borrower, it may be difficult for the participating bank to receive timely credit information to allow it to conduct a comprehensive credit analysis of the transaction. However, the participating bank should not rely solely on the lead bank's credit analysis. It should gather all available relevant credit information, including the details on the collateral's value (for example, values determined by an independent appraisal or an evaluation), lien status, loan agreements, and the loan's other participation agreements that existed prior to making its commitment to acquire the loan participation. A participating bank also should reach an agreement with the loan originator (transferor) that it will provide ongoing, complete, and timely credit information about the borrower. It is important for the participating banks to maintain current and complete records on their loan participations. The absence of such information may indicate that the bank did not perform the necessary due diligence prior to making its decision to acquire the loan participation. During the life of the loan participation, the bank should monitor the loan's servicing and repayment status.

SALES OF LOAN PARTICIPATIONS IN THE SECONDARY MARKET

If a bank has a concentration in loan participations, it may be possible for it to sell its participating interests in the secondary market to reduce its dependence on an asset group. If the bank is not large enough to participate in the secondary market, an alternative might be to sell loans without recourse to a correspondent bank that also desires to diversify its loan portfolio.

SALE OF LOAN PARTICIPATIONS WITH OR WITHOUT THE RIGHT OF RECOURSE

The parties to a participation agreement (those having a participating ownership interest) generally may have *no recourse* to the transferor or to each other even though the transferor (e.g., the originating lender) continues to service the loan. No participant's interest should be subordinate to another. Some loan participation agreements, however, may give the seller a contractual right to repurchase the participated loan interest for purposes of working out or modifying the sale. When the seller has the right to repurchase the participation, it may provide the seller with a call option on a specific loan participation asset. If the seller's right to repurchase precludes the seller from recognizing the transaction as a sale, the transaction should be accounted for as a secured borrowing.

SALES OF 100 PERCENT PARTICIPATIONS

Some loan participation agreements may be structured so that the transferor (lead bank) sells

4. This is *not* a participating interest—no sale.

5. The cash flows from a loan participation agreement, except servicing fees, should be divided in proportion to the third parties' participating interests.

the entire underlying loan amount (100 percent) to the agreement's participants. If participation agreements are not structured properly they can pose unnecessary and increased risks (for example, legal, compliance, or reputational risks) to the originator and the participants. The lead bank, as originator, would have no ownership in the loan. Such agreements should therefore clearly state that the loan participants are participating in the loan and that they are not investing in a business enterprise. The policies of a bank engaged in such loan participation agreements should focus on safety and soundness concerns that include

- the program's objectives
- the plan of distribution
- the credit requirements that pertain to the borrower—the originating bank should structure 100 percent loan participation programs only for borrowers who meet the originating institution's credit requirements
- the program participant's accessibility to the borrower's financial information (as authorized by the borrower)—the originating bank should allow potential loan participants to obtain and review appropriate credit and other information that would enable them to make an informed credit decision.

PARTICIPATION TRANSACTIONS BETWEEN AFFILIATES

Banks should not relax their credit standards when participation agreements involve affiliated insured depository institutions. Such agreements must be structured to comply with sections 23A and 23B of the Federal Reserve Act (FRA) and the Board's Regulation W. The Federal Reserve has determined that in certain very limited circumstances the purchase or sale of a participation agreement may be exempt from these provisions.

Transfer of Low-Quality Assets

In general, a bank cannot purchase a low-quality asset, including a loan participation from an affiliate. Section 23A of the FRA provides a limited exception to the general rule prohibiting purchase of low-quality assets if the bank performs an independent credit evaluation and commits to the purchase of the asset before the affiliate acquires the asset.[6] Section 223.15 of the Board's Regulation W provides an exception from the prohibition on the purchase of a low-quality asset by a member bank from an affiliate for certain loan renewals. The rule allows a member bank that purchased a loan participation from an affiliate to renew its participation in the loan, or provide additional funding under the existing participation, even if the underlying loan had become a low-quality asset, so long as certain criteria were met. These renewals or additional credit extensions may enable both the affiliate and the participating member bank to avoid or minimize potential losses. The exception is available only if (1) the underlying loan was not a low-quality asset at the time the member bank purchased its participation and (2) the proposed transaction would not increase the member bank's proportional share of the credit facility. The member bank must also obtain the prior approval of its entire board of directors (or its delegees) and it must give a 20-day post-consummation notice to its appropriate federal banking agency. A member bank is permitted to increase its proportionate share in a restructured loan by 5 percent (or by a higher percentage with the prior approval of the bank's appropriate federal banking agency). The scope of the exemption includes renewals of participations in loans originated by any affiliate of the member bank (not just affiliated depository institutions).

CONCENTRATIONS OF CREDIT INVOLVING LOAN PARTICIPATIONS

Banks should avoid purchasing loans that generate unacceptable credit concentrations. Such concentrations may arise solely from the bank's purchases, or they may arise when loans or purchased participations are aggregated with loans originated and retained by the purchasing bank. The extent of contingent liabilities, holdbacks, reserve requirements, and the manner in which loans will be handled and serviced should be clearly defined. In addition, loans purchased from another source should be evaluated in the same manner as loans originated by the bank itself. Guidelines should be established for the

6. 12 USC 371c(a)(3).

type and frequency of credit and other information the bank needs to obtain from the originating institution to keep itself continually updated on the status of the credit. Guidelines should also be established for supplying complete and regularly updated credit information to the purchasers of loans originated and sold by the bank.

LOAN PARTICIPATIONS AND ENVIRONMENTAL LIABILITY

Environmental risk represents the adverse consequences that result from generating or handling hazardous substances or from being associated with the aftermath of contamination. Banks may be indirectly liable via their lending activities for the costs resulting from cleaning up hazardous substance contamination. Banks need to be careful that their actions making, administering, and collecting loans—including assessing and controlling environmental liability—cannot be construed as taking an active role in the management or day-to-day operations of a borrower's business. Such actions could lead to potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Banks that originate loans to borrowers through loan participation agreements could be transferring environmental risk and liability to the holders of participations, thus making them susceptible to such losses. The originating banks should establish and follow policies and procedures designed to control environmental risks. See section 2140.1 (the ''Environmental Liability'' subsection) for a more detailed discussion on ways banks can protect themselves as lenders, and their loan participation agreement holders, from environmental liability.

RED FLAG WARNING SIGNALS

The following conditions may indicate that there are significant problems with the management of the bank's loan participation portfolio:

1. the absence of formal loan participation policies.
2. the absence of any formal participation agreement.
3. the absence of credit evaluations and independent credit analysis.
4. the absence of complete loan documentation.
5. a higher volume of loan participations when compared to the volume of other loans in the bank's loan portfolio.
6. missing loan participation agreements and documentation which should denote the rights and responsibilities of all participants.
7. the existence of numerous disputes or disagreements among the participants regarding
   a. the receipt of payment(s) in accordance with the participation agreements,
   b. documentation requirements, or
   c. any other significant aspects of the bank's loan participation transactions.
8. the originating bank is making loan payments to loan participation acquirers without receiving reimbursement by the original borrower.

1. To ascertain if the bank engages in the purchase or sale of loans via loan participation agreements.
2. To determine if the bank's lending policy
   a. places limits on the amount of loan participations originated, purchased, or sold based on any one source or in the aggregate;
   b. has set credit standards for the bank's borrowers requesting loans as well as third parties acquiring loan participations from the bank as originator;
   c. requires the same credit standards for loan participations as it does for other loans;
   d. sets the amount of contingent liability, holdback (retained ownership), and the manner in which the loan should be serviced; or
   e. requires complete loan documentation for loan participations.
3. To assess the impact of any concentrations of credit to a borrower, or in the aggregate, that arise from loans involved in loan participation agreements.
4. To determine if there are any informal repurchase agreements that exist between loan participation acquirers that are designed to circumvent the originating bank's legal lending limits, disguise delinquencies, and avoid adverse classifications.
5. To determine whether the bank's financial condition is compromised by assessing the impact of the bank's loan participations with its affiliates.
6. To ascertain whether the bank's loan participation transactions with affiliates are in compliance with sections 23A and 23B of the Federal Reserve Act and the Board's Regulation W.
7. To determine if there are disputes between the bank as originator of loan participations and its participants. To determine, if possible, if any loan participations have been adversely classified by examiners, including examiners from other supervisory agencies (includes loan participations held by the other institutions).

Loan Participations Examination Procedures

Effective date October 2009

Section 2045.3

These examination procedures are designed to ensure that originated loans that were transferred via loan participation agreements or certificates to state member banks, bank holding companies, nonbank affiliates, or other third parties were carefully evaluated. The examination procedures also instruct examiners to determine if the asset transfers were carried out to avoid or circumvent classification and to determine the effect of the transfers on the bank's financial condition. In addition, the procedures are designed to ensure that the primary regulator of another financial institution involved in the asset transfer is notified.

1. Review the board of directors' or their designated committees' policies and procedures governing how loan participation agreements and activities are created, transacted, and administered. Refer to section 2045.1 for the minimum items that should be included in board-approved policies on loan participation activities.
2. Determine if managerial reports provide sufficient information relative to the size and risk profile of the loan participation portfolio and evaluate the accuracy and timeliness of reports produced for the board and senior management.
3. For loan participations held (either in whole or in part) with another lending institution, review, if applicable,
   - participation certificates and agreements, on a test basis, to determine if the contractual terms are being adhered to;
   - loan documentation to determine if it meets the bank's underwriting procedures (that is, the documentation for loan participations should meet the same standards as the documentation for other loans the bank originates);
   - the transfer of loans immediately before the date of the examination to determine if the loan was either nonperforming or classified and if the transfer was made to avoid possible criticism during the current examination; and
   - losses to determine if they are shared on a pro rata or other basis according to the terms of the participation agreement.
4. Check participation certificates or agreements and records to determine whether the parties share in the risks and contractual payments on a pro rata or other basis.
5. Determine if loans are purchased on a recourse basis and that loans are sold on a nonrecourse basis.
6. Ascertain that the bank does not buy back or pay interest on defaulted loans in contradiction of the underlying participation agreement.
7. Compare the volume of outstanding originated or purchased loans that were issued in the form of loan participations with the total outstanding loan portfolio.
8. Determine if the bank has sufficient expertise to properly evaluate the volume of loans originated or purchased and sold as loan participations.
9. Based on the terms of the loan participation agreements, review the originator's distribution of the borrower's payments received to those entities or persons owning interests in the loan participations. Ascertain if the agreement's recourse provisions may require accounting for the transactions as a secured borrowing rather than as a sale.
10. Determine if loans are sold primarily to accommodate credit overline needs of customers or to generate fee income.
11. Determine if loans are purchased or sold to affiliates or other companies in a chain-banking organization or a commonly owned group of banks; if so, determine whether the purchasing companies are given sufficient information to properly evaluate the credit. (Section 23A of the Federal Reserve Act and the Board's Regulation W prohibit transfers of low-quality assets between affiliates. See section 4050.1, "Bank-Related Organizations.")
12. Investigate any situations in which assets were transferred before the date of examination:
    a. Determine if any were transferred to avoid possible criticism during the examination.
    b. Determine whether any of the loan participations transferred were nonperforming at the time of transfer, classified during the previous examination, or transferred for any other reason that may

cause the loans to be considered of questionable quality.

13. Review the bank's policies and procedures to determine whether loan participations purchased by the bank are required to be given an independent, complete, and adequate credit evaluation. If the bank is a holding company subsidiary or a member of a chain-banking organization or commonly owned group of banks, review asset participations sold to affiliates or other known members of the chain or group of banks to determine if the asset purchases were supported by an *arm's-length* and *independent* credit evaluation.
14. Determine that any assets purchased by the bank were properly reflected on its books at fair market value at the time of purchase.
15. Determine that transactions involving transfers of low-quality assets to the parent holding company or a nonbank affiliate are properly reflected at fair market value on the books of both the bank and the holding company affiliate.
16. If poor-quality assets were transferred to another financial institution for which the Federal Reserve is not the primary regulator, prepare a memorandum to be submitted to the Reserve Bank supervisory personnel. The Reserve Bank's appropriate staff will then inform the local office of the primary federal regulator of the other institution involved in the transfer. The memorandum should include the following information, as applicable,
    - name of originating and receiving institutions;
    - type of assets involved;
    - date (or dates) of transfer;
    - total number and dollar amount of assets transferred;
    - status of the assets when transferred (e.g., nonperforming, classified, etc.); and
    - any other information that would be helpful to the other regulator. Ascertain whether the bank manages not only the risk from individual participation loans but also portfolio risk.
17. Find out if management develops appropriate strategies for managing concentration levels, including the development of a contingency plan to reduce or mitigate concentrations during adverse market conditions (such a plan may include strategies involving not only loan participations, but also whole loan sales). Find out if the bank's contingency plan includes selling loans as loan participations.
18. Ascertain if management periodically assesses the marketability of its loan participation portfolio and evaluates the bank's ability to access the secondary market.
19. Verify whether the bank compares its underwriting standards for loan participations with those that exist in the secondary market.

Loan Participations
Internal Control Questionnaire

Effective date October 2009

Section 2045.4

1. Under what circumstances are loans participated?
2. Who determines the type of loans that may be participated? Does the bank have policies in that regard? Are credit standards included in the lending policy for purchased loan participations, and does the policy require complete loan documentation and independent credit and collateral evaluation or appraisal?
3. Does the lending policy place lending limits on the amount of loan participations purchased from any one source, and does it place an aggregate limit on such loans?
4. Are low-quality loans allowed to be participated?
5. What is the volume and frequency of inter-institution transactions involving loan participations?
6. Does the bank have accounting policies to ensure the appropriate treatment of loan participations as either sales or secured borrowings?

The guidance[1] discussed below highlights generally the accounting and reporting requirements unique to business combinations resulting in bargain purchase gains. The guidance does not provide a comprehensive discussion on all aspects of accounting for business combinations. (See SR-10-12 and its attachment.)

SUPERVISORY CONSIDERATIONS

Compliance with GAAP and Regulatory Reporting Requirements

Accurate regulatory reports are critical for effective supervision and, because of their public availability, for enhancing the transparency of an institution's risk profile and financial position. Business combinations, including bargain purchase transactions and assisted transactions, should be accounted for in accordance with the Financial Accounting Standards Board's Accounting Standards Codification (ASC) Topic 805, "Business Combinations." The management of an acquiring institution is responsible for preparing regulatory reports in accordance with generally accepted accounting principles (GAAP), regulatory reporting requirements, and relevant supervisory guidance. The complexity of the accounting requirements related to a business combination does not relieve management of this responsibility and should be factored into management's overall analysis of the practicability of a potential acquisition. The management of each institution is responsible for establishing and maintaining appropriate governance and an effective internal control structure over the preparation of regulatory reports commensurate with the institution's size, complexity, and risk profile. This structure should include written policies and procedures that provide clear guidelines on accounting and reporting matters related to business combinations. Management is encouraged to discuss applicable regulatory reporting requirements and supervisory considerations with its primary federal regulator prior to consummating a business combination.

Fair-Value Measurements

The valuation of the assets acquired and liabilities assumed in a business combination presents accounting and supervisory challenges. For example, many of these assets and liabilities are illiquid and lack quoted market prices, which complicates the estimation of their acquisition-date fair values. Thus, a key issue underlying fair-value estimates is the appropriateness of inputs and the appropriate selection and use of valuation techniques. Some valuation techniques employ complex models and, therefore, warrant further supervisory review. For example, reliability concerns may arise when the institution does not use clear and rigorous valuation techniques or where one or more significant inputs to a valuation estimate are not observable, even indirectly, from active markets. This is especially true when estimating the fair value of illiquid financial instruments, indemnification assets, and identifiable intangible assets that are acquired in a business combination.

It is management's responsibility to report fair values in accordance with ASC Topic 820, "Fair Value Measurement." Because of the significant impact fair-value measurements and any resultant goodwill or bargain purchase gain have on the financial statements, management should have appropriate written fair-value measurement policies, procedures, and controls in place. These policies, procedures, and controls should be executed by experienced and qualified individuals knowledgeable in both GAAP and regulatory reporting requirements for business combinations. Furthermore, management's fair-value measurements should be well supported and are subject to review by examiners.

If management does not possess the expertise to identify and measure the identifiable assets acquired and the liabilities assumed in a business combination (and the equity or member interests in the acquiree in a combination of mutual institutions), management should engage a qualified third-party expert to provide professional guidance and support for the preparation

1. Part III of the June 7, 2010, "Interagency Supervisory Guidance on Bargain Purchases and FDIC- and NCUA-Assisted Acquisitions" was issued by the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the National Credit Union Administration, and the former Office of Thrift Supervision.

of fair-value measurements required by ASC Topic 805 and determined in accordance with ASC Topic 820. For example, management may use a third party to estimate the expected cash flows and the fair value of a loan portfolio acquired in an assisted acquisition (and the related expected cash flows and fair value of an FDIC loss-sharing indemnification asset). The use of outside resources, however, does not relieve management of its responsibility to ensure that fair-value estimates are measured in accordance with GAAP. Management must sufficiently understand the bases for the measurement and valuation techniques used by outside parties to determine the appropriateness of these techniques, the underlying inputs and assumptions, and the resulting fair-value measurements.

Retrospective Adjustments of Fair-Value Measurements during the Measurement Period

During the measurement period, management should finalize its fair-value measurement estimates and retrospectively adjust the provisionally recorded amounts to reflect the information it was seeking about the acquisition-date facts and circumstances promptly after receipt of this information. The existence of a measurement period does not permit management to delay completion of comprehensive fair-value measurements that conform to the requirements of ASC Topic 820. Rather, at the earliest possible reporting date, management should establish and report appropriate fair-value estimates for the identifiable assets acquired and liabilities assumed in a business combination (and the equity or member interests in the acquiree in a combination of mutual institutions).

An acquiring institution's regulatory capital is subject to retrospective adjustments made during the measurement period. Although bargain purchase gains are reported in earnings and included in the computation of regulatory capital under the agencies' capital standards, the acquiring institution's primary federal regulator may determine an estimated bargain purchase gain lacks sufficient necessary permanence to rely on the estimate as a component of regulatory capital.

INTRODUCTION

A concentration exists when extensions of credit or other obligations possess similar risk characteristics. Typically, loans to related groups of borrowers, loans collateralized by a single security or securities with common characteristics, and loans to borrowers with common characteristics within an industry have been included in homogeneous risk groupings when assessing asset concentrations. Furthermore, a concentration may include the aggregate of all types of credit (e.g., loan product) to or investment in a particular homogeneous risk grouping.

While the size of a concentration does not necessarily determine the risk, a bank's asset quality, earnings, or capital can be disproportionally affected by a single or localized economic event or market conditions if the bank holds significant asset concentrations. Therefore, a bank's risk-management system needs to identify, measure, monitor, and control concentrations in a bank's loan portfolios and investments.

LEGAL LENDING LIMITS AND REGULATORY CONSIDERATIONS

Limitations imposed by the various state and federal legal lending limits are intended to prevent an individual or a relatively small group from borrowing an undue amount of the bank's resources and to safeguard the bank's depositors by spreading the loans among a relatively large number of persons engaged in different businesses. However, lending limits alone are not sufficient to prevent and control concentrations of credit.

The Interagency Guidelines Establishing Standards for Safety and Soundness (12 CFR 208 appendix D-1 for state member banks) state that a depository institution should establish and maintain prudent credit underwriting practices that take adequate account of concentration of credit risk. Further, an insured depository institution should establish and maintain a risk-management system that is commensurate with the institution's size and the nature and scope of its operations to identify problem assets and prevent deterioration in those assets. In establishing and maintaining its risk-management system, the institution should, among other things, consider the size and potential risks of material asset concentrations.

The real estate lending standards in the Board's Regulation H require each state member bank to adopt and maintain a written policy that establishes appropriate limits and standards for all extensions of credit that are secured by liens on or interests in real estate.[1] In terms of governance, a bank's real estate lending policies must be consistent with safe and sound banking practices; appropriate to the size of the institution and the nature and scope of its operations; and reviewed and approved by the bank's board of directors at least annually. The real estate lending policies outlined in 12 CFR 208.51 should consider the Interagency Guidelines for Real Estate Lending Policies (12 CFR 208, appendix C). The Interagency Guidelines for Real Estate Lending Policies state that in managing its loan portfolio, the institution should consider both internal and external factors in the formulation of its loan policies and strategic plan. This includes the need to avoid undue concentrations in risk.

In addition, the Board's Regulation F (12 (12 CFR 206) addresses exposure that may arise from a bank's relationship with its correspondents. Regulation F states that a bank must establish policies and procedures that take into account credit and liquidity risks, including operational risks, in selecting correspondents and in terminating those relationships. At least annually, these policies and procedures should be reviewed and approved by the bank's board of directors. For more information, see this manual's sections on "Interbank Liabilities" and "Correspondent Concentration Risks."

TYPES OF CREDIT CONCENTRATIONS

There are numerous approaches for determining concentrations within a loan portfolio. In evaluating a potential concentration, a bank needs to determine the key factors germane to the credit portfolios.

1. 12 CFR 208.51.

Commercial Real Estate (CRE) Credit Concentrations

Concentrations in commercial real estate (CRE) loans are particularly noteworthy given its historical volatility and role in bank failures.[2] Banks may view a CRE loan as a product, which would include all transactions secured by commercial real estate. Alternatively, banks may also take an "industry" view, which would include only those CRE loans where the primary source of repayment is sale or refinancing of commercial real estate or collection of lease and rental payments of the property. A CRE loan pool may be further segmented by other factors such as geography, property use, tenant concentrations, risk rating, or credit structure (for instance, fixed or variable interest rate).

Banks with weak risk management and high CRE credit concentrations are exposed to a greater risk of loss and failure. Therefore, banks with CRE credit concentration should have appropriate risk-management practices in place to manage their risk exposure.[3]

Other Common Loan Portfolio Concentrations

Other concentrations that are commonly identified in a loan portfolio include the following:

- Loans to a group of borrowers, perhaps unrelated, predicated on the collateral support afforded by a debt or equity issue of a corporation. Regardless of whether the issuing entity is a publicly traded company or a closely held enterprise, a concentration may exist in the underlying collateral.
- Loans that are dependent on a particular agricultural crop or livestock herd. Banking institutions located in farming, dairying, or livestock areas may grant substantially all their loans to individuals or concerns engaged in and dependent on the agricultural industry. Concentrations of agricultural lending activity are commonplace and may be necessary if these banks are to adequately serve the needs of their communities.[4]
- Reserve-based lending, which is a type of financing where a loan is secured by the reserves of oil and gas of a borrower and repaid primarily using the proceeds from the future sale of encumbered oil or gas reserves. Concentrations can occur in any one well, reservoir, field, or producing area. For more information on the management of concentrations in energy lending, see this manual's section, "Energy Lending—Reserve-Based Loans"
- The aggregate amount of interim construction loans that do not have firm, permanent takeout commitments. In the event that permanent financing is not obtainable, the bank will have to continue financing the real estate property until the borrower sells the property or obtains permanent financing from another lender. This longer term financing subjects the bank to additional liquidity and possibly interest rate risks as well as to market and economic risks associated with the real estate property.
- Loans to groups of borrowers who handle a product from the same industry or economic sector. Although the borrowers may appear to be independent from one another, their financial conditions may be affected similarly if a slowdown occurs in their economic sector.
- Loans that are originated in geographic areas that are economically driven by a certain industry or dominated by one or only a few business enterprises. In these situations, banks may extend a substantial amount of credit to these companies and to a large percentage of the companies' employees. If economic or other events cause the enterprise's operations to slow down or stop, heavy unemployment may result as there may be limited job opportunities in the area.
- Loans that are extended to other financial institutions, including, but not limited to, due from accounts, federal funds sold, investments, net current exposure of derivatives contracts, and direct or indirect loans. For more information, see SR-10-10, "Interagency Guidance on Correspondent Concentration Risk," and this manual's section, "Correspondent Concentration Risks."
- Retail loan products, including, but not limited to, credit cards, home equity lines of credit, home equity loans, residential first mortgages, auto loans, boat loans, and manu-

2. For more information, see SR-15-17, "Interagency Statement on Prudent Risk Management for Commercial Real Estate Lending."

3. See also this manual's section, "Concentrations in Commercial Real Estate Lending, Sound Risk-Management Practices."

4. See also this manual's section, "Agricultural Loans."

factured housing loans. In these cases, loan product features (e.g., target market, purpose, documentation, underwriting criteria, or repayment expectations) constitute the common characteristics and sensitivities of the loans. These pools may be further segmented by other factors, such as direct or indirect loans, vintage, credit scores, or loan-to-value ratios.

RISK MANAGEMENT OF ASSET CONCENTRATIONS

The key risk-management objective for credit concentrations is to identify pools of transactions that may act like a single, correlated exposure. The sophistication of a bank's risk-management processes should be appropriate to the size as well as the level and nature of concentrations and the associated risk to the bank. A bank's risk-management framework should effectively identify, monitor, and control concentration risk.

The board of directors is responsible for establishing the bank's strategic plan, including the level of assumed risk. If the bank has significant credit concentration risk, its strategic plan should address the rationale for such a concentration in relation to its overall growth objectives, financial targets, and capital plan. A bank's lending policies should reflect the level of risk that is acceptable to its board of directors and should provide clear and measurable underwriting standards that enable the institution's lending staff to evaluate relevant credit factors. When a bank has a credit concentration, the establishment of sound lending policies becomes even more critical to promote credit quality in its credit portfolio.

A strong management information system (MIS) is key to effective portfolio management. The sophistication of MIS will necessarily vary with the size and complexity of the credit portfolio and level and nature of existing or planned concentrations. Effective MIS produces timely, comprehensive, and accurate data. MIS should provide management with sufficient information to identify, measure, monitor, and manage concentration risk. This includes meaningful information on portfolio characteristics that is relevant to the bank's lending strategy, underwriting standards, and risk tolerances. A bank should assess periodically the adequacy of MIS in light of changes in its credit portfolio's size, risk profile, and complexity.

Banks that have effective internal controls to manage and reduce excessive concentrations over a reasonable period of time need not automatically refuse credit to sound borrowers because of their particular industry or geographic location. Banks should appropriately incorporate analytical information (such as scenario analysis results, if conducted) in establishing concentration limits and managing concentration risks.

Furthermore, a bank may be able to reduce the risks associated with concentrations through strengthening the loan terms in an individual credit. For example, the bank may be able to obtain additional collateral, government guarantees, crop insurance backed by government agencies, or private insurance arrangements for loans or asset pledging. In the event of deterioration, the bank's position would be strengthened because the additional collateral or guarantees provide a cushion against any losses.

When concentration levels have been built up over an extended period, a bank needs time, in some cases several years, to achieve a more balanced and diversified portfolio mix. Given the bank's trade area, lack of economic diversity, or geographic location, reducing the existing concentration in the near term may be impossible. If a concentration does exist, the bank should have adequate systems and controls for reducing undue or excessive concentrations in accordance with a prudent plan. Strong credit policies and loan administration standards should provide adequate control for the risks associated with new loans in a loan portfolio with a high risk concentration. The bank should also maintain adequate capital to protect the bank while its portfolio is being restructured. For identified asset concentrations, bank management should be aware of not only the current market and economic trends for a particular asset concentration as well as future prospects.

Concentrations that involve excessive or undue risks require close scrutiny by the bank and should be reduced over a reasonable period of time. If the concentrations compromise the safety and soundness of the institution, management is normally expected to develop a plan to reduce the asset concentration that is realistic, prudent, and achievable in view of the particular circumstances and market conditions.

Alternatives for Reducing Credit or Asset Concentrations

As noted above, sometimes credit concentration can become so significant that, if the common factor influencing the credit portfolio deteriorates sufficiently, even a portfolio of well underwritten loans can suffer losses and reduce an institution's capital. This possibility underscores why the control and management of concentration risk is so important. To manage a credit or asset concentration, a bank may consider the following actions.

Increased holdings of capital. To compensate for the additional risk that may be associated with an asset concentration, a bank may elect to maintain a higher capital ratio than would be required under the appropriate capital regulations. This additional capital would provide support in the event the concentration adversely affects the organization's financial position.

Increased allowance for credit losses. The bank may choose to factor credit concentrations into its determination of an adequate allowance for credit losses. Management should consider the need to qualitatively adjust expected credit loss estimates for information not already captured in the loss estimation process. As part of the loss estimation process, management should consider, among other things, the existence, growth, and effect of any concentrations of credit.

Loan participations. If a bank has a concentration, the bank may sell a portion of its loan portfolio in the secondary market to reduce its dependency on an asset group. If the bank is not large enough to participate in the secondary market, the bank might be able to sell loans, without recourse, to a correspondent bank that is also attempting to diversify its loan portfolio. For more information on loan participations, see this manual's section entitled, "Loan Participations, the Agreements and Participants."

Government guarantee programs. Another possible solution to reduce the risk associated with a loan concentration is for the bank to participate in loan programs that provide a government guarantee or insurance in the event the borrower defaults on a loan. Such programs provide the bank with the ability to offset a portion of its credit risk.

Modifying underwriting standards. Modifying underwriting standards to increase exposure to higher quality transactions or to diminish exposure to weaker borrowers. Concurrently, management can increase the level of oversight over credit underwriting while executing exit strategies from lower-quality relationships (e.g., increasing pricing or tightening terms and conditions).

Diversification of the loan portfolio. Banks can engage in activities or markets that are not likely to perform in a similar manner with its existing loan portfolios, considering its expertise in a market and loan products.

Modifying exposure limits or credit risk benchmarks. This can be accomplished by adjusting limits on loan commitments or outstanding balance on a line of credit, or tightening constraints on distribution by the bank's internal loan ratings/grades.

Buying credit derivative protection. For some banks, it may be appropriate to engage in default or total return swaps on an individual credit transaction or a loan pool.

SUPERVISORY CONSIDERATIONS FOR ASSESSING CONCENTRATIONS

Quantitative Considerations

Examiners should determine the existence of any credit concentrations at the bank and assess whether any concentrations of credit represent a hazard to the safety and soundness of the bank or violate applicable laws and regulations. Examiners should understand the activities that may heighten concentration risk, such as acute asset growth; increases in nonperforming assets; or changes to the bank's loan portfolio. As described in the this manual's section, "Earnings—Analytical Review of Income and Expense," examiners should reference the Uniform Bank Performance Report (UBPR) as well as the most recent financial statements and other related financial information in performing the analytical review of a bank. UBPR page 7B entitled, "Analysis of Concentrations of Credit" and provides percentages of certain bank assets by its capital. More specifically, the UBPR provides concentration information on residential and commercial real estate loans, construction and development lending, agricultural loans, commercial and industrial loans, and different types of leases.

For supervisory processes, examiners should evaluate a bank's credit concentration ratios to

assess the size and potential risks of material credit concentrations posed to the bank's capital. In March 2020, the Federal Reserve, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (agencies) adopted a common approach for defining credit concentration ratios.[5] As of March 31, 2020, for banks that have adopted the Financial Accounting Standards Board's Accounting Standards Codification Topic 326, *Financial Instruments—Credit Losses* that implements the current expected credit losses (CECL) methodology, the agencies' examiners will calculate credit concentration ratios using

- tier 1 capital plus the allowance for credit losses attributed to loans and leases as the denominator.[6]

For institutions that have not adopted CECL, the agencies' examiners calculate credit concentration ratios using

- tier 1 capital plus the entire allowance for loan and lease losses as the denominator.

When determining and calculating concentrations, the amount of loan commitments and other off-balance-sheet risk items should be considered. This includes all types of loans, overdrafts, cash items, suspense resources, securities, leases, acceptances, advances, letters of credit, and all other items due to the bank as well as loans endorsed, guaranteed, or cosigned by related individuals and their related interests. A concentration of credit generally exists when an institution advances or commits economically related direct or indirect extensions of credit and contingent obligations to a person, entity, or affiliated group that, when aggregated, exceed 25 percent of the bank's capital, as defined above.

Qualitative Considerations

In addition to the quantitative assessment of bank concentration ratios, examiners should understand and evaluate the effectiveness of the internal policies, systems, and controls that a bank uses to monitor and manage the risk associated with asset concentrations. Examiners should determine whether the bank's MIS reports on credit concentrations are adequate and allow management to make informed decisions. Further, examiners should determine whether management followed established guidelines for concentrations, and if those guidelines align with the bank's risk appetite or strategic plan. If the

5. The agencies adopted this approach in response to changes in the regulatory capital requirements for some banking organizations after the implementation of the community bank leverage ratio (CBLR) rule (84 Fed. Reg. 61,776 (November 19, 2019)). As of March 31, 2020, qualifying community banking organizations (generally, depository institutions and depository institution holding companies with less than $10 billion in total consolidated assets that meet other qualifying criteria, including a leverage ratio of greater than 9 percent) that elect the CBLR framework are no longer required to report tier 2 capital. Tier 2 capital is a component of total capital, which has generally been the denominator in credit concentration ratios used for supervisory processes. See SR-20-8, "Joint Statement on Adjustment to the Calculation for Credit Concentration Ratios Used in the Supervisory Approach."

6. The agencies have adopted final rules providing banks the option to phase in the day-one adverse effects on regulatory capital that may result from the adoption of the CECL accounting standard. See 84 Fed. Reg. 4222, February 14, 2019 and 85 Fed. Reg. 17,723, March 31, 2020. For banks that are phasing in the capital impact of implementing the CECL accounting standard, the denominator for concentration calculations is tier 1 capital plus allowance for loan and lease losses or allowance for credit losses adjusted for the amount of CECL phase in capital included in both allowance and tier 1 capital. As noted in 84 Fed. Reg. 4222, for purposes of determining whether a bank phasing in the capital impact of implementing the CECL methodology is in compliance with its regulatory capital requirements (including capital buffer and prompt corrective action requirements), the agencies will use the bank's regulatory capital ratios as adjusted by the CECL transition provision. Through the supervisory process, the agencies will continue to examine banks' credit loss estimates and allowance balances regardless of whether the bank has elected to use the CECL transition provision. In addition, the agencies may examine whether electing bank will have adequate amounts of capital at the expiration of their CECL transition provision period. After all banks have adopted the CECL methodology and have exited their CECL transition provision periods, it will no longer be necessary to adjust for the amount of CECL phase in capital included in both the allowance and tier 1 capital.

For the purposes of measuring concentrations at banks that are phasing in the adoption of the CECL accounting standard, examiners should evaluate the appropriateness of the amounts included in the denominator for the tier 1 capital calculation and confirm that the CECL transitioned amounts, if elected, plus the allowance for credit losses related to loans and leases have been excluded. To calculate the amount to be excluded from tier 1 capital, examiners should use the difference between "retained earnings" as reported on item 26.a of Schedule RC to the Call Report and "retained earnings" as reported on item 2 Schedule RC-R, Part I, to the Call Report. This resulting difference is the amount of retained earnings that should have been used to calculate tier 1 capital for purposes of measuring lending-related concentrations and should equal the retained earnings on the institution's balance sheet.

bank modified its strategic plans in a way that could increase concentration risk at the bank, examiners should assess whether the bank made the necessary modifications to concentration risk-management systems.

A bank should maintain adequate records that may be used to identify asset concentrations. The degree of sophistication of the reporting records will vary by the asset size of a bank. Regardless of the identification system used by the bank, examiners should verify the accuracy of listed concentrations in such reporting records, as well as the appropriateness of concentrations, during the examination.

Reporting Concentrations in the Report of Examination

As noted in the "Community Bank Supervision Process" section of this manual, examiners are to include a discussion on concentrations in the report of examination if the bank has materially deficient practices in managing concentrations. The report of examination should include a discussion of the appropriateness of risk-management practices regarding any materially significant concentrations of assets, liabilities, specific industries, and other categories, as applicable. If the bank has materially deficient practices in managing concentrations or has concentrations that compromise safety and soundness, the report of examination should address the bank's alternatives or plans for reducing concentrations. Further, examiners should comment on the ability to leverage the bank's internal concentration reporting when conducting the review and assessment of concentrations.

The criteria used to assign quality ratings to extensions of credit that exhibit potential problems or well-defined weaknesses are primarily based upon the degree of risk and the likelihood of orderly repayment, and their effect on a bank's safety and soundness. Extensions of credit that exhibit potential weaknesses are categorized as "special mention," while those that exhibit well-defined weaknesses and a distinct possibility of loss are assigned to the more general category of "classified." The term "classified" is subdivided into more specific subcategories ranging from least to most severe: "substandard," "doubtful," and "loss." The amount of classified extensions of credit as a percent of capital represents the standard measure of expressing the overall quality of a bank's loan portfolio.

These classification guidelines are only applied to individual credits, even if entire portions or segments of the industry to which the borrower belongs are experiencing financial difficulties. The evaluation of each extension of credit should be based upon the fundamental characteristics affecting the collectibility of that particular credit. The problems broadly associated with some sectors or segments of an industry, such as certain commercial real estate markets, should not lead to overly pessimistic assessments of particular credits in the same industry that are not affected by the problems of the troubled sector(s).

ASSESSMENT OF CREDIT QUALITY

The evaluation of each credit should be based upon the fundamentals of the particular credit, including, at a minimum—

- the overall financial condition and resources of the borrower, including the current and stabilized cash flow (capacity);
- the credit history of the borrower;
- the borrower's or principal's character;
- the purpose of the credit relative to the source of repayment; and
- the types of secondary sources of repayment available, such as guarantor support and the collateral's value and cash flow, when they are not a primary source of repayment. (Undue reliance on secondary sources of repayment should be questioned, and the bank's policy about permitting such a practice should be reviewed.)

The longer the tenure of the borrower's extension of credit or contractual right to obtain funds, the greater the risk of some adverse development in the borrower's ability to repay the funds. This is because confidence in the borrower's repayment ability is based upon the borrower's past financial performance as well as projections of future performance. Failure of the borrower to meet its financial projections is a credit weakness, but does not necessarily mean the extension of credit should be considered as special mention or be classified. On the other hand, the inability to generate sufficient cash flow to service the debt is a well-defined weakness that jeopardizes the repayment of the debt and, in most cases, merits classification. When determining which credit-quality rating category is appropriate, the examiner should consider the extent of the shortfall in the operating figures, the support provided by any pledged collateral, and/or the support provided by cosigners, endorsers, or guarantors.

Delinquent Extensions of Credit

One of the key indicators of a problem credit is a borrower's inability to meet the contractual repayment terms of an extension of credit. When this occurs, the extension of credit is identified as past due or delinquent. An extension of credit that is *not* delinquent may be identified as special mention or classified. Nondelinquent extensions of credit (also referred to as "performing" or "current") should be classified when well-defined weaknesses exist that jeopardize repayment. Examples of well-defined weaknesses include the lack of credible support for full repayment from reliable sources, or a significant departure from the intended source of repayment. This latter weakness warrants concern because a delinquent credit may have been brought current through loan or credit modifications, refinancing, or additional advances.

SPECIAL MENTION CATEGORY

A special mention extension of credit is defined as having potential weaknesses that deserve management's close attention. If left uncorrected, these potential weaknesses may, *at some future date*, result in the deterioration of the repayment prospects for the credit or the institution's credit position. Special mention credits are not considered as part of the classified extensions of credit category and do not expose an institution to sufficient risk to warrant classification.

Extensions of credit that might be detailed in this category include those in which—

- the lending officer may be unable to properly supervise the credit because of an inadequate loan or credit agreement;
- questions exist regarding the condition of and/or control over collateral;
- economic or market conditions may unfavorably affect the obligor in the future;
- a declining trend in the obligor's operations or an imbalanced position in the balance sheet exists, but not to the point that repayment is jeopardized; and
- other deviations from prudent lending practices are present.

The special mention category should not be used to identify an extension of credit that has as its sole weakness credit-data or documentation exceptions not material to the repayment of the credit. It should also not be used to list extensions of credit that contain risks usually associated with that particular type of lending. Any extension of credit involves certain risks, regardless of the collateral or the borrower's capacity and willingness to repay the debt.

For example, an extension of credit secured by accounts receivable has a certain degree of risk, but the risk must have increased beyond that which existed at origination to categorize the credit as special mention. Other characteristics of accounts receivable warranting identification as special mention include a rapid increase in receivables without bank knowledge of the causative factors, concentrations in receivables lacking proper credit support, or lack of on-site audits of the bank's borrower.

CLASSIFICATION CATEGORIES

Split Classifications

When classifying a particular credit, it may not be appropriate to list the entire balance under one credit-quality category. This situation is commonly referred to as a "split classification" and may be appropriate in certain instances, especially when there is more certainty regarding the collectibility of one portion of an extension of credit than another. Split classifications may also involve special mention as well as "pass" credits, those that are neither special mention nor classified. Extensions of credit that exhibit well-defined credit weaknesses may warrant classification based on the description of the following three classification categories.[1]

Substandard Extensions of Credit

A "substandard" extension of credit is inadequately protected by the current sound worth and paying capacity of the obligor or of the collateral pledged, if any. Extensions of credit so classified must have a well-defined weakness or

1. Guidelines for the uniform classification of consumer-installment extensions of credit and credit card plans, as well as classification guidelines for troubled commercial real estate credits, are discussed in detail in sections 2130.1 and 2090.1, respectively.

weaknesses that jeopardize the liquidation[2] of the debt. They are characterized by the distinct possibility that the bank will sustain some loss if the deficiencies are not corrected. Loss potential, while existing in the aggregate amount of substandard credits, does not have to exist in individual extensions of credit classified substandard.

Doubtful Extensions of Credit

An extension of credit classified ''doubtful'' has all the weaknesses inherent in one classified substandard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable. The possibility of loss is extremely high, but because of certain important and reasonably specific pending factors that may work to the advantage of and strengthen the credit, its classification as an estimated loss is deferred until its more exact status may be determined. Pending factors may include a proposed merger or acquisition, liquidation proceedings, capital injection, perfecting liens on additional collateral, or refinancing plans.

Examiners should avoid classifying an entire credit as doubtful when collection of a specific portion appears highly probable. An example of proper use of the doubtful category is the case of a company being liquidated, with the trustee-in-bankruptcy indicating a minimum disbursement of 40 percent and a maximum of 65 percent to unsecured creditors, including the bank. In this situation, estimates are based on liquidation-value appraisals with actual values yet to be realized. By definition, the only portion of the credit that is doubtful is the 25 percent difference between 40 and 65 percent. A proper classification of such a credit would show 40 percent substandard, 25 percent doubtful, and 35 percent loss.

Examiners should generally avoid repeating a doubtful classification at subsequent examinations, as the time between examinations should be sufficient to resolve pending factors. This is not to say that situations do not occur when continuation of the doubtful classification is warranted. However, the examiner should avoid undue continuation if repeatedly, over the course of time, pending events do not occur and repayment is again deferred awaiting new developments.

Loss Extensions of Credit

Extensions of credit classified ''loss'' are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the credit has absolutely no recovery or salvage value, but rather that it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be effected in the future. Amounts classified loss should be promptly charged off. (See SR-04-9 and its attachment.)

Banks should not be allowed to attempt long-term recoveries while the credit remains on the bank's books. Losses should be taken in the period in which they surface as uncollectible.

In some cases, examiners should determine a reasonable carrying value for a distressed extension of credit and require a write-down through a charge to the allowance for loan and lease losses, or to other operating expenses in the case of an ''other asset.'' Such a determination should be based on tangible facts recorded in the bank's credit file and contained in reports on problem credits submitted to the board of directors or its committee, and not solely on verbal assurances from a bank officer.

SITUATIONS NOT REQUIRING CLASSIFICATION

It is generally not necessary to classify extensions of credit and contingent liabilities that are adequately protected by the current sound worth and debt-service capacity of the borrower, guarantor, or the underlying collateral. Further, a performing extension of credit should not automatically be identified as special mention, classified, or charged off solely because the value of the underlying collateral has declined to an amount that is less than the balance outstanding. Extensions of credit to sound borrowers that are refinanced or renewed in accordance with prudent underwriting standards should not be cat-

2. This terminology is used in the original classification definitions as set forth in the 1938 accord and its amendments. The term ''liquidation'' refers to the orderly repayment of the debt and not to a forced sale of the loan or its underlying collateral.

egorized as special mention unless a potential weakness exists, or classified unless a well-defined weakness exists that jeopardizes repayment. The existence of special mention or classified extensions of credit should not be identified as an imprudent banking practice, as long as the institution has a well-conceived and effective workout plan for such borrowers, and effective internal controls to manage the level of these extensions of credit.

Partially Charged-Off Extensions of Credit

When an institution has charged off a portion of a credit and the remaining recorded balance of the credit (1) is being serviced (based upon reliable sources) and (2) is reasonably assured of collection, categorization of the remaining recorded balance as special mention or classified may not be appropriate.[3] For example, when the remaining recorded balance of an extension of credit is secured by readily marketable collateral, the portion that is secured by this collateral would generally not be identified as special mention or classified. This would be appropriate, however, if potential or well-defined weaknesses, respectively, continue to be present in the remaining recorded balance. In such cases, the remaining recorded balance would generally receive a credit rating no more severe than substandard.

A more severe credit rating than substandard for the remaining recorded balance would be appropriate if the loss exposure cannot be reasonably determined, for example, when significant risk exposures are perceived, such as might be the case in bankruptcy or for credits collateralized by properties subject to environmental hazards. In addition, classification of the remaining recorded balance would be appropriate when sources of repayment are considered unreliable.

Formally Restructured Extensions of Credit

Restructured troubled debt should be identified in the institution's internal credit-review system and closely monitored by management. When analyzing a formally restructured extension of credit, the examiner should focus on the ability of the borrower to repay the credit in accordance with its *modified terms*.[4] With formally restructured credits, it is frequently necessary to charge off a portion of the principal, due to the borrower's difficulties in meeting the contractual payments. In these circumstances, the same credit-risk assessment given to nonrestructured credits with partial charge-offs (see the previous subsection) would also generally be appropriate for a formally restructured credit. This includes *not* identifying the remaining recorded balance as special mention or classified if unwarranted. The assignment of special mention status to a formally restructured credit would be appropriate, if, after the restructuring, potential weaknesses remained. It would also be appropriate to classify a formally restructured extension of credit when well-defined weaknesses exist that jeopardize the orderly repayment of the credit, based upon its reasonable modified terms. For a further discussion of troubled debt restructurings, see the glossary section of the Instructions for the Consolidated Reports of Condition and Income and "Loan Portfolio Management," section 2040.1.

ROLE OF GUARANTEES

The primary focus of a review of an extension of credit's quality is the original source of repayment and the borrower's ability and intent to fulfill the obligation without reliance on guarantors.[5] In situations involving troubled credits, however, the assessment of credit quality should also be based upon the support provided by guarantees. As a result, the lending institution

3. The accrual/nonaccrual status of the credit must continue to be determined in accordance with the glossary section of the Instructions for the Consolidated Reports of Condition and Income (Call Report). Thus, while these partially charged-off credits may qualify for nonaccrual treatment, cash-basis recognition of income will be appropriate when the criteria specified in the Call Report guidance are met.

4. An example of a restructured commercial real estate credit that does *not* have reasonable modified terms would be a mortgage that requires interest payments *only*, but no principal payments, despite the fact that the underlying collateral generates sufficient cash flow to pay both.

5. Some credits are originated based primarily upon the financial strength of the guarantor, who is, in substance, the primary source of repayment. In such circumstances, examiners generally assess the collectibility of the credit based upon the guarantor's ability to repay the credit.

must have sufficient information concerning the guarantor's financial condition, income, liquidity, cash flow, contingent liabilities, and other relevant factors (including credit ratings, when available) to demonstrate the guarantor's financial capacity to fulfill the obligation.

Examiner Treatment of Guarantees

A guarantee should provide support for repayment of indebtedness, in whole or in part, and be legally enforceable. It is predicated upon both the guarantor's financial capacity and willingness to provide support for a credit.

To assess the financial capacity of a guarantor and determine whether the guarantor can honor its contingent liabilities in the event required, examiners normally rely on their own analysis of a guarantor's financial strength. This includes an evaluation of the financial statements and the number and amount of guarantees currently committed to.

A guarantor's willingness to perform is assumed, unless there is evidence to the contrary. Since a guarantee is obtained with the intent of improving the repayment prospects of a credit, a guarantor may add sufficient strength to preclude or reduce the severity of the risk assessment.

Examiners should consider and analyze the following guarantee-related factors during the course of their review of extensions of credit:

- The degree to which the guarantors have demonstrated their ability and willingness to fulfill previous guarantees.
- Whether previously required performance under guarantees was voluntary or was the result of legal or other actions by the lender. Examiners should give limited credence, if any, to guarantees from obligors who have reneged on obligations in the past, unless there is clear evidence that the guarantor has the ability and intent to honor the specific guarantee under review.
- The economic incentives for performance by guarantors. This includes—
  - — guarantors who have already partially performed under the guarantee;
  - — guarantors who have other significant investments in the project;
  - — guarantors whose other sound projects are cross-collateralized or otherwise intertwined with the credit; or
  - — guarantees collateralized by readily marketable assets that are under the control of a third party.
- The extent to which guarantees are legally enforceable, although in general this is the only type of guarantee that should be relied upon.
  - — Collection of funds under a guarantee should not be subject to significant delays or undue complexities or uncertainties that might render legal enforceability questionable.
  - — Although the bank may have a legally enforceable guarantee, it may decide not to enforce it. The examiner's judgment should be favorably affected by previous extensions of credit evidencing the timely enforcement and successful collection of guarantees.
- The type of the guarantee. Some guarantees for real estate projects are limited in that they only pertain to the development and construction phases of a project. As such, these limited guarantees cannot be relied upon to support a troubled credit after the completion of these phases.

OFF-BALANCE-SHEET ITEMS

The principal off-balance-sheet credit-related transactions likely to be encountered during loan reviews are loan commitments, commercial letters of credit, and standby letters of credit. When evaluating off-balance-sheet credit transactions for the purpose of assigning a credit-quality rating, the examiner should carefully consider whether the bank is irrevocably committed to advance additional funds under the credit agreement. If the bank must continue to fund the commitment and a potential weakness exists that, if left uncorrected, may at some future date result in the deterioration of repayment prospects or the bank's credit position, the amount of the commitment may be categorized as special mention. If there is a well-defined weakness that jeopardizes repayment of a commitment, classification may be warranted. If an amount is classified, it should be separated into two components: the direct amount (the amount that has already been advanced) and the indirect amount

(the amount that must be advanced in the future).

Loan Commitments

Loan commitments are defined as legally binding obligations to extend credit (other than in the form of retail credit cards, check credit, and related plans) for which a fee or other compensation is typically received. Different types of loan commitments vary based upon the nature of the credit granted. Loan-commitment credit risk stems from the possibility that the creditworthiness of the customer will deteriorate between the time the commitment is made and the funds are advanced. (See ''Contingent Claims from Off-Balance-Sheet Activities,'' section 4110.1.)

Commercial Letters of Credit

Commercial letters of credit involve a buyer of goods and a seller of goods and are instruments issued by a bank serving as an intermediary between the two for the resultant payment for the goods. Commercial letters of credit are customarily used to facilitate international trade due to the distances involved, as well as differences in legal, political, and business practices. Additionally, there may be a lack of familiarity between the buyer and seller. As a result, the bank substitutes its credit in place of the buyer's credit and promises on behalf of its customer to pay predetermined amounts of money to the seller against the delivery of documents indicating shipment of goods and representing title to those goods. If the shipping documents are in order, the bank is obligated to pay the seller through the issuance of a sight or time draft. The bank is then reimbursed by its customer for the amount of the shipment plus a fee for conducting the transaction.

Given the nature of the bank's commitment to pay for the goods on behalf of its customer, a commercial letter of credit is typically irrevocable. This means that it cannot be cancelled or revoked without the consent of all parties concerned. As a result, there is added credit risk for the issuing bank since it cannot cancel its commitment in the event the credit standing of its customer deteriorates, even if the deterioration occurs before the shipment of the goods.

Standby Letters of Credit

Most standby letters of credit (SLCs) are unsecured and involve substituting the bank's credit standing for that of the bank's customer on behalf of a beneficiary. This occurs when the beneficiary needs to ensure that the bank's customer is able to honor its commitment to deliver the goods or services by the agreed-upon time and with the agreed-upon quality. For credit-analysis purposes, SLCs are to be treated like loans and represent just one type of extension of credit relative to the overall exposure extended by the bank to the borrower. SLCs can be divided into two main groups: ''financial SLCs'' and ''nonfinancial SLCs.'' Financial SLCs essentially guarantee repayment of financial instruments and are commonly used to ''guarantee'' payment on behalf of customers, issuers of commercial paper, or municipalities (relative to tax-exempt securities). Nonfinancial SLCs are essentially used as bid and performance bonds to ''guarantee'' completion of projects, such as building or road construction, or to guarantee penalty payment in case a supplier is unable to deliver goods or services under a contract.

REQUIRED LOAN WRITE-UPS

A full loan write-up (see criteria below) is required for all significant or material classified or specially mentioned assets if (1) management disagrees with the disposition accorded by the examiner, or (2) the institution will be rated composite 3, 4, or 5. The write-ups will be used to support the classifications to management and, in the case of problem banks, to support any necessary follow-up supervisory actions.

An abbreviated write-up may be appropriate for other loans to illustrate a credit-administration weakness or to formalize certain decisions, document agreements, and clarify action plans for management. For example, bank management may have agreed to either collect or charge off a loan classified doubtful by the next call report date or to reverse interest accruals and place the loan on nonaccrual status. These agreements may be expressed in the report through a brief comment under the classification write-up.

The examiner may find it beneficial to list extensions of credit alphabetically by depart-

ment and/or branch. When more than one borrower is relevant to a single write-up, the alphabetization of the prime borrower or the parent corporation should determine the credit's position in the list. All other parties to the credit, including cosigners, endorsers, and guarantors, should be indicated directly under the maker of the notes or embodied within the write-up.

Although classifications and items listed for special mention may be listed alphabetically on the report page, examiners may elect to format the listing or write-ups in other ways to illustrate examination findings or conclusions. For example, examiners may wish to group classifications into categories of weakness and to use these listings to support loan-administration comments without providing a write-up for each classified item.

Notwithstanding this guidance, examiners have the flexibility of writing up more than the criticized assets, including any special mention credits, if deemed necessary. The decision to increase the number of write-ups should be based on factors such as the overall financial condition of the bank, quality of the loan portfolio, or adequacy of loan portfolio administration.

It is important that a sufficient number of write-ups with appropriate content be provided to support the examiner's assessment of the bank's problem loans, leases, and other extensions of credit. The write-ups should also support any comments pertaining to credit-administration policies and practices as they relate to this component of the bank's loan portfolio.

General Guidelines for Write-Ups of Special Mention and Classified Extensions of Credit

Extension of credit write-ups may be in a narrative or bullet format, similar to the write-ups of shared national credits, where appropriate. When the special mention or classified credit consists of numerous extensions of credit to one borrower, or when multiple borrowers are discussed in one write-up, the write-up should be structured to clearly identify the credit facilities being discussed. For example, each extension of credit could be numbered when multiple credits are involved.

Before a write-up is prepared, the examiner should recheck central information files or other sources in the bank to determine that all of the obligor's debt, including related debt,[6] has been noted and included. The examiner should consider identifying accrued interest receivable as special mention or classified, especially when the cumulative effect on classified percentages is significant or the accrued interest is appropriately classified loss.

Even though the length of a write-up may be limited, the information and observations contained in the write-up must substantiate the credit's treatment as a special mention or classified credit. To prepare a write-up that brings out pertinent and fundamental facts, an examiner needs to have a thorough understanding of all the factors relative to the extension of credit. An ineffective presentation of the facts weakens a write-up and frequently casts doubt on the accuracy of the risk assessment. The examiner might consider emphasizing deviations from prudent banking practices as well as loan policy and procedure deficiencies that are pertinent to the credit's problems. When portions of a borrower's indebtedness are assigned to different risk categories, including portions identified as "pass," the examiner's comments should clearly set forth the reason for the split-rating treatment. A full write-up on items adversely classified or listed as special mention must provide sufficient detail to support the examiner's judgment concerning the rating assigned. To ensure that the write-ups provide a clear, concise, and logical discussion of material credit weaknesses, the following minimum categories of information should be presented, preferably in the order listed (see SR-99-24):

1. *A general description of the obligation.*
   - *Amount of exposure (both outstanding and contingent or undrawn) as follows:*
     - — Summarize total related and contingent borrowings, including amounts previously charged off and recovered.
     - — List the borrower's total related liabilities outstanding. Amounts making up this total refer to credits in which the borrower may have a related interest and is directly or indirectly obligated to repay, such as partnerships and joint ventures. The rule for determining what

6. The term "related" refers to direct and indirect obligations.

is included in related debt (aggregating debt), which ultimately has to do with ascertaining compliance with legal lending limits, is governed by state law.

— List and identify the obligor's contingent liabilities to the bank under examination. Contingent liabilities include items such as unadvanced portions of a line of credit or extension of credit (commitments), guarantees or endorsements, and commercial and standby letters of credit. Although contingent liabilities to other lenders represent an important component of the financial analysis of the obligor, they should not be listed in the write-up unless they are particularly relevant to the situation, or are portions of both related and contingent liabilities that represent participations purchased from and sold to other lenders. The latter example should be listed even though the entire relationship may not have been identified as special mention or classified. Additionally, only the classified portion of extensions of credit or contingent liabilities of the bank under examination should be listed in the appropriate column(s) of the classified asset page.

- *The obligor and the obligor's location and type of business or occupation.* For the type of business or occupation of the obligor, indicate whether the business is a proprietorship, partnership, joint venture, or corporation. This information can be used to compare the purpose of the credit with the source(s) of repayment, and to compare the credit's structure with the obligor's repayment ability. The general identification of occupation, such as professional or wage earner, may not be definitive enough, so it may be necessary to indicate that, for example, the extension of credit is to a medical doctor.

  Types of businesses may be clearly indicated in the borrower's business name and may not require additional comment. For example, Apex Supermarket and Ajax Sporting Goods Store imply a retail supermarket and a retail sporting goods store. However, examiners should not be misled in their analysis of the credit; likewise, the write-up reviewer should not be misled by assuming that a borrower is necessarily in the same line of business indicated by the borrower's business name. In the preceding example, if the borrower is primarily a wholesale grocery or sporting goods supplier, or if it radically deviates from the type of business indicated in its business name, the situation should be clarified. It is important to state the borrower's position in the marketing process—manufacturer, wholesaler, or retailer—and to indicate the types of goods or services.

- *Description and value of collateral.* The type of lien, collateral description and its condition and marketability, as well as the collateral's current value, date of valuation, and basis for the valuation, should be included. If values are estimated, the write-up should indicate the source of the valuation, such as the obligor's recent financial statement, an independent appraisal, or an internal management report. If valuations are not available, a statement to that effect should be included. A bank's failure to obtain collateral valuations, when available, is cause for criticism. Also include any other pertinent information that might impede or facilitate the possible sale of the collateral to repay the extension of credit.

  When problem borrowers are involved, the sale of the collateral often becomes the sole or primary source of repayment. As a result, the valuation of the collateral becomes especially important when describing the credit, as described in the specific examples below.

  If real estate is pledged to secure the credit, the write-up should provide a description of the property, the lien status, the amount of any prior lien, and the appraised value. If multiple parcels are securing the credit, appraised values should be listed for each parcel, including the date of the appraisal and the basis for the value. When bank staff or examiners' challenges to appraisal assumptions are supported, the resulting adjustment in value for credit-analysis purposes should be indicated. If the property held as collateral has tenants, its cash flow should be noted and the financial strength of the major lessees commented upon, if appropriate.

  If the collateral represents shares of or an interest in a closely held company, the

shares or ownership interest held should be indicated in relation to the total shares outstanding, and the financial condition of the closely held company should be summarized in the write-up. Additionally, the approximate value of the closely held company, as indicated by its financial statements, should be compared for consistency with the value of the company as indicated on the principal's or partner's personal financial statement. The values often do not correlate to the extent they should, which typically indicates overvaluation of the asset on the balance sheet of the entity owning the shares or ownership interest.

If a blanket lien on assets, such as receivables, inventory, or equipment, is pledged as collateral, the current estimated value of each asset type should be shown separately. The basis for these values can come from various sources, which should be indicated:

— If receivables are pledged as collateral for an asset-based extension of credit, a current aging report and an assessment of the appropriateness of the advance ratio is usually necessary to determine their collectibility and value.
— If inventory is pledged as collateral for an asset-based extension of credit, an assessment of the appropriateness of the advance ratio is necessary. Additionally, the value varies with the condition and marketability of the inventory.
— If listed securities or commodities are pledged as collateral, the market value and date of valuation should be noted.

- *Notation if borrower is an insider or a related interest of an insider.*
- *Guarantors and a brief description of their ability to act as a source of repayment.* If the financial strength of guarantors has changed significantly since the initial guarantee of the credit facility, this should be noted. The relationship of the guarantors to the borrower should be identified, including a brief description of the guarantors' ability (financial strength) to serve as a source of repayment independent of the borrower. Any collateral supporting the guarantees should also be stated. See the previous subsection, ''Role of Guarantees,'' for further guidance on considering guarantees for credit-analysis purposes.
- *Amounts previously classified.*
- *Repayment terms and historical performance, including prior charge-offs, and current delinquency status (with notation if the credit is currently on nonaccrual status).* Any changes to the original repayment terms, whether initiated by bank management or the obligor, should be detailed with an appropriate analysis of the changes included in the write-up. Renewals, extensions, and rewritten notes that deviate from the stated purpose and repayment expectations, as approved by management, should be discussed in light of their effect on the quality of the credit. Restructurings should be discussed in terms of their reasonable objectives, focusing on the prospects for full repayment in accordance with the modified terms.

  It may be prudent to state the purpose of the credit. The purpose can be compared with the intended source of repayment for appropriateness. For example, a working capital extension of credit generally should not depend on the sale of real estate for repayment. Additionally, the obligor's prior business experience should correlate to the credit's purpose.

2. *A summary listing of weaknesses resulting in classification or special mention treatment.*
3. *A reference to any identified deficiencies in the item that will support loan-administration or violation comments elsewhere in the report.* This information may consist of deficiencies in credit and collateral documentation or violations of law that have a material impact on credit quality. Loan-portfolio-administration performance includes, but is not limited to—
   - changes in asset quality since the last examination;
   - the appropriateness of loan-underwriting standards;
   - the adequacy of—
     — loan documentation;
     — management information systems;
     — internal control systems; and
     — loan-loss reserves;
   - the accuracy of internal loan-rating systems;
   - the ability and experience of lending officers, as well as other personnel managing the lending function; and
   - changes in lending policies or procedures since the last examination.

4. *If management disagrees with the classification, a statement to that effect along with management's rationale.* Information could include selected data from the most recent fiscal and interim financial statements (discussion of items such as leverage, liquidity, and cash flow) when the primary reason for the write-up relates to the borrower's financial condition or operating performance. Cost of goods sold, nonrecurring expenses, dividends, or other items indicating deterioration in the credit quality may also be highlighted. Any stated value of the borrower's encumbered assets should be set off against specific debt to arrive at the unprotected balance, if applicable. In addition, the examiner should identify encumbered assets that are pledged elsewhere.
5. *A concise description of any management action taken or planned to address the weakness in the asset.* The action plan should focus on a concise description of management's workout or action plan to improve the credit's collectibility or to liquidate the debt. Review of the bank's documented workout plan should give an examiner a clear idea of past efforts to improve the prospect of collectibility and management's current efforts and future strategy. The plan should clearly state the bank's goals and corresponding timetable as they appear at that point, including items such as the degree of repayment envisioned and the proceeds anticipated from the sale of the collateral. Based on this information, the examiner should succinctly summarize in the write-up the bank's collection efforts to date and its ongoing plans to address the situation.

Optional Information for Write-ups

At the examiner's discretion, other information may be included in loan write-ups. For example the examiner may want to include current financial information on the borrower, cosigners, and guarantors. The additional information may consist of discussions regarding current balance sheets and operating statements. If discussed, the examiner should indicate whether the financial statements have been audited, reviewed, compiled, or prepared by the borrower, and whether they are fiscal or interim statements. If the statements are audited, the examiner should indicate the type of opinion expressed—unqualified, qualified, disclaimer, or adverse—and whether the auditor is a certified public accountant. If the opinion is qualified, note the reason(s) given by the auditor.

When the examiner includes comments regarding the borrower's financial condition, the comments should always highlight credit weaknesses in a manner that supports the risk assessment. It is important that sufficient detail is provided to identify unfavorable factors. A trend analysis or details of balance-sheet, income-statement, or cash-flow items can be included. The examiner may also include comments when special mention or classified credits may exhibit favorable as well as unfavorable financial characteristics. Both types of pertinent factors may be included in the write-up as long as they are placed in the proper perspective to demonstrate the credit's inherent weaknesses.

The allowance for loan and lease losses (ALLL) is presented on the balance sheet as a contra-asset account that reduces the amount of the loan portfolio reported on the balance sheet. The purpose of the ALLL is to reflect *estimated credit losses* within a bank's portfolio of loans and leases. Estimated credit losses are estimates of the current amount of loans that are probable that the bank will be unable to collect given the facts and circumstances since the evaluation date (generally the balance sheet date). That is, estimated credit losses represent net charge-offs that are likely to be realized for a loan or group of loans as of the evaluation date.

All federally insured depository institutions must maintain an ALLL, except for federally insured branches and agencies of foreign banks. A bank determines the appropriate balance or level of the ALLL at least each quarter, periodically validating its methodology for estimating the ALLL (see SR-11-7), and by evaluating the collectibility of its loan and lease portfolio, including any accrued and unpaid interest. Increases or decreases to the ALLL are to be made through charges (debits) or credits to the "provision for loan and lease losses" (provision), an expense account on the bank's Consolidated Report of Income or income statement, and not through transfers from retained earnings or any segregation of retained earnings or other components of equity capital.

When there is information available to confirm that specific loans, or portions thereof, are uncollectible, these amounts should be promptly charged off against the ALLL. Under no circumstances can loan or lease losses be charged directly to "retained earnings" and capital. Any subsequent recoveries on loans or leases previously charged off must be credited to the ALLL, provided, however, that the total amount credited to the allowance as recoveries of an individual loan (which may include amounts representing principal, interest, and fees) is limited to the amount previously charged off against the ALLL on that loan. Any amounts collected in excess of this limit should be recognized as income.

To illustrate these concepts, assume that Bank A has a loan and lease portfolio totaling $100 million at the end of year 1 and an ALLL of $1.25 million; thus, its net carrying amount for the loan portfolio on the balance sheet is $98.75 million. Based on its most recent analysis, Bank A has determined that an ALLL of $1.5 million is necessary to cover its estimated credit losses as of the end of the fourth quarter. Therefore, in the fourth quarter of year 1, Bank A should record a provision for $250,000, debiting this expense and crediting the ALLL for this amount to bring the ALLL to the appropriate level of $1.5 million. Assume further that during the first quarter of year 2, Bank A identifies $750,000 in uncollectible loans. It must charge off this amount against the ALLL by debiting the ALLL and crediting the individual loans for a total of $750,000. Also assume that in the same first quarter of year 2, Bank A receives $100,000 in cash recoveries on previously charged-off loans. These recoveries must be credited to the ALLL in that quarter. Thus, in the first quarter of year 2, Bank A's ALLL, which began the year at $1.5 million, will have been reduced $850,000 ($1,500,000 − $750,000 + $100,000 = $850,000). However, management's ALLL analysis for the first quarter of year 2 indicates that an ALLL of $1.2 million is appropriate. To bring the recorded ALLL to this level, Bank A must make a debit to the provision for loan and lease losses of $350,000 ($850,000 + $350,000 = $1.2 million).

While the overall responsibility for maintaining the ALLL at an appropriate level rests with the bank's senior management and board of directors, the appropriateness of the ALLL and management's analysis of it are subject to examiner review. The examiner should make every effort to fully understand a bank's methods for determining the needed balance of its ALLL. During the process of conducting the examination, the examiner should take these methods into account when making a final determination on the appropriateness (adequacy) of the balance of the ALLL. The examiner may confer with bank management and any outside accountant or auditor that has advised management on its ALLL-review policies or practices.

If the examiner concludes that the reported ALLL level is not appropriate or determines that the ALLL evaluation process is based on the results of an unreliable loan review system or is otherwise deficient, recommendations for correcting these deficiencies, including any examiner concerns regarding an appropriate level for the ALLL, should be noted in the report of examination. The examiner's comments should cite any departures from generally accepted

accounting principles (GAAP) and any contraventions of the following 2006 Interagency Policy Statement on the Allowance for Loan and Lease Losses as well as the 2001 policy statement (see "ALLL Methodologies and Documentation"). Additional supervisory action may also be taken based on the magnitude of the observed shortcomings in the ALLL process, including the materiality of any error in the reported amount of the ALLL.

INTERAGENCY POLICY STATEMENT ON THE ALLOWANCE FOR LOAN AND LEASE LOSSES

This 2006 policy statement[1] revises and replaces the 1993 policy statement on the ALLL. It reiterates key concepts and requirements included in generally accepted accounting principles (GAAP) and existing ALLL supervisory guidance.[2] The principal sources of guidance on accounting for impairment in a loan portfolio under GAAP are Statement of Financial Accounting Standards No. 5, "Accounting for Contingencies" (FAS 5), and Statement of Financial Accounting Standards No. 114, "Accounting by Creditors for Impairment of a Loan" (FAS 114). In addition, the Financial Accounting Standards Board Viewpoints article that is included in Emerging Issues Task Force Topic D-80 (EITF D-80), "Application of FASB Statements No. 5 and No. 114 to a Loan Portfolio," presents questions and answers that provide specific guidance on the interaction between these two FASB statements and may be helpful in applying them.

In July 1999, the banking agencies and the Securities and Exchange Commission (SEC) issued a Joint Interagency Letter to Financial Institutions. The letter stated that the banking agencies and the SEC agreed on the following important aspects of loan loss allowance practices:

- Arriving at an appropriate allowance involves a high degree of management judgment and results in a range of estimated losses.
- Prudent, conservative—but not excessive—loan loss allowances that fall within an acceptable range of estimated losses are appropriate. In accordance with GAAP, an institution should record its best estimate within the range of credit losses, including when management's best estimate is at the high end of the range.
- Determining the allowance for loan losses is inevitably imprecise, and an appropriate allowance falls within a range of estimated losses.
- An "unallocated" loan loss allowance is appropriate when it reflects an estimate of probable losses, determined in accordance with GAAP, and is properly supported.
- Allowance estimates should be based on a comprehensive, well-documented, and consistently applied analysis of the loan portfolio.
- The loan loss allowance should take into consideration all available information existing as of the financial statement date, including environmental factors such as industry, geographical, economic, and political factors.

In July 2001, the banking agencies issued the Policy Statement on Allowance for Loan and Lease Losses Methodologies and Documentation for Banks and Savings Institutions (2001 Policy Statement). The policy statement is designed to assist institutions in establishing a sound process for determining an appropriate ALLL and documenting that process in accordance with GAAP.[3] (See "ALLL Methodologies and Documentation.")

In March 2004, the agencies also issued the Update on Accounting for Loan and Lease Losses. This guidance provided reminders of longstanding supervisory guidance as well as a listing of the existing allowance guidance that institutions should continue to apply.

1. This policy statement was adopted on December 13, 2006, by, and applies to, all depository institutions (institutions), except U.S. branches and agencies of foreign banks, that are supervised by the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation (the banking agencies). U.S. branches and agencies of foreign banks continue to be subject to any separate guidance that has been issued by their primary supervisory agency.

2. As discussed more fully below in the "Nature and Purpose of the ALLL" section, this policy statement and the ALLL generally do not address loans carried at fair value or loans held for sale. In addition, this policy statement provides only limited guidance on "purchased impaired loans."

3. See "ALLL Methodologies and Documentation" for the 2001 Policy Statement. The SEC staff issued parallel guidance in July 2001, which is found in Staff Accounting Bulletin No. 102, "Selected Loan Loss Allowance Methodology and Documentation Issues" (SAB 102), which has been codified as Topic 6.L. in the SEC's Codification of Staff Accounting Bulletins. Both SAB 102 and the codification are available on the SEC's website.

Nature and Purpose of the ALLL

The ALLL represents one of the most significant estimates in an institution's financial statements and regulatory reports. Because of its significance, each institution has a responsibility for developing, maintaining, and documenting a comprehensive, systematic, and consistently applied process for determining the amounts of the ALLL and the provision for loan and lease losses (PLLL). To fulfill this responsibility, each institution should ensure controls are in place to consistently determine the ALLL in accordance with GAAP, the institution's stated policies and procedures, management's best judgment, and relevant supervisory guidance. As of the end of each quarter, or more frequently if warranted, each institution must analyze the collectibility of its loans and leases held for investment[4] (hereafter referred to as "loans") and maintain an ALLL at a level that is appropriate and determined in accordance with GAAP. An appropriate ALLL covers estimated credit losses on individually evaluated loans that are determined to be impaired as well as estimated credit losses inherent in the remainder of the loan and lease portfolio. The ALLL does not apply, however, to loans carried at fair value, loans held for sale,[5] off-balance-sheet credit exposures[6] (for example, financial instruments such as off-balance-sheet loan commitments, standby letters of credit, and guarantees), or general or unspecified business risks.

For purposes of this policy statement, the term *estimated credit losses* means an estimate of the current amount of loans that it is probable the institution will be unable to collect given facts and circumstances since the evaluation date. Thus, estimated credit losses represent net charge-offs that are likely to be realized for a loan or group of loans. These estimated credit losses should meet the criteria for accrual of a loss contingency (that is, through a provision to the ALLL) set forth in GAAP.[7] When available information confirms that specific loans, or portions thereof, are uncollectible, these amounts should be promptly charged off against the ALLL. For "purchased impaired loans,"[8] GAAP prohibits "carrying over" or creating an ALLL in the initial recording of these loans. However, if, upon evaluation subsequent to acquisition, it is probable that the institution will be unable to collect all cash flows expected at acquisition on a purchased impaired loan (an estimate that considers both timing and amount), the loan should be considered impaired for purposes of applying the measurement and other provisions of FAS 5 or, if applicable, FAS 114.

Estimates of credit losses should reflect consideration of all significant factors that affect the collectibility of the portfolio as of the evaluation date. For loans within the scope of FAS 114 that

4. Consistent with the American Institute of Certified Public Accountants' (AICPA) Statement of Position 01-6, "Accounting by Certain Entities (Including Entities With Trade Receivables) That Lend to or Finance the Activities of Others," loans and leases held for investment are those loans and leases that the institution has the intent and ability to hold for the foreseeable future or until maturity or payoff.

5. See "Interagency Guidance on Certain Loans Held for Sale" (March 26, 2001) for the appropriate accounting and reporting treatment for certain loans that are sold directly from the loan portfolio or transferred to a held-for-sale account. Loans held for sale are reported at the lower of cost or fair value. Declines in value occurring after the transfer of a loan to the held-for-sale portfolio are accounted for as adjustments to a valuation allowance for held-for-sale loans and not as adjustments to the ALLL.

6. Credit losses on off-balance-sheet credit exposures should be estimated in accordance with FAS 5. Any allowance for credit losses on off-balance-sheet exposures should be reported on the balance sheet as an "other liability," and not as part of the ALLL.

7. FAS 5 requires the accrual of a loss contingency when information available prior to the issuance of the financial statements indicates it is probable that an asset has been impaired at the date of the financial statements and the amount of loss can be reasonably estimated. These conditions may be considered in relation to individual loans or in relation to groups of similar types of loans. If the conditions are met, accrual should be made even though the particular loans that are uncollectible may not be identifiable. Under FAS 114, an individual loan is impaired when, based on current information and events, it is probable that a creditor will be unable to collect all amounts due according to the contractual terms of the loan agreement. It is implicit in these conditions that it must be probable that one or more future events will occur confirming the fact of the loss. Thus, under GAAP, the purpose of the ALLL is not to absorb all of the risk in the loan portfolio, but to cover probable credit losses that have already been incurred.

8. A *purchased impaired loan* is defined as a loan that an institution has purchased, including a loan acquired in a purchase business combination, that has evidence of deterioration of credit quality since its origination and for which it is probable, at the purchase date, that the institution will be unable to collect all contractually required payments. When reviewing the appropriateness of the reported ALLL of an institution with purchased impaired loans, examiners should consider the credit losses factored into the initial investment in these loans when determining whether further deterioration—for example, decreases in cash flows expected to be collected—has occurred since the loans were purchased. The bank's consolidated reports of condition and income and the disclosures in the bank's financial statements may provide useful information for examiners in reviewing these loans. Refer to the AICPA's Statement of Position 03-3, "Accounting for Certain Loans or Debt Securities Acquired in a Transfer," for further guidance on the appropriate accounting.

are individually evaluated and determined to be impaired,[9] these estimates should reflect consideration of one of the standard's three impairment measurement methods as of the evaluation date: (1) the present value of expected future cash flows discounted at the loan's effective interest rate,[10] (2) the loan's observable market price, or (3) the fair value of the collateral if the loan is collateral dependent.

An institution may choose the appropriate FAS 114 measurement method on a loan-by-loan basis for an individually impaired loan, except for an impaired collateral-dependent loan. The agencies require impairment of a collateral-dependent loan to be measured using the fair value of collateral method. As defined in FAS 114, a loan is collateral dependent if repayment of the loan is expected to be provided solely by the underlying collateral. In general, any portion of the recorded investment in a collateral-dependent loan (including any capitalized accrued interest, net deferred loan fees or costs, and unamortized premium or discount) in excess of the fair value of the collateral that can be identified as uncollectible, and is therefore deemed a confirmed loss, should be promptly charged off against the ALLL.[11]

All other loans, including individually evaluated loans determined not to be impaired under FAS 114, should be included in a group of loans that is evaluated for impairment under FAS 5.[12] While an institution may segment its loan portfolio into groups of loans based on a variety of factors, the loans within each group should have similar risk characteristics. For example, a loan that is fully collateralized with risk-free assets should not be grouped with uncollateralized loans. When estimating credit losses on each group of loans with similar risk characteristics, an institution should consider its historical loss experience on the group, *adjusted for changes in trends, conditions, and other relevant factors* that affect repayment of the loans as of the evaluation date.

For analytical purposes, an institution should attribute portions of the ALLL to loans that it evaluates and determines to be impaired under FAS 114 and to groups of loans that it evaluates collectively under FAS 5. However, the ALLL is available to cover all charge-offs that arise from the loan portfolio.

Responsibilities of the Board of Directors and Management

Appropriate ALLL Level

Each institution's management is responsible for maintaining the ALLL at an appropriate level and for documenting its analysis according to the standards set forth in the 2001 policy statement. Thus, management should evaluate the ALLL reported on the balance sheet as of the end of each quarter or more frequently if warranted, and charge or credit the PLLL to bring the ALLL to an appropriate level as of each evaluation date. The determination of the amounts of the ALLL and the PLLL should be based on management's current judgments about the credit quality of the loan portfolio, and should consider all known relevant internal and external factors that affect loan collectibility as of the evaluation date. Management's evaluation is subject to review by examiners. An institution's failure to analyze the collectibility of the loan portfolio and maintain and support an appropriate ALLL in accordance with GAAP and supervisory guidance is generally an unsafe and unsound practice.

In carrying out its responsibility for maintaining an appropriate ALLL, management is expected to adopt and adhere to written policies and procedures that are appropriate to the size of the institution and the nature, scope, and risk of its lending activities. At a minimum, these policies and procedures should ensure that—

- the institution's process for determining an appropriate level for the ALLL is based on a comprehensive, well-documented, and consis-

9. FAS 114 does not specify how an institution should identify loans that are to be evaluated for collectibility nor does it specify how an institution should determine that a loan is impaired. An institution should apply its normal loan review procedures in making those judgments. Refer to the ALLL interpretations for further guidance.

10. The "effective interest rate" on a loan is the rate of return implicit in the loan (that is, the contractual interest rate adjusted for any net deferred loan fees or costs and any premium or discount existing at the origination or acquisition of the loan).

11. For further information, refer to the illustration in Appendix B of the 2001 Policy Statement in the section "ALLL Methodologies and Documentation."

12. An individually evaluated loan that is determined not to be impaired under FAS 114 should be evaluated under FAS 5 when specific characteristics of the loan indicate that it is probable there would be estimated credit losses in a group of loans with those characteristics. For further guidance, refer to the frequently asked questions (FAQs) that were distributed with this policy statement.

tently applied analysis of its loan portfolio.[13] The analysis should consider all significant factors that affect the collectibility of the portfolio and should support the credit losses estimated by this process.

- the institution has an effective loan review system and controls (including an effective loan classification or credit grading system) that identify, monitor, and address asset quality problems in an accurate and timely manner.[14] To be effective, the institution's loan review system and controls must be responsive to changes in internal and external factors affecting the level of credit risk in the portfolio.
- the institution has adequate data capture and reporting systems to supply the information necessary to support and document its estimate of an appropriate ALLL.
- the institution evaluates any loss estimation models before they are employed and modifies the models' assumptions, as needed, to ensure that the resulting loss estimates are consistent with GAAP. To demonstrate this consistency, the institution should document its evaluations and conclusions regarding the appropriateness of estimating credit losses with the models or other estimation tools. The institution should also document and support any adjustments made to the models or to the output of the models in determining the estimated credit losses.
- the institution promptly charges off loans, or portions of loans, that available information confirms to be uncollectible.
- the institution periodically validates the ALLL methodology. This validation process should be done by a party who is independent of the institution's credit approval and ALLL estimation processes, of the ALLL methodology and its application in order to confirm its effectiveness. See SR 11-7 for more information. A party who is independent of these processes could be the internal audit staff, a risk management unit of the institution, an external auditor (subject to applicable auditor independence standards), or another contracted third party from outside the institution. One party need not perform the entire analysis as the validation can be divided among various independent parties.

The board of directors is responsible for overseeing management's significant judgments and estimates pertaining to the determination of an appropriate ALLL. This oversight should include but is not limited to—

- reviewing and approving the institution's written ALLL policies and procedures at least annually;
- reviewing management's assessment and justification that the loan review system is sound and appropriate for the size and complexity of the institution;
- reviewing management's assessment and justification for the amounts estimated and reported each period for the PLLL and the ALLL; and
- requiring management to periodically validate and, when appropriate, revise the ALLL methodology.

For purposes of the Consolidated Reports of Condition and Income for a Bank (Call Report), an appropriate ALLL (after deducting all loans and portions of loans confirmed loss) should consist only of the following components (as applicable),[15] the amounts of which take into account *all relevant facts and circumstances as of the evaluation date:*

- For loans within the scope of ASC Topic 310, Receivables (formerly FAS 114, "Accounting by Creditors for Impairment of a Loan") that are individually evaluated and found to be impaired, the associated ALLL should be based upon one of the three impairment measurement methods specified in FAS 114.[16]

13. As noted in the 2001 Policy Statement, an institution with less complex lending activities and products may find it more efficient to combine a number of procedures while continuing to ensure that the institution has a consistent and appropriate ALLL methodology. Thus, much of the supporting documentation required for an institution with more complex products or portfolios may be combined into fewer supporting documents in an institution with less complex products or portfolios.

14. Loan review and loan classification or credit grading systems are discussed in this manual's section, "Credit Risk Review Systems." In addition, state member banks should refer to the asset quality standards in the Interagency Guidelines Establishing Standards for Safety and Soundness, which were adopted by the Federal Reserve Board (see Appendix D-1, 12 CFR 208).

15. A component of the ALLL that is labeled "unallocated" is appropriate when it reflects estimated credit losses determined in accordance with GAAP and is properly supported and documented.

16. As previously noted, the use of the fair value of collateral method is required for an individually evaluated loan that is impaired if the loan is collateral dependent.

- For all other loans, including individually evaluated loans determined not to be impaired under FAS 114,[17] the associated ALLL should be measured under ASC Subtopic 450-20, Contingencies—Loss Contingencies (formerly FAS 5, "Accounting for Contingencies") and should provide for all estimated credit losses that have been incurred on groups of loans with similar risk characteristics.
- For estimated credit losses from transfer risk on cross-border loans, the impact to the ALLL should be evaluated individually for impaired loans under FAS 114 or evaluated on a group basis under FAS 5. See this policy statement's attachment for further guidance on considerations of transfer risk on cross-border loans.
- For estimated credit losses on accrued interest and fees on loans that have been reported as part of the respective loan balances on the institution's balance sheet, the associated ALLL should be evaluated under FAS 114 or FAS 5 as appropriate, if not already included in one of the preceding components.

Because deposit accounts that are overdrawn (that is, overdrafts) must be reclassified as loans on the balance sheet, overdrawn accounts should be included in one of the first two components above, as appropriate, and evaluated for estimated credit losses.

Determining the appropriate level for the ALLL is inevitably imprecise and requires a high degree of management judgment. Management's analysis should reflect a prudent, conservative, but not excessive ALLL that falls within an acceptable range of estimated credit losses. When a range of losses is determined, institutions should maintain appropriate documentation to support the identified range and the rationale used for determining the best estimate from within the range of loan losses.

It is essential that institutions maintain effective loan review systems. An effective loan review system should work to ensure the accuracy of internal credit classification or grading systems and, thus, the quality of the information used to assess the appropriateness of the ALLL. The complexity and scope of an institution's ALLL evaluation process, loan review system, and other relevant controls should be appropriate for the size of the institution and the nature of its lending activities. The evaluation process should also provide for sufficient flexibility to respond to changes in the factors that affect the collectibility of the portfolio.

Credit losses that arise from the transfer risk associated with an institution's cross-border lending activities require special consideration. In particular, for banks with cross-border lending exposure, management should determine that the ALLL is appropriate to cover estimated losses from transfer risk associated with this exposure over and above any minimum amount that the Interagency Country Exposure Review Committee requires to be provided in the Allocated Transfer Risk Reserve (or charged off against the ALLL). These estimated losses should meet the criteria for accrual of a loss contingency set forth in GAAP. (See the attachment for factors to consider.)

Factors to Consider in the Estimation of Credit Losses

Estimated credit losses should reflect consideration of all significant factors that affect the collectibility of the portfolio as of the evaluation date. Normally, an institution should determine the historical loss rate for each group of loans with similar risk characteristics in its portfolio based on its own loss experience for loans in that group. While historical loss experience provides a reasonable starting point for the institution's analysis, historical losses—or even recent trends in losses—do not by themselves form a sufficient basis to determine the appropriate level for the ALLL. Management also should consider those qualitative or environmental factors that are likely to cause estimated credit losses associated with the institution's existing portfolio to differ from historical loss experience, including but not limited to—

- changes in lending policies and procedures, including changes in underwriting standards and collection, charge-off, and recovery practices not considered elsewhere in estimating credit losses;
- changes in international, national, regional, and local economic and business conditions and developments that affect the collectibility of the portfolio, including the condition of various market segments;[18]

17. See note 12.

18. Credit loss and recovery experience may vary significantly depending upon the stage of the business cycle. For example, an over reliance on credit loss experience during a period of economic growth will not result in realistic estimates

- 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 other relevant staff;
- changes in the volume and severity of past due loans, the volume of nonaccrual loans, and the volume and severity of adversely classified or graded loans;[19]
- changes in the quality of the institution's loan review system;
- changes in the value of underlying collateral for collateral-dependent loans;
- the existence and effect of any concentrations of credit, and changes in the level of such concentrations; and
- the effect of other external factors such as competition and legal and regulatory requirements on the level of estimated credit losses in the institution's existing portfolio.

In addition, changes in the level of the ALLL should be directionally consistent with changes in the factors, taken as a whole, that evidence credit losses, keeping in mind the characteristics of an institution's loan portfolio. For example, if declining credit quality trends relevant to the types of loans in an institution's portfolio are evident, the ALLL level as a percentage of the portfolio should generally increase, barring unusual charge-off activity. Similarly, if improving credit quality trends are evident, the ALLL level as a percentage of the portfolio should generally decrease.

Measurement of Estimated Credit Losses

FAS 5. When measuring estimated credit losses on groups of loans with similar risk characteristics in accordance with FAS 5, a widely used method is based on each group's historical net charge-off rate adjusted for the effects of the qualitative or environmental factors discussed previously. As the first step in applying this method, management generally bases the historical net charge-off rates on the "annualized" historical gross loan charge-offs, less recoveries, recorded by the institution on loans in each group.

Methodologies for determining the historical net charge-off rate on a group of loans with similar risk characteristics under FAS 5 can range from the simple average of, or a determination of the range of, an institution's annual net charge-off experience to more complex techniques, such as migration analysis and models that estimate credit losses.[20] Generally, institutions should use at least an "annualized" or twelve-month average net charge-off rate that will be applied to the groups of loans when estimating credit losses. However, this rate could vary. For example, loans with effective lives longer than twelve months often have workout periods over an extended period of time, which may indicate that the estimated credit losses should be greater than that calculated based solely on the annualized net charge-off rate for such loans. These groups may include certain commercial loans as well as groups of adversely classified loans. Other groups of loans may have effective lives shorter than twelve months, which may indicate that the estimated credit losses should be less than that calculated based on the annualized net charge-off rate.

Regardless of the method used, institutions should maintain supporting documentation for the techniques used to develop the historical loss rate for each group of loans. If a range of historical loss rates is developed instead for a group of loans, institutions should maintain documentation to support the identified range and the rationale for determining which rate is the best estimate within the range of loss rates. The rationale should be based on management's assessment of which rate is most reflective of the estimated credit losses in the current loan portfolio.

of credit losses during a period of economic downturn.

19. For banks, adversely classified or graded loans are loans rated "Substandard" (or its equivalent) or worse under its loan classification system.

20. Annual charge-off rates are calculated over a specified time period (for example, three years or five years), which can vary based on a number of factors including the relevance of past periods' experience to the current period or point in the credit cycle. Also, some institutions remove loans that become adversely classified or graded from a group of nonclassified or nongraded loans with similar risk characteristics in order to evaluate the removed loans individually under FAS 114 (if deemed impaired) or collectively in a group of adversely classified or graded loans with similar risk characteristics under FAS 5. In this situation, the net charge-off experience on the adversely classified or graded loans that have been removed from the group of nonclassified or nongraded loans should be included in the historical loss rates for that group of loans. Even though the net charge-off experience on adversely classified or graded loans is included in the estimation of the historical loss rates that will be applied to the group of nonclassified or nongraded loans, the adversely classified or graded loans themselves are no longer included in that group for purposes of estimating credit losses on the group.

After determining the appropriate historical loss rate for each group of loans with similar risk characteristics, management should consider those current qualitative or environmental factors that are likely to cause estimated credit losses as of the evaluation date to differ from the group's historical loss experience. Institutions typically reflect the overall effect of these factors on a loan group as an adjustment that, as appropriate, increases or decreases the historical loss rate applied to the loan group. Alternatively, the effect of these factors may be reflected through separate standalone adjustments within the FAS 5 component of the ALLL.[21] Both methods are consistent with GAAP, provided the adjustments for qualitative or environmental factors are reasonably and consistently determined, are adequately documented, and represent estimated credit losses. For each group of loans, an institution should apply its adjusted historical loss rate, or its historical loss rate and separate standalone adjustments, to the recorded investment in the group when determining its estimated credit losses.

Management must exercise significant judgment when evaluating the effect of qualitative factors on the amount of the ALLL because data may not be reasonably available or directly applicable for management to determine the precise impact of a factor on the collectibility of the institution's loan portfolio as of the evaluation date. Accordingly, institutions should support adjustments to historical loss rates and explain how the adjustments reflect current information, events, circumstances, and conditions in the loss measurements. Management should maintain reasonable documentation to support which factors affected the analysis and the impact of those factors on the loss measurement. Support and documentation includes descriptions of each factor, management's analysis of how each factor has changed over time, which loan groups' loss rates have been adjusted, the amount by which loss estimates have been adjusted for changes in conditions, an explanation of how management estimated the impact, and other available data that supports the reasonableness of the adjustments. Examples of underlying supporting evidence could include, but are not limited to, relevant articles from newspapers and other publications that describe economic events affecting a particular geographic area, economic reports and data, and notes from discussions with borrowers.

There may be times when an institution does not have its own historical loss experience upon which to base its estimate of the credit losses in a group of loans with similar risk characteristics. This may occur when an institution offers a new loan product or when it is a newly established (that is, de novo) institution. If an institution has no experience of its own for a loan group, reference to the experience of other enterprises in the same lending business may be appropriate, provided the institution demonstrates that the attributes of the group of loans in its portfolio are similar to those of the loan group in the portfolio providing the loss experience. An institution should only use another enterprise's experience on a short-term basis until it has developed its own loss experience for a particular group of loans.

FAS 114. When determining the FAS 114 component of the ALLL for an individually impaired loan,[22] an institution should consider estimated costs to sell the loan's collateral, if any, on a discounted basis, in the measurement of impairment if those costs are expected to reduce the cash flows available to repay or otherwise satisfy the loan. If the institution bases its measure of loan impairment on the present value of expected future cash flows discounted at the loan's effective interest rate, the estimates of these cash flows should be the institution's best estimate based on reasonable and supportable assumptions and projections. All available evidence should be considered in developing the estimate of expected future cash flows. The weight given to the evidence should be commensurate with the extent to which the evidence can be verified objectively. The likelihood of the possible outcomes should be con-

21. An overall adjustment to a portion of the ALLL that is not attributed to specific segments of the loan portfolio is often labeled "unallocated." Regardless of what a component of the ALLL is labeled, it is appropriate when it reflects estimated credit losses determined in accordance with GAAP and is properly supported.

22. As noted in FAS 114, some individually impaired loans have risk characteristics that are unique to an individual borrower and the institution will apply the measurement methods on a loan-by-loan basis. However, some impaired loans may have risk characteristics in common with other impaired loans. An institution may aggregate those loans and may use historical statistics, such as average recovery period and average amount recovered, along with a composite effective interest rate as a means of measuring impairment of those loans.

sidered in determining the best estimate of expected future cash flows.

Analyzing the Overall Measurement of the ALLL

Institutions also are encouraged to use ratio analysis as a supplemental tool for evaluating the overall reasonableness of the ALLL. Ratio analysis can be useful in identifying divergent trends (compared with an institution's peer group and its own historical experience) in the relationship of the ALLL to adversely classified or graded loans, past due and nonaccrual loans, total loans, and historical gross and net charge-offs. Based on such analysis, an institution may identify additional issues or factors that previously had not been considered in the ALLL estimation process, which may warrant adjustments to estimated credit losses. Such adjustments should be appropriately supported and documented.

While ratio analysis, when used prudently, can be helpful as a supplemental check on the reasonableness of management's assumptions and analyses, it is not a sufficient basis for determining the appropriate amount for the ALLL. In particular, because an appropriate ALLL is an institution-specific amount, such comparisons do not obviate the need for a comprehensive analysis of the loan portfolio and the factors affecting its collectibility. Furthermore, it is inappropriate for the board of directors or management to make adjustments to the ALLL when it has been properly computed and supported under the institution's methodology for the sole purpose of reporting an ALLL that corresponds to the peer group median, a target ratio, or a budgeted amount. Institutions that have high levels of risk in the loan portfolio or are uncertain about the effect of possible future events on the collectibility of the portfolio should address these concerns by maintaining higher equity capital and not by arbitrarily increasing the ALLL in excess of amounts supported under GAAP.[23]

Estimated Credit Losses in Credit Related Accounts

Typically, institutions evaluate and estimate credit losses for off-balance-sheet credit exposures at the same time that they estimate credit losses for loans. While a similar process should be followed to support loss estimates related to off-balance-sheet exposures, these estimated credit losses are not recorded as part of the ALLL. When the conditions for accrual of a loss under FAS 5 are met, an institution should maintain and report as a separate liability account, an allowance that is appropriate to cover estimated credit losses on off-balance-sheet loan commitments, standby letters of credit, and guarantees. In addition, recourse liability accounts (that arise from recourse obligations on any transfers of loans that are reported as sales in accordance with GAAP) should be reported in regulatory reports as liabilities that are separate and distinct from both the ALLL and the allowance for credit losses on off-balance-sheet credit exposures.

When accrued interest and fees are reported separately on an institution's balance sheet from the related loan balances (that is, as other assets), the institution should maintain an appropriate valuation allowance, determined in accordance with GAAP, for amounts that are not likely to be collected unless management has placed the underlying loans in nonaccrual status and reversed previously accrued interest and fees.[24]

Responsibilities of Examiners

Examiners should assess the credit quality of an institution's loan portfolio, the appropriateness of its ALLL methodology and documentation, and the appropriateness of the reported ALLL in the institution's regulatory reports. In their review and classification or grading of the loan portfolio, examiners should consider all significant factors that affect the collectibility of the portfolio, including the value of any collateral.

23. It is inappropriate to use a "standard percentage" as the sole determinant for the amount to be reported as the ALLL on the balance sheet. Moreover, an institution should not simply default to a peer ratio or a "standard percentage" after determining an appropriate level of ALLL under its methodology. However, there may be circumstances when an institution's ALLL methodology and credit risk identification systems are not reliable. Absent reliable data of its own, management may seek data that could be used as a short-term proxy for the unavailable information (for example, an industry average loss rate for loans with similar risk characteristics). This is only appropriate as a short-term remedy until the institution creates a viable system for estimating credit losses within its loan portfolio.

24. See the Call Report instructions for further guidance on placing a loan in nonaccrual status.

In reviewing the appropriateness of the ALLL, examiners should do the following:

- Consider the effectiveness of board oversight as well as the quality of the institution's loan review system and management in identifying, monitoring, and addressing asset quality problems. This will include a review of the institution's loan review function and credit grading system. Typically, this will involve testing a sample of the institution's loans. The sample size generally varies and will depend on the nature or purpose of the examination.[25]
- Evaluate the institution's ALLL policies and procedures and assess the methodology that management uses to arrive at an overall estimate of the ALLL, including whether management's assumptions, valuations, and judgments appear reasonable and are properly supported. If a range of credit losses has been estimated by management, evaluate the reasonableness of the range and management's best estimate within the range. In making these evaluations, examiners should ensure that the institution's historical loss experience and all significant qualitative or environmental factors that affect the collectibility of the portfolio (including changes in the quality of the institution's loan review function and the other factors previously discussed) have been appropriately considered and that management has appropriately applied GAAP, including FAS 114 and FAS 5.
- Review management's use of loss estimation models or other loss estimation tools to ensure that the resulting estimated credit losses are in conformity with GAAP.
- Review the appropriateness and reasonableness of the overall level of the ALLL. In some instances this may include a quantitative analysis (for example, using the types of ratio analysis previously discussed) as a preliminary check on the reasonableness of the ALLL. This quantitative analysis should demonstrate whether changes in the key ratios from prior periods are reasonable based on the examiner's knowledge of the collectibility of loans at the institution and its current environment.
- Review the ALLL amount reported in the institution's regulatory reports and financial statements and ensure these amounts reconcile to its ALLL analyses. There should be no material differences between the consolidated loss estimate, as determined by the ALLL methodology, and the final ALLL balance reported in the financial statements. Inquire about reasons for any material differences between the results of the institution's ALLL analyses and the institution's reported ALLL to determine whether the differences can be satisfactorily explained.
- Review the adequacy of the documentation and controls maintained by management to support the appropriateness of the ALLL.
- Review the interest and fee income accounts associated with the lending process to ensure that the institution's net income is not materially misstated.[26]

As noted in the "Responsibilities of the Board of Directors and Management" section of this policy statement, when assessing the appropriateness of the ALLL, it is important to recognize that the related process, methodology, and underlying assumptions require a substantial degree of management judgment. Even when an institution maintains sound loan administration and collection procedures and an effective loan review system and controls, its estimate of credit losses is not a single precise amount due to the wide range of qualitative or environmental factors that must be considered.

An institution's ability to estimate credit losses on specific loans and groups of loans should improve over time as substantive information accumulates regarding the factors affecting repayment prospects. Therefore, examiners should generally accept management's estimates when assessing the appropriateness of the institution's reported ALLL, and not seek adjustments to the ALLL, when management has—

25. In an examiner's review of an institution's loan review system, the examiner's loan classifications or credit grades may differ from those of the institution's loan review system. If the examiner's evaluation of these differences indicates problems with the loan review system, especially when the loan classification or credit grades assigned by the institution are more liberal than those assigned by the examiner, the institution would be expected to make appropriate adjustments to the assignment of its loan classifications or credit grades to the loan portfolio and to its estimated credit losses. Furthermore, the institution would be expected to improve its loan review system.

26. As noted previously, accrued interest and fees on loans that have been reported as part of the respective loan balances on the institution's balance sheet should be evaluated for estimated credit losses. The accrual of the interest and fee income should also be considered. Refer to GAAP and the Call Report instructions for further guidance on income recognition.

- maintained effective loan review systems and controls for identifying, monitoring, and addressing asset quality problems in a timely manner;
- analyzed all significant qualitative or environmental factors that affect the collectibility of the portfolio as of the evaluation date in a reasonable manner;
- established an acceptable ALLL evaluation process for both individual loans and groups of loans that meets the GAAP requirements for an appropriate ALLL; and
- incorporated reasonable and properly supported assumptions, valuations, and judgments into the evaluation process.

If the examiner concludes that the reported ALLL level is not appropriate or determines that the ALLL evaluation process is based on the results of an unreliable loan review system or is otherwise deficient, recommendations for correcting these deficiencies, including any examiner concerns regarding an appropriate level for the ALLL, should be noted in the report of examination. The examiner's comments should cite any departures from GAAP and any contraventions of this policy statement and the 2001 policy statement, as applicable. Additional supervisory action may also be taken based on the magnitude of the observed shortcomings in the ALLL process, including the materiality of any error in the reported amount of the ALLL.

ALLL Level Reflected in Regulatory Reports

The agencies believe that an ALLL established in accordance with this policy statement and the 2001 policy statement, as applicable, falls within the range of acceptable estimates determined in accordance with GAAP. When the reported amount of an institution's ALLL is not appropriate, the institution will be required to adjust its ALLL by an amount sufficient to bring the ALLL reported on its Call Report to an appropriate level as of the evaluation date. This adjustment should be reflected in the current period provision or through the restatement of prior period provisions, as appropriate in the circumstances.

Attachment to the Policy Statement—International Transfer Risk Considerations

With respect to international transfer risk, an institution with cross-border exposures should support its determination of the appropriateness of its ALLL by performing an analysis of the transfer risk, commensurate with the size and composition of the institution's exposure to each country. Such analyses should take into consideration the following factors, as appropriate:

- the institution's loan portfolio mix for each country (for example, types of borrowers, loan maturities, collateral, guarantees, special credit facilities, and other distinguishing factors);
- the institution's business strategy and its debt management plans for each country;
- each country's balance of payments position;
- each country's level of international reserves;
- each country's established payment performance record and its future debt servicing prospects;
- each country's socio-political situation and its effect on the adoption or implementation of economic reforms, in particular those affecting debt servicing capacity;
- each country's current standing with multilateral and official creditors;
- the status of each country's relationships with other creditors, including institutions; and
- the most recent evaluations distributed by the banking agencies' Interagency Country Exposure Review Committee.

OVERVIEW AND APPLICABILITY

In June 2020, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the National Credit Union Administration (collectively, the agencies) issued an interagency policy statement on allowances for credit losses (ACLs) (hereafter "policy statement").[1] The agencies issued the policy statement in response to changes to U.S. generally accepted accounting principles (GAAP) as promulgated by the Financial Accounting Standards Board (FASB) in Accounting Standards Update (ASU) 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* and subsequent amendments issued since June 2016. These updates are codified in Accounting Standards Codification (ASC) Topic 326, *Financial Instruments—Credit Losses* (FASB ASC Topic 326).

The policy statement on ACLs describes the measurement of expected credit losses under the current expected credit losses (CECL) methodology and the accounting for impairment on available-for-sale debt securities in accordance with FASB ASC Topic 326; the design, documentation, and validation of expected credit loss estimation processes, including the internal controls over these processes; the maintenance of appropriate ACLs; the responsibilities of boards of directors and management; and examiner reviews of ACLs.

FASB ASC Topic 326 replaces the incurred loss methodology for financial assets measured at amortized cost, net investments in leases, and certain off-balance-sheet credit exposures, and modifies the accounting for impairment on available-for-sale debt securities. FASB ASC Topic 326 applies to all banks, savings associations, credit unions, and financial institution holding companies (collectively, institutions), regardless of size, that file regulatory reports for which the reporting requirements conform to GAAP.[2] The agencies are maintaining conformance with GAAP and consistency with FASB ASC Topic 326 through the issuance of the policy statement on ACLs.[3]

The agencies have issued guidelines establishing standards for safety and soundness, including operational and managerial standards that address such matters as internal controls and information systems, an internal audit system, loan documentation, credit underwriting, asset quality, and earnings that should be appropriate for an institution's size, complexity, and risk profile.[4] The principles described in the policy statement are consistent with these guidelines.

The policy statement becomes applicable to an institution upon that institution's adoption of FASB ASC Topic 326.[5] The following policy statements are no longer effective for an institution upon its adoption of FASB ASC Topic 326: the December 2006 Interagency Policy Statement on the Allowance for Loan and Lease Losses;[6] the July 2001 Policy Statement on Allowance for Loan and Lease Losses Methodologies and Documentation for Banks and Savings Institutions.[7] The agencies will rescind the

1. See 85 Fed. Reg. 32,991 (June 1, 2020) and SR-20-12, "Interagency Policy Statement on Allowances for Credit Losses."

2. See section 37(a) of the Federal Deposit Insurance Act. Under these statutory provisions, the accounting principles applicable to reports or statements required to be filed by all insured depository institutions with the federal banking agencies (the Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Board), and the Federal Deposit Insurance Corporation (FDIC)).

3. If the agencies determine that a particular accounting principle within GAAP, including a private company accounting alternative, is inconsistent with the statutorily specified supervisory objectives, those agencies may prescribe an accounting principle for regulatory reporting purposes that is no less stringent than GAAP. In such a situation, an institution would not be permitted to use that particular private company accounting alternative or other accounting principle within GAAP for regulatory reporting purposes.

4. See Appendix D to 12 CFR part 208 which was adopted by the Board for depository institutions pursuant to section 39 of the Federal Deposit Insurance Act. *See* 12 U.S.C. 1831p-1.

5. As noted in ASU 2019-10, FASB ASC Topic 326 is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, for public business entities that meet the definition of a Securities Exchange Commission (SEC) filer, excluding entities eligible to be small reporting companies as defined by the SEC. FASB ASC Topic 326 is effective for all other entities for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. For all entities, early application of FASB ASC Topic 326 is permitted as set forth in ASU 2016-13.

6. See SR-06-17. The final policy statement does not affect Attachment 1 to the December 2006 Interagency Policy Statement on the Allowance for Loan and Lease Losses. Attachment 1 has been revised through a separate interagency notice published in 85 Fed. Reg. 33,278 (June 1, 2020). *See also* SR-20-13, "Interagency Guidance on Credit Risk Review Systems."

7. See SR-01-17.

ALLL Policy Statements once FASB ASC Topic 326 is effective for all institutions.

The agencies issued this Interagency Policy Statement on Allowances for Credit Losses to promote consistency in the interpretation and application of FASB Accounting Standards Update 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* as well as the amendments issued since June 2016.[8] These updates are codified in ASC Topic 326, *Financial Instruments—Credit Losses* (FASB ASC Topic 326). FASB ASC Topic 326 applies to all institutions, regardless of size, that file regulatory reports for which the reporting requirements conform to U.S. GAAP.[9]

INTERAGENCY POLICY STATEMENT ON ALLOWANCES FOR CREDIT LOSSES

Purpose

The principles described in this policy statement are consistent with GAAP, applicable regulatory reporting requirements,[10] safe and sound banking practices, and the agencies' codified guidelines establishing standards for safety and soundness.[11]

The operational and managerial standards included in those guidelines, which address such matters as internal controls and information systems, an internal audit system, loan documentation, credit underwriting, asset quality, and earnings, should be appropriate for an institution's size and the nature, scope, and risk of its activities.

SCOPE

This policy statement describes the CECL methodology for determining the ACLs applicable to loans held-for-investment, net investments in leases, and held-to-maturity debt securities accounted for at amortized cost.[12] It also describes the estimation of the ACL for an available-for-sale debt security in accordance with FASB ASC Subtopic 326-30. This policy statement does not address or supersede existing agency requirements or guidance regarding appropriate due diligence in connection with the purchase or sale of assets or determining whether assets are permissible to be purchased or held by institutions.[13]

The CECL methodology described in FASB ASC Topic 326 applies to financial assets mea-

8. The FASB issued Accounting Standards Update (ASU) 2016-13 on June 16, 2016. The following updates were published after the issuance of ASU 2016-13: ASU 2018-19—*Codification Improvements to Topic 326, Financial Instruments—Credit Losses;* ASU 2019-04—*Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments;* ASU 2019-05—*Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief;* ASU 2019-10—*Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates;* and ASU 2019-11—*Codification Improvements to Topic 326, Financial Instruments—Credit Losses.* Additionally, institutions may refer to FASB Staff Q&A-Topic 326, No. 1, *Whether the Weighted-Average Remaining Maturity Method is an Acceptable Method to Estimate Expected Credit Losses,* and FASB Staff Q&A-Topic 326, No. 2, *Developing an Estimate of Expected Credit Losses on Financial Assets.*

9. U.S. branches and agencies of foreign banking organizations may choose to, but are not required to, maintain ACLs on a branch or agency level. These institutions should refer to the instructions for the FFIEC 002, *Report of Assets and Liabilities of U. S. Branches and Agencies of Foreign Banks;* SR-95-4, "Allowance for Loan and Lease Losses for U.S. Branches and Agencies of Foreign Banking Organizations"; and SR-95-42, "Allowance for Loan and Lease Losses for U.S. Branches and Agencies of Foreign Banking Organizations."

10. For FDIC-insured depository institutions, section 37(a) of the Federal Deposit Insurance Act (12 U.S.C. 1831n(a)) states that, in general, the accounting principles applicable to the Consolidated Reports of Condition and Income (Call Report) "shall be uniform and consistent with generally accepted accounting principles."

11. FDIC-insured depository institutions should refer to the *Interagency Guidelines Establishing Standards for Safety and Soundness* adopted by their primary federal regulator pursuant to section 39 of the Federal Deposit Insurance Act (12 U.S.C. 1831p-1): For state member banks, see Appendix D to 12 CFR part 208.

12. FASB ASC Topic 326 defines the amortized cost basis as the amount at which a financing receivable or investment is originated or acquired, adjusted for applicable accrued interest, accretion, or amortization of premium, discount, and net deferred fees or costs, collection of cash, write-offs, foreign exchange, and fair value hedge accounting adjustments.

13. See the final guidance attached to SR-12-15, "Investing in Securities without Reliance on Nationally Recognized Statistical Rating Organization Ratings." Under the Federal Reserve Act (12 U.S.C. 335) and the Federal Reserve's Regulation H (12 CFR 208.21), state member banks are subject to the same limitations and conditions with respect to the purchasing, selling, underwriting, and holding of investment securities and stock as national banks under the National Banking Act (12 U.S.C. 24 (Seventh)). Therefore, when investing in securities, state member banks must comply with the provisions of the National Banking Act and the OCC regulations in 12 CFR part 1.

sured at amortized cost, net investments in leases, and off-balance-sheet credit exposures (collectively, financial assets) including

- financing receivables, such as loans held-for-investment;
- overdrawn deposit accounts (i.e., overdrafts) that are reclassified as held-for-investment loans;
- held-to-maturity debt securities;
- receivables that result from revenue transactions within the scope of Topic 606 on revenue from contracts with customers and Topic 610 on other income, which applies, for example, to the sale of foreclosed real estate;
- reinsurance recoverables that result from insurance transactions within the scope of Topic 944 on insurance;
- receivables related to repurchase agreements and securities lending agreements within the scope of Topic 860 on transfers and servicing;
- net investments in leases recognized by a lessor in accordance with Topic 842 on leases; and
- off-balance-sheet credit exposures, including off-balance-sheet loan commitments, standby letters of credit, and financial guarantees not accounted for as insurance, and other similar instruments except for those within the scope of Topic 815 on derivatives and hedging.

The CECL methodology does not apply to the following financial assets:

- financial assets measured at fair value through net income, including those assets for which the fair value option has been elected;
- available-for-sale debt securities;[14]
- loans held-for-sale;
- policy loan receivables of an insurance entity;
- loans and receivables between entities under common control; and
- receivables arising from operating leases.

14. Refer to FASB ASC Subtopic 326-30, Financial Instruments—Credit Losses—Available-for-Sale Debt Securities (FASB ASC Subtopic 326-30).

MEASUREMENT OF ACLs FOR LOANS, LEASES, HELD-TO-MATURITY DEBT SECURITIES, AND OFF-BALANCE-SHEET CREDIT EXPOSURES

Overview of ACLs

An ACL is a valuation account that is deducted from, or added to, the amortized cost basis of financial assets to present the net amount expected to be collected over the contractual term of the assets.[15] In estimating the net amount expected to be collected, management should consider the effects of past events, current conditions, and reasonable and supportable forecasts on the collectibility of the institution's financial assets.[16] FASB ASC Topic 326 requires management to use relevant forward-looking information and expectations drawn from reasonable and supportable forecasts when estimating expected credit losses.

ACLs are evaluated as of the end of each reporting period. The methods used to determine ACLs generally should be applied consistently over time and reflect management's current expectations of credit losses. Changes to ACLs resulting from these periodic evaluations are recorded through increases or decreases to the related provisions for credit losses (PCLs). When available information confirms that specific loans, securities, other assets, or portions thereof, are uncollectible, these amounts should be promptly written off against the related ACLs.[17]

15. Consistent with FASB ASC Topic 326, an institution's determination of the contractual term should reflect the financial asset's contractual life adjusted for prepayments, renewal and extension options that are not unconditionally cancellable by the institution, and reasonably expected troubled debt restructurings. For more information, see the "Contractual Term of a Financial Asset" section in this policy statement.

16. Recoveries are a component of management's estimation of the net amount expected to be collected for a financial asset. Expected recoveries of amounts previously written off or expected to be written off that are included in ACLs may not exceed the aggregate amounts previously written off or expected to be written off. In some circumstances, the ACL for a specific portfolio or loan may be negative because the amount expected to be collected, including expected recoveries, exceeds the financial asset's amortized cost basis.

17. Consistent with FASB ASC Topic 326, this policy statement uses the verbs "write off" and "written off" and the noun "write-off." These terms are used interchangeably with "charge off," "charged off," and "charge-off," respectively, in

Estimating appropriate ACLs involves a high degree of management judgment and is inherently imprecise. An institution's process for determining appropriate ACLs may result in a range of estimates for expected credit losses. An institution should support and record its best estimate within the range of expected credit losses.

Collective Evaluation of Expected Losses

FASB ASC Topic 326 requires expected losses to be evaluated on a collective, or pool, basis when financial assets share similar risk characteristics. Financial assets may be segmented based on one characteristic, or a combination of characteristics.

Examples of risk characteristics relevant to this evaluation include, but are not limited to

- internal or external credit scores or credit ratings;
- risk ratings or classifications;
- financial asset type;
- collateral type;
- size;
- effective interest rate;
- term;
- geographical location;
- industry of the borrower; and
- vintage.

Other risk characteristics that may be relevant for segmenting held-to-maturity debt securities include issuer, maturity, coupon rate, yield, payment frequency, source of repayment, bond payment structure, and embedded options.

FASB ASC Topic 326 does not prescribe a process for segmenting financial assets for collective evaluation. Therefore, management should exercise judgment when establishing appropriate segments or pools. Management should evaluate financial asset segmentation on an ongoing basis to determine whether the financial assets in the pool continue to share similar risk characteristics. If a financial asset ceases to share risk characteristics with other assets in its segment, it should be moved to a different segment with assets sharing similar risk characteristics if such a segment exists.

the agencies' regulations, guidance, and regulatory reporting instructions.

If a financial asset does not share similar risk characteristics with other assets, expected credit losses for that asset should be evaluated individually. Individually evaluated assets should not be included in a collective assessment of expected credit losses.

Estimation Methods for Expected Credit Losses

FASB ASC Topic 326 does not require the use of a specific loss estimation method for purposes of determining ACLs. Various methods may be used to estimate the expected collectibility of financial assets, with those methods generally applied consistently over time. The same loss estimation method does not need to be applied to all financial assets. Management is not precluded from selecting a different method when it determines the method will result in a better estimate of ACLs.

Management may use a loss-rate method,[18] probability of default/loss given default (PD/LGD) method, roll-rate method, discounted cash flow method, a method that uses aging schedules, or another reasonable method to estimate expected credit losses. The selected method(s) should be appropriate for the financial assets being evaluated, consistent with the institution's size and complexity.

Contractual Term of a Financial Asset

FASB ASC Topic 326 requires an institution to measure estimated expected credit losses over the contractual term of its financial assets, considering expected prepayments. Renewals, extensions, and modifications are excluded from the contractual term of a financial asset for purposes of estimating the ACL unless there is a reasonable expectation of executing a troubled debt restructuring (TDR) or the renewal and extension options are part of the original or modified contract and are not unconditionally cancellable by the institution. If such renewal or extension options are present, management must evaluate

18. Various loss-rate methods may be used to estimate expected credit losses under the current expected credit loss methodology. These include the weighted-average-remaining-maturity method, vintage analysis, and the snapshot or open pool method.

the likelihood of a borrower exercising those options when determining the contractual term.

Historical Loss Information

Historical loss information generally provides a basis for an institution's assessment of expected credit losses. Historical loss information may be based on internal information, external information, or a combination of both. Management should consider whether the historical loss information may need to be adjusted for differences in current asset specific characteristics such as differences in underwriting standards, portfolio mix, or when historical asset terms do not reflect the contractual terms of the financial assets being evaluated as of the reporting date.

Management should then consider whether further adjustments to historical loss information are needed to reflect the extent to which current conditions and reasonable and supportable forecasts differ from the conditions that existed during the historical loss period. Adjustments to historical loss information may be quantitative or qualitative in nature and should reflect changes to relevant data (such as changes in unemployment rates, delinquency, or other factors associated with the financial assets).

Reasonable and Supportable Forecasts

When estimating expected credit losses, FASB ASC Topic 326 requires management to consider forward-looking information that is both reasonable and supportable and relevant to assessing the collectibility of cash flows. Reasonable and supportable forecasts may extend over the entire contractual term of a financial asset or a period shorter than the contractual term. FASB ASC Topic 326 does not prescribe a specific method for determining reasonable and supportable forecasts nor does it include bright lines for establishing a minimum or maximum length of time for reasonable and supportable forecast period(s). Judgment is necessary in determining an appropriate period(s) for each institution. Reasonable and supportable forecasts may vary by portfolio segment or individual forecast input. These forecasts may include data from internal sources, external sources, or a combination of both. Management is not required to search for all possible information nor incur undue cost and effort to collect data for its forecasts. However, reasonably available and relevant information should not be ignored in assessing the collectibility of cash flows. Management should evaluate the appropriateness of the reasonable and supportable forecast period(s) each reporting period, consistent with other inputs used in the estimation of expected credit losses.

Institutions may develop reasonable and supportable forecasts by using one or more economic scenarios. FASB ASC Topic 326 does not require the use of multiple economic scenarios; however, institutions are not precluded from considering multiple economic scenarios when estimating expected credit losses.

Reversion

When the contractual term of a financial asset extends beyond the reasonable and supportable period, FASB ASC Topic 326 requires reverting to historical loss information, or an appropriate proxy, for those periods beyond the reasonable and supportable forecast period (often referred to as the reversion period). Management may revert to historical loss information for each individual forecast input or based on the entire estimate of loss.

FASB ASC Topic 326 does not require the application of a specific reversion technique or use of a specific reversion period. Reversion to historical loss information may be immediate, occur on a straight-line basis, or use any systematic, rational method. Management may apply different reversion techniques depending on the economic environment or the financial asset portfolio. Reversion techniques are not accounting policy elections and should be evaluated for appropriateness each reporting period, consistent with other inputs used in the estimation of expected credit losses.

FASB ASC Topic 326 does not specify the historical loss information that is used in the reversion period. This historical loss information may be based on long-term average losses or on losses that occurred during a particular historical period(s). Management may use multiple historical periods that are not sequential. Management should not adjust historical loss information for existing economic conditions or expectations of future economic conditions for periods beyond the reasonable and supportable

period. However, management should consider whether the historical loss information may need to be adjusted for differences in current asset specific characteristics, such as differences in underwriting standards, portfolio mix, or when historical asset terms do not reflect the contractual terms of the financial assets being evaluated as of the reporting date.

Qualitative Factor Adjustments

The estimation of ACLs should reflect consideration of all significant factors relevant to the expected collectibility of the institution's financial assets as of the reporting date. Management may begin the expected credit loss estimation process by determining its historical loss information or obtaining reliable and relevant historical loss proxy data for each segment of financial assets with similar risk characteristics. Historical credit losses (or even recent trends in losses) generally do not, by themselves, form a sufficient basis to determine the appropriate levels for ACLs.

Management should consider the need to qualitatively adjust expected credit loss estimates for information not already captured in the loss estimation process. These qualitative factor adjustments may increase or decrease management's estimate of expected credit losses. Adjustments should not be made for information that has already been considered and included in the loss estimation process.

Management should consider the qualitative factors that are relevant to the institution as of the reporting date, which may include, but are not limited to

- the nature and volume of the institution's financial assets;
- the existence, growth, and effect of any concentrations of credit;
- the volume and severity of past due financial assets, the volume of nonaccrual assets, and the volume and severity of adversely classified or graded assets;[19]
- the value of the underlying collateral for loans that are not collateral-dependent;[20]
- the institution's lending policies and procedures, including changes in underwriting standards and practices for collections, write-offs, and recoveries;
- the quality of the institution's credit review function;
- the experience, ability, and depth of the institution's lending, investment, collection, and other relevant management and staff;
- the effect of other external factors, such as the regulatory, legal, and technological environments; competition; and events, such as natural disasters; and
- actual and expected changes in international, national, regional, and local economic and business conditions and developments in which the institution operates that affect the collectibility of financial assets.[21]

Management may consider the following additional qualitative factors specific to held-to-maturity debt securities as of the reporting date:[22]

- the effect of recent changes in investment strategies and policies;
- the existence and effect of loss allocation methods, the definition of default, the impact of performance and market value triggers, and credit and liquidity enhancements associated with debt securities;
- the effect of structural subordination and collateral deterioration on tranche performance of debt securities;
- the quality of underwriting for any collateral backing debt securities; and

19. For banks and savings associations, adversely classified or graded loans are loans rated "substandard" (or its equivalent) or worse under the institution's loan classification system. For credit unions, adversely graded loans are loans included in the more severely graded categories under the institution's credit grading system, i.e., those loans that tend to be included in the credit union's "watch lists." Criteria related to the classification of an investment security may be found in the interagency policy statement *Uniform Agreement on the Classification and Appraisal of Securities Held by Depository Institutions* issued by the FDIC, Board, and OCC in October 2013. *See* SR-13-18.

20. See the "Collateral-Dependent Financial Assets" section of this policy statement for more information on collateral-dependent loans.

21. Changes in economic and business conditions and developments included in qualitative factor adjustments are limited to those that affect the collectibility of an institution's financial assets and are relevant to the institution's financial asset portfolios. For example, an economic factor for current or forecasted unemployment at the national or state level may indicate a strong job market based on low national or state unemployment rates, but a local unemployment rate, which may be significantly higher, for example, because of the actual or forecasted loss of a major local employer may be more relevant to the collectibility of an institution's financial assets.

22. This list is not all-inclusive, and all of the factors listed may not be relevant to all institutions.

- the effect of legal covenants associated with debt securities.

Changes in the level of an institution's ACLs may not always be directionally consistent with changes in the level of qualitative factor adjustments due to the incorporation of reasonable and supportable forecasts in estimating expected losses. For example, if improving credit quality trends are evident throughout an institution's portfolio in recent years, but management's evaluation of reasonable and supportable forecasts indicates expected deterioration in credit quality of the institution's financial assets during the forecast period, the ACL as a percentage of the portfolio may increase.

Collateral-Dependent Financial Assets

FASB ASC Topic 326 describes a collateral-dependent asset as a financial asset for which the repayment is expected to be provided substantially through the operation or sale of the collateral when the borrower, based on management's assessment, is experiencing financial difficulty as of the reporting date. For regulatory reporting purposes, the ACL for a collateral-dependent loan is measured using the fair value of collateral, regardless of whether foreclosure is probable.[23]

When estimating the ACL for a collateral-dependent loan, FASB ASC Topic 326 requires the fair value of collateral to be adjusted to consider estimated costs to sell if repayment or satisfaction of the loan depends on the sale of the collateral. ACL adjustments for estimated costs to sell are not appropriate when the repayment of a collateral-dependent loan is expected from the operation of the collateral.

The fair value of collateral securing a collateral-dependent loan may change over time. If the fair value of the collateral as of the ACL evaluation date has decreased since the previous ACL evaluation date, the ACL should be increased to reflect the additional decrease in the fair value of the collateral. Likewise, if the fair value of the collateral has increased as of the ACL evaluation date, the increase in the fair value of the collateral is reflected through a reduction in the ACL. Any negative ACL that results is capped at the amount previously written off. Changes in the fair value of collateral described herein should be supported and documented through recent appraisals or evaluations.[24]

Troubled Debt Restructurings (TDRs)

Expected credit losses on financial assets modified in TDRs or reasonably expected to be modified in TDRs (collectively, TDRs) are estimated under the same CECL methodology that is applied to other financial assets measured at amortized cost.[25] Expected credit losses are evaluated on a collective basis, or, if a TDR does not share similar risk characteristics with other financial assets, on an individual basis.

FASB ASC Topic 326 allows an institution to use any appropriate loss estimation method to estimate ACLs for TDRs. However, there are circumstances when specific measurement methods are required. If a TDR, or a financial asset for which a TDR is reasonably expected, is collateral-dependent, the ACL is estimated using the fair value of collateral.

23. The agencies, at times, prescribe specific regulatory reporting requirements that fall within a range of acceptable practice under GAAP. These specific reporting requirements, such as the requirement for institutions to apply the practical expedient in ASC 326-20-35-5 for collateral-dependent loans, regardless of whether foreclosure is probable, have been adopted to achieve safety and soundness and other public policy objectives and to ensure comparability among institutions. The regulatory reporting requirement to apply the practical expedient for collateral-dependent financial assets is consistent with the agencies' long-standing practice for collateral-dependent loans, and it continues to be limited to collateral-dependent loans. It does not apply to other financial assets such as held-to-maturity debt securities that are collateral-dependent.

24. For more information on regulatory expectations related to the use of appraisals and evaluations, see the "Interagency Appraisal and Evaluation Guidelines" (SR-10-16) published on December 10, 2010. Insured depository institutions should also refer to the interagency regulations on appraisals adopted by their primary federal regulator. For state member banks, see 12 CFR parts 208 and 225.

25. A troubled debt restructuring is defined in ASC Subtopic 310-40, Receivables—Troubled Debt Restructurings by Creditors. The October 24, 2013, "Interagency Supervisory Guidance Addressing Certain Issues Related to Troubled Debt Restructurings" (SR-13-17) provides more information on troubled debt restructurings (TDRs), including, but not limited to, accrual status, regulatory credit risk grade, classification and write-off treatment, and capitalized costs. This interagency supervisory guidance remains applicable, unless affected by FASB ASC Topic 326. Information on the reporting of a subsequent restructuring of a TDR may be found in the instructions for the Call Report.

In addition, when management has a reasonable expectation of executing a TDR or if a TDR has been executed, the expected effect of the modification (e.g., term extension or interest rate concession) is included in the estimate of the ACLs. Management should determine, support, and document how it identifies and estimates the effect of a reasonably expected TDR and estimates the related ACL. The estimated effect of reasonably expected TDRs may be included in an institution's qualitative factor adjustments.

Purchased Credit-Deteriorated Assets

FASB ASC Topic 326 introduces the concept of purchased credit-deteriorated (PCD) assets. PCD assets are acquired financial assets that, at acquisition, have experienced more-than-insignificant deterioration in credit quality since origination. FASB ASC Topic 326 does not provide a prescriptive definition of more-than-insignificant credit deterioration. The acquiring institution's management should establish and document a reasonable process to consistently determine what constitutes a more-than-insignificant deterioration in credit quality.

When recording the acquisition of PCD assets, the amount of expected credit losses as of the acquisition date is added to the purchase price of the financial assets rather than recording these losses through PCLs. This establishes the amortized cost basis of the PCD assets. Any difference between the unpaid principal balance of the PCD assets and the amortized cost basis of the assets as of the acquisition date is the non-credit discount or premium. The initial ACL and non-credit discount or premium determined on a collective basis at the acquisition date are allocated to the individual PCD assets.

After acquisition, ACLs for PCD assets should be adjusted at each reporting date with a corresponding debit or credit to the PCLs to reflect management's current estimate of expected credit losses. The non-credit discount recorded at acquisition will be accreted into interest income over the remaining life of the PCD assets on a level-yield basis.

Financial Assets with Collateral Maintenance Agreements

Institutions may have financial assets that are secured by collateral (such as debt securities) and are subject to collateral maintenance agreements requiring the borrower to continuously replenish the amount of collateral securing the asset. If the fair value of the collateral declines, the borrower is required to provide additional collateral as specified by the agreement.

FASB ASC Topic 326 includes a practical expedient for financial assets with collateral maintenance agreements where the borrower is required to provide collateral greater than or equal to the amortized cost basis of the asset and is expected to continuously replenish the collateral. In those cases, management may elect the collateral maintenance practical expedient and measure expected credit losses for these qualifying assets based on the fair value of the collateral.[26] If the fair value of the collateral is greater than the amortized cost basis of the financial asset and management expects the borrower to replenish collateral as needed, management may record an ACL of zero for the financial asset when the collateral maintenance practical expedient is applied. Similarly, if the fair value of the collateral is less than the amortized cost basis of the financial asset and management expects the borrower to replenish collateral as needed, the ACL is limited to the difference between the fair value of the collateral and the amortized cost basis of the asset as of the reporting date when applying the collateral maintenance practical expedient.

Accrued Interest Receivable

FASB ASC Topic 326 includes accrued interest receivable in the amortized cost basis of a financial asset. As a result, accrued interest receivable is included in the amounts for which ACLs are estimated. Generally, any accrued interest receivable that is not collectible is written off against the related ACL.

26. For example, an institution enters into a reverse repurchase agreement with a collateral maintenance agreement. Management may not need to record the expected credit losses at each reporting date as long as the fair value of the security collateral is greater than the amortized cost basis of the reverse repurchase agreement. Refer to ASC 326-20-55-46 for more information.

FASB ASC Topic 326 permits a series of independent accounting policy elections related to accrued interest receivable that alter the accounting treatment described in the preceding paragraph. These elections are made upon adoption of FASB ASC Topic 326 and may differ by class of financing receivable or major security-type level. The available accounting policy elections[27] are

- management may elect not to measure ACLs for accrued interest receivable if uncollectible accrued interest is written off in a timely manner. Management should define and document its definition of a timely write-off.
- management may elect to write off accrued interest receivable by either reversing interest income, recognizing the loss through PCLs, or through a combination of both methods.
- management may elect to separately present accrued interest receivable from the associated financial asset in its regulatory reports and financial statements, if applicable. The accrued interest receivable is presented net of ACLs (if any).

Financial Assets with Zero Credit Loss Expectations

There may be certain financial assets for which the expectation of credit loss is zero after evaluating historical loss information, making necessary adjustments for current conditions and reasonable and supportable forecasts, and considering any collateral or guarantee arrangements that are not free-standing contracts. Factors to consider when evaluating whether expectations of zero credit loss are appropriate may include, but are not limited to

- a long history of zero credit loss;
- a financial asset that is fully secured by cash or cash equivalents;
- high credit ratings from rating agencies with no expected future downgrade;[28]
- principal and interest payments that are guaranteed by the U.S. government;
- The issuer, guarantor, or sponsor can print its own currency and the currency is held by other central banks as reserve currency; and
- The interest rate on the security is recognized as a risk-free rate.

A loan that is fully secured by cash or cash equivalents, such as certificates of deposit issued by the lending institution, would likely have zero credit loss expectations. Similarly, the guaranteed portion of a U.S. Small Business Administration (SBA) loan or security purchased on the secondary market through the SBA's fiscal and transfer agent would likely have zero credit loss expectations if these financial assets are unconditionally guaranteed by the U.S. government. Examples of held-to-maturity debt securities that may result in expectations of zero credit loss include U.S. Treasury securities as well as mortgage-backed securities issued and guaranteed by the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, and the Federal National Mortgage Association. Assumptions related to zero credit loss expectations should be included in the institution's ACL documentation.

Estimated Credit Losses for Off-Balance-Sheet Credit Exposures

FASB ASC Topic 326 requires that an institution estimate expected credit losses for off-balance-sheet credit exposures within the scope of FASB ASC Topic 326 over the contractual period during which the institution is exposed to credit risk. The estimate of expected credit losses should take into consideration the likelihood that funding will occur as well as the amount expected to be funded over the estimated remaining contractual term of the off-balance-sheet credit exposures. Management should not record an estimate of expected credit losses for off-balance-sheet exposures that are unconditionally cancellable by the issuer.

Management must evaluate expected credit losses for off-balance-sheet credit exposures as of each reporting date. While the process for estimating expected credit losses for these exposures is similar to the one used for on-balance-sheet financial assets, these estimated credit losses are not recorded as part of the ACLs

27. The accounting policy elections related to accrued interest receivable that are described in this paragraph also apply to accrued interest receivable for an available-for-sale debt security that, for purposes of identifying and measuring an impairment, exclude the applicable accrued interest from both the fair value and amortized cost basis of the securities.

28. Management should not rely solely on credit rating agencies but should also make its own assessment based on third party research, default statistics, and other data that may indicate a decline in credit rating.

because cash has not yet been disbursed to fund the contractual obligation to extend credit. Instead, these loss estimates are recorded as a liability, separate and distinct from the ACLs.[29] The amount needed to adjust the liability for expected credit losses for off-balance-sheet credit exposures as of each reporting date is reported in net income.

MEASUREMENT OF THE ACL FOR AVAILABLE-FOR-SALE DEBT SECURITIES

FASB ASC Subtopic 326-30, *Financial Instruments—Credit Losses—Available-for-Sale Debt Securities* (FASB ASC Subtopic 326-30) describes the accounting for expected credit losses associated with available-for-sale debt securities. Credit losses for available-for-sale debt securities are evaluated as of each reporting date when the fair value is less than amortized cost. FASB ASC Subtopic 326-30 requires credit losses to be calculated individually, rather than collectively, using a discounted cash flow method, through which management compares the present value of expected cash flows with the amortized cost basis of the security. An ACL is established, with a charge to the PCL, to reflect the credit loss component of the decline in fair value below amortized cost. If the fair value of the security increases over time, any ACL that has not been written off may be reversed through a credit to the PCL. The ACL for an available-for-sale debt security is limited by the amount that the fair value is less than the amortized cost, which is referred to as the fair value floor.

If management intends to sell an available-for-sale debt security or will more likely than not be required to sell the security before recovery of the amortized cost basis, the security's ACL should be written off and the amortized cost basis of the security should be written down to its fair value at the reporting date with any incremental impairment reported in income.

A change during the reporting period in the non-credit component of any decline in fair value below amortized cost on an available-for-sale debt security is reported in other comprehensive income, net of applicable income taxes.[30]

When evaluating impairment for available-for-sale debt securities, management may evaluate the amortized cost basis including accrued interest receivable, or may evaluate the accrued interest receivable separately from the remaining amortized cost basis. If evaluated separately, accrued interest receivable is excluded from both the fair value of the available-for-sale debt security and its amortized cost basis.[31]

DOCUMENTATION STANDARDS

For financial and regulatory reporting purposes, ACLs and PCLs must be determined in accordance with GAAP. ACLs and PCLs should be well documented, with clear explanations of the supporting analyses and rationale. Sound policies, procedures, and control systems should be appropriately tailored to an institution's size and complexity, organizational structure, business environment and strategy, risk appetite, financial asset characteristics, loan administration procedures, investment strategy, and management information systems.[32] Maintaining, analyzing, supporting, and documenting appropriate ACLs and PCLs in accordance with GAAP is consistent with safe and sound banking practices.

The policies and procedures governing an institution's ACL processes and the controls over these processes should be designed, implemented, and maintained to reasonably estimate expected credit losses for financial assets and off-balance-sheet credit exposures as of the reporting date. The policies and procedures should describe management's processes for evaluating the credit quality and collectibility of financial asset portfolios, including reasonable and supportable forecasts about changes in the credit quality of these portfolios, through a disciplined and consistently applied process that

29. The ACL associated with off-balance-sheet credit exposures is included in the "Allowance for credit losses on off-balance-sheet credit exposures" in *Schedule RC-G—Other Liabilities* in the Call Report.

30. Non-credit impairment on an available-for-sale debt security that is not required to be recorded through the ACL should be reported in other comprehensive income as described in ASC 326-30-35-2.

31. The accounting policy elections described in the "Accrued Interest Receivable" section of this policy statement apply to accrued interest receivable recorded for an available-for-sale debt security if an institution excludes applicable accrued interest receivable from both the fair value and amortized cost basis of the security for purposes of identifying and measuring impairment.

32. Management often documents policies, procedures, and controls related to ACLs in accounting or credit risk management policies, or a combination thereof.

results in an appropriate estimate of the ACLs. Management should review and, as needed, revise the institution's ACL policies and procedures at least annually, or more frequently if necessary.

An institution's policies and procedures for the systems, processes, and controls necessary to maintain appropriate ACLs should address, but not be limited to

- processes that support the determination and maintenance of appropriate levels for ACLs that are based on a comprehensive, well-documented, and consistently applied analysis of an institution's financial asset portfolios and off-balance-sheet credit exposures. The analyses and loss estimation processes used should consider all significant factors that affect the credit risk and collectibility of the financial asset portfolios;
- the roles, responsibilities, and segregation of duties of the institution's senior management and other personnel who provide input into ACL processes, determine ACLs, or review ACLs. These departments and individuals may include accounting, financial reporting, treasury, investment management, lending, special asset or problem loan workout teams, retail collections and foreclosure groups, credit review, model risk management, internal audit, and others, as applicable. Individuals with responsibilities related to the estimation of ACLs should be competent and well-trained, with the ability to escalate material issues;
- processes for determining the appropriate historical period(s) to use as the basis for estimating expected credit losses and approaches for adjusting historical credit loss information to reflect differences in asset specific characteristics as well as current conditions and reasonable and supportable forecasts that are different from conditions existing in the historical period(s);
- processes for determining and revising the appropriate techniques and periods to revert to historical credit loss information when the contractual term of a financial asset or off-balance-sheet credit exposure extends beyond the reasonable and supportable forecast period(s);
- processes for segmenting financial assets for estimating expected credit losses and periodically evaluating the segments to determine whether the assets continue to share similar risk characteristics;
- data capture and reporting systems that supply the quality and breadth of relevant and reliable information necessary, whether obtained internally or externally, to support and document the estimates of appropriate ACLs for regulatory reporting requirements and, if applicable, financial statement and disclosure requirements;
- the description of the institution's systematic and logical loss estimation process(es) for determining and consolidating expected credit losses to ensure that the ACLs are recorded in accordance with GAAP and regulatory reporting requirements. This may include, but is not limited to
  - management's judgments, accounting policy elections, and application of practical expedients in determining the amount of expected credit losses;
  - the process for determining when a loan is collateral-dependent;
  - the process for determining the fair value of collateral, if any, used as an input when estimating the ACL, including the basis for making any adjustments to the market value conclusion and how costs to sell, if applicable, are calculated;
  - the process for determining when a financial asset has zero credit loss expectations;
  - the process for determining expected credit losses when a financial asset has a collateral maintenance provision; and
  - a description of and support for qualitative factors that affect collectibility of financial assets;
- procedures for validating and independently reviewing the loss estimation process as well as any changes to the process from prior periods;
- policies and procedures for the prompt write-off of financial assets, or portions of financial assets, when available information confirms the assets to be uncollectible, consistent with regulatory reporting requirements; and
- the systems of internal controls used to confirm that the ACL processes are maintained and periodically adjusted in accordance with GAAP and interagency guidelines establishing standards for safety and soundness.

Internal control systems for the ACL estimation processes should

- provide reasonable assurance regarding the relevance, reliability, and integrity of data and

other information used in estimating expected credit losses;
- provide reasonable assurance of compliance with laws, regulations, and the institution's policies and procedures;
- provide reasonable assurance that the institution's financial statements are prepared in accordance with GAAP, and the institution's regulatory reports are prepared in accordance with the applicable instructions;
- include a well-defined and effective loan review and grading process that is consistently applied and identifies, measures, monitors, and reports asset quality problems in an accurate, sound and timely manner. The loan review process should respond to changes in internal and external factors affecting the level of credit risk in the portfolio; and
- include a well-defined and effective process for monitoring credit quality in the debt securities portfolio.

ANALYZING AND VALIDATING THE OVERALL MEASUREMENT OF ACLs

To ensure that ACLs are presented fairly, in accordance with GAAP and regulatory reporting requirements, and are transparent for regulatory examinations, management should document its measurements of the amounts of ACLs reported in regulatory reports and financial statements, if applicable, for each type of financial asset (e.g., loans, held-to-maturity debt securities, and available-for-sale debt securities) and for off-balance-sheet credit exposures. This documentation should include ACL calculations, qualitative adjustments, and any adjustments to the ACLs that are required as part of the internal review and challenge process. The board of directors, or a committee thereof, should review management's assessments of and justifications for the reported amounts of ACLs.

Various techniques are available to assist management in analyzing and evaluating the ACLs. For example, comparing estimates of expected credit losses to actual write-offs in aggregate, and by portfolio, may enable management to assess whether the institution's loss estimation process is sufficiently designed.[33] Further, comparing the estimate of ACLs to actual write-offs at the financial asset portfolio level allows management to analyze changing portfolio characteristics, such as the volume of assets or increases in write-off rates, which may affect future forecast adjustments. Techniques applied in these instances do not have to be complex to be effective but, if used, should be commensurate with the institution's size and complexity.

Ratio analysis may also be useful for evaluating the overall reasonableness of ACLs. Ratio analysis assists in identifying divergent or emerging trends in the relationship of ACLs to other factors, such as adversely classified or graded loans, past due and nonaccrual loans, total loans, historical gross write-offs, net write-offs, and historic delinquency and default trends for securities.

Comparing the institution's ACLs to those of peer institutions may provide management with limited insight into management's own ACL estimates. Management should apply caution when performing peer comparisons as there may be significant differences among peer institutions in the mix of financial asset portfolios, reasonable and supportable forecast period assumptions, reversion techniques, the data used for historical loss information, and other factors.

When used prudently, comparisons of estimated expected losses to actual write-offs, ratio analysis, and peer comparisons can be helpful as a supplemental check on the reasonableness of management's assumptions and analyses. Because appropriate ACLs are institution-specific estimates, the use of comparisons does not eliminate the need for a comprehensive analysis of financial asset portfolios and the factors affecting their collectibility.

When an appropriate expected credit loss framework has been used to estimate expected credit losses, it is inappropriate for the board of directors or management to make further adjustments to ACLs for the sole purpose of reporting ACLs that correspond to a peer group median, a target ratio, or a budgeted amount. Additionally, neither the board of directors nor management should further adjust ACLs beyond what has been appropriately measured and documented in accordance with FASB ASC Topic 326.

33. Institutions using models in the loss estimation process may incorporate a qualitative factor adjustment in the estimate of expected credit losses to capture the variance between modeled credit loss expectations and actual historical losses when the model is still considered predictive and fit for use. Institutions should monitor this variance, as well as changes to the variance, to determine if the variance is significant or material enough to warrant further changes to the model.

After analyzing ACLs, management should periodically validate the loss estimation process, and any changes to the process, to confirm that the process remains appropriate for the institution's size, complexity, and risk profile. The validation process should include procedures for review by a party with appropriate knowledge, technical expertise, and experience who is independent of the institution's credit approval and ACL estimation processes. A party who is independent of these processes could be from internal audit staff, a risk management unit of the institution independent of management supervising these processes, or a contracted third-party. One party need not perform the entire analysis as the validation may be divided among various independent parties.[34]

RESPONSIBILITIES OF THE BOARD OF DIRECTORS

The board of directors, or a committee thereof, is responsible for overseeing management's significant judgments and estimates used in determining appropriate ACLs. Evidence of the board of directors' oversight activities is subject to review by examiners. These activities should include, but are not limited to

- retaining experienced and qualified management to oversee all ACL and PCL activities;
- reviewing and approving the institution's written loss estimation policies, including any revisions thereto, at least annually;
- reviewing management's assessment of the loan review system and management's conclusion and support for whether the system is sound and appropriate for the institution's size and complexity;
- reviewing management's assessment of the effectiveness of processes and controls for monitoring the credit quality of the investment portfolio;
- reviewing management's assessments of and justifications for the estimated amounts reported each period for the ACLs and the PCLs;
- requiring management to validate, and, when appropriate, revise loss estimation methods periodically;
- approving the internal and external audit plans for the ACLs, as applicable; and
- reviewing any identified audit findings and monitoring resolution of those items.

RESPONSIBILITIES OF MANAGEMENT

Management is responsible for maintaining ACLs at appropriate levels and for documenting its analyses in accordance with the concepts and requirements set forth in GAAP, regulatory reporting requirements, and this policy statement. Management should evaluate the ACLs reported on the balance sheet as of the end of each period, and debit or credit the related PCLs to bring the ACLs to an appropriate level as of each reporting date. The determination of the amounts of the ACLs and the PCLs should be based on management's current judgments about the credit quality of the institution's financial assets and should consider known and expected relevant internal and external factors that significantly affect collectibility over reasonable and supportable forecast periods for the institution's financial assets as well as appropriate reversion techniques applied to periods beyond the reasonable and supportable forecast periods. Management's evaluations are subject to review by examiners.

In carrying out its responsibility for maintaining appropriate ACLs, management should adopt and adhere to written policies and procedures that are appropriate to the institution's size and the nature, scope, and risk of its lending and investing activities. These policies and procedures should address the processes and activities described in the "Documentation Standards" section of this policy statement.

Management fulfills other responsibilities that aid in the maintenance of appropriate ACLs. These activities include, but are not limited to

- establishing and maintaining appropriate governance activities for the loss estimation process(es). These activities may include reviewing and challenging the assumptions used in estimating expected credit losses and designing and executing effective internal controls over the credit loss estimation method(s);
- periodically performing procedures that compare credit loss estimates to actual write-offs,

34. Engaging the institution's external auditor to perform the validation process described in this paragraph when the external auditor also conducts the institution's independent financial statement audit, may impair the auditor's independence under applicable auditor independence standards and prevent the auditor from performing an independent audit of the institution's financial statements.

at the portfolio level and in aggregate, to confirm that amounts recorded in the ACLs were sufficient to cover actual credit losses. This analysis supports that appropriate ACLs were recorded and provides insight into the loss estimation process's ability to estimate expected credit losses. This analysis is not intended to reflect the accuracy of management's economic forecasts;
- periodically validating the loss estimation process(es), including changes, if any, to confirm it is appropriate for the institution; and
- engaging in sound risk management of third parties involved in ACL estimation process(es), if applicable, to ensure that the loss estimation processes are commensurate with the level of risk, the complexity of the third-party relationship and the institution's organizational structure.[35]

Additionally, if an institution uses loss estimation models in determining expected credit losses, management should evaluate the models before they are employed and modify the model logic and assumptions, as needed, to help ensure that the resulting loss estimates are consistent with GAAP and regulatory reporting requirements.[36] To demonstrate such consistency, management should document its evaluations and conclusions regarding the appropriateness of estimating credit losses with models. When used for multiple purposes within an institution, models should be specifically adjusted and validated for use in ACL loss estimation processes. Management should document and support any adjustments made to the models, the outputs of the models, and compensating controls applied in determining the estimated expected credit losses.

EXAMINER REVIEW OF ACLs

Examiners are expected to assess the appropriateness of management's loss estimation processes and the appropriateness of the institution's ACL balances as part of their supervisory activities. The review of ACLs, including the depth of the examiner's assessment, should be commensurate with the institution's size, complexity, and risk profile. As part of their supervisory activities, examiners generally assess the credit quality and credit risk of an institution's financial asset portfolios, the adequacy of the institution's credit loss estimation processes, the adequacy of supporting documentation, and the appropriateness of the reported ACLs and PCLs in the institution's regulatory reports and financial statements, if applicable. Examiners may consider the significant factors that affect collectibility, including the value of collateral securing financial assets and any other repayment sources. Supervisory activities may include evaluating management's effectiveness in assessing credit risk for debt securities (both prior to purchase and on an on-going basis). In reviewing the appropriateness of an institution's ACLs, examiners may

- evaluate the institution's ACL policies and procedures and assess the loss estimation method(s) used to arrive at overall estimates of ACLs, including the documentation supporting the reasonableness of management's assumptions, valuations, and judgments. Supporting activities may include, but, are not limited to
  - evaluating whether management has appropriately considered historical loss information, current conditions, and reasonable and supportable forecasts, including significant qualitative factors that affect the collectibility of the financial asset portfolios;
  - assessing loss estimation techniques, including loss estimation models, if applicable, as well as the incorporation of qualitative adjustments to determine whether the resulting estimates of expected credit losses are in conformity with GAAP and regulatory reporting requirements; and
  - evaluating the adequacy of the documentation and the effectiveness of the controls used to support the measurement of the ACLs;
- assess the effectiveness of board oversight as well as management's effectiveness in identifying, measuring, monitoring, and controlling credit risk. This may include, but is not limited to, a review of underwriting standards and practices, portfolio composition and trends, credit risk review functions, risk rating

35. Guidance on third party service providers may be found in SR-13-19/CA-13-21, "Guidance on Managing Outsourcing Risk."

36. See the interagency statement titled, "Guidance on Model Risk Management," (SR-11-7). The statement also addresses the incorporation of vendor products into an institution's model risk management framework following the same principles relevant to in-house models.

systems, credit administration practices, investment securities management practices, and related management information systems and reports;

- review the appropriateness and reasonableness of the overall level of the ACLs relative to the level of credit risk, the complexity of the institution's financial asset portfolios, and available information relevant to assessing collectibility, including consideration of current conditions and reasonable and supportable forecasts. Examiners may include a quantitative analysis (e.g., using management's results comparing expected write-offs to actual write-offs as well as ratio analysis) to assess the appropriateness of the ACLs. This quantitative analysis may be used to determine the reasonableness of management's assumptions, valuations, and judgments and understand variances between actual and estimated credit losses. Loss estimates that are consistently and materially over or under predicting actual losses may indicate a weakness in the loss forecasting process;
- review the ACLs reported in the institution's regulatory reports and in any financial statements and other key financial reports to determine whether the reported amounts reconcile to the institution's estimate of the ACLs. The consolidated loss estimates determined by the institution's loss estimation method(s) should be consistent with the final ACLs reported in its regulatory reports and financial statements, if applicable;
- verify that models used in the loss estimation process, if any, are subject to initial and ongoing validation activities. Validation activities include evaluating and concluding on the conceptual soundness of the model, including developmental evidence, performing ongoing monitoring activities, including process verification and benchmarking, and analyzing model output.[37] Examiners may review model validation findings, management's response to those findings, and applicable action plans to remediate any concerns, if applicable. Examiners may also assess the adequacy of the institution's processes to implement changes in a timely manner; and
- review the effectiveness of the institution's third-party risk management framework associated with the estimation of ACLs, if applicable, to assess whether the processes are commensurate with the level of risk, the complexity and nature of the relationship, and the institution's organizational structure. Examiners may determine whether management monitors material risks and deficiencies in third-party relationships, and takes appropriate action as needed.[38]

When assessing the appropriateness of ACLs, examiners should recognize that the processes, loss estimation methods, and underlying assumptions an institution uses to calculate ACLs require the exercise of a substantial degree of management judgment. Even when an institution maintains sound procedures, controls, and monitoring activities, an estimate of expected credit losses is not a single precise amount and may result in a range of acceptable outcomes for these estimates. This is a result of the flexibility FASB ASC Topic 326 provides institutions in selecting loss estimation methods and the wide range of qualitative and forecasting factors that are considered.

Management's ability to estimate expected credit losses should improve over the contractual term of financial assets as substantive information accumulates regarding the factors affecting repayment prospects. Examiners generally should accept an institution's ACL estimates and not seek adjustments to the ACLs, when management has provided adequate support for the loss estimation process employed, and the ACL balances and the assumptions used in the ACL estimates are in accordance with GAAP and regulatory reporting requirements. It is inappropriate for examiners to seek adjustments to ACLs for the sole purpose of achieving ACL levels that correspond to a peer group median, a target ratio, or a benchmark amount when management has used an appropriate expected credit loss framework to estimate expected credit losses.

If the examiner concludes that an institution's reported ACLs are not appropriate or determines that its ACL evaluation processes or loss estimation method(s) are otherwise deficient, these concerns should be noted in the report of examination and communicated to the board of directors and senior management.[39] Additional super-

37. See SR-11-7.

38. See SR-13-19/CA-13-21.

39. Each agency has formal and informal communication channels for sharing supervisory information with the board of directors and management depending on agency practices and the nature of the information being shared. These chan-

visory action may be taken based on the magnitude of the shortcomings in ACLs, including the materiality of any errors in the reported amounts of ACLs.

nels may include, but are not limited to, institution specific supervisory letters, letters to the industry, transmittal letters, visitation findings summary letters, targeted review conclusion letters, or official examination or inspection reports.

METHODOLOGY

1. Determine the methodology or methodologies used to measure the expected collectability of loans, and consider whether management maintains supporting documentation for the assumptions and estimates used. Methodologies include
   - loss-rate;
   - weighted-average-remaining-maturity (WARM);
   - probability of default/loss given default (PD/LGD);
   - roll-rate;
   - discounted cash flow;
   - a method that uses aging schedules;
   - fair value of the collateral (required for all collateral-dependent loans); and
   - another reasonable method to estimate expected credit losses.
2. Assess the methodology or methodologies used in determining an appropriate allowance for credit loss (ACL) for loans and leases. Determine whether the complexity and scope of the ACL evaluation process for loans and leases and the loan review system are appropriate given the institution's risk profile and complexity of lending activities. Consider whether management provides for the following:
   - an effective loan review system and controls;
   - data-capture and loan-reporting systems that provide meaningful information regarding portfolio risks to support and document the estimates of an appropriate ACL for loans and leases for regulatory reporting requirements and, if applicable, financial statement and disclosure requirements;
   - resources to appropriately evaluate loss-estimation models before they are implemented (when applicable) and to modify model assumptions as needed;
   - processes that support the determination and maintenance of an appropriate level for the ACL for loans and leases that are based on a comprehensive, well-documented, and consistently applied analysis of the loan and lease portfolio and off-balance-sheet credit exposures;
   - procedures for an independent third party to review and validate the ACL methodology for loans and leases;
   - processes for determining the appropriate historical period(s) to use as the basis for estimating expected credit losses and approaches for adjusting historical credit loss information to reflect differences in loan specific characteristics, as well as current conditions and reasonable and supportable forecasts that are different from conditions existing in the historical period(s);
   - procedures to incorporate relevant internal and external factors that significantly affect collectability over reasonable and supportable forecast periods as well as to apply appropriate reversion techniques to periods beyond reasonable and supportable forecast periods;
   - processes for determining and revising the appropriate techniques and periods to revert to historical credit loss information when the contractual term of loans and leases or off-balance-sheet credit exposures extends beyond the reasonable and supportable forecast period(s);
   - processes for segmenting the loan and lease portfolio for estimating expected credit losses and periodically evaluating the segments to determine whether the loans and leases continue to share similar risk characteristics; and
   - policies and procedures for the prompt write-off of loans and leases, or portions of loans and leases, when available information confirms the loans and leases to be uncollectible, consistent with regulatory reporting requirements.
3. Evaluate the criteria management uses to segment loans by similar risk characteristics. Generally accepted accounting principles (GAAP) require expected losses to be evaluated collectively when loans share similar risk characteristics. If a loan does not share similar risk characteristics with other loans, expected credit losses for that loan should be evaluated individually. Examples of risk characteristics include but are not limited to

- internal or external credit scores or credit ratings;
- risk ratings or classifications;
- loan type;
- collateral type;
- size;
- effective interest rate;
- term;
- geographical location;
- borrower industry; and
- vintage.

4. Evaluate the policies and procedures for the ACL for loans and leases, and assess the loss estimation method(s) used to arrive at estimates of the ACL for loans and leases, including the documentation supporting management's assumptions, valuations, and judgments. Determine whether management appropriately considers historical loss information, current conditions, and reasonable and supportable forecasts that are relevant to assessing the collectability of cash flows, including significant qualitative factors that affect the collectability of the loan and lease portfolio.
5. Determine the basis for evaluating groups of loans under ASC Subtopic 326-20 (CECL).[1]
   - Evaluate the calculation of historical loss rates for each segment.[2]
   - Review the time period and the method of calculation (e.g., simple average, weighted average) for reasonableness and consistency.[3]
   - Consider whether the historical loss information may need to be adjusted for differences in current loan specific characteristics, such as differences in underwriting standards, portfolio mix, or when historical credit terms do not reflect the contractual terms of the loans being evaluated as of the reporting date.
   - Consider the effect of new loan products or newly expanded markets.[4]
   - Consider how segmentation methods and historical loss-rate calculations reflect the extent to which current conditions and reasonable and supportable forecasts differ from the conditions that existed during the historical loss period.
   - Consider management's process for evaluating contractual terms of loans, considering expected prepayments.[5]
6. Determine whether management considered all significant factors relevant to the expected collectability of the loan and lease portfolio as of the reporting date and maintains documentation sufficient to support all material adjustments. Appropriate documentation generally addresses all material factors that are relevant to the institution at the reporting date.[6] Qualitative or environmental factors may include
   - the nature and volume of the loans and leases;
   - the existence, growth, and effect of concentrations of credit;
   - the volume and severity of past due loans, the volume of nonaccrual loans, and the volume and severity of adversely classified or graded loans;
   - the value of the underlying collateral for loans that are not collateral-dependent;
   - the institution's lending policies and procedures, including changes in underwriting standards and collections, charge-off, and recovery practices;
   - the quality of the institution's credit review system;

1. Adjustments to historical loss information may be positive or negative, quantitative or qualitative, and are supported by relevant data (e.g., changes in unemployment rates, delinquency, or other factors associated with the loans).

2. The granularity of segmentation and the method used to calculate loss rates affects 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.

3. Historical loss information may be based on internal information, external information, or a combination of both.

4. Historical loss rates for new products or loans in a new market may not be reliable given lack of seasoning or market awareness.

5. Renewals, extensions, and modifications are excluded from the contractual term of a loan for purposes of estimating the ACL for loans and leases unless there is a reasonable expectation of executing a troubled debt restructuring or the renewal and extension options are part of the original or modified contract and are not unconditionally cancellable by the institution.

6. Historical credit losses (or even recent trends in losses) generally do not, by themselves, form a sufficient basis to determine the appropriate level of the ACL for loans and leases. Management should consider the need to qualitatively adjust expected credit loss estimates for information not already captured in the loss estimation process. These qualitative factor adjustments may increase or decrease management's estimate of expected credit losses. Adjustments should not be made for information that has already been considered and included in the loss estimation process.

- the experience, ability, and depth of the lending, collection, and other relevant management and staff;
- the effect of other external factors, such as the regulatory, legal, and technological environments; competition; and events, such as natural disasters; and
- actual and expected changes in international, national, regional, and local economic and business conditions and developments in which the institution operates that affect the collectability of the loan and lease portfolio.

7. Determine how management estimates credit losses on a group of loans with similar risk characteristics when the institution does not have loss experience of its own for such a loan group.[7]
8. Confirm that loans evaluated individually are not included in a collective assessment of expected credit losses.
9. When the contractual term of a loan or lease extends beyond the reasonable and supportable period, determine whether management reverts to historical loss information, or an appropriate proxy, for those periods beyond the reasonable and supportable forecast period (often referred to as the reversion period).
10. If the ACL for loans and leases includes an *unallocated* amount, determine whether it conforms to GAAP and is properly documented and supported.
11. Where appropriate, determine whether the assessment of an appropriate level for the ACL for loans and leases includes an estimate of losses from transfer risk associated with cross-border lending activities.
12. Determine whether the ACL evaluation process for loans and leases is completed at least quarterly, and evaluate the documentation maintained to support management's assumptions, valuations, and judgments.

LEVEL OF THE ACL

13. Evaluate the level of the ALLL or ACL for loans and leases.
14. Determine whether the ALLL or ACL for loans and leases is appropriate based on a review of the institution's methodology coupled with examination findings as they relate to
    - loan classifications and internal watch list ratings;
    - effectiveness and reliability of the loan review system;
    - level and trend of past due and nonaccrual loans;
    - historical recovery of loan charge-offs;
    - lending policies and procedures, such as underwriting, collection, and charge-off and recovery practices; and
    - changes in the business cycle that necessitate qualitative or environmental factor adjustments to historical loss rates.
15. Consider reviewing applicable ratios as a preliminary check on the reasonableness of the ALLL or ACL for loans and leases.[8]
    - Evaluate trends compared to historical experience (e.g., the relationship of the ALLL or ACL) for loans and leases to adversely classified or graded loans, past due and nonaccrual loans, total loans, and historical gross and net charge-offs.
    - Analyze changes in key ratios from prior periods, assess the directional consistency of the ALLL or ACL for loans and leases in relation to these changes, and assess the appropriateness and reasonableness of the ALLL or ACL for loans and leases based on the collectability of the institution's loan portfolio in the current environment.
16. If the institution's loan review system is effective and the methodology for determining an appropriate ALLL or ACL for loans and leases is acceptable, compare the result of the institution's methodology to the actual ALLL or ACL for loans and leases balance. Ensure that the ALLL or ACL amount for loans and leases reported in the institution's regulatory reports and financial statements reconciles to the ALLL or ACL analysis for loans and leases. Assess the reasons for material differences.
17. Assess management's estimated credit losses, and, if necessary, consider the need for additional provision expenses based on examination findings. Consider whether
    - the loan review system is substan-

7. An institution may not have a loss history if the product is new or the institution is a de novo organization.

8. Ratio analysis can be a supplemental check on the reasonableness of management's assumptions and analysis. However, sole use of ratio analysis is insufficient for determining an appropriate level for the ALLL or ACL for loans and leases.

tially inaccurate;
- the bank is lending in stressed market conditions;
- credit administration and underwriting weaknesses have not been timely identified or addressed; or
- examination results reflect significant loan quality deterioration.

OVERVIEW

A supplemental interagency Policy Statement on Allowance for Loan and Lease Losses Methodologies and Documentation for Banks and Savings Institutions[1] was issued by the Federal Financial Institutions Examination Council (FFIEC) on July 2, 2001.[2] The policy statement clarifies the agencies' expectations for documentation that supports the ALLL methodology. Additionally, the statement emphasizes the need for appropriate ALLL policies and procedures, which should include an effective loan-review system. The guidance also provides examples of appropriate supporting documentation, as well as illustrations on how to implement this guidance. The policy statement, by its terms, applies only to depository institutions insured by the Federal Deposit Insurance Corporation. Examiners should apply the policy during the examination of state member banks and their subsidiaries. (See SR-01-17.)

The guidance requires that a financial institution's ALLL methodology be in accordance with generally accepted accounting principles (GAAP) and all outstanding supervisory guidance. An ALLL methodology should be systematic, consistently applied, and auditable. The methodology should be validated periodically and modified to incorporate new events or findings, as needed. The guidance specifies that management, under the direction of the board of directors, should implement appropriate procedures and controls to ensure compliance with the institution's ALLL policies and procedures. Institution management should (1) segment the portfolio to evaluate credit risks; (2) select loss rates that best reflect the probable loss; and (3) be responsive to changes in the organization, the economy, or the lending environment by changing the methodology, when appropriate. Furthermore, supporting information should be included on summary schedules, whenever feasible. Under this policy, institutions with less complex loan products or portfolios, such as community banks, may use a more streamlined approach to implement this guidance.

The policy statement is consistent with the Federal Reserve's long-standing policy to promote strong internal controls over an institution's ALLL process. In this regard, the new policy statement recognizes that determining an appropriate allowance involves a high degree of management judgment and is inevitably imprecise. Accordingly, an institution may determine that the amount of loss falls within a range. In accordance with GAAP, an institution should record its best estimate within the range of credit losses.

The policy statement is provided below. Some wording has been slightly modified for this manual, as indicated by asterisks or text enclosed in brackets. Some footnotes have also been renumbered.

2001 POLICY STATEMENT ON ALLL METHODOLOGIES AND DOCUMENTATION

Boards of directors of banks * * * are responsible for ensuring that their institutions have controls in place to consistently determine the allowance for loan and lease losses (ALLL) in accordance with the institutions' stated policies and procedures, generally accepted accounting principles (GAAP), and ALLL supervisory guidance.[3] To fulfill this responsibility, boards of directors instruct management to develop and maintain an appropriate, systematic, and consistently applied process to determine the amounts of the ALLL and provisions for loan losses. Management should create and implement suitable policies and procedures to communicate the ALLL process internally to all applicable personnel. Regardless of who develops and implements these policies, procedures, and underlying controls, the board of directors should assure themselves that the policies specifically address the institution's unique goals, systems, risk profile, personnel, and other resources before approving them. Additionally, by creating an environment that encourages personnel to fol-

1. See 66 *Fed. Reg.* 35629–35639 (July 6, 2001).

2. The guidance was developed in consultation with Securities and Exchange Commission staff, who are issuing parallel guidance in the form of Staff Accounting Bulletin No. 102.

3. The actual policy statement includes a bibliography that lists applicable ALLL GAAP guidance, interagency statements, and other reference materials that may assist in understanding and implementing an ALLL in accordance with GAAP. See the appendix for additional information on applying GAAP to determine the ALLL.

low these policies and procedures, management improves procedural discipline and compliance.

The determination of the amounts of the ALLL and provisions for loan and lease losses should be based on management's current judgments about the credit quality of the loan portfolio, and should consider all known relevant internal and external factors that affect loan collectibility as of the reporting date. The amounts reported each period for the provision for loan and lease losses and the ALLL should be reviewed and approved by the board of directors. To ensure the methodology remains appropriate for the institution, the board of directors should have the methodology periodically validated and, if appropriate, revised. Further, the audit committee[4] should oversee and monitor the internal controls over the ALLL-determination process.[5]

The [Federal Reserve and other] banking agencies[6] have long-standing examination policies that call for examiners to review an institution's lending and loan-review functions and recommend improvements, if needed. Additionally, in 1995 and 1996, the banking agencies adopted interagency guidelines establishing standards for safety and soundness, pursuant to section 39 of the Federal Deposit Insurance Act (FDI Act).[7] The interagency asset-quality guidelines and [this guidance will assist] an institution in estimating and establishing a sufficient ALLL supported by adequate documentation, as required under the FDI Act. Additionally, the guidelines require operational and managerial standards that are appropriate for an institution's size and the nature and scope of its activities.

For financial-reporting purposes, including regulatory reporting, the provision for loan and lease losses and the ALLL must be determined in accordance with GAAP. GAAP requires that allowances be well documented, with clear explanations of the supporting analyses and rationale.[8] This [2001] policy statement describes but does not increase the documentation requirements already existing within GAAP. Failure to maintain, analyze, or support an adequate ALLL in accordance with GAAP and supervisory guidance is generally an unsafe and unsound banking practice.[9]

This guidance [the 2001 policy statement] applies equally to all institutions, regardless of the size. However, institutions with less complex lending activities and products may find it more efficient to combine a number of procedures (e.g., information gathering, documentation, and internal-approval processes) while continuing to ensure the institution has a consistent and appropriate methodology. Thus, much of the supporting documentation required for an institution with more complex products or portfolios may be combined into fewer supporting documents in an institution with less complex products or portfolios. For example, simplified documentation can include spreadsheets, checklists, and other summary documents that many institutions currently use. Illustrations A and C provide specific examples of how less complex institutions may determine and document portions of their loan-loss allowance.

Documentation Standards

Appropriate written supporting documentation for the loan-loss provision and allowance facili-

4. All institutions are encouraged to establish audit committees; however, at small institutions without audit committees, the board of directors retains this responsibility.

5. Institutions and their auditors should refer to Statement on Auditing Standards No. 61, "Communication with Audit Committees" (as amended by Statement on Auditing Standards No. 90, "Audit Committee Communications"), which requires certain discussions between the auditor and the audit committee. These discussions should include items, such as accounting policies and estimates, judgments, and uncertainties that have a significant impact on the accounting information included in the financial statements.

6. The [other] banking agencies are the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

7. Institutions should refer to the guidelines *** for state member banks, appendix D to part 208***.

8. The documentation guidance within this [2001] policy statement is predominantly based upon the GAAP guidance from Financial Accounting Standards Board (FASB) Statement No. 5 and No. 114 (FAS 5 and FAS 114, respectively); Emerging Issues Task Force Topic No. D-80 (EITF Topic D-80 and attachments), "Application of FASB Statements No. 5 and No. 114 to a Loan Portfolio" (which includes the *Viewpoints* article—an article issued in 1999 by FASB staff providing guidance on certain issues regarding the ALLL, particularly on the application of FAS 5 and FAS 114 and how these statements interrelate); Chapter 7, "Credit Losses," the American Institute of Certified Public Accountants' (AICPA) Audit and Accounting Guide, *Banks and Savings Institutions,* 2000 edition (AICPA Audit Guide); and the Securities and Exchange Commission's (SEC) Financial Reporting Release No. 28 (FRR 28).

9. Failure to maintain adequate supporting documentation does not relieve an institution of its obligation to record an appropriate ALLL.

tates review of the ALLL process and reported amounts, builds discipline and consistency into the ALLL-determination process, and improves the process for estimating loan and lease losses by helping to ensure that all relevant factors are appropriately considered in the ALLL analysis. An institution should document the relationship between the findings of its detailed review of the loan portfolio and the amount of the ALLL and the provision for loan and lease losses reported in each period.[10]

At a minimum, institutions should maintain written supporting documentation for the following decisions, strategies, and processes:

- policies and procedures—
  - — over the systems and controls that maintain an appropriate ALLL and
  - — over the ALLL methodology
- loan-grading system or process
- summary or consolidation of the ALLL balance
- validation of the ALLL methodology
- periodic adjustments to the ALLL process

Policies and Procedures

Financial institutions utilize a wide range of policies, procedures, and control systems in their ALLL process. Sound policies should be appropriately tailored to the size and complexity of the institution and its loan portfolio.

In order for an institution's ALLL methodology to be effective, the institution's written policies and procedures for the systems and controls that maintain an appropriate ALLL should address but not be limited to—

- the roles and responsibilities of the institution's departments and personnel (including the lending function, credit review, financial reporting, internal audit, senior management, audit committee, board of directors, and others, as applicable) who determine, or review, as applicable, the ALLL to be reported in the financial statements;
- the institution's accounting policies for loans, [leases, and their loan losses], including the policies for charge-offs and recoveries and for estimating the fair value of collateral, where applicable;
- the description of the institution's systematic methodology, which should be consistent with the institution's accounting policies for determining its ALLL;[11] and
- the system of internal controls used to ensure that the ALLL process is maintained in accordance with GAAP and supervisory guidance.

An internal-control system for the ALLL-estimation process should—

- include measures to provide assurance regarding the reliability and integrity of information and compliance with laws, regulations, and internal policies and procedures;
- reasonably assure that the institution's financial statements (including regulatory reports) are prepared in accordance with GAAP and ALLL supervisory guidance;[12] and
- include a well-defined loan-review process containing—
  - — an effective loan-grading system that is consistently applied, identifies differing risk characteristics and loan-quality problems accurately and in a timely manner, and prompts appropriate administrative actions;
  - — sufficient internal controls to ensure that all relevant loan-review information is appropriately considered in estimating losses. This includes maintaining appropriate reports, details of reviews performed, and identification of personnel involved; and
  - — clear formal communication and coordination between an institution's credit-administration function, financial-reporting group, management, board of directors,

10. This position is fully described in the SEC's FRR 28, in which the SEC indicates that the books and records of public companies engaged in lending activities should include documentation of the rationale supporting each period's determination that the ALLL and provision amounts reported were adequate.

11. Further explanation is presented in the ''Methodology'' section that appears below.

12. In addition to the supporting documentation requirements for financial institutions, as described in interagency asset-quality guidelines, public companies are required to comply with the books and records provisions of the Securities Exchange Act of 1934 (Exchange Act). Under sections 13(b)(2)–(7) of the Exchange Act, registrants must make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets of the registrant. Registrants also must maintain internal accounting controls that are sufficient to provide reasonable assurances that, among other things, transactions are recorded as necessary to permit the preparation of financial statements in conformity with GAAP. See also SEC Staff Accounting Bulletin No. 99, *Materiality.*

and others who are involved in the ALLL-determination or -review process, as applicable (e.g., written policies and procedures, management reports, audit programs, and committee minutes).

Methodology

An ALLL methodology is a system that an institution designs and implements to reasonably estimate loan and lease losses as of the financial statement date. It is critical that ALLL methodologies incorporate management's current judgments about the credit quality of the loan portfolio through a disciplined and consistently applied process.

An institution's ALLL methodology is influenced by institution-specific factors, such as an institution's size, organizational structure, business environment and strategy, management style, loan-portfolio characteristics, loan-administration procedures, and management information systems. However, there are certain common elements an institution should incorporate in its ALLL methodology. A summary of common elements is provided in [the appendix].[13]

Documentation of ALLL Methodology in Written Policies and Procedures

An institution's written policies and procedures should describe the primary elements of the institution's ALLL methodology, including portfolio segmentation and impairment measurement. In order for an institution's ALLL methodology to be effective, the institution's written policies and procedures should describe the methodology—

- for segmenting the portfolio:
  - — how the segmentation process is performed (i.e., by loan type, industry, risk rates, etc.),
  - — when a loan-grading system is used to segment the portfolio:
    - the definitions of each loan grade,
    - a reconciliation of the internal loan grades to supervisory loan grades, and
    - the delineation of responsibilities for the loan-grading system.
- for determining and measuring impairment under FAS 114:
  - — the methods used to identify loans to be analyzed individually;
  - — for individually reviewed loans that are impaired, how the amount of any impairment is determined and measured, including—
    - procedures describing the impairment-measurement techniques available and
    - steps performed to determine which technique is most appropriate in a given situation.
  - — the methods used to determine whether and how loans individually evaluated under FAS 114, but not considered to be individually impaired, should be grouped with other loans that share common characteristics for impairment evaluation under FAS 5.
- for determining and measuring impairment under FAS 5—
  - — how loans with similar characteristics are grouped to be evaluated for loan collectibility (such as loan type, past-due status, and risk);
  - — how loss rates are determined (e.g., historical loss rates adjusted for environmental factors or migration analysis) and what factors are considered when establishing appropriate time frames over which to evaluate loss experience; and
  - — descriptions of qualitative factors (e.g., industry, geographical, economic, and political factors) that may affect loss rates or other loss measurements.

The supporting documents for the ALLL may be integrated in an institution's credit files, loan-review reports or worksheets, board of directors' and committee meeting minutes, computer reports, or other appropriate documents and files.

ALLL Under FAS 114

An institution's ALLL methodology related to FAS 114 loans begins with the use of its normal loan-review procedures to identify whether a loan is impaired as defined by the accounting standard. Institutions should document—

- the method and process for identifying loans to be evaluated under FAS 114 and

13. Also, refer to paragraph 7.05 of the AICPA Audit Guide.

- the analysis that resulted in an impairment decision for each loan and the determination of the impairment-measurement method to be used (i.e., present value of expected future cash flows, fair value of collateral less costs to sell, or the loan's observable market price).

Once an institution has determined which of the three available measurement methods to use for an impaired loan under FAS 114, it should maintain supporting documentation as follows:

- When using the present-value-of-expected-future-cash-flows method—
  - — the amount and timing of cash flows,
  - — the effective interest rate used to discount the cash flows, and
  - — the basis for the determination of cash flows, including consideration of current environmental factors and other information reflecting past events and current conditions.
- When using the fair-value-of-collateral method—
  - — how fair value was determined, including the use of appraisals, valuation assumptions, and calculations,
  - — the supporting rationale for adjustments to appraised values, if any,
  - — the determination of costs to sell, if applicable, and
  - — appraisal quality, and the expertise and independence of the appraiser.
- When using the observable-market-price-of-a-loan method—
  - — the amount, source, and date of the observable market price.

Illustration A describes a practice used by a small financial institution to document its FAS 114 measurement of impairment using a comprehensive worksheet.[14] [Examples 1 and 2 provide examples of applying and documenting impairment-measurement methods under FAS 114. Some loans that are evauluated individually for impairment under FAS 114 may be fully collateralized and therefore require no ALLL. Example 3 presents an institution whose loan portfolio includes fully collateralized loans. It describes the documentation maintained by that institution to support its conclusion that no ALLL was needed for those loans.]

14. The [referenced] illustrations are presented to assist institutions in evaluating how to implement the guidance provided in this document. The methods described in the illustrations may not be suitable for all institutions and are not considered required processes or actions. For additional descriptions of key aspects of ALLL guidance, a series of [numbered examples is provided. These examples were included in appendix A of the policy statement as questions and answers. The wording of the examples has been slightly modified for this format.]

Illustration A

Documenting an ALLL Under FAS 114

Comprehensive worksheet for the impairment-measurement process

A small institution utilizes a comprehensive worksheet for each loan being reviewed individually under FAS 114. Each worksheet includes a description of why the loan was selected for individual review, the impairment-measurement technique used, the measurement calculation, a comparison to the current loan balance, and the amount of the ALLL for that loan. The rationale for the impairment-measurement technique used (e.g., present value of expected future cash flows, observable market price of the loan, fair value of the collateral) is also described on the worksheet.

Example 1: ALLL Under FAS 114—Measuring and Documenting Impairment

Facts. Approximately one-third of Institution A's commercial loan portfolio consists of large-balance, nonhomogeneous loans. Due to their large individual balances, these loans meet the criteria under Institution A's policies and procedures for individual review for impairment under FAS 114. Upon review of the large-balance loans, Institution A determines that certain of the loans are impaired as defined by FAS 114.

Analysis. For the commercial loans reviewed under FAS 114 that are individually impaired, Institution A should measure and document the impairment on those loans. For those loans that are reviewed individually under FAS 114 and considered individually impaired, Institution A must use one of the methods for measuring impairment that is specified by FAS 114 (that is, the present value of expected future cash flows,

the loan's observable market price, or the fair value of collateral).

An impairment-measurement method other than the methods allowed by FAS 114 cannot be used. For the loans considered individually impaired under FAS 114, under the circumstances described above, it would not be appropriate for Institution A to choose a measurement method not prescribed by FAS 114. For example, it would not be appropriate to measure loan impairment by applying a loss rate to each loan based on the average historical loss percentage for all of its commercial loans for the past five years.

Institution A should maintain, as sufficient, objective evidence, written documentation to support its measurement of loan impairment under FAS 114. If it uses the present value of expected future cash flows to measure impairment of a loan, it should document (1) the amount and timing of cash flows, (2) the effective interest rate used to discount the cash flows, and (3) the basis for the determination of cash flows, including consideration of current environmental factors[15] and other information reflecting past events and current conditions. If Institution A uses the fair value of collateral to measure impairment, it should document (1) how it determined the fair value, including the use of appraisals, valuation assumptions and calculations; (2) the supporting rationale for adjustments to appraised values, if any, and the determination of costs to sell, if applicable; (3) appraisal quality; and (4) the expertise and independence of the appraiser. Similarly, Institution A should document the amount, source, and date of the observable market price of a loan, if that method of measuring loan impairment is used.

Example 2: ALLL Under FAS 114—Measuring Impairment for a Collateral-Dependent Loan

Facts. Institution B has a $10 million loan outstanding to Company X that is secured by real estate, which Institution B individually evaluates under FAS 114 due to the loan's size. Company X is delinquent in its loan payments under the terms of the loan agreement. Accordingly, Institution B determines that its loan to Company X is impaired, as defined by FAS 114. Because the loan is collateral dependent, Institution B measures impairment of the loan based on the fair value of the collateral. Institution B determines that the most recent valuation of the collateral was performed by an appraiser 18 months ago and, at that time, the estimated value of the collateral (fair value less costs to sell) was $12 million.

Institution B believes that certain of the assumptions that were used to value the collateral 18 months ago do not reflect current market conditions and, therefore, the appraiser's valuation does not approximate current fair value of the collateral. Several buildings, which are comparable to the real estate collateral, were recently completed in the area, increasing vacancy rates, decreasing lease rates, and attracting several tenants away from the borrower. Accordingly, credit-review personnel at Institution B adjust certain of the valuation assumptions to better reflect the current market conditions as they relate to the loan's collateral.[16] After adjusting the collateral-valuation assumptions, the credit-review department determines that the current estimated fair value of the collateral, less costs to sell, is $8 million. Given that the recorded investment in the loan is $10 million, Institution B concludes that the loan is impaired by $2 million and records an allowance for loan losses of $2 million.

Analysis. Institution B should maintain documentation to support its determination of the allowance for loan losses of $2 million for the loan to Company X. It should document that it measured impairment of the loan to Company X by using the fair value of the loan's collateral, less costs to sell, which it estimated to be $8 million. This documentation should include (1) the institution's rationale and basis for the $8 million valuation, including the revised valuation assumptions it used; (2) the valuation calculation; and (3) the determination of costs to sell, if applicable. Because Institution B arrived at the valuation of $8 million by modifying an earlier appraisal, it should document its rationale and basis for the changes it made to the valuation assumptions that resulted in the collateral value declining from $12 million 18

15. Question 16 in Exhibit D-80A of EITF Topic D-80 and [its] attachments indicates that environmental factors include existing industry, geographical, economic, and political factors.

16. When reviewing collateral-dependent loans, Institution B may often find it more appropriate to obtain an updated appraisal to estimate the effect of current market conditions on the appraised value instead of internally estimating an adjustment.

months ago to $8 million in the current period.[17]

Example 3: ALLL Under FAS 114—Fully Collateralized Loans

Facts. Institution C has $10 million in loans that are fully collateralized by highly rated debt securities with readily determinable market values. The loan agreement for each of these loans requires the borrower to provide qualifying collateral sufficient to maintain a loan-to-value ratio with sufficient margin to absorb volatility in the securities' market prices. Institution C's collateral department has physical control of the debt securities through safekeeping arrangements. In addition, Institution C perfected its security interest in the collateral when the funds were originally distributed. On a quarterly basis, Institution C's credit-administration function determines the market value of the collateral for each loan using two independent market quotes and compares the collateral value to the loan carrying value. If there are any collateral deficiencies, Institution C notifies the borrower and requests that the borrower immediately remedy the deficiency. Due in part to its efficient operation, Institution C has historically not incurred any material losses on these loans. Institution C believes these loans are fully collateralized and therefore does not maintain any ALLL balance for these loans.

Analysis. To adequately support its determination that no allowance is needed for this group of loans, Institution C must maintain the following documentation:

- The management summary of the ALLL must include documentation indicating that, in accordance with the institution's ALLL policy, (1) Institution C has verified the collateral protection on these loans, (2) no probable loss has been incurred, and (3) no ALLL is necessary.
- The documentation in Institution C's loan files must include (1) the two independent market quotes obtained each quarter for each loan's collateral amount, (2) the documents evidencing the perfection of the security interest in the collateral and other relevant supporting documents, and (3) Institution C's ALLL policy, including guidance for determining when a loan is considered "fully collateralized," which would not require an ALLL. Institution C's policy should require the following factors to be considered and fully documented:
  - — volatility of the market value of the collateral
  - — recency and reliability of the appraisal or other valuation
  - — recency of the institution's or third party's inspection of the collateral
  - — historical losses on similar loans
  - — confidence in the institution's lien or security position including appropriate—
    - type of security perfection (e.g., physical possession of collateral or secured filing);
    - filing of security perfection (i.e., correct documents and with the appropriate officials);
    - relationship to other liens; and
    - other factors as appropriate for the loan type.

17. In accordance with the FFIEC's *Federal Register* notice, Implementation Issues Arising from FASB No. 114, "Accounting by Creditors for Impairment of a Loan," published February 10, 1995 (60 *Fed. Reg.* 7966, February 10, 1995), impaired, collateral-dependent loans must be reported at the fair value of collateral, less costs to sell, in regulatory reports. This treatment is to be applied to all collateral-dependent loans, regardless of type of collateral.

ALLL Under FAS 5

Segmenting the Portfolio

For loans evaluated on a group basis under FAS 5, management should segment the loan portfolio by identifying risk characteristics that are common to groups of loans. Institutions typically decide how to segment their loan portfolios based on many factors, which vary with their business strategies as well as their information system capabilities. Smaller institutions that are involved in less complex activities often segment the portfolio into broad loan categories. This method of segmenting the portfolio is likely to be appropriate in only small institutions offering a narrow range of loan products. Larger institutions typically offer a more diverse and complex mix of loan products. Such institutions may start by segmenting the portfolio into major loan types but typically have more detailed information available that allows them to further segregate the portfolio into product-line segments based on the risk characteristics of each

portfolio segment. Regardless of the segmentation method used, an institution should maintain documentation to support its conclusion that the loans in each segment have similar attributes or characteristics.

As economic and other business conditions change, institutions often modify their business strategies, which may result in adjustments to the way in which they segment their loan portfolio for purposes of estimating loan losses. Illustration B presents an example in which an institution refined its segmentation method to more effectively consider risk factors and maintains documentation to support this change.

Illustration B

Documenting Segmenting Practices

Documenting a refinement in a segmentation method

An institution with a significant portfolio of consumer loans performed a review of its ALLL methodology. The institution had determined its ALLL based upon historical loss rates in the overall consumer portfolio. The ALLL methodology was validated by comparing actual loss rates (charge-offs) for the past two years to the estimated loss rates. During this process, the institution decided to evaluate loss rates on an individual-product basis (e.g., auto loans, unsecured loans, or home equity loans). This analysis disclosed significant differences in the loss rates on different products. With this additional information, the methodology was amended in the current period to segment the portfolio by product, resulting in a better estimation of the loan losses associated with the portfolio. To support this change in segmentation practice, the credit-review committee records contain the analysis that was used as a basis for the change and the written report describing the need for the change.

Institutions use a variety of documents to support the segmentation of their portfolios. Some of these documents include—

- loan trial balances by categories and types of loans,
- management reports about the mix of loans in the portfolio,
- delinquency and nonaccrual reports, and
- a summary presentation of the results of an internal or external loan-grading review.

Reports generated to assess the profitability of a loan-product line may be useful in identifying areas in which to further segment the portfolio.

Estimating Loss on Groups of Loans

Based on the segmentation of the loan portfolio, an institution should estimate the FAS 5 portion of its ALLL. For those segments that require an ALLL, [18] the institution should estimate the loan and lease losses, on at least a quarterly basis, based upon its ongoing loan-review process and analysis of loan performance. The institution should follow a systematic and consistently applied approach to select the most appropriate loss-measurement methods and support its conclusions and rationale with written documentation. Regardless of the methods used to measure losses, an institution should demonstrate and document that the loss-measurement methods used to estimate the ALLL for each segment are determined in accordance with GAAP as of the financial statement date.[19]

One method of estimating loan losses for groups of loans is through the application of loss rates to the groups' aggregate loan balances. Such loss rates typically reflect the institution's historical loan-loss experience for each group of loans, adjusted for relevant environmental factors (e.g., industry, geographical, economic, and political factors) over a defined period of time. If an institution does not have loss experience of its own, it may be appropriate to reference the loss experience of other institutions, provided that the institution demonstrates that the attributes of the loans in its portfolio segment are similar to those of the loans included in the portfolio of the institution providing the loss experience.[20] Institutions should maintain supporting docu-

18. An example of a loan segment that does not generally require an ALLL is loans that are fully secured by deposits maintained at the lending institution.

19. Refer to paragraph 8(b) of FAS 5***.

20. Refer to paragraph 23 of FAS 5.

mentation for the technique used to develop their loss rates, including the period of time over which the losses were incurred. If a range of loss is determined, institutions should maintain documentation to support the identified range and the rationale used for determining which estimate is the best estimate within the range of loan losses. An example of how a small institution performs a comprehensive historical loss analysis is provided as the first item in Illustration C.

Before employing a loss-estimation model, an institution should evaluate and modify, as needed, the model's assumptions to ensure that the resulting loss estimate is consistent with GAAP. In order to demonstrate consistency with GAAP, institutions that use loss-estimation models typically document the evaluation, the conclusions regarding the appropriateness of estimating loan losses with a model or other loss-estimation tool, and the support for adjustments to the model or its results.

In developing loss measurements, institutions should consider the impact of current environmental factors and then document which factors were used in the analysis and how those factors affected the loss measurements. Factors that should be considered in developing loss measurements include the following:[21]

- levels of and trends in delinquencies and impaired loans
- levels of and trends in charge-offs and recoveries
- trends in volume and terms of loans
- effects of any changes in risk-selection and underwriting standards, and other changes in lending policies, procedures, and practices
- experience, ability, and depth of lending management and other relevant staff
- national and local economic trends and conditions
- industry conditions
- effects of changes in credit concentrations

For any adjustment of loss measurements for environmental factors, the institution should maintain sufficient, objective evidence to support the amount of the adjustment and to explain why the adjustment is necessary to reflect current information, events, circumstances, and conditions in the loss measurements.

The second item in illustration C provides an example of how an institution adjusts its commercial real estate historical loss rates for changes in local economic conditions. Example 4 provides an example of maintaining supporting documentation for adjustments to portfolio-segment loss rates for an environmental factor related to an economic downturn in the borrower's primary industry. Example 5 describes one institution's process for determining and documenting an ALLL for loans that are not individually impaired but have characteristics indicating there are loan losses on a group basis.

21. Refer to paragraph 7.13 in the AICPA Audit Guide.

Illustration C

Documenting the Setting of Loss Rates

Comprehensive loss analysis in a small institution

A small institution determines its loss rates based on loss rates over a three-year historical period. The analysis is conducted by type of loan and is further segmented by originating branch office. The analysis considers charge-offs and recoveries in determining the loss rate. The institution also considers the loss rates for each loan grade and compares them to historical losses on similarly rated loans in arriving at the historical loss factor. The institution maintains supporting documentation for its loss-factor analysis, including historical losses by type of loan, originating branch office, and loan grade for the three-year period.

Adjustment of loss rates for changes in local economic conditions

An institution develops a factor to adjust loss rates for its assessment of the impact of changes in the local economy. For example, when analyzing the loss rate on commercial real estate loans, the assessment identifies changes in recent commercial building occupancy rates. The institution generally finds the occupancy statistics to be a good indicator of probable losses on these types of loans. The institution maintains documentation that summarizes the relationship between current occupancy rates and its loss experience.

Example 4: ALLL Under FAS 5—Adjusting Loss Rates

Facts. Institution D's lending area includes a metropolitan area that is financially dependent upon the profitability of a number of manufacturing businesses. These businesses use highly specialized equipment and significant quantities of rare metals in the manufacturing process. Due to increased low-cost foreign competition, several of the parts suppliers servicing these manufacturing firms declared bankruptcy. The foreign suppliers have subsequently increased prices, and the manufacturing firms have suffered from increased equipment maintenance costs and smaller profit margins. Additionally, the cost of the rare metals used in the manufacturing process increased and has now stabilized at double last year's price. Due to these events, the manufacturing businesses are experiencing financial difficulties and have recently announced downsizing plans.

Although Institution D has yet to confirm an increase in its loss experience as a result of these events, management knows that it lends to a significant number of businesses and individuals whose repayment ability depends upon the long-term viability of the manufacturing businesses. Institution D's management has identified particular segments of its commercial and consumer customer bases that include borrowers highly dependent upon sales or salary from the manufacturing businesses. Institution D's management performs an analysis of the affected portfolio segments to adjust its historical loss rates used to determine the ALLL. In this particular case, Institution D has experienced similar business and lending conditions in the past that it can compare to current conditions.

Analysis. Institution D should document its support for the loss-rate adjustments that result from considering these manufacturing firms' financial downturns. It should document its identification of the particular segments of its commercial and consumer loan portfolio for which it is probable that the manufacturing business' financial downturn has resulted in loan losses. In addition, it should document its analysis that resulted in the adjustments to the loss rates for the affected portfolio segments. As part of its documentation, Institution D should maintain copies of the documents supporting the analysis, including relevant newspaper articles, economic reports, economic data, and notes from discussions with individual borrowers.

Since Institution D has had similar situations in the past, its supporting documentation should also include an analysis of how the current conditions compare to its previous loss experiences in similar circumstances. As part of its effective ALLL methodology, a summary should be created of the amount and rationale for the adjustment factor, which management presents to the audit committee and board for their review and approval prior to the issuance of the financial statements.

Example 5: ALLL Under FAS 5—Estimating Losses on Loans Individually Reviewed for Impairment but Not Considered Individually Impaired

Facts. Institution E has outstanding loans of $2 million to Company Y and $1 million to Company Z, both of which are paying as agreed upon in the loan documents. The institution's ALLL policy specifies that all loans greater than $750,000 must be individually reviewed for impairment under FAS 114. Company Y's financial statements reflect a strong net worth, good profits, and ongoing ability to meet debt-service requirements. In contrast, recent information indicates Company Z's profitability is declining and its cash flow is tight. Accordingly, this loan is rated substandard under the institution's loan-grading system. Despite its concern, management believes Company Z will resolve its problems and determines that neither loan is individually impaired as defined by FAS 114.

Institution E segments its loan portfolio to estimate loan losses under FAS 5. Two of its loan portfolio segments are Segment 1 and Segment 2. The loan to Company Y has risk characteristics similar to the loans included in Segment 1, and the loan to Company Z has risk characteristics similar to the loans included in Segment 2.[22]

In its determination of the ALLL under FAS 5, Institution E includes its loans to Company Y

22. These groups of loans do not include any loans that have been individually reviewed for impairment under FAS 114 and determined to be impaired as defined by FAS 114.

and Company Z in the groups of loans with similar characteristics (i.e., Segment 1 for Company Y's loan and Segment 2 for Company Z's loan). Management's analyses of Segment 1 and Segment 2 indicate that it is probable that each segment includes some losses, even though the losses cannot be identified to one or more specific loans. Management estimates that the use of its historical loss rates for these two segments, with adjustments for changes in environmental factors, provides a reasonable estimate of the institution's probable loan losses in these segments.

Analysis. Institution E should adequately document an ALLL under FAS 5 for these loans that were individually reviewed for impairment but are not considered individually impaired. As part of its effective ALLL methodology, Institution E documents the decision to include its loans to Company Y and Company Z in its determination of its ALLL under FAS 5. It should also document the specific characteristics of the loans that were the basis for grouping these loans with other loans in Segment 1 and Segment 2, respectively. Institution E maintains documentation to support its method of estimating loan losses for Segment 1 and Segment 2, including the average loss rate used, the analysis of historical losses by loan type and by internal risk rating, and support for any adjustments to its historical loss rates. The institution also maintains copies of the economic and other reports that provided source data.

Consolidating the Loss Estimates

To verify that ALLL balances are presented fairly in accordance with GAAP and are auditable, management should prepare a document that summarizes the amount to be reported in the financial statements for the ALLL. The board of directors should review and approve this summary.

Common elements in such summaries include—

- the estimate of the probable loss or range of loss incurred for each category evaluated (e.g., individually evaluated impaired loans, homogeneous pools, and other groups of loans that are collectively evaluated for impairment);
- the aggregate probable loss estimated using the institution's methodology;
- a summary of the current ALLL balance;
- the amount, if any, by which the ALLL is to be adjusted;[23] and
- depending on the level of detail that supports the ALLL analysis, detailed subschedules of loss estimates that reconcile to the summary schedule.

Illustration D describes how an institution documents its estimated ALLL by adding comprehensive explanations to its summary schedule.

Generally, an institution's review and approval process for the ALLL relies upon the data provided in these consolidated summaries. There may be instances in which individuals or committees that review the ALLL methodology and resulting allowance balance identify adjustments that need to be made to the loss estimates to provide a better estimate of loan losses. These changes may be due to information not known at the time of the initial loss estimate (e.g., information that surfaces after determining and adjusting, as necessary, historical loss rates, or a recent decline in the marketability of property after conducting a FAS 114 valuation based upon the fair value of collateral). It is important that these adjustments are consistent with GAAP and are reviewed and approved by appropriate personnel. Additionally, the summary should provide each subsequent reviewer with an understanding of the support behind these adjustments. Therefore, management should document the nature of any adjustments and the underlying rationale for making the changes. This documentation should be provided to those making the final determination of the ALLL amount. Example 6 addresses the documentation of the final amount of the ALLL.

23. Subsequent to adjustments, there should be no material differences between the consolidated loss estimate, as determined by the methodology, and the final ALLL balance reported in the financial statements.

Illustration D
Summarizing Loss Estimates

Descriptive comments added to the consolidated ALLL summary schedule

To simplify the supporting documentation process and to eliminate redundancy, an institution adds detailed supporting information to its summary schedule. For example, this institution's board of directors receives, within the body of the ALLL summary schedule, a brief description of the institution's policy for selecting loans for evaluation under FAS 114. Additionally, the institution identifies which FAS 114 impairment-measurement method was used for each individually reviewed impaired loan. Other items on the schedule include a brief description of the loss factors for each segment of the loan portfolio, the basis for adjustments to loss rates, and explanations of changes in ALLL amounts from period to period, including cross-references to more detailed supporting documents.

Example 6: Consolidating the Loss Estimates—Documenting the Reported ALLL

Facts. Institution F determines its ALLL using an established systematic process. At the end of each period, the accounting department prepares a summary schedule that includes the amount of each of the components of the ALLL, as well as the total ALLL amount, for review by senior management, the credit committee, and, ultimately, the board of directors. Members of senior management and the credit committee meet to discuss the ALLL. During these discussions, they identify changes that are required by GAAP to be made to certain of the ALLL estimates. As a result of the adjustments made by senior management, the total amount of the ALLL changes. However, senior management (or its designee) does not update the ALLL summary schedule to reflect the adjustments or reasons for the adjustments. When performing their audit of the financial statements, the independent accountants are provided with the original ALLL summary schedule that was reviewed by senior management and the credit committee, as well as a verbal explanation of the changes made by senior management and the credit committee when they met to discuss the loan-loss allowance.

Analysis. Institution F's documentation practices supporting the balance of its loan-loss allowance, as reported in its financial statements, are not in compliance with existing documentation guidance. An institution must maintain supporting documentation for the loan-loss allowance amount reported in its financial statements. As illustrated above, there may be instances in which ALLL reviewers identify adjustments that need to be made to the loan-loss estimates. The nature of the adjustments, how they were measured or determined, and the underlying rationale for making the changes to the ALLL balance should be documented. Appropriate documentation of the adjustments should be provided to the board of directors (or its designee) for review of the final ALLL amount to be reported in the financial statements. For institutions subject to external audit, this documentation should also be made available to the independent accountants. If changes frequently occur during management or credit committee reviews of the ALLL, management may find it appropriate to analyze the reasons for the frequent changes and to reassess the methodology the institution uses.

Validating the ALLL Methodology

An institution's ALLL methodology is considered valid when it accurately estimates the amount of loss contained in the portfolio. Thus, the institution's methodology should include procedures that adjust loss-estimation methods to reduce differences between estimated losses and actual subsequent charge-offs, as necessary.

To verify that the ALLL methodology is valid and conforms to GAAP and supervisory guidance, an institution's directors should establish internal-control policies, appropriate for the size of the institution and the type and complexity of its loan products. These policies should include procedures for a review, by a party who is independent of the ALLL-estimation process, of the ALLL methodology and its application in order to confirm its effectiveness.

In practice, financial institutions employ numerous procedures when validating the reasonableness of their ALLL methodology and

determining whether there may be deficiencies in their overall methodology or loan-grading process. Examples are—

- a review of trends in loan volume, delinquencies, restructurings, and concentrations;
- a review of previous charge-off and recovery history, including an evaluation of the timeliness of the entries to record both the charge-offs and the recoveries;
- a review by a party that is independent of the ALLL-estimation process (this often involves the independent party reviewing, on a test basis, source documents and underlying assumptions to determine that the established methodology develops reasonable loss estimates); and
- an evaluation of the appraisal process of the underlying collateral. (This may be accomplished by periodically comparing the appraised value to the actual sales price on selected properties sold.)

Supporting Documentation for the Validation Process

Management usually supports the validation process with the workpapers from the ALLL-review function. Additional documentation often includes the summary findings of the independent reviewer. The institution's board of directors, or its designee, reviews the findings and acknowledges its review in its meeting minutes. If the methodology is changed based upon the findings of the validation process, documentation that describes and supports the changes should be maintained.

Appendix—Application of GAAP

[This appendix was designated appendix B in the policy statement.] An ALLL recorded pursuant to GAAP is an institution's best estimate of the probable amount of loans and lease-financing receivables that it will be unable to collect based on current information and events.[24] A creditor should record an ALLL when the criteria for accrual of a loss contingency as set forth in GAAP have been met. Estimating the amount of an ALLL involves a high degree of management judgment and is inevitably imprecise. Accordingly, an institution may determine that the amount of loss falls within a range. An institution should record its best estimate within the range of loan losses.[25]

Under GAAP, Statement of Financial Accounting Standards No. 5, "Accounting for Contingencies" (FAS 5), provides the basic guidance for recognition of a loss contingency, such as the collectibility of loans (receivables), when it is probable that a loss has been incurred and the amount can be reasonably estimated. Statement of Financial Accounting Standards No. 114, "Accounting by Creditors for Impairment of a Loan" (FAS 114) provides more specific guidance about the measurement and disclosure of impairment for certain types of loans.[26] Specifically, FAS 114 applies to loans that are identified for evaluation on an individual basis. Loans are considered impaired when, based on current information and events, it is probable that the creditor will be unable to collect all interest and principal payments due according to the contractual terms of the loan agreement.

For individually impaired loans, FAS 114 provides guidance on the acceptable methods to measure impairment. Specifically, FAS 114 states that when a loan is impaired, a creditor should measure impairment based on the present value of expected future principal and interest cash flows discounted at the loan's effective interest rate, except that as a practical expedient, a creditor may measure impairment based on a loan's observable market price or the fair value of collateral, if the loan is collateral dependent. When developing the estimate of expected future cash flows for a loan, an institution should

24. This appendix provides guidance on the ALLL and does not address allowances for credit losses for off-balance-sheet instruments (e.g., loan commitments, guarantees, and standby letters of credit). Institutions should record liabilities for these exposures in accordance with GAAP. Further guidance on this topic is presented in the American Institute of Certified Public Accountants' Audit and Accounting Guide, *Banks and Savings Institutions*, 2000 edition (AICPA Audit Guide). Additionally, this appendix does not address allowances or accounting for assets or portions of assets sold with recourse, which is described in Statement of Financial Accounting Standards No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities—a Replacement of FASB Statement No. 125" (FAS 140).

25. Refer to FASB Interpretation No. 14, "Reasonable Estimation of the Amount of a Loss," and Emerging Issues Task Force Topic No. D-80, "Application of FASB Statements No. 5 and No. 114 to a Loan Portfolio" (EITF Topic D-80).

26. EITF Topic D-80 includes additional guidance on the requirements of FAS 5 and FAS 114 and how they relate to each other.***

consider all available information reflecting past events and current conditions, including the effect of existing environmental factors. The following illustration provides an example of an institution estimating a loan's impairment when the loan has been partially charged off.

Illustration

Interaction of FAS 114 with an Adversely Classified Loan, Partial Charge-Off, and the Overall ALLL

An institution determined that a collateral-dependent loan, which it identified for evaluation, was impaired. In accordance with FAS 114, the institution established an ALLL for the amount that the recorded investment in the loan exceeded the fair value of the underlying collateral, less costs to sell.

Consistent with relevant regulatory guidance, the institution classified as "Loss," the portion of the recorded investment deemed to be the confirmed loss and classified the remaining recorded investment as "Substandard." For this loan, the amount classified "Loss" was less than the impairment amount (as determined under FAS 114). The institution charged off the "Loss" portion of the loan. After the charge-off, the portion of the ALLL related to this "Substandard" loan (1) reflects an appropriate measure of impairment under FAS 114, and (2) is included in the aggregate FAS 114 ALLL for all loans that were identified for evaluation and individually considered impaired. The aggregate FAS 114 ALLL is included in the institution's overall ALLL.

Large groups of smaller-balance homogeneous loans that are collectively evaluated for impairment are not included in the scope of FAS 114.[27] Such groups of loans may include, but are not limited to, credit card, residential mortgage, and consumer installment loans. FAS 5 addresses the accounting for impairment of these loans. Also, FAS 5 provides the accounting guidance for impairment of loans that are not identified for evaluation on an individual basis and loans that are individually evaluated but are not individually considered impaired. Institutions should ensure that they do not layer their loan-loss allowances. Layering is the inappropriate practice of recording in the ALLL more than one amount for the same probable loan loss. Layering can happen when an institution includes a loan in one segment, determines its best estimate of loss for that loan either individually or on a group basis (after taking into account all appropriate environmental factors, conditions, and events), and then includes the loan in another group, which receives an additional ALLL amount.[28]

While different institutions may use different methods, there are certain common elements that should be included in any loan-loss allowance methodology. Generally, an institution's methodology should—

- include a detailed analysis of the loan portfolio, performed on a regular basis;
- consider all loans (whether on an individual or group basis);
- identify loans to be evaluated for impairment on an individual basis under FAS 114 and segment the remainder of the portfolio into groups of loans with similar risk characteristics for evaluation and analysis under FAS 5;
- consider all known relevant internal and external factors that may affect loan collectibility;
- be applied consistently but, when appropriate, be modified for new factors affecting collectibility;
- consider the particular risks inherent in different kinds of lending;
- consider current collateral values (less costs to sell), where applicable;
- require that analyses, estimates, reviews, and other ALLL methodology functions be performed by competent and well-trained personnel;
- be based on current and reliable data;

27. In addition, FAS 114 does not apply to loans measured at fair value or at the lower of cost or fair value, leases, or debt securities.

28. According to the Federal Financial Institutions Examination Council's *Federal Register* notice, Implementation Issues Arising from FASB Statement No. 114, "Accounting by Creditors for Impairment of a Loan," published February 10, 1995, institution-specific issues should be reviewed when estimating loan losses under FAS 114. This analysis should be conducted as part of the evaluation of each individual loan reviewed under FAS 114 to avoid potential ALLL layering.

- be well documented, in writing, with clear explanations of the supporting analyses and rationale; and
- include a systematic and logical method to consolidate the loss estimates and ensure the ALLL balance is recorded in accordance with GAAP.[29]

A systematic methodology that is properly designed and implemented should result in an institution's best estimate of the ALLL. Accordingly, institutions should adjust their ALLL balance, either upward or downward, in each period for differences between the results of the systematic determination process and the unadjusted ALLL balance in the general ledger.[30]

29. Refer to paragraph 7.05 of the AICPA Audit Guide.

30. Institutions should refer to the guidance on materiality in SEC Staff Accounting Bulletin No. 99, *Materiality*.

The federal banking agencies[1] issued, in January 2012, "Interagency Supervisory Guidance on Allowance for Loan and Lease Losses Estimation Practices for Loans and Lines of Credit Secured by Junior Liens on 1–4 Family Residential Properties." The guidance was issued to address the allowance for loan and lease losses (ALLL) estimation practices for junior-lien loans and lines of credit (collectively, junior liens). (See SR-12-3.)

Domestic banking organizations that are supervised by the Federal Reserve are reminded to consider all credit quality indicators relevant to their junior liens. Generally, this information should include the delinquency status of senior liens associated with the institution's junior liens and whether the senior lien has been modified. Institutions should ensure that during the ALLL estimation process, sufficient information is gathered to adequately assess the probable loss incurred within junior-lien portfolios.

Based on the rapid growth in home equity lending during the 2003–2007 timeframe, a significant volume of home equity lines of credit (HELOCs) will be approaching the end of their draw periods within the next several years and will either convert to amortized loans or will start having principal due as a balloon payment. An institution with a significant number of HELOCs should ensure that its ALLL methodology appropriately captures the elevated borrower default risk associated with any upcoming payment shocks.

This 2012 ALLL guidance applies to institutions of all sizes. The guidance states that an institution should use reasonably available tools to determine the payment status of senior liens associated with its junior liens, such as credit reports, third-party services, or, in certain cases, a proxy. It is expected that large, complex institutions would find most tools reasonably available and would use proxies in limited circumstances.

The guidance does not add or modify existing regulatory reporting requirements issued by the agencies or current generally accepted accounting principles (GAAP). This guidance reiterates key concepts included in GAAP and existing supervisory guidance related to the ALLL. (See, for example, SR-01-17 and SR-06-17 and their attachments. See also sections 2070.1 and 2072.1.)

Institutions also are reminded to follow appropriate risk-management principles in managing junior-lien loans and lines of credit, including the May 2005 "Interagency Credit Risk Management Guidance for Home Equity Lending." (See SR-05-11 and section 2090.1.)

ALLL ESTIMATION PRACTICES FOR LOANS AND LINES OF CREDIT SECURED BY JUNIOR LIENS ON 1–4 FAMILY RESIDENTIAL PROPERTIES

Amidst continued uncertainty in the economy and the housing market, federally regulated financial institutions are reminded to monitor all credit quality indicators relevant to credit portfolios, including junior liens. While the following guidance specifically addresses junior liens, it contains principles that apply to estimating the ALLL for all types of loans. Institutions also are reminded to follow appropriate risk-management principles in managing junior-lien loans and lines of credit, including those in the May 2005 "Interagency Credit Risk Management Guidance for Home Equity Lending."

The December 2006 "Interagency Policy Statement on the Allowance for Loan and Lease Losses" (IPS) states: "Estimates of credit losses should reflect consideration of the significant factors that affect the collectibility of the portfolio as of the evaluation date."

The "Interagency Credit Risk Management Guidance for Home Equity Lending" states: "Financial institutions should establish an appropriate ALLL and hold capital commensurate with the riskiness of portfolios. In determining the ALLL adequacy, an institution should consider how the interest-only and draw features of HELOCs during the lines' revolving period could affect the loss curves for the HELOC portfolio. Those institutions engaging in programmatic subprime home equity lending or institutions that have higher risk products are expected to recognize the elevated risk of the activity when assessing capital and ALLL adequacy."

1. The federal banking agencies are the Board of Governors of the Federal Reserve System (Federal Reserve Board), the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), and the National Credit Union Administration (NCUA).

While the 2012 ALLL guidance specifically addresses junior liens, it contains principles that apply to estimating the ALLL for *all types* of loans.

Responsibilities of Management

Consideration of All Significant Factors

Institutions should ensure that during the ALLL estimation process sufficient information is gathered to adequately assess the probable loss incurred within junior-lien portfolios. Generally, this information should include the delinquency status of senior liens associated with the institution's junior liens and whether the senior lien loan has been modified. Institutions with significant holdings of junior liens should gather and analyze data on the associated senior-lien loans it owns or services. When an institution does not own or service the associated senior-lien loans, it should use reasonably available tools to determine the payment status of the senior-lien loans. Such tools include obtaining credit reports or data from third-party services to assist in matching an institution's junior liens with its associated senior liens. Additionally, an institution may, as a proxy, use the relevant performance data on similar senior liens it owns or services. An institution with an insignificant volume of junior-lien loans and lines of credit may use judgment when determining what information about associated senior liens not owned or serviced is reasonably available.

Institutions with significant holdings of junior liens should also periodically refresh other credit quality indicators the organization has deemed relevant about the collectibility of its junior liens, such as borrower credit scores and combined loan-to-value ratios (CLTVs), which include both the senior and junior liens. An institution should refresh relevant credit quality indicators as often as necessary considering economic and housing market conditions that affect the institution's junior-lien portfolio. As noted in SR-06-17, ''changes in the level of the ALLL should be directionally consistent with changes in the factors, taken as a whole, that evidence credit losses.'' For example, if declining credit quality trends in the factors relevant to either junior liens or their associated senior-lien loans are evident, the ALLL level as a percentage of the junior-lien portfolio should generally increase, barring unusual charge-off activity. Similarly, if improving credit quality trends are evident, the ALLL level as a percentage of the junior-lien portfolio should generally decrease.

Institutions routinely gather information for credit-risk management purposes, but some may not fully use that information in the allowance estimation process. Institutions should consider all reasonably available and relevant information in the allowance estimation process, including information obtained for credit-risk management purposes. Financial Accounting Standards Board Accounting Standards Codification (ASC) Topic 450 states that losses should be accrued by a charge to income if information available prior to issuance of the financial statements indicates that it is probable that an asset has been impaired. The 2006 IPS states, ''...estimates of credit losses should reflect consideration of all significant factors.'' (See SR-06-17 and its attachment.) Consequently, it is considered inconsistent with both GAAP and supervisory guidance to fail to gather and consider reasonably available and relevant information that would significantly affect management's judgment about the collectibility of the portfolio.[2]

Adequate Segmentation

Institutions normally segment their loan portfolio into groups of loans based on risk characteristics as part of the ALLL estimation process. Institutions with significant holdings of junior liens should ensure adequate segmentation within their junior-lien portfolio to appropriately estimate the allowance for high-risk segments within this portfolio. A lack of segmentation can result in an allowance established for the entire junior-lien portfolio that is lower than what the allowance would be if high-risk loans were segregated and grouped together for evaluation in one or more separate segments. The following credit quality indicators may be appropriate for use in identifying high-risk junior-lien portfolio segments:

2. ''Portfolio'' refers to loans collectively evaluated for impairment under ASC Topic 450; this supervisory guidance may also be applicable to junior-lien loans that are subject to measurement for impairment under ASC Subtopic 310-10, Receivables - Overall (formerly Statement of Financial Accounting Standards No. 114, *Accounting by Creditors for Impairment of a Loan*) and ASC Subtopic 310-30, Loans and Debt Securities Acquired with Deteriorated Credit Quality (formerly AICPA Statement of Position 03-3, *Accounting for Certain Loans or Debt Securities Acquired in a Transfer*).

- delinquency and modification status of an institution's junior liens
- delinquency and modification status of senior-lien loans associated with an institution's junior liens
- current borrower credit score
- current CLTV
- origination channel
- documentation type
- property type (for example, investor owned or owner-occupied)
- geographic location of property
- origination vintage
- HELOCs where the borrower is making only the minimum payment due
- HELOCs where current information and conditions indicate that the borrower will be subject to payment shock

In particular, institutions should ensure their ALLL methodology adequately incorporates the elevated borrower default risk associated with payment shocks due to (1) rising interest rates for adjustable rate junior liens, including HELOCs,[3] or (2) HELOCs converting from interest-only to amortizing loans. If the default rate of junior liens that have experienced payment shock is higher than the default rate of junior liens that have not experienced payment shock, an institution should determine whether it has a significant number of junior liens approaching their conversion to amortizing loans or approaching an interest rate adjustment date. If so, to ensure the institution's estimate of credit losses is not understated, it would be necessary to adjust historical default rates on these junior liens to incorporate the effect of payment shocks that, based on current information and conditions, are likely to occur.

Adequate segmentation of the junior-lien portfolio by risk factors should facilitate an institution's ability to track default rates and loss severity for high-risk segments and its ability to appropriately incorporate these data into the allowance estimation process.

3. Forecasts of future interest rate increases should not be included in the determination of the ALLL. However, if rates have risen since the last rate adjustment, the effect of the increase on the amount of the payment at the next rate adjustment should be considered.

Qualitative or Environmental Factor Adjustments

As noted in SR-06-17, institutions should adjust a loan group's historical loss rate for the effect of qualitative or environmental factors that are likely to cause estimated credit losses as of the evaluation date to differ from the group's historical loss experience. Institutions typically reflect the overall effect of these factors on a loan group as an adjustment that, as appropriate, increases or decreases the historical loss rate applied to the loan group. Alternatively, the effect of these factors may be reflected through separate standalone adjustments within the ASC Subtopic 450-20 component of the ALLL.

When an institution uses qualitative or environmental factors to estimate probable losses related to individual high-risk segments within the junior-lien portfolio, any adjustment to the historical loss rate or any separate standalone adjustment should be supported by an analysis that relates the adjustment to the characteristics of and trends in the individual risk segments. In addition, changes in the allowance allocation for junior liens should be directionally consistent with changes in the factors taken as a whole that evidence credit losses on junior liens, keeping in mind the characteristics of the institution's junior-lien portfolio.

Charge-Off and Nonaccrual Policies

Banking institutions should ensure that their charge-off policy on junior liens is in accordance with the June 2000 Uniform Retail Credit Classification and Account Management Policy. (See SR-00-8 and the appendix of section 2130.1.) As stated in SR-06-17, "when available information confirms that specific loans, or portions thereof, are uncollectible, these amounts should be promptly charged off against the ALLL."

Institutions also should ensure that income-recognition practices related to junior liens are appropriate. Consistent with GAAP and regulatory guidance, institutions are expected to have revenue recognition practices that do not result in overstating income. Placing a junior lien on nonaccrual, including a current junior lien, when payment of principal or interest in full is not expected is one appropriate method to ensure that income is not overstated. An institution's income-recognition policy should incorporate

management's consideration of all reasonably available information including, for junior liens, the performance of the associated senior liens as well as trends in other credit quality indicators. The policy should require that consideration of these factors takes place before foreclosure on the senior lien or delinquency of the junior lien. The policy should also explain how management's consideration of these factors affects income recognition prior to foreclosure on the senior lien or delinquency of the junior lien to ensure income is not overstated.

Responsibilities of Examiners

To the extent an institution has significant holdings of junior liens, examiners should assess the appropriateness of the institution's ALLL methodology and documentation related to these loans, and the appropriateness of the level of the ALLL established for this portfolio. As noted in SR-06-17, for analytical purposes, an institution should attribute portions of the ALLL to loans that it individually evaluates and determines to be impaired under ASC Subtopic 310-10 and to groups of loans that it evaluates collectively under ASC Subtopic 450-20. However, the ALLL is available to cover all charge-offs that arise from the loan portfolio.

Consistent with SR-06-17, in their review of the junior-lien portfolio, examiners should consider all significant factors that affect the collectibility of the portfolio. Examiners should take the following steps when reviewing the appropriateness of an institution's allowance that is established for junior liens:

- Evaluate the institution's ALLL policies and procedures and assess the methodology that management uses to arrive at an overall estimate of the ALLL for junior liens. This should include whether all significant qualitative or environmental factors that affect the collectibility of the portfolio (including those factors previously discussed) have been appropriately considered in accordance with GAAP.
- Review management's use of loss estimation models or other loss estimation tools to ensure that the resulting estimated credit losses are in conformity with GAAP.
- Review management's support for any qualitative or environmental factor adjustments to the allowance related to junior liens. Examiners should ensure that all relevant qualitative or environmental factors were considered and adjustments to historical loss rates for specific risk segments within the junior-lien portfolio are supported by an analysis that relates the adjustment to the characteristics of and trends in the individual risk segments.
- Review the interest income accounts associated with junior liens to ensure that the institution's net income is not overstated.

If the examiner concludes that the reported ALLL for junior liens is not appropriate or determines that the ALLL evaluation process is deficient, recommendations for correcting these deficiencies, including any examiner concerns regarding an appropriate level for the ALLL, should be noted in the report of examination. Examiners should cite any departures from GAAP and regulatory guidance, as applicable. Additional supervisory action may also be taken based on the magnitude of the observed shortcomings in the ALLL process.

ALLL Estimation Practices for Loans Secured by Junior Liens

Examination Objectives

Effective date April 2012

Section 2073.2

The examination objectives for an institution that has significant holdings of loans secured by junior liens are as follows:

1. To evaluate the appropriateness of the institution's methodology and documentation of the allowance for loan and lease losses (ALLL) related to these loans.
2. To ascertain whether the institution's policies, practices, procedures, and internal controls regarding the ALLL estimation practices for loans secured by junior liens are sufficient.
3. To determine whether the level of the ALLL is reasonable and adequate for the institution's volume of such loans outstanding.
4. To evaluate if the institution has fully considered and accounted for all significant qualitative or environmental factors that affect the collectability of such loans.
5. To ascertain whether the portfolio has been properly accounted in accordance with generally accepted accounting principles and whether all applicable supervisory and regulatory guidance, as well as statutory and regulatory requirements, have been adhered to.

1. To the extent an institution has significant holdings of loans secured by junior liens, assess the appropriateness of the institution's
   a. allowance for loan and lease loss (ALLL) methodology and documentation related to these loans, and
   b. ALLL level established for this portfolio.
2. During the examination's review of the of the junior-lien portfolio, consider all significant qualitative or environmental factors that affect the collectibility of the junior-lien portfolio and whether they have been appropriately considered in accordance with generally accepted accounting principles (GAAP).
3. Perform the following steps when reviewing the appropriateness of the institution's ALLL that is established for junior liens:
   a. Evaluate the institution's ALLL policies and procedures and assess the methodology that management uses to arrive at an overall estimate of the ALLL for junior liens.
   b. Review management's use of loss-estimation models or other loss-estimation tools to ensure that the resulting estimated credit losses are in conformity with GAAP.
   c. Review management's support for any qualitative or environmental factor adjustments to the ALLL related to junior liens. Ensure that all relevant qualitative or environmental factors were considered and adjustments to historical loss rates for specific risk segments within the junior-lien portfolio are supported by an analysis that relates the adjustment to the characteristics of and trends in the individual risk segments.
   d. Review the interest income accounts associated with junior liens to ensure that the institution's net income is not overstated.
4. Provide comments in the examination report when the ALLL for junior liens is not appropriate or if the ALLL evaluation process is deficient. Include recommendations for correcting these deficiencies and any concerns regarding an appropriate level for the ALLL.
5. Cite in the examination report any departures from GAAP and regulatory guidance, as applicable.

INTRODUCTION

This section will provide examiners with a fundamental understanding of secured and unsecured commercial and industrial loans, loan evaluation and coverage techniques, the key principles for assessing credit quality, minimum documentation standards for loan line sheets, and basic bankruptcy law, as well as an overview of sections 23A and 23B of the Federal Reserve Act and tie-in arrangements. Other sections of this manual discuss more specific types of lending.

The term "commercial and industrial loan" is commonly used to designate loans to a corporation, commercial enterprise, or joint venture that are not ordinarily maintained in either the real estate or consumer installment loan portfolios. Generally, commercial loans are the largest asset concentration of a state member bank, offer the most complexity, and require the greatest commitment from bank management to monitor and control risks. Proper management of these assets requires a clearly articulated credit-policy that imposes discipline and sound loan administration. Since lenders are subject to pressures related to productivity and competition, they may be tempted to relax prudent credit-underwriting standards to remain competitive in the marketplace, thus increasing the potential for risk. Examiners need to understand the unique characteristics of the varying types of commercial and industrial loans, as well as how to properly analyze their quality.

Commercial loans are extended on a secured or unsecured basis with a wide range of purposes, terms, and maturities. While the types of commercial and industrial loans can vary widely depending on the purpose of loans made and market characteristics where the bank operates, most commercial and industrial loans will primarily be made in the form of a seasonal or working-capital loan, term business loan, or loan to an individual for a business purpose.

PRIMARY TYPES OF COMMERCIAL AND INDUSTRIAL LOANS

Seasonal or Working-Capital Loans

Seasonal or working-capital loans provide a business with short-term financing for inventory, receivables, the purchase of supplies, or other operating needs during the business cycle. These types of loans are often appropriate for businesses that experience seasonal or short-term peaks in current assets and current liabilities, such as a retailer who relies heavily on a holiday season for sales or a manufacturing company that specializes in summer clothing. These types of loans are often structured in the form of an advised line of credit or a revolving credit. An advised revocable line of credit is a revocable commitment by the bank to lend funds up to a specified period of time, usually one year. Lines of credit are generally reviewed annually by the bank, do not have a fixed repayment schedule, and may not require fees or compensating balances. In the case of unadvised lines of credit, the bank has more control over advances and may terminate the facility at any time, depending on state law or legal precedents. A revolving credit is valid for a stated period of time and does not have a fixed repayment schedule, but usually it has a required fee. The lender has less control over a revolving credit since there is an embedded guarantee to make advances within the prescribed limits of the loan agreement. The borrower may receive periodic advances under the line of credit or the revolving credit. Repayment of the loans is generally accomplished through conversion or turnover of short-term assets. Interest payments on seasonal loans are usually paid throughout the term of the loan, such as monthly or quarterly.

Seasonal or working-capital loans are intended to be repaid through the cash flow derived from converting the financed assets to cash. The structure of the loans can vary, but they should be closely tied to the timing of the conversion of the financed assets. In most cases, seasonal or working-capital facilities are renewable at maturity, are for a one-year term, and include a clean-up requirement for a period sometime during the low point or contraction phase of the business cycle. The clean-up period is a specified period (usually 30 days) during the term of

the loan in which the borrower is required to pay off the loan. While this requirement is becoming less common, it provides the bank with proof that the borrower is not dependent on the lender for permanent financing. It is important to note, however, that an expanding business may not be able to clean up its facility since it may be increasing its current assets.

Analysis of Seasonal and Working-Capital Loans

The analysis of a seasonal loan is best accomplished by a monthly or quarterly review of a company's balance sheet and income statements to identify the peak and contraction phases of the business cycle. The lender should know when the peak and contraction phases are, and the loan should be structured accordingly. The lender's primary objective is to determine whether the advances are being used for the intended purposes (inventories or payables) and not for the acquisition of fixed assets or payments on other debts. Repayments on the facility should also be consistent with the conversion of assets. If the borrower has other loan facilities at the bank, all credit facilities should be reviewed at the same time to ensure that the activity with the seasonal or working-capital facility is not linked to other loans in the bank. Projections of sources and uses of funds are also a valuable tool for reviewing a seasonal or working-capital line of credit and determining the sales cycle.

Quarterly balance-sheet and income statements are very helpful when a comparison is made with the original projections. Other helpful information can be obtained from a review of an aging of accounts receivable for delinquencies and concentrations, a current list of inventory, an accounts-payable aging, and accruals made during the quarter. This information can be compared with the outstanding balance of the facility to ensure that the loan is not overextended and that the collateral margins are consistent with borrowing-base parameters. A borrowing base is the amount the lender is willing to advance against a dollar value of pledged collateral; for example, a bank will only lend up to a predetermined specified percentage of total outstanding receivables less all past-due accounts more than a certain number of days delinquent. A borrowing-base certificate should be compiled at least monthly or more often during peak activity in the facility. When reviewing seasonal loans, examiners should remember that a bank relies heavily on inventory as collateral in the beginning of a company's business cycle and on receivables toward the end of the business cycle. However, in traditional working-capital loans, greater emphasis is usually placed on accounts receivable as collateral throughout the loan's tenure.

Normally, a bank is secured by a perfected blanket security interest on accounts receivable, inventory, and equipment and on the proceeds from the turnover of these assets. Well-capitalized companies with a good history of seasonal payout or cleanup may be exceptions. An annual lien search, however, would be prudent under this type of lending relationship to detect any purchase-money security interest that may have occurred during the business cycle.

The following are potential problems associated with working-capital and seasonal loans:

- *Working-capital advances used for funding losses.* A business uses advances from a revolving line of credit to fund business losses, including the funding of wages, business expenses, debt service, or any other cost not specifically associated with the intended purpose of the facility.
- *Working-capital advances funding long-term assets.* A business will use working-capital funds to purchase capital assets that are normally associated with term business loans.
- *Trade creditors not paid out at end of business cycle.* While the bank may be paid out, some trade creditors may not get full repayment. This can cause a strained relationship as unpaid trade creditors may be less willing to provide financing or offer favorable credit terms in the future. In turn, the business will become more reliant on the bank to support funding needs that were previously financed by trade creditors.
- *Overextension of collateral.* The business does not have the collateral to support the extension of credit, causing an out-of-borrowing-base situation. Examiners should review borrowing-base certificates to verify that coverage meets the prescribed limitations established by the bank's credit policy for the specific asset being financed.
- *Value of inventory declines.* If a business does not pay back the bank after inventory is

converted to cash or accounts receivable, the value of the inventory declines. Other causes of inventory devaluation include obsolescence; a general economic downturn; or, in the case of a commodity, market volatility. Declines in inventory value will commonly put a working-capital facility in an out-of-borrowing-base situation and require the excess debt to be amortized and repaid through future profits of the business.

- *Collectibility of accounts receivable declines.* The increasingly past-due status of accounts receivable or deteriorating credit quality of account customers both result in the noncollection of receivables. This can also cause an out-of-borrowing-base situation for the lending institution.
- *Working-capital advances used to fund long-term capital.* Funds may be inappropriately used to repurchase company stock, pay off subordinated debt holders, or even pay dividends on capital stock.

These situations may cause a loan balance to be remaining at the end of the business cycle. If this should occur, the bank generally has one of three options: (1) Require the unpaid balance to be amortized. This option is, however, dependent on the ability of the business to repay the debt through future profits. (2) Request the borrower to find another lender or require an infusion of capital by the borrower. This is not always a feasible option because of the probable weakened financial condition of the business and ownership under these circumstances. (3) Liquidate the collateral. Foreclosing on the collateral should only be executed when it becomes obvious that the business can no longer function as a going concern. The problem with this option is that once the bank discovers that the business is no longer a viable concern, realizing the full value of the collateral is in jeopardy. The need to resort to any of these options may prompt criticism of the credit.

Term Business Loans

Term business loans are generally granted at a fixed or variable rate of interest, have a maturity in excess of one year, and are intended to provide an organization with the funds needed to acquire long-term assets, such as physical plants and equipment, or finance the residual balance on lines of credit or long-term working capital. Term loans are repaid through the business's cash flow, according to a fixed-amortization schedule, which can vary based on the cash-flow expectations of the underlying asset financed or the anticipated profitability or cash flow of the business. Term business loans involve greater risk than short-term advances because of the length of time the credit is extended. As a result of this greater risk, term loans are often secured. Loan interest may be payable monthly, quarterly, semiannually, or annually.

In most cases, the terms of these loans are detailed in formal loan agreements with affirmative and negative covenants that place certain conditions on the borrower throughout the term of the loan. Generally, loan agreements substantially enhance a borrower/banker relationship because they encourage and promote more frequent communication between the parties. In affirmative covenants, the borrower pledges to fulfill certain requirements, such as maintain adequate insurance coverage, make timely loan repayments, or ensure the financial stability of the business. Negative or restrictive covenants prohibit or require the borrower to refrain from certain practices, such as selling or transferring assets, defaulting, falling below a minimum debt coverage ratio, exceeding a maximum debt-to-equity ratio, or taking any action that may diminish the value of collateral or impair the collectibility of the loan. Covenants should not be written so restrictively that the borrower is constantly in default over trivial issues; however, violations should be dealt with immediately to give credibility to the agreement. Violations of these covenants can often result in acceleration of the debt maturity. A formal loan agreement is most often associated with longer-term loans. If a formal agreement does not exist, the term loans should be written with shorter maturities and balloon payments to allow more frequent review by bank management.

Analysis of Term Business Loans

While a seasonal or working-capital loan analysis emphasizes the balance sheet, the analysis of term loans will focus on both the balance sheet and the income statement. Because a term loan is repaid from excess cash flow, the long-term viability of the business is critical in determining the overall quality of the credit. In evaluat-

ing long-term earnings, the examiner must develop a fundamental understanding of the company's industry and competitive position in the marketplace. Most of the analysis will be conducted based on the historical performance of the business and its history of making payments on its debt. Any historical record of inconsistencies or inability to perform on existing debt should prompt an in-depth review to determine the ability of the borrower to meet the loan's contractual agreements. One of the most critical determinations that should be made when evaluating term debt is whether the term of the debt exceeds the useful life of the underlying asset being financed.

While cash flow of the business is the primary source of repayment for a term loan, a secondary source would be the sale of the underlying collateral. Often, if circumstances warrant a collateral sale, the bank may face steep discounts and significant expenses related to the sale. Examiners should carefully consider these issues when evaluating the underlying value of collateral under a liquidation scenario.

The following are potential problems associated with term business loans:

- The term of the loan is not consistent with the useful life of collateral.
- Cash flow from operations does not allow for adequate debt amortization, a fundamental problem that can only be solved by improved performance.
- The gross margin of the business is narrowing, which requires the business to sell more product to produce the same gross profit. Higher sales volume could require more cash for expansion of current assets, leaving less cash for debt amortization. This situation is a common by-product of increased competition.
- Sales are lower than expected. In the face of lower sales, management is unable or unwilling to cut overhead expenses, straining cash flow and resulting in diminished debt-servicing ability.
- Fixed assets that are financed by term loans become obsolete before the loans are retired, likely causing the value of underlying collateral to deteriorate.
- The business's excess cash is spent on higher salaries or other unnecessary expenses.
- The payments on term debt have put a strain on cash flow, and the business is unable to adequately operate or allow natural expansion.
- The balance sheet of the business is weakening. The overall financial condition of the business is deteriorating because of poor performance or unforeseen occurrences in the industry.

SECURED AND UNSECURED TRANSACTIONS

This subsection is intended to be a general reference for an examiner's review of a credit file to determine whether the bank's collateral position is properly documented. Examiners should be aware that secured transactions encompass an extensive body of law that is rather technical in nature. The following discussion contains general information for examiners on the basic laws that govern a bank's security interest in property and on the documentation that needs to be in a loan file to properly document a perfected security interest in a borrower's assets.

Secured Transactions

Most secured transactions in personal property and fixtures are governed by article 9 of the Uniform Commercial Code (UCC). The UCC has been adopted by all 50 states, the District of Columbia, and the Virgin Islands. Timing differences as well as filing locations differ from state to state. Failure to file a financing statement in a timely manner or in the proper location will compromise a lender's security interest in the collateral.

Article 9 of the UCC applies to any transaction that is intended to create a security interest in personal property. Mortgage transactions are not covered, marine mortgages are filed with the Coast Guard, and aircraft liens are filed with the Federal Aviation Administration. A "security interest" is defined in the UCC as "an interest in personal property or fixtures which secures payment or performance of an obligation." A secured transaction requires that there be an *agreement* between the parties indicating the parties' intention to create a security interest for the benefit of the creditor or secured party. This agreement is commonly referred to as a security agreement.

Article 9 of the UCC refers to two different concepts related to security interests: attachment and perfection. Attachment is the point in time

at which the security interest is created and becomes enforceable against the debtor. Perfection refers to the steps that must be taken in order for the security interest to be enforceable against third parties who have claims against collateral.

Attachment of Security Interest

The three requirements for the creation of a security interest are stated in UCC section 9-203(1). Once the following requirements are met, the security interest attaches:

- The collateral is in the possession of the secured party pursuant to agreement, or the debtor has signed a security agreement that contains a description of the collateral and, when the security interest covers crops now growing or to be grown or timber to be cut, a description of the land concerned.
- Value has been given to the debtor.
- The debtor has rights in the collateral.

Thus, unless the collateral is in the possession of the secured party, there must be a written security agreement that describes the collateral. The description does not have to be very specific or detailed—"any description of personal property…is sufficient whether or not it is specific if it reasonably identifies what is described" (see section 9-110). The agreement must also be signed by the debtor. The creditor may sign it, but its failure to do so does not affect the agreement's enforceability against the debtor.

"Giving value" is any consideration that supports a contract. Value can be given by a direct loan, a commitment to grant a loan in the future, the release of an existing security interest, or the sale of goods on contract.

While the debtor must have "rights" in the collateral, he or she does not necessarily have to have title to the property. For example, the debtor may be the beneficiary of a trust (the trustee has title of trust assets) or may lease the collateral. The debtor, in such cases, has rights in the collateral, but does not hold the title to the collateral. The secured party, however, only obtains the debtor's limited interest in the collateral on default if the debtor does not have full title to the collateral.

Perfection of Security Interest in Property

Perfection represents the legal process by which a bank secures an interest in property. Perfection provides the bank assurance that it has an interest in the collateral. The category of collateral will dictate the method of perfection to be used. The most common methods of perfection are (1) automatic perfection when the security interest attaches (such as in the case of purchase-money security interests applicable to consumer goods other than vehicles); (2) perfection by possession; (3) the filing of a financing statement in one or more public filing offices (The financing statement is good for five years, and the lender must file for a continuation within the six-month period before expiration of the original statement.) and (4) compliance with a state certificate of title law or central filing under a state statute other than the UCC, such as registration of vehicles.

The most common method of perfecting a security interest is public filing. Public filing serves as a constructive notice to the rest of the world that the bank claims a security interest in certain property of the debtor described in both the security agreement and the financing statement. Public filing is accomplished by filing a financing statement (UCC-1) in a public office, usually the county recorder or secretary of state. The system of filing required by the UCC provides for a notice filing whereby potential creditors can determine the existence of any outstanding liens against the debtor's property.

The form of the financing statement and where to file it varies from state to state. While the filing of a nonstandard form will generally be accepted, the failure to file in the proper public office can jeopardize the priority of the lender's security interest. The UCC provides three alternative filing systems:

- *Alternative System One.* Liens on minerals, timber to be cut, and fixtures are filed in the county land records. All other liens are filed in the office of the secretary of state.
- *Alternative System Two.* The majority of states have adopted this version. It is the same as system one, except liens on consumer goods, farm equipment, and farm products are filed in the county where the debtor resides or in the county where the collateral is located if it is owned by a nonresident.
- *Alternative System Three.* In a minority of states, filings made with the secretary of state must

also be filed in the county of the borrower's business (or residence if there is no place of business in that state). Otherwise, the requirement in these states is the same as system two.

As each state may select any of the above three alternatives or a modified version of them, it is important that the examiner ascertain the filing requirements of the state(s) where the bank's customer operates. Most importantly, it is the location of the borrower, not the bank, that determines where the financing statement must be filed.

Evaluation of Security Interest in Property

Key items to look for in evaluating a security interest in property include the following:

- *Security agreement.* There should be a proper security agreement, signed and dated by the borrower, that identifies the appropriate collateral to be secured. It should include a description of the collateral and its location in sufficient detail so the lender can identify it, and should assign to the lender the right to sell or dispose of the collateral if the borrower is unable to pay the obligation.
- *Collateral possession.* If the institution has taken possession of the collateral to perfect its security interest, management of the institution should have an adequate record-keeping system and proper dual control over the property.
- *Financing statement.* If the institution has filed a financing statement with the state or local authority to perfect its security interest in the collateral, in general, it should contain the following information:
  - — names of the secured party and debtor
  - — the debtor's signature
  - — the debtor's mailing address
  - — the address of the secured party from which information about the security interest may be obtained
  - — the types of the collateral and description of the collateral (Substantial compliance with the requirements of UCC section 9-402 is sufficient if errors are only minor and not seriously misleading. Some states require the debtor's tax ID number on the financing statement.)
- *Amendments.* Not all amendments require the borrower's signature, and banks may file an amendment for the following reasons:
  - — borrower's change of address
  - — creditor's change of address
  - — borrower's name change
  - — creditor's name change
  - — correction of an inaccurate collateral description
  - — addition of a trade name for the borrower that was subsequently adopted
- *Where to file a financing statement.* In general, financing statements filed in good faith or financing statements not filed in all of the required places are effective with respect to any collateral covered by the financing statement against any person with knowledge of the statement's contents. If a local filing is required, the office of the recorder in the county of the debtor's residence is the place to file. If state filing is required, the office of the secretary of state is the place to file.
- *Duration of effectiveness of a financing statement.* Generally, effectiveness lapses five years after filing date. If a continuation statement is filed within six months before the lapse, effectiveness is extended five years after the last date on which the filing was effective. Succeeding continuation statements may be filed to further extend the period of effectiveness.

Perfection of Security Interest in Real Estate

As previously mentioned, real estate is expressly excluded from coverage under the UCC. A separate body of state law covers such interests. However, for a real estate mortgage to be enforceable, the mortgage must be recorded in the county where the real estate covered by the mortgage is located.

Real estate mortgage or deed of trust. When obtaining a valid lien on real estate, only one document is used, the mortgage or deed of trust. The difference between a mortgage and a deed of trust varies from state to state; however, the primary difference relates to the process of foreclosure. A mortgage generally requires a judicial foreclosure, whereas, in some states, a foreclosure on a deed of trust may not. Nearly all matters affecting the title to the real estate, including the ownership thereof, are recorded in the recorder's office.

When determining the enforceability of a real estate mortgage or deed of trust, the examiner should be aware of the following requirements:

- The mortgage must be in writing.
- To be recordable, the mortgage must be acknowledged. There are different forms of acknowledgments for various situations depending on whether individuals, corporations, partnerships, or other entities are executing the mortgage. Make sure that the form of the acknowledgment used is in accordance with the type of individual or entity executing the mortgage.
- If a corporation is the mortgagor, its articles of incorporation or bylaws often will specifically state which officers have authority to sign an instrument affecting real estate. In these instances, the designated officer should be required to sign. If the corporation has a seal, that also must be affixed. If the corporation does not have a seal, this fact must be shown in the acknowledgment.
- As soon as possible after the mortgage is executed, it should be recorded in the office of the recorder for each county in which the property described in the mortgage is located. In most cases, the borrower signs an affidavit that indicates, in part, that he or she will not attempt to encumber the property while the lender is waiting for the mortgage to be recorded. In smaller community banks, common practice may be not to advance any of the money under the loan until the mortgage has been recorded and the later search completed. In larger banks or cities, however, this practice is often not practical.
- If the mortgagor is married, the spouse must join in the execution of the mortgage to subject his or her interest to the lien of the mortgage. If the mortgagor is single, the mortgage should indicate that no spouse exists who might have a dower interest or homestead interest in the property.
- If the mortgagor is a partnership, it must be determined whether the title is in the name of the partnership or in the names of the individual partners. If the title is in the names of the individual partners, their spouses should join in executing the mortgage. If the title is in the name of the partnership, those partners who are required to sign under the partnership agreement should sign.

Unsecured Transactions

Unsecured transactions are granted based on the borrower's financial capacity, credit history, earnings potential, and liquidity. Assignment of the borrower's collateral is not required, and repayment is based on the terms and conditions of the loan agreement. While unsecured loans often represent the bank's strongest borrowers, the unsecured loan portfolio can represent its most significant risk. One of the primary concerns related to unsecured credit is that if the borrower's financial condition deteriorates, the lender's options to work out of the lending relationship deteriorate as well. In general, if a credit is unsecured, the file should contain reliable and current financial information that is sufficient to indicate that the borrower has the capacity and can be reasonably expected to repay the debt.

Problem Loans

The following are key signals of an emerging problem loan:

- *Outdated or inaccurate financial information on the borrower.* The borrower is unwilling to provide the financial institution with a current, complete, and accurate financial statement at least annually. Management should also be requesting a personal tax return (and all related schedules) on the borrower. While borrowers will usually present their personal financial statements in the most favorable light, their income tax return provides a more conservative picture.
- *The crisis borrower.* The borrower needed the money yesterday, so the bank advanced unsecured credit.
- *No specific terms for repayment.* The unsecured loan has no structure for repayment, and it is commonly renewed or extended at maturity.
- *Undefined source of repayment.* These types of loans are often repaid through excess cash flow of the borrower, sale of an asset(s), or loan proceeds from another financial institution. These repayment sources are often not identified and are unpredictable.

Commercial Loan-Sampling Techniques

Sampling techniques are a valid and efficient method for reviewing the commercial loan portfolios at banks during on-site examinations. Sampling enables the examiner to draw conclusions regarding the condition of the entire loan portfolio by reviewing only a selected portion. These techniques make more efficient use of examination resources and allow examiners to devote more of their time and efforts to other areas of the examination.

Generally, a judgmental sampling technique is used for reviewing commercial loans. This technique enables examiners to evaluate the portfolio by reviewing a desired percentage of all the loans over a preselected cutoff amount. In addition to the judgmental sampling approach, statistical sampling techniques can also be valid methods for evaluating loan portfolios. Two statistical sampling techniques that may be selectively implemented during on-site examinations are attributes sampling and proportional sampling. Attributes sampling is especially well-suited for large banks that have formal loan review programs; proportional sampling may be better suited for smaller or regional banks without internal loan-review programs.

In statistical sampling, the examiner uses the concepts of probability to apply sampling techniques to the design, selection, and evaluation of loan samples. Statistical sampling eliminates (or at least minimizes) potential selection biases because each item in the sample-loan population must have an equal or otherwise determinable probability of being included in the examined portion. This probability provides the examiner with a quantitative, controllable measure of risk.

Generally, statistical sampling techniques may be implemented only in those banks (1) that were found to be in financially sound condition, (2) that were without any undue loan portfolio problems at the latest examination, and (3) where it was determined that the systems and controls were appropriate for implementing such techniques. Moreover, if during an examination, the examiner determines that the statistical sampling results are unsatisfactory, the traditional judgmental sampling technique should be implemented.

The two recommended statistical sampling techniques are described below:

- *Attributes Sampling.* The objective of attributes sampling is to determine from a sample, within specified reliability limits, the validity of the bank's internal loan-review program. The reliability limits are determined by the examiner, who formulates a hypothesis about the bank's loan-review program when evaluating its policies, practices, and procedures for loan extensions. The population to be sampled consists of all loans between certain dollar parameters, except for loans reviewed under the shared national credit program and loans to identified problem industries (the latter are reviewed separately during the examination). The lower dollar parameter is an amount that the examiner deems sufficient to achieve the desired coverage of the loan portfolio and is selected in much the same manner as a cutoff line is chosen in judgmental sampling. The upper dollar parameter is an amount over which all loans must be reviewed because of the significant effect each could have on the bank's capital. Loans are selected from the sample population by using a random digit table.

  When the selected loans are reviewed, the examiner compares his or her grading with those of the bank's loan-review program. An "error" generally exists if the examiner's grading of a particular loan is significantly more severe than the bank's grading. If the error rate in the sample is beyond the preestablished reliability limits the examiner is able to accept, all loans over the cutoff amount should be reviewed. If the examiner is satisfied with the sample results, the bank's internal grading will be accepted for all criticized loans that have not been independently reviewed within the sample population. Even when the bank's internal grading is deemed acceptable by the examiner, any loans reviewed and found to be in error will be appropriately classified in the report.
- *Proportional Sampling.* The procedures for proportional sampling are similar to those followed for attributes sampling. The objective of this sampling technique is to determine whether bank management can identify all the criticizable loans in the portfolio. The examiner formulates a hypothesis about the quality of the examined bank's loan administration, based on an analysis of loan policies, practices, and procedures for loan extensions. In proportional sampling, every loan in the sample population is given an equal chance of

selection in proportion to its size, so the larger the loan, the more likely it will be selected for review. Examiners grade the loans in the sample and compare these gradings with the bank's problem-loan list.

As in attributes sampling, the examiner specifies the desired precision of the sample, that is, that the true error rate in the bank's problem-loan list should be within a certain range of values. A statistical error occurs whenever the examiner criticizes a loan that is not criticized by the bank. If the error rate is higher than expected, the examiner will review all loans over a cutoff line, which is determined using the same criteria as line selection in judgmental sampling. If the sample results indicate an error rate within expectations, then the examiner will accept the bank's problem-loan list as a reliable list of the nonpass loans in the population from which the sample was taken. The examiner will then review and grade each loan on the problem-loan list over the cutoff amount.

For detailed procedures on how to implement both attributes and proportional sampling, examiners should contact either Reserve Bank supervision staff or Federal Reserve Board supervision staff.

REVIEWING CREDIT QUALITY

Importance of Cash Flow

Evaluating cash flow is the single most important element in determining whether a business has the ability to repay debt. Two principal methods of calculating the cash flow available in a business to service debt are presented in this subsection. The results of these methods should be used to determine the adequacy of cash flow in each credit evaluated at an institution. The accrual conversion method is the preferred method because it is the most reliable. The second and less reliable method is the supplemental or traditional cash-flow analysis; however, the information needed for this analysis is usually more obtainable and easier to calculate. The traditional method can be used when circumstances warrant, for example, when the borrower's financial statements are not sufficiently detailed for the information requested in the accrual conversion analysis or when historical information is inadequate.

Analysis and Limitations of Cash Flow

Cash-flow analysis uses the income statement and balance sheet to determine a borrower's operational cash flow. Careful analysis of all investment and financing (borrowing) activities must be made for an accurate assessment of cash flow. In reality, examiners face time constraints that often prevent them from performing the complex mathematical calculations involved in sophisticated cash-flow analysis. Therefore, the cash-flow methods presented below were designed to be reasonable and practical for examiner use. *However, examiners should be careful of conclusions reached using the traditional cash-flow analysis, without consideration to balance-sheet changes or other activities that affect cash flow. The traditional cash-flow analysis does not recognize growth in accounts receivable or inventory, a slow-down in accounts payable, capital expenditures, or additional borrowings.* If the credit file contains a CPA-prepared statement of cash flow or a statement prepared using the accrual conversion method, the examiner should concentrate efforts on reviewing and analyzing these statements rather than on preparing a traditional cash-flow statement.

One critical issue to remember is that deficit cash flow does not always mean that the borrower is encountering serious financial difficulties. In some cases, deficit cash flow is caused by a business's experiencing significant growth, and there is a pronounced need for external financing to accommodate this growth and eliminate the deficit cash-flow position. In this case, an adequate working-capital facility may not be in place to accommodate the need for additional inventory. A comprehensive analysis of changes in the balance sheet from period to period should be made before the loan is criticized.[1]

1. Examiners should make sure that they are using financial data from consistent periods, that is, year-to-date financial information. Mixing annual financial data with interim financial information can cause misinterpretation of cash flow for a given business cycle or annual period.

Components of the Accrual Conversion Method of Cash Flow

Category	*Basis for Amount*
Sales:	Dollar amount of sales in period
+/−change in A/R, INV., A/P:	Represents the absolute difference of the current period from the corresponding period of the previous year in accounts receivable, inventory, and accounts payable.
Formula:	(a) An increase in any current asset is a use of cash and is subtracted from the calculation. Conversely, a decrease in any current asset is a source of cash and is added to the calculation. (b) An increase in any current liability is a source of cash and is added to the calculation. Conversely, a decrease in any current liability is a use of cash and is subtracted from the calculation.
SGA:	Subtract selling, general, and administrative expenses.
Interest Expense:	Add interest expense to the calculation if SGA "expense" includes interest expense.
Excess (Deficit) Cash Flow:	Represents cash available before debt service.

Calculation of Supplemental/Traditional Cash Flow

Net Income:	Amount of net income reported on most recent annual income statement before taxes.
Interest Expense:	Add the total amount of interest expense for the period.
Depreciation/ Amortization:	Add all noncash depreciation and principal amortization on outstanding debt.
Cash Flow before Debt Service:	Indicates net Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA). Amortization should include both principal and interest payments required on debt.
Debt Service:	Subtract scheduled principal and interest payments.
Capital Expenditures:	Subtract all capital expenditures for the period.
EQUALS— Excess (Deficit) Cash Flow:	Total amount of excess or deficit cash flow for the period after debt service.
Coverage Ratio:	Cash flow before debt service divided by debt service (principal and interest).

Importance of Financial Analysis

While cash-flow analysis is critical in reviewing whether a borrower has the ability to repay individual debt, a review of the borrower's other financial statements can offer information about other sources of repayment, as well as the borrower's overall financial condition and future prospects. The availability of historical balance-sheet and income information, which allow declining trends to be identified, is critical. Also, it may be appropriate to compare the borrower's financial ratios with the average for the industry overall. Much of the financial information that examiners will review will not be audited; therefore, considerable understanding of general accounting principles is necessary to competently review an unaudited financial statement. The bank should obtain at least annual financial statements from a borrower.

When reviewing a credit file of a borrowing customer of a bank, the following financial information should be available for review: income statement, balance sheet, reconciliation of equity, cash-flow statements, and applicable notes to financial statements. The components for a financial review can be segregated into three areas: operations management, asset man-

agement, and liability management. Operations management is derived from the income statement and can be used to assess company sales, cost control, and profitability. Asset management involves the analysis of the quality and liquidity of assets, as well as the asset mix. Liability management covers the analysis of the company's record of matching liabilities to the asset conversion cycle, such as long-term assets being funded by long-term liabilities.

In studying the above forms of management, various ratios will help the examiner form an informed and educated conclusion about the quality of the credit being reviewed. The ratios can be divided into four main categories:

- *Profitability ratios.* These ratios measure management's efficiency in achieving a given level of sales revenue and profits, as well as management's ability to control expenses and generate return on investment. Examples of these ratios include gross margin, operating profit margin, net profit margin, profit to sales ratio, profit to total assets ratio, and direct cost and expense ratios.
- *Efficiency ratios.* These ratios, which measure management's ability to manage and control assets, include sales to assets, inventory days on hand, accounts receivable days on hand, accounts payable days on hand, sales to net fixed assets, return on assets, and return on equity.
- *Leverage ratios.* These ratios compare the funds supplied by business owners with the financing supplied by creditors, and measure debt capacity and ability to meet obligations. These ratios may include debt to assets, debt to net worth, debt to tangible net worth, and interest coverage.
- *Liquidity ratios.* Include ratios such as the current ratio and quick ratio, which measure the borrower's ability to meet current obligations.

Common "Red Flags"

The symptoms listed below are included to provide an understanding of the common problems or weaknesses examiners encounter in their review of financial information. While one symptom may not justify criticizing a loan, when symptoms are considered in the aggregate, they may help the examiner detect near-term trouble. This list is only a sampling of "red flags" that should prompt further review; examiners should also be able to identify issues that may require further investigation from their cursory review of a borrower's financial statement.

- *A slowdown in the receivables collection period.* This symptom often reveals that the borrower has become more liberal in establishing credit policies, has softened collection practices, or is encountering an increase in uncollected accounts.
- *Noticeably rising inventory levels in both dollar amount and percentage of total assets.* Increases in inventory levels are usually supported by trade suppliers, and financing these increases can be extremely risky, particularly if turnover ratios are declining. The increase in inventory levels or lower turnover ratios may also be related to the borrower's natural reluctance to liquidate excessive or obsolete goods at a reduced price. Many businesses are willing to sacrifice liquidity to maintain profit margins.
- *Slowdown in inventory turnover.* This symptom may indicate overbuying or some other imbalance in the company's purchasing policies, and it may indicate that inventory is slow-moving. If the inventory is undervalued, the actual turnover is even slower than the calculated results.
- *Existence of heavy liens on assets.* Evidence of second and third mortgage holders is a sign of greater-than-average risk. The cost of junior money is high. Most borrowers are reluctant to use this source of funds unless conventional sources are unavailable.
- *Concentrations of noncurrent assets other than fixed assets.* A company may put funds into affiliates or subsidiaries for which the bank may not have a ready source of information on operations.
- *High levels of intangible assets.* Intangible assets, which shrink or vanish much more quickly than hard assets, usually have very uncertain values in the marketplace. In some cases, however, intangible assets such as patents or trademarks have significant value and should be given considerable credit.
- *Substantial increases in long-term debt.* This symptom causes increasing dependence on cash flow and long-term profits to support debt repayment.

- *A major gap between gross and net sales.* This gap represents a rising level of returns and allowances, which could indicate lower quality or inferior product lines. Customer dissatisfaction can seriously affect future profitability.
- *Rising cost percentages.* These percentages can indicate the business's inability or unwillingness to pass higher costs to the customer or its inability to control overhead expenses.
- *A rising level of total assets in relation to sales.* If a company does more business, it will take more current assets in the form of inventory, receivables, and fixed assets. Examiners should be concerned when assets are increasing faster than sales growth.
- *Significant changes in the balance-sheet structure.* These changes may not be the customary changes mentioned previously, but they are represented by marked changes spread across many balance-sheet items and may not be consistent with changes in the marketplace, profits or sales, product lines, or the general nature of the business.

REQUIRED MINIMUM DOCUMENTATION STANDARDS FOR LOAN LINE SHEETS

Certain minimum documentation must appear on all line examination sheets to leave an acceptable audit trail and to support the classification of designated loans. Currently, much of this information is often placed on the line ticket automatically by using computer-based loan-review systems. However, the disposition of the loan and the reasons for that disposition are the most crucial entries on the line ticket. Examiners must document their entries and decide how much of the documentation is required to support the loan-review decision. That decision and a summary of the reasons a loan is passed, listed for special mention, or adversely classified should be provided (preferably in bullet form) on the loan line ticket. Beyond that, the documentation will vary depending on the complexity and profile of the credit. The examiner may provide more detailed information on the collateral, cash flow, and repayment history. This additional information is not mandatory if the rationale for the disposition of the credit is otherwise clear.

The extension of credit line sheets and workpapers should document loan discussion comments, identify the examiner who reviewed the credit, and identify the officer(s) with whom the credit was discussed. Line sheets should also include the examiner's conclusion on the specific credit and the reasons for that conclusion.

As part of a review of examination and supervisory policies and procedures and to promote consistency, the items described below have been implemented as required minimum documentation standards for loan line sheets. These standards recognize a transactional approach in examinations and reflect the efficiencies inherent in a risk-focused approach to examinations. The amount of information that should be documented or included as part of a line sheet may vary depending on the type, complexity, and materiality of the credit. However, all line sheets should include the following information to satisfy the required minimum documentation standards, as set forth by SR-99-25 ("Minimum Documentation Standards for Loan Line Sheets," September 29, 1999). The first seven items are frequently provided through computer-based loan-review systems.

- *Name and location of borrower.* Document the name of the individual or company responsible for repayment of the debt.
- *Notation if the borrower is an insider or a related interest of an insider.* If the borrower is an insider or a related interest of the insider as defined by Regulation O, reflect this association on the line sheet.
- *Business or occupation.* Briefly describe the legal entity and the type of business in which the company is engaged, according to the following definitions:
  - *Corporation.* A business organization that is owned by shareholders who have no inherent right to manage the business. The organization is generally managed by a board of directors that is elected by the shareholders. The file should contain the borrowing resolution indicating which officers from the corporation are authorized to sign on its behalf. Indicate if the corporation is closely held.
  - *Partnership.* A business organization, specifically, an association of two or more persons to carry on as co-owners of a business for profit. Indicate if it is a general partnership (GP) or limited partnership (LP). If GP, each partner is fully liable for the firm's debts and actions. If LP, at least one general partner is fully

liable, but there will also be a number of partners whose liability is limited to that enumerated by the partnership agreement. Indicate each partner's proportionate interest (such as 25 or 50 percent).
  — *Proprietorship.* A form of business organization that is owned and operated by an individual. If the borrower is an individual, include his or her primary occupation.
- *Loan terms.* Include the following loan information[2]:
  — date of origination (note subsequent renewals and/or extensions)
  — repayment terms (for example, maturity, periodic payments, revolving)
  — maturity (restructured loans should be noted as such)
  — interest rate (fixed or variable) (If variable, state the basis (index) upon which the interest rate is determined.)
  — originated amount of the loan
- *Purpose of loan.* Note the purpose of each credit facility.
- *Repayment source.* Indicate the primary and secondary sources of repayment for each credit facility.
- *Collateral summary and value.* Describe collateral and assess the value of the collateral in which the bank maintains a perfected security interest. Values should be supported by some type of document, such as a recent financial statement, formal appraisal, management estimate, or any publication that maintains a current market value of collateral. At a minimum, the collateral assessment should include the following information:
  — collateral value
  — basis for valuation
  — date of valuation
  — control of collateral
  — current lien status
- *Loan officer assigned to the credit and the internal rating of the credit.* Note the name of the loan officer responsible for the loan. Also document the bank's internal risk-rating. The date of the most recent update of the rating should also be noted. Particular attention should be given to the consistency between the loan classification at the current examination and the assessment provided by the bank's internal loan-review department. Significant disparities should be noted in the asset-quality assessment.
- *Total commitment and total outstanding balances.* Indicate the total amount of the bank's legal commitment or line of credit available to the borrower. Note the total outstanding debt to the borrower as of the date of examination.
- *Examination date.* Indicate the as-of date of the examination.
- *Past-due or nonaccrual status.* Indicate the past-due status (current, nonaccrual, and days past due).
- *Amounts previously classified.* Note the loan amount and how the loan was previously classified at the most recent examination (Federal Reserve Bank or state).
- *Loan disposition (pass, special mention, or adverse classification).* Note the credit amount and how the credit is being classified, such as pass, special mention, substandard, doubtful, or loss.
- *Rationale for examiner's conclusions (preferably in bullet form).* Indicate the reasons for passing the credit or extending it for criticism, which should be consistent with the classification descriptions noted in the "Classification of Credits" section.
- *Name or initials of the examiner reviewing the credit.* Indicate the name or initials of the examiner who reviewed and assigned the classification to the credit.
- *Any significant comments by, or commitments from, management.* Clearly and specifically indicate relevant comments (including management's disagreement with the disposition of the loan, if applicable) that may be considered when determining whether or not to criticize the credit. Comments can include officer's comments noted in the credit file, information derived from discussions with management, questions the examiner may have about the borrower, or any other item deemed appropriate. If management plans to get out of the credit relationship, a workout strategy should be included in this section. Comments should be included as to why management disagrees with any loan classification or how any loan was classified.
- *Any noted documentation exceptions or loan-administration policy or procedural weaknesses, and any contravention of law, regulation, or policy.* Indicate any documentation exception or violation of law, regulation, or

2. If the loan is a shared national credit (SNC), this should be noted on the line sheet. A copy of the SNC write-up should be attached to the line sheet, and it is not necessary to provide any additional data.

policy that would be appropriate to include as part of the report of examination. The examiner may include any technical exception noted from the credit file that would inhibit the ability of the loan officer or the examiner to make an informed and/or competent judgment about the quality of the credit relationship.

When needed, loan line sheets should briefly note that information is not available or that certain information is not reliable due to deficient loan-administration systems and processes, particularly with respect to loan and collateral documentation and collateral values. If such deficiencies are material, a listing of the exceptions should be noted in the examination report. In addition, the effect of these loan-administration weaknesses should be discussed and factored into the risk-management rating.

Optional Information for Loan Line Sheets

In addition to the above information, additional items should be listed when needed to describe the terms of the credit and/or the disposition accorded to it by the examiners, for example, guarantors, amount of any specific reserve, or amounts previously charged off, as described below:

- *Related debt/tie-ins.* The name, total debt outstanding, and type of borrowings (such as real estate, commercial, installment debt) of the related party might be indicated.
- *Guarantor(s).* If a guarantor exists, the name, amount of the guaranty, and date the guaranty was signed can be noted. A summary and an assessment of data supporting a guaranty may also be included, along with current financial information from the guarantor(s) which the bank should obtain at least annually. Tax returns and supporting schedules, income statements, and other pertinent information on the guarantor(s) may be appropriate under certain circumstances. If a troubled credit, indicate whether the guarantor has exhibited any willingness to financially support the credit.
- *Summary of financial data.* The following information may be appropriate, based on the type and complexity of the loan:
  - — key balance-sheet information (current ratio, D/E ratio)
  - — key income items (EBITDA—earnings before income taxes, depreciation, and amortization; net income; profit margin)
  - — cash-flow coverage (debt-service coverage, interest coverage)
  - — source of financial data (company-prepared balance sheet, audited financial statement)
- *Dates and amounts of previous charge-offs.*
- *Specific reserves.* The examiner may indicate whether an amount (allocated reserve) was specifically set aside to absorb any loss from the credit. When evaluating the overall adequacy of the loan-loss reserve, subtract the aggregate of allocated reserves from the total reserve balance, and subtract the aggregate amount of loans for which allocated reserves exist from the total loan balance.
- *The name of the loan officer who may have offered the most pertinent discussion items that affected the classification decision.*

BANKRUPTCY LAW AND COMMERCIAL LOANS

This section provides examiners with an overview of the United States Bankruptcy Code (the code) chapters that affect commercial and industrial loans. Bankruptcy law is a significant body of law; it would be difficult in this manual to discuss all the issues necessary for comprehensive understanding of the code. This subsection will focus on basic issues that an examiner needs to be familiar with relative to three principal sections of the code: chapters 7, 11, and 13.

Creditors of a Bankrupt Business

A creditor in bankruptcy is anyone with a claim against a bankrupt business, even if a formal claim is not filed in the bankruptcy case. In bankruptcy court, a claim is defined very broadly. A claim may include a right to payment from a bankrupt business, a promise to perform work, or a right to a disputed payment from the debtor that is contingent on some other event. The two basic types of creditors are secured and unsecured. Secured creditors are those with perfected security interest in specific property, such as equipment, accounts receivable, or any other asset pledged as collateral on a loan. Unsecured creditors are generally trade creditors and others

who have not taken a specific interest in property supplied to the bankrupt debtor.

Voluntary Versus Involuntary Bankruptcy

When a debtor files a bankruptcy petition, it is described as a voluntary bankruptcy filing. The individual or organization does not have to be insolvent to file a voluntary case. Creditors may also file a bankruptcy petition, in which case the proceeding is known as an involuntary bankruptcy. This form of petition can occur in chapters 7 and 11 bankruptcy cases, and the debtor generally must be insolvent. To be deemed insolvent, the debtor must be unable to pay debts as they mature. However, the code does limit who an involuntary action can be sought against.

Chapter 7—Liquidation Bankruptcy

A chapter 7 action may be filed by virtually any person or business organization that is eligible to file bankruptcy. Chapter 7 bankruptcy can be filed by a sole proprietorship, partnership, corporation, joint stock company, or any other business organization. Restrictions apply to only a few highly regulated businesses, such as railroads, insurance companies, banks, municipalities, and other financial institutions. This chapter is often referred to as "straight liquidation," or the orderly liquidation of all assets of the entity. Generally, a debtor in a chapter 7 bankruptcy case is released from obligations to pay all dischargeable prebankruptcy debts in exchange for surrendering all nonexempt assets to a bankruptcy trustee. The trustee liquidates all assets and distributes the net proceeds on a pro rata basis against the allowed claims of unsecured creditors. Secured creditor claims are generally satisfied by possession or sale of the debtor's assets. Depending on the circumstances, a secured creditor may receive the collateral, the proceeds from the sale of the collateral, or a reaffirmation of the debt from the debtor. The reaffirmed debts are generally secured by property that the debtor can exempt from the bankruptcy estate, such as a home or vehicle. The amount of the reaffirmation is limited to the value of the asset at the time of the bankruptcy filing. Some characteristics of a chapter 7 bankruptcy are described below:

- A trustee is appointed in all chapter 7 bankruptcies and acts as an administrator of the bankruptcy estate. The bankruptcy estate that is established when the petition is filed becomes the legal owner of the property. The trustee acts to protect the interest of all parties affected by the bankruptcy.
- The trustee has control of all nonexempt assets of the bankrupt debtor.
- The trustee is required to liquidate the estate quickly without jeopardizing the interests of the affected parties.
- The proceeds from the sale pay trustee's fees and other creditors. Trustee fees are determined according to the amount disbursed to the creditors and are a priority claim.
- A chapter 7 bankruptcy is typically completed in 90 days, depending on the time needed to liquidate collateral. Some chapter 7 bankruptcies take years to complete.
- The court may allow the trustee to continue to operate a business, if this is consistent with the orderly liquidation of the estate.

Chapter 11—Reorganization

Most major or large businesses filing bankruptcy file a chapter 11 reorganization. As in chapter 7, virtually any business can file a chapter 11 reorganization. There are specialized chapter 11 reorganization procedures for certain businesses such as railroads, and chapter 11 is not available to stockbrokers, commodity brokers, or a municipality. The basic concept behind chapter 11 is that a business gets temporary relief or a reprieve from paying all debts owed to creditors. This temporary relief gives the business time to reorganize, reschedule its debts (at least partially), and successfully emerge from bankruptcy as a viable business. The basic assumption underlying a chapter 11 bankruptcy is that the value of the enterprise as a going concern will usually exceed the liquidation value of its assets.

Reorganization Plan

Generally, the debtor has an exclusive 120-day period to prepare and file a reorganization plan. If the debtor's plan has not been confirmed within 180 days of the bankruptcy filing, a

creditor may file a plan. A plan can provide for any treatment of creditor claims and equity interest, as long as it meets the requirements set out in the code. For example, a plan must designate substantially similar creditor claims and equity interest into classes and provide for equal treatment of such class members. A plan must also identify those classes with impaired claims and their proposed treatment. Finally, a method of implementation must be provided. Although plans do not have to be filed by a deadline, the bankruptcy judge will generally place a deadline on the debtor or creditor authorized to prepare the plan.

Some characteristics of a chapter 11 bankruptcy are described below.

- The bankrupt debtor usually controls the business during the bankruptcy proceedings. This arrangement is referred to as "debtor in possession."
- The business continues to operate while in bankruptcy.
- The debtor is charged with the duty of developing a reorganization plan within the first 120 days of the filing. After this period expires, the court may grant this authority to a creditors' committee.
- Once the plan is approved by the bankruptcy court, the debtor's payment of debts is generally limited to the schedule and amounts that are detailed in the reorganization plan.
- A chapter 11 proceeding can be complex and lengthy, depending on the number of creditors, amount of the debts, amount of the assets, and other factors that complicate the proceedings.

Chapter 13—Wage-Earner Bankruptcy

A chapter 13 bankruptcy is available to any individual whose income is sufficiently stable and regular to enable him or her to make payments under the plan. As long as the individual has regular wages or takes a regular draw from his or her business, the individual may qualify under chapter 13 of the code. Under chapter 13, an individual or married couple can pay their debts over time without selling their property. As a protection to creditors, the money paid to a creditor must equal or exceed the amount that the creditor would get in a liquidation or chapter 7 bankruptcy. Chapter 13 may be used for a business bankruptcy, but only if the business is a proprietorship. In most cases, the business needs to be fairly small to qualify.

Some characteristics of a chapter 13 bankruptcy are described below:

- In most cases, only an individual can file a chapter 13 bankruptcy.
- Secured debt may not exceed $350,000.
- Unsecured debt may not exceed $100,000.
- The debtor must propose a good-faith plan to repay as many debts as possible from available income.
- A debtor makes regular payments to a trustee, who disburses the funds to creditors under the terms of the plan.
- The trustee does not control the debtor's assets.
- A chapter 13 bankruptcy may include the debts of a sole proprietorship. The business may continue to operate during the bankruptcy.
- After all payments are made under the plan, general discharge is granted.

SECTIONS 23A AND 23B OF THE FEDERAL RESERVE ACT

The intent of this subsection is to provide examiners with general guidance on how to identify potential violations of sections 23A and 23B of the Federal Reserve Act as they pertain to the commercial-lending function. More specific guidance on sections 23A and 23B of the Federal Reserve Act can be obtained from the Board's Regulation W (12 CFR part 223) as well as the sections of this manual on Regulation W.

Section 23A

Section 23A of the Federal Reserve Act was designed to prevent misuse of a bank's resources stemming from non-arm's-length transactions with affiliates. Examiners will first need to determine if the bank and counterparty involved in a transaction are affiliates. Once this relationship is determined, the examiner will need to decide if the transaction is included in the statute as a "covered transaction." Generally, covered transactions within the lending function of the institution would include any loan or extension of credit to an affiliate, as defined by Regula-

tion W, which defines extensions of credit to mean any similar transaction as a result of which an affiliate becomes obligated to pay money or its equivalent to the bank. Any transaction by a bank with any person is deemed to be a transaction with an affiliate to the extent that the proceeds of the transaction are used for the benefit of, or transferred to an affiliate. A key element of section 23A is that covered transactions between a bank and its affiliate must be on terms and conditions consistent with safe and sound banking practices.

Once the examiner has determined that the counterparty is an affiliate and that the transaction is a covered transaction, there are quantitative limitations that apply. Section 23A limits the amount of covered transactions between a bank and its subsidiary and a single affiliate to no more than 10 percent of the bank's capital and surplus (as defined in 12 CFR 223(d)). In addition, an institution and its subsidiaries may only engage in a covered transaction with an affiliate if, in the case of all affiliates, the aggregate amount of the covered transactions of the institution and its subsidiaries will not exceed 20 percent of the capital stock and surplus of the institution.

When the transaction involves an extension of credit to an affiliate, certain collateral requirements must also be met. Generally, extensions of credit require certain collateral margins that are tied to the type of collateral. For example, extensions of credit that are secured by U.S. Treasury securities or certain agency securities require a collateral margin of 100 percent of the transaction amount, whereas collateral consisting of stock, leases, or other real or personal property requires a margin of 130 percent. Some collateral, such as the obligations of an affiliate, are not eligible as collateral for transactions between a bank and its affiliates. Certain exemptions to the specific collateral requirements of section 23A were included to permit transactions that posed little risk to the bank and to prevent undue hardship among the affiliated organizations in carrying out customary transactions with related entities. These exemptions include various transactions that are related to sister-bank relationships, correspondent relationships, and uncollected items in the process of collection.

Section 23B

Section 23B defines affiliates in the same manner as section 23A, except that all banks are excluded from section 23B as affiliates. The principal requirements of section 23B state that any transaction between a bank and a defined affiliate under the act must be (1) on terms and under circumstances, including credit standards, that are substantially the same, or at least as favorable to the bank or its subsidiary, as those prevailing at the time for comparable transactions with or involving other nonaffiliated companies, or (2) in the absence of comparable transactions, on terms and under circumstances, including credit standards, that in good faith would be offered or would apply to nonaffiliated companies. In short, the terms and conditions of an extension of credit to an affiliate under section 23B should be no more favorable than those that would be extended to any other borrowing customer of the bank. For covered transactions, all transactions that are covered under section 23A are covered under section 23B; however, section 23B expanded the list to include other transactions such as the sale of securities or other assets to an affiliate, the payment of money or furnishing of services to an affiliate, or any transaction if the affiliate has a financial interest or participates in the transaction.

The focus of section 23B is different from that of section 23A. Section 23A contains quantitative and collateral restrictions to protect the bank; section 23B focuses on whether transactions with nonbank affiliates are arm's length and not injurious to the bank. Essentially, examiners need to keep one basic principal in mind: If money or assets flow from the bank to an affiliate other than through a dividend, the transaction is probably a covered transaction and would be subject to sections 23A and 23B. In addition, if a bank assumes the liabilities of an affiliate, the transaction is subject to sections 23A and 23B.

TYING ARRANGEMENTS

Among other things, section 106 of the Bank Holding Company Act Amendments of 1970 (section 106) prohibits a bank from conditioning the availability or price of one product on a requirement that the customer also obtain another

product from the bank or an affiliate of the bank.[3] The statute is intended to prevent banks from using their ability to offer bank products in a coercive manner to gain a competitive advantage in markets for other products and services. Although section 106 prohibits banks from imposing certain types of tying arrangements on their customers, the statute also expressly permits banks to engage in other forms of tying and authorizes the Board to grant additional exceptions to the statute's prohibitions by regulation or order. For more information on section 106, see this manual's section, "Regulation Y: Prohibitions Against Tying Arrangements."

3. 12 U.S.C. 1972.

1. To determine if lending policies, practices, procedures, and internal controls for commercial and industrial loans are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the portfolio for credit quality, performance, collectibility, and collateral sufficiency.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, objectives, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the commercial loan section of the internal control questionnaire.
2. On the basis of the evaluation of internal controls and the work performed by internal or external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Also obtain a listing of any deficiencies noted in the latest review done by internal or external auditors, and determine if corrections have been accomplished.
4. Obtain a trial balance of the customer liability records.
   a. Agree or reconcile balances to department controls and the general ledger.
   b. Review reconciling items for reasonableness.
5. Using an appropriate technique, select borrowers for examination. Prepare credit line cards.
6. Obtain the following information from the bank or other examination areas, if applicable:
   a. past-due loans
   b. loans in a nonaccrual status
   c. loans on which interest is not being collected in accordance with the terms of the loan (Particular attention should be given to loans that have been renewed with interest being rolled into principal.)
   d. loans whose terms have been modified by a reduction of interest-rate or principal payment, by a deferral of interest or principal, or by other restructuring of repayment terms
   e. loans transferred, either in whole or in part, to another lending institution as a result of a sale, participation, or asset swap since the previous examination
   f. loans acquired from another lending institution as a result of a purchase, participation, or asset swap since the previous examination
   g. loan commitments and other contingent liabilities
   h. loans secured by stock of other depository institutions
   i. extensions of credit to employees, officers, directors, and principal shareholders and their interests, specifying which officers are considered executive officers
   j. extensions of credit to executive officers, directors, and principal shareholders and their interests of correspondent banks
   k. a list of correspondent banks
   l. miscellaneous loan-debit and credit-suspense accounts
   m. Shared National Credits
   n. loans considered "problem loans" by management
   o. specific guidelines in the lending policy
   p. each officer's current lending authority
   q. any useful information resulting from the review of the minutes of the loan and discount committee or any similar committee
   r. reports furnished to the loan and discount committee or any similar committee
   s. reports furnished to the board of directors
   t. loans classified during the previous examination
   u. the extent and nature of loans serviced
7. Review the information received, and perform the following procedures.
   a. *Loans transferred, either in whole or in part, to or from another lending institution as a result of a participation, sale or purchase, or asset swap.*
      - Participations only:
        — Test participation certificates and records, and determine that the parties share in the risks and contractual payments on a pro rata basis.
        — Determine that the bank exercises similar controls and procedures over loans serviced for others as for loans in its own portfolio.
        — Determine that the bank, as lead or agent in a credit, exercises similar controls and procedures over syndications and participations sold as for loans in its own portfolio.
      - Procedures pertaining to all transfers:
        — Investigate any situations in which loans were transferred immediately before the date of examination to determine if any were trans-

ferred to avoid possible criticism during the examination.

— Determine whether any of the loans transferred were either nonperforming at the time of transfer or classified at the previous examination.

— Determine that the consideration received for low-quality loans transferred from the bank to an affiliate is properly reflected on the bank's books and is equal to the fair market value of the transferred loans. (While fair market value may be difficult to determine, it should at a minimum reflect both the rate of return being earned on such loans as well as an appropriate risk premium.) Section 23A of the Federal Reserve Act generally prohibits a state member bank from purchasing a low-quality asset.

— Determine that low-quality loans transferred to the parent holding company or a nonbank affiliate are properly reflected at fair market value on the books of both the bank and its affiliate.

— If low-quality loans were transferred to or from another lending institution for which the Federal Reserve is not the primary regulator, prepare a memorandum to be submitted to Reserve Bank supervisory personnel. The Reserve Bank will then inform the local office of the primary federal regulator of the other institution involved in the transfer. The memorandum should include the following information, as applicable:
  (1) name of originating institution
  (2) name of receiving institution
  (3) type of transfer (i.e., participation, purchase or sale, swap)
  (4) date of transfer
  (5) total number of loans transferred
  (6) total dollar amount of loans transferred
  (7) status of the loans when transferred (e.g., nonperforming, classified, etc.)
  (8) any other information that would be helpful to the other regulator

b. *Miscellaneous loan-debit and credit-suspense accounts.*
   - Discuss with management any large or old items.
   - Perform additional procedures as deemed appropriate.

c. *Loan commitments and other contingent liabilities.* Analyze the commitment or contingent liability if the borrower has been advised of the commitment and the combined amount of the current loan balance (if any) and the commitment or other contingent liability exceeds the cutoff.

d. *Loans classified during the previous examination.*
   - current balance and payment status, or
   - date the loan was repaid and the source of payment

   Investigate any situations in which all or part of the funds for the repayment came from the proceeds of another loan at the bank, or as a result of a participation, sale, or swap with another lending institution. If repayment was a result of a participation, sale, or swap, refer to step 7a of this section for the appropriate examination procedures.

e. *Review of leveraged buyouts.*
   - In evaluating individual loans and credit files, pay particular attention to the reasonableness of interest-rate assumptions and earnings projections relied on by the bank in extending the loan; the trend of the borrowing company's and the industry's performance over time and the history and stability of the company's earnings and cash flow, particularly over the most recent business cycle; the relationship between the company's cash-flow and debt-service requirements and the resulting margin of debt-service coverage; and the reliability and stability of collateral values and the adequacy of collateral coverage.
   - In reviewing the performance of individual credits, attempt to determine if debt-service requirements are being covered by cash flow generated by the company's operations or whether the debt-service requirements are being met out of the proceeds of additional or ancillary loans from the bank designed to cover interest changes.

- Review policies and procedures pertaining to leveraged buyout financing to ensure that they incorporate prudent and reasonable limits on the total *amount* and *type* (by industry) of exposure that the bank can assume through these financing arrangements.
- Review the bank's pricing, credit policies, and approval procedures to ensure that rates are reasonable in light of the risks involved and that credit standards are not compromised in order to increase market share. Credit standards and internal review and approval standards should reflect the degree of risk and leverage inherent in these transactions.
- Total loans to finance leveraged buyouts should be treated as a potential concentration of credit. If, in the aggregate, these loans are sufficiently large in relation to capital, the loans should be listed on the concentrations page in the examination report.
- Discuss significant deficiencies or risks regarding a bank's leveraged buyout financing on page 1 of the examination report, and bring them to the attention of the board of directors.

f. *Uniform review of Shared National Credits.*
- Compare the schedule of commercial credits included in the uniform review of the Shared National Credit Program with the loans being reviewed to determine which loans are portions of Shared National Credits.
- For each loan so identified, transcribe appropriate information from the schedule to line cards. (No further examination procedures are necessary for these credits.)

8. Consult with the examiner responsible for the asset/liability management analysis to determine the appropriate maturity breakdown of loans needed for the analysis. If requested, compile the information using bank records or other appropriate sources.
9. Transcribe or compare information from the schedules to commercial line cards, where appropriate.
10. Prepare commercial line cards for any loan not in the sample that, based on information derived from the above schedules, requires in-depth review.
11. Obtain liability and other information on common borrowers from examiners assigned to cash items, overdrafts, lease financing, and other loan areas, and together decide who will review the borrowing relationship.
12. Add collateral data to line cards selected in the preceding steps.
13. Obtain credit files for all borrowers for whom commercial line cards were prepared, and complete line cards. To analyze the loans, perform the following procedures:

    a. Analyze balance-sheet and profit-and-loss items as reflected in current and preceding financial statements, and determine the existence of any favorable or adverse trends.

    b. Review components of the balance sheet as reflected in the current financial statements, and determine the reasonableness of each item as it relates to the total financial structure.

    c. Review supporting information for the major balance-sheet items and the techniques used in consolidation, if applicable, and determine the primary sources of repayment and evaluate their adequacy.

    d. Ascertain compliance with provisions of loan agreements.

    e. Review digests of officers' memoranda, mercantile reports, credit checks, and correspondence to determine the existence of any problems that might deter the contractual liquidation program.

    f. Relate collateral values to outstanding debt.

    g. Compare interest rates charged with the interest-rate schedule, and determine that the terms are within established guidelines.

    h. Compare the original amount of loan with the lending officer's authority.

    i. Analyze secondary support afforded by guarantors and endorsers.

    j. Ascertain compliance with the bank's established commercial loan policy.

    k. Determine whether public officials are receiving preferential treatment and

whether there is any correlation between loans to public officials and deposits they may control or influence.

14. For selected loans, check the central liability file on borrowers indebted above the cutoff or borrowers displaying credit weakness or suspected of having additional liability in other loan areas.
15. Transcribe significant liability and other information on officers, principals, and affiliations of appropriate borrowers contained in the sample. Cross-reference line cards to borrowers, where appropriate.
16. Prepare "Report of Loans Supported by Bank Stock," if appropriate. Determine if a concentration of any bank's stock has been pledged.
17. Determine compliance with laws, rulings, and regulations pertaining to commercial lending by performing the following steps.
    a. *Lending limits.*
       - Determine the bank's lending limits as prescribed by state law.
       - Determine advances or combinations of advances with aggregate balances above the limit, if any.
    b. *Section 23A, Relations with Affiliates (12 U.S.C. 371c), and section 23B, Restrictions on Transactions with Affiliates (12 U.S.C. 371c-1), of the Federal Reserve Act, and Regulation W.*
       - Obtain a listing of loans to affiliates.
       - Test-check the listing against the bank's customer liability records to determine its accuracy and completeness.
       - Obtain a listing of other covered transactions with affiliates (i.e., purchase of loans from affiliates or acceptance of affiliates' securities as collateral for loan to any person).
       - Ensure that covered transactions with affiliates do not exceed the limits of section 23A and Regulation W.
       - Ensure that covered transactions with affiliates meet the appropriate collateral requirements of section 23A and Regulation W.
       - Determine that low-quality loans have not been purchased from an affiliate.
       - Determine that all covered transactions with affiliates are on terms and conditions that are consistent with safe and sound banking practices.
       - Determine that all transactions with affiliates comply with the market-terms requirement of section 23B and Regulation W.
    c. *18 U.S.C. 215, Receipt of Commission or Gift for Procuring Loans.*
       - While examining the commercial loan area, determine the existence of any possible cases in which a bank officer, director, employee, agent, or attorney may have received anything of value for procuring or endeavoring to procure any extension of credit.
       - Investigate any such suspected situation.
    d. *Federal Election Campaign Act (2 U.S.C. 441b), Political Contributions.*
       - While examining the commercial loan area, determine the existence of any loans in connection with any political campaigns.
       - Review each such credit to determine whether it is made in accordance with applicable banking laws and in the ordinary course of business.
    e. *12 U.S.C. 1972, Tie-In Provisions.* While reviewing credit and collateral files (especially loan agreements), determine whether any extension of credit is conditioned upon—
       - obtaining or providing an additional credit, property, or service to or from the bank or its holding company (or a subsidiary of its holding company), other than a loan, discount, deposit, or trust service;
       - the customer not obtaining a credit, property, or service from a competitor of the bank or its holding company (or a subsidiary of its holding company), other than a reasonable condition to ensure the soundness of the credit. (See "Tie-In Considerations of the BHC Act," section 3500.0 of the *Bank Holding Company Supervision Manual*.)
    f. *Insider lending activities.* The examination procedures for checking compliance with the relevant law and regulation covering insider lending activities and reporting requirements are as follows (the examiner should refer to the appropriate sections of the statutes for specific definitions, lending limitations, reporting requirements, and conditions indicating preferential treatment):

- *Regulation O (12 CFR 215), Loans to Executive Officers, Directors, and Principal Shareholders and Their Related Interests.* While reviewing information relating to insiders that is received from the bank or appropriate examiner (including loan participations, loans purchased and sold, and loan swaps)—
  - test the accuracy and completeness of information about commercial loans by comparing it with the trial balance or loans sampled;
  - review credit files on insider loans to determine that required information is available;
  - determine that loans to insiders do not contain terms more favorable than those afforded other borrowers;
  - determine that loans to insiders do not involve more than normal risk of repayment or present other unfavorable features;
  - determine that loans to insiders, as defined by the various sections of Regulation O, do not exceed the lending limits imposed by those sections;
  - if prior approval by the bank's board was required for a loan to an insider, determine that such approval was obtained;
  - determine compliance with the various reporting requirements for insider loans;
  - determine that the bank has made provisions to comply with the public disclosure requirements of Regulation O; and
  - determine that the bank maintains records of such public requests and the disposition of the requests for a period of two years after the dates of the requests.
- *Title VIII of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRA) (12 U.S.C. 1972(2)), Loans to Executive Officers, Directors, and Principal Shareholders of Correspondent Banks.*
  - Obtain from or request that the examiners reviewing due from banks and deposit accounts verify a list of correspondent banks provided by bank management, and ascertain the profitability of those relationships.
  - Determine that loans to insiders of correspondent banks are not made on preferential terms and that no conflict of interest appears to exist.

g. *12 U.S.C. 1828(v), Loans Secured by Bank Stock.*
   - While examining the commercial loan area, determine the existence of any loans or discounts that are secured by the insured financial institution's own stock.
   - In each case, determine that the chief executive officer has promptly reported such fact to the proper regulatory authority.

h. *12 U.S.C. 83 (Rev. Stat. 5201), made applicable to state member banks by section 9, para. 6, of the Federal Reserve Act (12 U.S.C. 324), Loans Secured by Own Stock (see also 3-1505 in the* Federal Reserve Regulatory Service).
   - While examining the commercial loan area, determine the existence of any loans secured by the bank's own shares or capital notes and debentures.
   - Confer with the examiner assigned to investment securities to determine whether the bank owns any of its own shares or its own notes and debentures.
   - In each case in which such collateral or ownership exists, determine whether the collateral or ownership was taken to prevent loss on a debt previously contracted (DPC) transaction.

i. *Regulation U (12 CFR 221).* While reviewing credit files, check the following for all loans that are secured directly or indirectly by margin stock and that were extended for the purpose of buying or carrying margin stock:
   - Except for credits specifically exempted under Regulation U, determine that the required Form FR U-1 has been executed for each credit by the customer and that it has been signed and accepted by a duly authorized officer of the bank acting in good faith.
   - Determine that the bank has not extended more than the maximum loan value of the collateral securing such credits, as set by section 221.7 of Regulation U, and that the margin requirements are being maintained.

j. *Financial Recordkeeping and Reporting of Currency and Foreign Transactions (31 CFR 1010), Retention of Credit Files.*
   - Determine compliance with other specific exceptions and restrictions of the regulation as they relate to the credits reviewed.
   - Review the operating procedures and credit file documentation, and determine if the bank retains records of each extension of credit over $10,000, specifying the name and address of the borrower, the amount of credit, the nature and purpose of the loan, and the date thereof. (See 31 CFR 1010.410.) (Loans secured by an interest in real property are exempt.)

18. Determine whether the consumer compliance examination uncovered any violations of law or regulation in this department. If violations were noted, determine whether corrective action was taken. Test for subsequent compliance with any law or regulation so noted.
19. Perform the appropriate procedural steps in "Concentration of Credits" section.
20. Discuss with appropriate officers, and prepare summaries in appropriate report form of—
    a. delinquent loans
    b. violations of laws and regulations
    c. loans not supported by current and complete financial information
    d. loans on which collateral documentation is deficient
    e. concentrations of credits
    f. criticized loans
    g. inadequately collateralized loans
    h. Small Business Administration or other government-guaranteed delinquent or criticized loans
    i. transfers of low-quality loans to or from another lending institution
    j. extensions of credit to principal shareholders, employees, officers, directors, and related interests
    k. other matters regarding the condition of the department
21. Inform the Reserve Bank of all criticized participation loans that are not covered by the Shared National Credit Program. Include the names and addresses of all participating state member banks and copies of loan classification comments. (This step deals with loans that deteriorated subsequent to participation and does not duplicate step 7a, which deals with transfers of loans that were of low quality when transferred).
22. Inform the Reserve Bank of those loans eligible for the Shared National Credit Program that were not previously reviewed. Include the names and addresses of all participants and the amounts of their credit. (This step applies only to credits for which the bank under examination is the lead bank.)
23. Evaluate the function for—
    a. the adequacy of written policies relating to commercial loans,
    b. the manner in which bank officers are operating in conformance with established policy,
    c. adverse trends within the commercial loan department,
    d. the accuracy and completeness of the schedules obtained from the bank,
    e. internal control deficiencies or exceptions,
    f. recommended corrective action when policies, practices, or procedures are deficient,
    g. the competency of departmental management, and
    h. other matters of significance.
24. Update the workpapers with any information that will facilitate future examinations.

WHAT'S NEW IN THIS REVISED SECTION

This section includes revised procedures governing the use of statistical sampling in the review of commercial and industrial loans and commercial real estate loans during safety and soundness examinations of community banking organizations (CBOs). The "Core" bucket and its sub-buckets have been amended to provide greater flexibility to risk focus the loan review process. Instead of the loan review "Core" bucket requirements of the ten largest, ten large problem, five insider, and five new borrower exposures, the revised procedures require that the "Core" bucket loan review consist of up to a total of 25 borrowers. The "Core" bucket is to consist of appropriate representation of the largest, largest new, largest problem, and largest insider credits, respectfully, to be determined based on the examiner's judgment of where the examination should be appropriately risk-focused.

A statistically based sampling approach to loan reviews can serve as an alternative to the traditional "top-down" loan-coverage approach when scoping certain bank examinations. In some cases, sampling requires fewer loans[1] to be reviewed than would be required using the minimum-coverage approach, while in other cases it requires more. The results depend heavily on the number of commercial and industrial loans (C&I) and commercial real estate (CRE) loans and the structure of the loan portfolio. Asset size and the level of tier 1 capital also affect the sample methodology. Additionally, sampling may require fewer loans to be reviewed than under the traditional method in well-managed institutions whose portfolios are not dominated by a small number of relatively large exposures.

Significantly, sampling may provide examiners with a broader perspective on the accuracy of the bank's classification process than is typically provided by the traditional minimum-coverage target approach. The sampling approach should be directed towards banks currently having a CAMELS composite and asset-quality rating of 1 or 2 and also assets of $10 billion or less. (See section 2086.1.) The statistical sampling approach is not recommended, however, for use at de novo banks or other banks with unusually high or low capital ratios. Reserve Banks wishing to experiment with the sampling program at organizations with CAMELS or asset-quality ratings of 3 or above or at larger organizations should contact Board staff so that the examiner's experience that is gained in this area may be used to develop alternative sampling procedures for these other types of institutions.

See this manual's section 2084.1 for the examiner loan-sampling requirements for state member bank and credit-extending nonbank subsidiaries of banking organizations with $10–$50 billion in total consolidated assets.

CONCEPT AND STRUCTURE OF THE SAMPLING TECHNIQUE

The sampling approach builds on procedures examiners currently use to evaluate loan portfolios, which require coverage of a similar "core" group of exposures. The principal difference relates to the manner in which loans outside the core group are selected for review. Under the traditional approach, the largest remaining loans are selected until a desired coverage ratio is achieved. Using sampling, the remaining noncore loans are grouped into several strata, or buckets, based on the size of the borrowing relationship. Loans are randomly selected from each of these buckets proportionate to the dollar value of each bucket relative to the total noncore portfolio. The total number of sampled loans required is determined by the number and size distribution of loans in the bank's portfolio.

The sampling approach is an effective means to determine if the examiner can rely on the bank's classification process or whether the examiner must determine the level of classifications by traditional means. Although sampling may, in some cases, require examiners to review

1. The term "loans" encompasses all sources of credit exposure arising from loans and leases, including guarantees, letters of credit, and other loan commitments. The sampling methods described in this section select "loans" for review by obligor or related group of obligors (where identifiable). Thus, in the sampling procedures, the term "loan" refers to total credit exposure to an individual obligor or related group of obligors. As this implies, loan amounts referred to in this section should be determined on an exposure basis, including all outstanding notes and commitments.

more loans than required by the traditional loan-coverage approach, sampling is more likely to detect problems among smaller loans and will provide a broader perspective of the bank's classifications across the entire portfolio.

In most cases, examiners should expect to find very few misclassifications within the sampled buckets, since those segments would exclude any credits that the bank's internal procedures have identified as weak and those that the examiner has otherwise identified for specific review (the "core" loans). When the examiner's classifications agree with the bank's internal loan classifications, then internal classification totals can be relied upon in calculating the total and weighted asset-classification ratios. However, if misclassifications are found within the sample, internal classifications may underestimate the true extent of problem loans, and the examiner must make adjustments to estimate the actual extent of problems. To make that estimate, the rate of misclassification is applied to the remaining loans in the sampled bucket to derive an estimate of other problems that the examiners would likely find if all the loans were read. This extrapolated amount of problem loans is then added to the total of specifically identified problems to evaluate the significance of credit weaknesses at the institution. Depending on the severity of misclassifications and the magnitude of problems specifically identified, expansion of the examination scope will probably be necessary to better assess the accuracy of loan grading.

Specific Procedures

Using electronic loan files provided by the bank (for example, those loan files available in the Automated Loan Examination Review Tool (ALERT) format) and the System's loan-sampling software, examiners are able to construct a variety of core and noncore borrower groups. (See table 1.) The "core" group—bucket 1—consists of several categories of loans that examiners have traditionally reviewed and would continue to review using sampling. These core borrowers include, for instance, the largest exposures and certain large problem or insider loans. The sampling program also permits examiners to select any additional borrower (or borrowers) for review based on the examiner's experience and judgment. These individually selected loans would be placed in the "examiner-selected" group—bucket 2. All loans contained in buckets 1 and 2 would be individually reviewed, not sampled, and examiners would not extrapolate their findings to other loans. All remaining internally identified problem borrowers are included in a separate "problem" group—bucket 3—designated as "discuss only"; these borrowers are not incorporated into the commercial-loan-coverage ratio nor are their findings extrapolated to other loans within the same bucket. However, any borrower in the "problem" group—bucket 3—may be individually selected for review by the examiner. Additionally, if the number of "discuss-only" borrowers in the "problem" group—bucket 3—is large, the examiner may select a number of borrowers to be randomly sampled.

The remaining noncore categories represent "pass" or creditworthy loans, grouped by the size of the borrowing relationship. Buckets 4 through 8 are composed of loans to be randomly sampled. The number of loans selected from buckets 4 through 8 is proportional to its total dollar value relative to the total noncore portfolio. Thus, if loans in a particular category represent 30 percent of the bank's total noncore exposures, then approximately 30 percent of the number of sampled credits will be drawn from that category. A "custom" group—bucket 4—is available for examiners to target specific borrowers meeting a variety of selection criteria. Buckets 5 through 8 represent all remaining loans in the commercial loan portfolio, segregated by size relative to the bank's tier 1 capital and loan-loss reserve. The results of examiners' findings for these sampled buckets would be extrapolated to the entire group of borrowers not reviewed.

Determination of Reliance on a Bank's Internal Classifications

Once the commercial loans have been selected for review, examiners are expected to use existing credit-analysis techniques as described in this manual to evaluate the borrower's creditworthiness, determine the level of adverse classifications, and identify any discrepancies with the bank's internal classifications.

In performing their analysis of the accuracy of classified credits, examiners should start with the assets internally classified by the bank's rating system and add any pass credits that were misclassified by the bank and downgraded to a classified status during the examiner's credit

Table 1—Groups of Loans Available for Review

Bucket	*Description*
	Nonsampled Buckets
Bucket 1 Core*	1A: largest non-insider non-problem-borrower exposures* 1B: largest non-insider non-problem-borrower exposures underwritten in the previous 12 months* 1C: largest non-insider problem-borrower exposures* 1D: largest insider borrower exposures*
Bucket 2 Examiner-selected	Examiner optional group. Examiners may manually select any borrower to review.
Bucket 3 Problem	Problem loans (Watch list, >59 days past due, internal ratings, and previously classified). Discuss-only borrowers.
	Sampled Buckets
Bucket 4 Custom	Examiners may select to target specific borrowers meeting a variety of criteria.
Bucket 5 >3% T1	Remaining borrower exposures greater than 3 percent of tier 1 capital plus the ALLL.
Bucket 6 2%–3% T1	Remaining borrower exposures between 2 percent and 3 percent of tier 1 capital plus the ALLL.
Bucket 7 1%–2% T1	Remaining borrower exposures between 1 percent and 2 percent of tier 1 capital plus the ALLL.
Bucket 8 0.1%–1% T1	Remaining borrower exposures between 0.1 percent and 1 percent of tier 1 capital plus the ALLL.
Bucket 9 <0.1% T1	Remaining borrower exposures less than 0.1 percent of tier 1 capital plus the ALLL. These loans are not included in the sample.
Bucket 10 Noncommercial	All noncommercial borrowers. Examiners may scope into Bucket 2.

*Up to (i.e., a maximum of) 25 borrower exposures can be included in Bucket 1 (Core). Bucket 1 is comprised of a configuration of the borrower exposures in buckets 1A, 1B, 1C, and 1D, which must include appropriate representation of the largest, largest new, largest problem, and largest insider borrower exposures, respectfully. The number of borrower exposures in each of these sub-buckets should be based on the examiner's judgment and appropriately risk-focused.

review. These classified assets are the key component for a "base" weighted asset-classification ratio.

Under the sampling program, the "base" weighted asset-classification ratio must be adjusted upward (extrapolated) to the extent misclassifications were uncovered within the randomly sampled loan buckets. The resulting extrapolated weighted asset-classification ratio is necessary to account for the likelihood that misclassifications uncovered from the sampled loans represent only a small portion of the total misclassified loans throughout the rest of the portfolio that was not reviewed. The extrapo-

lated value provides examiners with a more comprehensive picture of the magnitude of the institution's credit problems.

In many cases, there will be no disagreements between the examiner's credit analysis and the bank's internal classifications. Consequently, there will be no difference between the weighted asset-classification ratio and the extrapolated ratio. Generally, no additional sampling would be necessary. However, other types of credit-administration weaknesses may be discovered that warrant additional review and, as a result, an additional sample of loans may be selected. In this case, the number of loans selected is left to the examiner's judgment.

In other cases, either minor or significant disagreements will require examiners to more fully investigate the reliance that can be placed on the internal classifications. When there are only a minor number of disagreements within the sampled loans, examiners should be aware that those seemingly minor disagreements may translate into fairly large differences between the base and extrapolated problem-loan figures. When those differences are significant enough that they would alter an examiner's overall conclusion regarding the accuracy of the bank's loan-grading system, follow-up work is required. In particular, significant differences between the "base" and extrapolated weighted classification ratios should raise concerns as to whether the institution is systematically misreporting credit problems.

For example, a disagreement may arise between an examiner's analysis and the bank's internal classification of a single credit that was drawn from the sample buckets. Assuming a "base" weighted asset-classification ratio of 4 percent, the disagreed-upon sample loan, when extrapolated, could increase the weighted asset-classification ratio to 7 percent. When the difference between the "base" and extrapolated ratios is not material, it would not be necessary to select additional loans if the ratio difference would not alter the examiner's conclusions regarding the condition of the loan portfolio.

In another situation, there may be disagreement between the examiner's analysis and the bank's internal rating on two small-dollar loans sampled from bucket 8 (borrower exposures between 0.1 percent and 1 percent of tier 1 capital plus the allowance for loan and lease losses (ALLL)). In this example, the bank's "base" weighted asset-classification ratio is calculated to be 3 percent. Individually, these loans do not play a significant role in the level of the "base" ratio. However, when these same disagreed-upon classifications are extrapolated, the result is a significant difference between the "base" ratio and the extrapolated classification ratio of 18.5 percent. This can occur when there are only four loans that are sampled from bucket 8, and the two loans in disagreement account for 40 percent of the dollar volume of the sampled loans. Through extrapolation, 40 percent of the remaining bucket 8 loans would be considered classified, thereby increasing the extrapolated ratio to a level that may cause an examiner to question the reliability of the bank's classification system.

In the preceding example, to rule out the possibility that misclassifications were identified as a matter of chance, examiners should expand their loan coverage by pulling an additional sample from the bucket in which the misclassifications were identified. If the examiner selected four additional borrowers from bucket 8 to review and no new misclassifications were found, the extrapolated ratio would decline to 11 percent. As the base and extrapolated ratios move much closer together, the examiner may have greater confidence in the bank's internal loan-rating system and place greater reliance on bank-identified problems in evaluating the bank's asset quality. However, when reviewing the additional four back-up loans, if the examiner found one new misclassification, then the extrapolated ratio would be 15 percent. In these cases, it is highly unlikely that the misclassifications were caused by chance, and it is probable that a systematic problem exists in the ability of bank management to correctly risk-rate their commercial loans. Consequently, examiners should closely review the misclassifications and determine if any pattern exists, such as loans generated from a specific originating office or loan officer, or by type of credit extension. In these cases, internal classifications should be deemed unreliable and further credit review should be performed to evaluate the full extent of problem assets. That expanded review should be consistent with the minimum loan coverage of 55 percent to 65 percent or more, as required for banks posing supervisory concerns. (See SR-94-13, which is partially superseded by SR-14-4 and section 2086.1.)

Factoring Sampling Results into Examination Findings

An evaluation of a bank's asset-quality rating within CAMELS should take into account both financial and managerial factors as detailed in SR-96-38. When using the sampling approach, the extrapolated weighted classification ratio is to be used as a tool for assessing the extent to which examiners may rely on the bank's internal classifications. To the extent loan sampling indicates that the bank's internal classifications are not reliable, the severity of that fundamental risk-management weakness should be factored into the asset-quality rating as well as the management and the risk-management rating. Results of the statistical loan sampling should be documented in the examination report. As for needed documentation, the traditional weighted classified asset ratio should appear in the open section of the examination report, and the extrapolated ratio should appear in the confidential section of the report. In cases where an expanded review was called for, the initial "base" classified asset ratio should also be noted, along with the final classified asset ratio resulting from the expanded review. (See the examination procedures, section 2082.3, for a detailed description of the required information.)

Discussions with Management Regarding the Sampling Procedures

The sampling procedure produces an extrapolated estimate of weighted classified assets. The principal use of extrapolation is to provide an *estimate* of what the weighted asset-classification ratio would be for the entire loan portfolio. The extrapolated ratio will differ significantly from the traditional weighted asset-classification ratio when errors in the bank's internal classification system are detected through random sampling. Examiners may want to discuss (1) how the errors led to a widening of the loan-review scope and (2) the degree of errors found in the loans pulled beyond the initial sample. Any uncertainties regarding the integrity of the institution's classification system or the extent of its asset-quality problems uncovered from the use of sampling (that resulted from rating errors) should be discussed with management and included in the examination report, along with any necessary follow-up work required to gain more certainty. Those discussions may center on the number of errors uncovered in sampled and core loans.

1. To evaluate and improve, using statistical sampling, the comprehensiveness and effectiveness of the examination's credit review of a bank's loan portfolio.
2. To better evaluate, using statistical sampling, a bank's internal credit-review process and also the effectiveness of its credit risk-management practices.
3. To assess the accuracy of the bank's internal credit classifications.

1. Using the Federal Reserve System's loan-sampling software and the electronic files provided by the bank under examination (for example, those in the Automated Loan Examination Review Tool (ALERT) format), develop the bank's core and sampled borrower groups. (See table 1 in section 2082.1.) Follow the "Specific Procedures" of section 2082.1 for selecting loans for review, including those that are to be randomly sampled.
2. Use the bank examination credit-analysis techniques in this manual to—
   a. evaluate the borrower's creditworthiness,
   b. determine the level of adverse classifications, and
   c. identify any discrepancies within the bank's internal classifications.
3. Continue to follow the "Specific Procedures."
   a. Be especially alert when reviewing loan misclassifications to detect patterns of misclassifications (for example, whether the misclassified loans were generated by a specific originating office or loan officer).
   b. When misclassifications are identified, be prepared to expand the scope of the loan review.
   c. Ascertain whether the bank is systematically misreporting credit problems.
4. When it is determined that the bank's internal classifications are unreliable, factor the severity of this risk-management weakness into the asset-quality, management, and risk-management ratings.
5. Include the following information in the examination report (for instance, the information illustrated below):
   a. Report the traditional weighted asset-classification ratio in the open section of the examination report.
   b. Report the extrapolated weighted asset-classification ratio, the traditional asset-classification ratio, and the number of errors found in the sampled buckets in the confidential section of the report.
   c. If an expanded sample was undertaken because of misclassification errors, report in the confidential section the number of additional loans selected, any errors from the expanded sample, and the adjusted weighted and extrapolated asset-classification ratios.

The illustration below is a sample table format that may be used to highlight the sampling findings within the indicated sections of the examination report.

Loan-Sampling Results—Items to Be Reported in the Examination Report

Open section	
Traditional weighted asset-classification ratio	%
Confidential section	
Extrapolated weighted asset-classification ratio	%
Number of borrowers sampled	
Number of errors in sampled buckets	
Expanded-sample information	
Number of sampled borrowers in expanded review	
Number of errors in expanded review	
Adjusted weighted asset-classification ratio	%
Adjusted extrapolated weighted asset-classification ratio	%

Examiner Loan Sampling Requirements for State Member Bank and Credit-Extending Nonbank Subsidiaries of Banking Organizations with $10–$50 Billion in Total Consolidated Assets

Effective date October 2015

Section 2084.1

WHAT'S NEW IN THIS REVISED SECTION

Effective October 2015, this section is revised to include a supplemental note to footnote 1.

This guidance sets forth loan sampling expectations for the Federal Reserve's examination of state member bank (SMB) and credit-extending nonbank subsidiaries of banking organizations with $10–$50 billion in total consolidated assets. Refer to SR-14-4, April 18, 2014, (same title as this section). Examiners will have the flexibility, depending upon the structure and size of subsidiary SMBs, to utilize the guidance applicable to smaller SMBs when the SMB subsidiary's total assets are below $10 billion. The guidance supersedes the examiner loan sampling expectations described in SR-94-13, "Loan Review Requirements for On-site Examinations," and clarifies expectations for the assessment of material[1] retail-credit portfolios for these institutions.

A thorough review of a bank's loan and lease portfolio remains a fundamental element of the Federal Reserve's examination program for SMBs. Such credit reviews are a primary means for examiners to (1) evaluate the effectiveness of a bank's internal loan review program and internal grading systems for determining the reliability of internal reporting of classified and Special Mention credits, (2) assess compliance with applicable guidance and regulations, and (3) determine the efficacy of credit-risk management and credit-administration processes. Further, examiners use the findings from their credit review to identify the overall thematic credit-risk management issues, to assess asset quality, to assist in the assessment of the adequacy of the allowance for loan and lease losses (ALLL), and to inform their analysis of capital adequacy.

1. A loan portfolio or portfolio segment is considered material when the portfolio or segment exceeds 25 percent of total risk-based capital or contributes 25 percent or more to annual revenues. When calculating a concentration of credit in a loan portfolio or portfolio segment, total risk-based capital refers to tier 1 capital plus the allowance for loan and lease losses. For the purposes of this section's discussion, the term "banking organizations" does not include savings and loan holding companies.

LOAN SAMPLING METHODOLOGY

Reserve Banks will establish the annual loan sampling objective during the supervisory planning process. The annual sampling objective should provide coverage of material exposures, including those in the retail segments.[2] Reserve Banks should plan on conducting at least two loan quality reviews during the annual supervisory cycle of SMBs with $10–$50 billion in total consolidated assets.

Each review should focus on one or more material commercial loan segment exposures by Call Report loan type and, in total over the annual cycle, should cover the four highest concentrations for commercial credits in terms of total risk-based capital for any Call Report loan type from Schedule RC-C. Loan segments that generate substantial revenues are generally likely to entail higher risk. To the extent that examiners can determine that a loan category contributes 25 percent or more to annual revenues,[3] examiners should sample these segments. Examiners should also sample other loan segments that they or the bank's internal loan review have identified as exhibiting high-risk characteristics. Such risk characteristics include liberal underwriting, high levels of policy exceptions, high delinquency trends, rapid growth, new lending products, concentrations and concentrations to industry, significant levels of classified credits, or significant levels of Special Mention credits. In addition to these risk-focused samples, a sample of loans to insiders must be reviewed.[4] Annual loan-sampling coverage by examiners should take into consideration the severity of the asset quality component rating, the effectiveness of the internal loan

2. Commercial loan segments include commercial and industrial (C&I) loans, 1–4 family construction, other construction loans, multifamily loans, farm loans, non-farm non-residential owner occupied, and non-farm non-residential other loans. Retail loan segments include first-lien mortgages, closed-end junior liens, home equity lines of credit (HELOCs), credit cards, automobile loans, and other consumer loans.

3. The 25 percent threshold should be based on internal MIS and may not be applicable or available in all instances. For the purposes of this guidance, annual revenue equals net interest income plus noninterest income.

4. Federal Reserve examiners must test and evaluate Regulation O compliance annually.

review program, the results of internal loan portfolio stress testing, and current asset quality financial trends.

During the examination scoping phase, Reserve Bank staff should analyze the results of recent loan review reports or audits prepared for an institution's internal use and the Reserve Bank's most current assessment of credit-risk management to help establish the size and composition of loans to be selected for review. An institution's internal loan review program should achieve substantial coverage beyond the examiners' annual judgmental sample of material loan portfolios. Examiners should review the findings and recommendations of the institution's internal loan review program to help identify areas of risk. In selecting loans from each segment of the loan portfolio to review, examiners should include a selection of the largest loans, problem loans (past due 90 days or more, nonaccrual, restructured, Special Mention, watch list, or internally classified loans), and newly originated loans. Examiners should ensure the sample selection includes robust coverage of classified, Special Mention, and watch credits. At a minimum, loans selected for review from commercial loan segments should represent 10 percent of the committed dollar amount of credit exposure within the loan segment.

Sample sizes should be increased beyond the 10 percent minimum, based on examiner judgment, for segments when the examination-scoping process or the internal loan review program has identified

1) deficiencies with credit-risk management and administration practices,
2) loan growth that has been unusually high,
3) credit quality or collateral values that have been adversely affected since the prior review by volatile local or national economic conditions, or
4) unreliable internal credit-risk grading.

Conversely, sample sizes should be based on the 10 percent minimum if

1) previous examinations concluded that internal loan review and credit-risk identification is effective,
2) internal loan review has reviewed a loan segment within the last 12 months and noted no material weaknesses, and
3) the examination-scoping process reveals no significant credit-risk management issues.

In general, the lower range of a 10 percent sampling of each segment or the entire commercial portfolio would be acceptable when all aspects of credit risk indicate low and stable risk.

Examiners should determine classification amounts for retail credits using the Uniform Retail Classification Guidance (SR-00-8, "Revised Uniform Retail Credit Classification and Account Management Policy"). Annually, examiners should focus on one or more material retail loan segment exposures by Call Report loan type. Examiners should determine the appropriate sample of retail loans from material segments based on risk to be tested for compliance with internal credit-administration policies and underwriting standards. While there is no minimum coverage expectation for retail portfolios or segments, the goal of sampling is to assist examiners in making an informed assessment of all aspects of retail credit-risk management. If applicable, examiners should evaluate and test secondary market origination and servicing practices and quality assurance programs. Examiners should also sample other retail loan segments, as needed, from segments the examiners or internal loan review identify as exhibiting high-risk characteristics such as liberal underwriting, high delinquency trends, rapid growth, new lending products, or significant levels of classified credits.

DOCUMENTATION OF LOAN SAMPLING ANALYSIS AND METHODOLOGY

Examiners should discuss their analysis and objectives for achieving loan sampling coverage with Board staff during the annual supervisory planning process. Upon reaching a consensus with Board staff, the analysis and methodology should be retained in workpapers and documented in the supervisory plan. Further, examiners should document their loan sample selection methods in scoping memoranda and in the confidential section of the report of examination. The required workpaper documentation of the commercial loan coverage calculation should be based on total loan commitments and should generally exclude loans reviewed outside of the Reserve Bank's supervisory plan when a detailed analysis of the loans by an examiner and an assessment of credit-risk management were not

performed. Review of syndicated loans and participations, such as those from the Shared National Credits (SNCs) annual review, should only be included in the coverage ratio if Reserve Bank staff reviewed the credit-risk management aspects of the credit (for example, adherence to underwriting policies) and these findings are included in the examiner's assessment of overall credit-risk management practices. Examiners should continue to follow the SNC grading guidance.[5]

FOLLOW-UP EXPECTATIONS FOR EXAMINATIONS WITH ADVERSE FINDINGS

Examiners should generally consider a bank's internal risk-rating system to be less reliable when examiner downgrades[6] or internal loan review downgrades equal 10 percent of the total number of loans reviewed, or 5 percent of the total dollar amount of loans and commitments reviewed. When a bank's risk rating system is determined to be unreliable, examiners may need to expand sampling to better evaluate the effect of rating differences on the bank's ALLL and capital. In such situations, examiners should direct the bank to take corrective action to validate its internal ratings and to evaluate whether the ALLL or capital should be increased. The Reserve Bank will follow-up with the bank to assess progress on corrective action and verify satisfactory completion. The timeframe for follow-up should correspond with the timeframe during which actions are to be completed.[7] All follow-up actions on adverse findings should be discussed with Board staff.

5. Refer to SR-77-377, ''Shared National Credit Program.''

6. A credit-risk grading difference is considered a downgrade when a) a risk rating is changed by the examiner from an internal Pass rating to Special Mention or classified category, b) a risk rating is changed by the examiner from Special Mention to a classified category, or c) a risk rating is changed by the examiner within the classified categories.

7. Refer to SR-13-13/CA-13-10, ''Supervisory Considerations for the Communications of Supervisory Findings.''

Loan Coverage Examination Requirements for Community State Member Banks with $10 Billion or Less in Total Consolidated Assets

Effective date October 2015

Section 2086.1

WHAT'S NEW IN THIS REVISED SECTION

This section is revised to remove references to SR-02-19, replace them with references to section 2082.1, remove references to SR-14-7 and reference this section, and to delete and reserve footnote 6.

This guidance sets forth the loan- sampling expectations for Federal Reserve led examinations of community state member banks and clarifies when statistical sampling is expected to be used.[1] In addition, the guidance establishes minimum coverage[2] expectations for judgmental samples for full-scope and asset-quality target examinations. Examiners are expected to select for review a sample of loans[3] that is of sufficient size and scope to enable them to reach sound and well-supported conclusions about the quality of, and risk management over, a community state member bank's lending portfolio. In selecting a sample of loans for review, examiners should be guided by the following requirements.

COMMERCIAL AND INDUSTRIAL AND COMMERCIAL REAL ESTATE LOANS

For community state member banks with CAMELS composite and Asset Quality ratings of "1" or "2" that have not materially changed the composition of their loan portfolios or their credit administration practices since the prior examination, and whose most recent overall SR-SABR rating is not "1D," "1F," "2D," or "2F,"[4] examiners are expected to use the statistical loan-sampling procedures outlined in section 2082.1.[5] Examiners are not expected to supplement statistical samples with additional loans to reach the specified minimum coverage ratios discussed below for judgmental samples.[6]

For all other community state member banks, examiners should draw a judgmental sample that includes a selection of large, insider, problem,[7] watch, renewed, and new credits.[8] The sample should mainly be drawn from the bank's primary lending business lines, new business lines, and out-of-area loans or highly specialized lending or leasing portfolios. Coverage targets should factor in the bank's current asset quality rating and credit risk management assessment. More specifically, for community state member banks with "weak" credit risk management practices, with asset quality component ratings of "3 or worse," or where SR-SABR ratings of "D" or "F" raise questions about loan quality, coverage should be 40 percent or more. Community state member banks with strong or acceptable credit-risk management practices and asset quality component ratings of "1" or "2" should have 20 to 30 percent coverage. This is illustrated further in the table below.

It may be necessary to expand the sample when using either statistical or judgmental sampling in situations where there are several differences in credit ratings between those assigned by examiners and bank management. To expand the sample when using the statistical sampling methodology, examiners should follow the guidance discussed in section 2082.1. When using judgmental sampling, examiners should gener-

1. With the issuance of this guidance, SR-94-13, "Loan Review Requirements for On-site Examinations," is superseded only for Federal Reserve led examinations of community state member banks.

2. A loan review coverage ratio, or "coverage," should be calculated by dividing the dollar volume of commercial and industrial and commercial real estate loans reviewed during the examination by a bank's total dollar volume of such loans in the bank's loan portfolio. Credit exposures arising from trading and derivatives activities should not be included in the coverage ratio.

3. For the purposes of this section 2086.1, the term "loans" includes all sources of credit exposure arising from loans and leases. Such exposure includes guarantees, letters of credit, and other loan commitments. Both funded and unfunded commitments should be considered when assessing loan exposure.

4. For additional information on SR-SABR, see SR-06-2, "Enhancements to the System's Off-Site Bank Surveillance Program," this manual's section 1020.1.

5. For section 2086.1, "Commercial and Industrial and Commercial Real Estate Loans" include all non-consumer related loan categories.

6. Footnote reserved.

7. Problem loans are comprised of past due loans, nonaccrual loans, impaired loans, renegotiated or restructured loans, loans internally criticized or classified by the bank, and loans that were classified at the previous examination.

8. Together, these credits constitute the "core" loan categories.

Asset Quality Component Rating	Credit Risk Management		
	Strong	Acceptable	Weak
1	20 to 30 percent coverage*		
2			
3	40 percent or more coverage		
4			
5			

*Where SR-SABR ratings of "D" or "F" raise questions about loan quality, coverage should be 40 percent or more.

ally consider a community state member bank's internal risk-rating system to be unreliable when examiner downgrades[9] are 10 percent or more of the total number of credit facilities reviewed, and 5 percent or more of the total dollar amount of loans reviewed. When a bank's risk-rating system is determined to be unreliable, examiners may need to expand sampling to better evaluate the effect of rating differences on the bank's allowance for loan and lease losses (ALLL) and capital. In such situations, examiners should direct the bank to promptly take corrective action to validate its internal ratings and to evaluate whether the ALLL or capital should be increased. The Reserve Bank should follow up with the bank to assess progress on corrective action and verify satisfactory completion. The timeframe for follow-up will depend on the nature and severity of problems identified and typically should be no more than six months after the Reserve Bank notifies the bank of the deficiencies.

RETAIL CONSUMER LENDING

Retail consumer lending involves a large number of relatively homogenous, small-balance loans such as installment loans, credit card receivables, home equity lines of credit (HELOCs), and residential mortgages. The supervisory review and classification of retail consumer loans should be carried out in accordance with the procedures set forth in the *Commercial Bank Examination Manual* and SR-00-8, "Revised Uniform Retail Credit Classification and Account Management Policy" (see section 2130.1, "Consumer Credit") and will generally be limited to past due and nonperforming assets.[10]

When a bank has a concentration (defined as more than 25 percent of the bank's tier 1 capital plus ALLL) in retail consumer loans, examiners should include in their examination scope a review of the retail lending program, its underwriting standards and policies, and related risks and controls. Examiners should also consider sampling a portion of credits in those segments (for instance, residential mortgages or HELOCs) of the bank's retail loan portfolio with a high concentration in order to assess risks and the adequacy of underwriting, internal controls, and credit risk management practices. A judgmental sample size should be used that is commensurate with concentration and credit risks and sufficient for the examiner to assess the quality and risks of the portfolio.

Loan Coverage of Commercial and Industrial and Commercial Real Estate Loans in a Target Examination

The Federal Reserve may deem it necessary to conduct a target examination prior to the next statutorily required full-scope examination.[11] Such target examinations should be risk-focused in accordance with existing guidance, including SR-97-25, "Risk-Focused Framework for the Supervision of Community Banks" (see section 1000.1, "Examination Strategy and Risk-Focused Examinations"). Any loan coverage goals should be determined using the judgment and discretion of the supervision staff involved in establishing the scope of the examination. For banks with a "3" composite rating, loan coverage of 30 percent or more should be achieved at a target examination that includes a review of asset quality. For banks with a "4" or "5" composite

9. A credit risk grading difference is considered a downgrade when: 1) a risk rating is changed by the examiner from an internal Pass rating to Special Mention or classified category, 2) a risk rating is changed by the examiner from Special Mention to a classified category, or 3) a risk rating is lowered by the examiner within the classified categories, including a split classification.

10. See section 2130.3, "Consumer Credit (Examination Procedures)."

11. SR-85-28, "Examination Frequency and Communicating with Directors," indicates targeted examinations will be conducted when deemed necessary by the Reserve Bank between statutorily required examinations (refer to section 1000.1). The Federal Reserve's examination frequency requirements for state member banks are in Regulation H (12 CFR 208.64).

rating, loan coverage of 40 percent or more should be achieved at the target examination.

Loan coverage may consist of updates to credits reviewed and classified or downgraded at the previous examination and any credit originated or extended since the previous examination. The examination results should be used to update the asset quality and credit-risk management assessment and inform the level of coverage needed at the next full-scope examination. Deteriorating asset quality or uncorrected credit-risk management deficiencies noted at the target examination would generally necessitate expanded coverage for the next full-scope examination.

Documentation of Loan Review Coverage

The scope of loan coverage and the loan-sampling procedures used in the examination process should be documented within examination workpapers and the examination report.[12] In particular, examiners should ensure that the composition and volume of the reviewed loans are documented within the examination report. This documentation should include the core loan categories that were included in the sample, the loan portfolio segments that were the focus of the review, and cutoff values that were used in deciding which loans are included in the sample. Documentation supporting the establishment of the sample should be included in the workpapers.

12. See section 1030.1, "Workpapers."

State member banks with less than $100 billion in total assets, in the community banking organization and regional banking organization supervision portfolios, have the option to have Federal Reserve examiners review loan files off site during full-scope or target examinations. Federal Reserve examiners may conduct an off-site loan review provided the state member bank is amenable to such an arrangement, and the bank is able to securely send legible and sufficiently comprehensive loan information to the Reserve Bank.[1]

In the past, the Federal Reserve's off-site examination work focused on financial performance analyses and the review of bank policies, procedures, and certain bank internal reports.[2] With technological advancements, such as secure data transmission and electronic file imaging, examiners have the ability to collect and review loan file information off site without compromising the effectiveness of the examination process. Therefore, Federal Reserve examiners may use the off-site loan review program when a state member bank has communicated its willingness to participate in the program and can appropriately image and send its loan documents to the Reserve Bank in a secure manner.

PROCESS FOR DETERMINING WHETHER A STATE MEMBER BANK MAY PARTICIPATE IN THE OFF-SITE LOAN REVIEW PROGRAM

A Reserve Bank will contact a state member bank prior to the start of an examination to confirm whether the institution has an interest in participating in the off-site loan review program.[3] A bank interested in participating in the program needs to be able to demonstrate its ability to appropriately image and send loan documents to the Reserve Bank. In assessing a bank's ability to participate in the off-site loan review program, a Reserve Bank will consider the bank's answers to the following questions:

- Will the institution submit the loan file data using a secure transmission method such as cloud-based collaboration products, secure email services, encrypted removable media, virtual private networks, or remote desktop control services?
- Is the institution able to provide loan data and imaged loan documents that are legible, easily viewable, and properly organized to allow for timely review by examiners?
- Are the loan files comprehensive to allow an examiner to come to a conclusion as to the appropriate rating of a credit without having to request additional information from the institution?

For state member banks that have demonstrated these technological capabilities, the Reserve Bank should make all efforts to accommodate the request for an off-site loan review. However, a Reserve Bank may decline a request if the Reserve Bank has justifiable reasons to believe that an off-site review would impede the examiners from efficiently and effectively assessing the institution's asset quality and credit risk management process.

SECURITY OF LOAN FILE DATA SUBMITTED TO THE RESERVE BANKS

Reserve Bank examiners must handle a state member bank's loan file data in accordance with existing Federal Reserve information security requirements. A Reserve Bank should explain its procedures and practices for safeguarding loan file data to a state member bank as part of the discussion as to whether or not to participate in the off-site loan review program. This includes an explanation about the Reserve Bank's procedures for coordinating off-site loan reviews with state banking agencies. Further, Reserve Banks and the state member bank should discuss the technical procedures and security practices for conducting off-site loan reviews when contin-

1. Refer to SR-16-8, "Off-Site Review of Loan Files." The guidance in SR-16-8 also is relevant to the supervision of U.S. branches and agencies of foreign banking organizations with combined U.S. assets of $50 billion or less.
2. Refer to SR-95-13, "Recommendations to Increase the Portion of Examinations and Inspections Conducted in Reserve Bank Offices."
3. In order for a Reserve Bank to be able to complete an off-site loan review, a state member bank will need to submit all requested information in a timely manner, including confirming its interest in being considered for the off-site review program and providing all the necessary information for a Reserve Bank to confirm the institution's technological preparedness.

gency operating circumstances necessitate a full-time telework environment for Reserve Bank examiners.

ADJUSTMENTS TO THE EXAMINATION PROCESS

Reserve Banks need to adjust their examination process in order to execute an off-site loan review. For example, examiners allocate time prior to the start of the examination to confirm that a state member bank has successfully transmitted its loan file data to the Reserve Bank. Further, examiners are expected to maintain ongoing communication with the institution's management during the examination process. Prior to the start of the examination, examiners establish a schedule with the institution's management for status calls during the off-site portion of the examination. Typically, examiners will conduct regular calls with management to discuss loan file review and the status of other examination work.

SCOPE OF THE OFF-SITE EXAMINATION WORK

Reserve Banks will try to conduct as much of the examination work off site as feasible without compromising the effectiveness of the examination process. Specific to loan review, examiners typically conduct the following portions of examination work off site regardless of whether the state member bank is participating in the off-site loan review program. This examination work includes

- determination of the scope of the loan review;
- risk assessment to determine the areas to be emphasized (for example, management of credit concentrations and the loan approval process);
- review of the bank's loan policies;
- review of financial performance reports and management reports;
- preliminary review of the loan loss reserve methodology;
- determination of the loans to be reviewed, and the selection of individual credits;
- grouping of loans to related obligors; and
- preparation of loan line sheets.

In addition, for a state member bank participating in the off-site loan review program, examiners will perform an off-site the review of credit files for quality, documentation, and compliance with bank policy and laws and regulations. Further, at the discretion of the examiners, Reserve Banks may hold either off-site or on-site discussions with the institution's management regarding preliminary loan review findings such as the appropriateness of individual credit ratings assigned by the state member bank and the completeness of credit file documentation.

SCOPE OF ON-SITE EXAMINATION WORK

On-site examination work remains an indispensable component of bank supervision that plays a critical role in the ability of the Federal Reserve to fulfill its supervisory responsibilities. Reserve Banks are expected to continue to perform on site those activities that require physical observation such as transaction testing and direct monitoring of an institution's operations and internal controls. While on site, examiners will also review documents such as meeting minute books of the board of directors that would be inappropriate or impractical for the state member bank to send to the Reserve Bank. Further, unless contingency operating circumstances necessitate teleworking arrangements, Federal Reserve examiners will conduct exit meetings in person with the institution's management to communicate final supervisory findings and conclusions, including the final supervisory findings from any off-site loan review examination work. (Refer to SR-16-8.)

INTRODUCTION TO THE SHARED NATIONAL CREDIT PROGRAM

In 1977, the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of the Currency (OCC) (collectively "the agencies") established the Shared National Credit (SNC) program to evaluate large and complex syndicated credits. The program provides for uniform treatment and increased efficiency in shared-credit risk analysis and classification of the largest and most complex credits shared by multiple financial institutions. The SNC program facilitates the collection and analysis of data on the largest and most complex credits and gives examiners from the agencies a medium to assess the risk-management practices associated with such credits. The SNC program is governed by an interagency agreement among the agencies.

DEFINITION OF A SHARED NATIONAL CREDIT

An SNC is any loan or formal loan commitment, and any asset such as real estate, stocks, notes, bonds, and debentures taken as debts previously contracted, extended to borrowers by a federally supervised institution (explained in the subtopic below entitled, "Shared National Credit Reporting"), its subsidiaries, and affiliates, that aggregates to $100 million or more and is shared by three or more unaffiliated federally supervised institutions, or a portion of which is sold to two or more unaffiliated federally supervised institutions.[1] The agencies may designate any other large credit as meeting the general intent or purpose of the SNC program. Other examples of SNCs include

- all international credits to borrowers in the private sector regardless of currency denomination that are administered by a U.S. domestic office of the institution.
- two or more credits to the same borrower for the same origination date where the aggregate commitment amount of the credits is greater than or equal to $100 million and is shared by three or more unaffiliated, supervised participant lenders. All unaffiliated supervised participant lenders should be lenders in each credit.
- any credit facility or tranche of a syndicated loan agreement that equals $100 million or more and includes three or more federally supervised institutions as well as all the other credit facilities or tranches subject to that credit agreement, regardless of the dollar amount or the number of federally supervised institutions participating in them.[2]

SHARED NATIONAL CREDIT REPORTING

The agent or administrative agent of the SNC is responsible for submitting credit data to the agencies. The agent is the federally supervised institution that originates an SNC or administers the credit for the syndication or participating lenders. For the purposes of the SNC program, a federally supervised institution is any financial institution, including subsidiaries, subject to supervision by one of the agencies. More specifically, federally supervised institutions that are part of the SNC program include

- FDIC-insured banks (for example, state member banks, nonmember banks, and national banks) and thrifts, their branches and subsidiaries;
- bank holding companies, and their non-bank subsidiaries subject to examination by the Federal Reserve System;
- savings and loan holding companies;
- federally and state-licensed branches and agencies of foreign banks (including non-U.S. branches managed by a U.S. branch); and
- U.S. subsidiaries of foreign banking organizations.

U.S. representative or loan production offices of foreign banks are not required to report to the agencies for SNC purposes.

1. Effective January 1, 2018, the aggregate loan commitment threshold for inclusion in the SNC program increased from $20 million to $100 million to adjust for inflation and changes in average loan size. The 2018 increase in the dollar threshold to $100 million for inclusion as an SNC was the first since the program's inception in 1977.

2. Each tranche/facility is reported as a separate credit when a credit agreement has tranches/facilities with different terms or participant groups.

The agencies divide SNC reporters into two categories: "basic" and "expanded" filers. Basic filers report SNCs and submit an agent file to the agencies. Basic filers do not submit a participant file.

Expanded filers are typically larger institutions and are subject to more comprehensive reporting expectations than basic reporters. In comparison to basic filers, expanded filers are required to submit all syndicated credits (SNC and non-SNC alike) to the agencies. Syndicated credits include all credits that are arranged and extended by two or more financial entities regardless of the number of participants that are considered regulated entities. While SNCs must have a commitment amount of at least $100 million, there is no minimum commitment amount with syndicated credits. Expanded filers are also required to report participant files, which include structure and ratings information for all credits purchased. Expanded filers also report Basel-related data to the agencies.

SHARED NATIONAL CREDIT EXAMINATIONS

Historically, the agencies conducted annual SNC reviews. Starting in 2016, the agencies initiated a semiannual SNC examination schedule and now conduct SNC reviews in the first and third calendar quarters, with some banks receiving two reviews and others receiving a single review each year. The first quarter SNC review uses data collected from federally supervised institutions in the third quarter of the prior year, and the third quarter SNC review uses first quarter data of the same year. The reported data is analyzed and a sample of credits is selected for review by the agencies and participating state banking supervisors during the examination phase of the program.

The SNC program is governed by agreements among agencies, which include information sharing and program administration procedures for completing reviews of SNCs.[3] In general, teams of three examiners analyze each SNC and assign a disposition to the credit. The credit quality rating assigned by the examination team is reported to each supervised institution that participated in the credit as of the examination date. The assigned ratings are used by the agencies during other examinations of supervised institutions to avoid duplicate reviews and ensure consistent treatment of these credits. After the SNC examination phase is completed, the appropriate agency or agencies compile and distribute the results to the federally supervised institutions that are agents or participants in an SNC.

The agencies issue a single statement annually that includes combined findings from the previous 12 months. This practice presents a complete view of the entire SNC portfolio, which can be compared with prior years' reports. These reports are available on the Board's website.

3. For example, see SR-94-62, "Shared National Credit Program—Interagency Agreement."

Real estate lending is a major function of most banks. However, the composition of banks' real estate loan portfolios will vary because of differences in the banks' asset size, investment objectives, lending experience, market competition, and location. Additionally, state member banks' lending activity is subject to supervision by state banking regulatory agencies, which may impose limitations, including restrictions on lending territory, types of lending, percentage of assets in real estate loans, loan limits, loan-to-value ratios, and loan terms.

Because of the differences in state banking laws, this section of the manual is only an overview of the Federal Reserve's supervisory and regulatory requirements for a safe and sound real estate lending program. This section also briefly discusses automated valuation models (see SR-11-7) and other collateral-evaluation tools or methods. For specific information on lending limitations and restrictions, refer to the applicable state banking laws. In addition, information related to real estate construction lending is discussed in section 2100.1 of this manual.

REAL ESTATE LENDING POLICY MANDATED BY FDICIA

A bank's real estate lending policy is a broad statement of its standards, guidelines, and limitations that senior bank management and lending officers are expected to adhere to when making a real estate loan. The maintenance of prudent written lending policies, effective internal systems and controls, and thorough loan documentation is essential to the bank's management of the lending function.

The policies governing a bank's real estate lending activities must include prudent underwriting standards that are clearly communicated to the institution's management and lending staff. The bank should also have credit-risk control procedures that include, for example, an effective credit-review and -classification process and a methodology for ensuring that the allowance for loan and lease losses is maintained at an adequate level. As part of the analysis of a bank's real estate loan portfolio, examiners should review lending policies, loan-administration procedures, and credit-risk control procedures, as well as the bank's compliance with its own policies.

As mandated by the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) (12 USC 1828(c)), the Federal Reserve Board, along with the other banking agencies, adopted in December 1992 uniform regulations prescribing standards for real estate lending. FDICIA defines real estate lending as extensions of credit secured by liens on or interests in real estate that are made for the purpose of financing the construction of a building or other improvements to real estate, regardless of whether a lien has been taken on the property.

The Federal Reserve's Regulation H requires an institution to adopt real estate lending policies that are—

- consistent with safe and sound banking practices,
- appropriate to the size of the institution and the nature and scope of its operations, and
- reviewed and approved by the bank's board of directors at least annually.

These lending policies must establish—

- loan portfolio diversification standards;
- prudent underwriting standards that are clear and measurable, including loan-to-value limits;
- loan-administration procedures for the institution's real estate portfolio; and
- documentation, approval, and reporting requirements to monitor compliance with the bank's real estate lending policies.

Furthermore, the bank is expected to monitor conditions in the real estate market in its lending area to ensure that its policies continue to be appropriate for current market conditions.

GUIDELINES ESTABLISHED PURSUANT TO FDICIA

The criteria and specific factors that a bank should consider in establishing its real estate lending policies are set forth in the Interagency Guidelines for Real Estate Lending Policies (Regulation H, part 208, appendix C (12 CFR

208, appendix C)). These guidelines apply to transactions (including legally binding, but unfunded, lending commitments) originated on or after March 19, 1993.

Loan Portfolio Management

The bank's lending policies should contain a general outline of its market area; a targeted loan portfolio distribution; and the manner in which real estate loans are made, serviced, and collected. Lending policies should include—

- identification of the geographic areas in which the bank will consider lending;
- establishment of a loan portfolio diversification policy and limits for real estate loans by type and geographic market (for example, limits on higher-risk loans);
- identification of the appropriate terms and conditions, by type of real estate loan;
- establishment of loan-origination and -approval procedures, both generally and by size and type of loan;
- establishment of prudent underwriting standards, including loan-to-value (LTV) limits, that are clear and measurable and consistent with the supervisory LTV limits contained in the interagency guidelines;
- establishment of review and approval procedures for exception loans, including loans with LTV ratios in excess of the interagency guidelines' supervisory limits;
- establishment of loan-administration procedures, including documentation, disbursement, collateral inspection, collection, and loan review;
- establishment of real estate appraisal and evaluation programs consistent with the Federal Reserve's appraisal regulation and guidelines; and
- a requirement that management monitor the loan portfolio and provide timely and adequate reports to the bank's board of directors.

The complexity and scope of these policies and procedures should be appropriate for the market, size, and financial condition of the institution and should reflect the expertise and size of the lending staff. The bank's policies should also consider the need to avoid undue concentrations of risk and compliance with all real estate–related laws and regulations (such as the Community Reinvestment Act, the Truth in Lending Act, the Real Estate Settlement Procedures Act, and antidiscrimination laws).

On December 13, 2013, the "Interagency Statement on Supervisory Approach for Qualified and Non-Qualified Mortgage Loans" was issued to clarify the safety-and-soundness expectations and Community Reinvestment Act considerations for regulated institutions engaged in residential mortgage lending. The Consumer Financial Protection Bureau's (CFPB's) Ability-to-Repay and Qualified Mortgage Standards Rule [1a] was issued on January 10, 2013 (effective on January 10, 2014). Institutions may issue qualified mortgages or non-qualified mortgages, based on their business strategies and risk appetites. Residential mortgage loans will not be subject to safety-and-soundness criticism based on their status as either qualified mortgages or non-qualified mortgages. As for safety-and-soundness expectations, the agencies [1b] continue to expect institutions to underwrite residential mortgage loans in a prudent fashion and to address key risk areas in their residential mortgage lending, including loan terms, borrower qualification standards, loan-to-value limits, documentation requirements, and appropriate portfolio and risk-management practices. Refer to SR-13-20 and its attachment.

The bank should monitor the conditions in the real estate markets in its lending area so that it can react quickly to changes in market conditions that are relevant to the lending decision. This should include monitoring market supply-and-demand factors, such as employment trends; economic indicators; current and projected vacancy, construction, and absorption rates; and

1a. See the Ability-to-Repay and Qualified Mortgage Standards Rule (the Ability-to-Repay Rule) under the Truth in Lending Act (Regulation Z), *78 Fed. Reg.* 6408 (January 30, 2013), as amended. The Ability-to-Repay Rule requires institutions to make reasonable, good faith determinations that consumers have the ability to repay mortgage loans before extending such loans. In accordance with the rule, a "qualified mortgage" may not have certain features, such as negative amortization, interest-only payments, or certain balloon structures, and must meet limits on points and fees and other underwriting requirements.

1b. The federal financial institutions regulatory agencies (the Federal Reserve, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the National Credit Union Administration).

current and projected lease terms, rental rates, and sales prices.

Underwriting Standards

The bank's lending policies should reflect the level of risk that is acceptable to its board of directors and should provide clear and measurable underwriting standards that enable the bank's lending staff to evaluate all relevant credit factors. These factors include—

- the capacity of the borrower or income from the underlying property to adequately service the debt;
- the market value of the underlying real estate collateral;
- the overall creditworthiness of the borrower,
- the level of the borrower's equity invested in the property;
- any secondary sources of repayment; and
- any additional collateral or credit enhancements, such as guarantees, mortgage insurance, or takeout commitments.

While there is no one lending policy appropriate for all banks, there are certain standards that a bank should address in its policies, such as—

- the maximum loan amount by type of property,
- the maximum loan maturities by type of property,
- amortization schedules,
- the pricing structure for each type of real estate loan, and
- loan-to-value limits by type of property.

For development and construction projects and completed commercial properties, the bank's policy should also establish appropriate standards for the unique risks associated with these types of real estate loans by addressing the size, type, and complexity of the project. Such standards should include the acceptability of and limits for nonamortizing loans and interest reserves; requirements for pre-leasing and presale; limits on partial recourse or nonrecourse loans; requirements for guarantor support; requirements for takeout commitments; and minimum covenants for loan agreements. Furthermore, the bank's policy should set minimum requirements for initial investment by the borrower; maintenance of hard equity throughout the life of the project; and net worth, cash flow, and debt-service coverage of the borrower or underlying property.

Exceptions to Underwriting Standards

The bank should have procedures for handling loan requests from creditworthy borrowers whose credit needs do not conform with the bank's general lending policy. As a part of the permanent loan file, the bank should document justification for approving such loans. Moreover, in the course of monitoring compliance with its own real estate lending policy, bank management should report to its board of directors loans of a significant size that are exceptions to bank policy. An excessive volume of exceptions to the institution's own policies may signal weaknesses in its underwriting practices or a need to revise its policy.

Supervisory Loan-to-Value Limits

The bank should establish its own internal loan-to-value (LTV) limits for each type of real estate loan that is permitted by its loan policy. The LTV ratio is derived at the time of loan origination by dividing the extension of credit, including the amount of all senior liens on, or other senior interests in, the property, by the total value of the property or properties securing or being improved by the extension of credit, plus the amount of any other acceptable collateral and readily marketable collateral securing the credit.

In accordance with the Federal Reserve's appraisal regulation and guidelines, the value of the real estate collateral should be set forth in an appraisal or evaluation (whichever is appropriate) and should be expressed in terms of market value. However, for loans to purchase an existing property, the term "value" means the lesser of the actual acquisition cost to the borrower or the estimate of value as presented in the appraisal or evaluation. See "Real Estate Appraisals and Evaluations," section 4140.1 of this manual for further discussion of the Federal Reserve's appraisal regulation and guidelines.

"Other acceptable collateral" refers to any collateral in which the lender has a perfected security interest, that has a quantifiable value, and that is accepted by the lender in accordance with safe and sound lending practices. This includes inventory, accounts receivables, equipment, and unconditional irrevocable standby letters of credit.

Readily marketable collateral means insured deposits, financial instruments, and bullion in which the lender has a perfected interest. Financial instruments and bullion must be readily salable under ordinary circumstances at a market value determined by quotations based on actual transactions, on an auction, or similarly available daily bid and asking price.

Other acceptable collateral and readily marketable collateral should be appropriately discounted by the lender consistent with the bank's usual practices for making loans secured by such collateral. The lender may not consider the general net worth of the borrower, which might be a determining factor for an unsecured loan, as equivalent to other acceptable collateral for determining the LTV on a secured real estate loan. Furthermore, if an institution attempts to circumvent the supervisory LTV limits by lending a portion of the funds on a secured basis and a portion on an unsecured basis, examiners are instructed to consider the two loans as one if certain similarities are found. These similarities are based upon facts such as common origination dates or loan purposes, and should be used to determine compliance with the supervisory LTV limits. The bank's policy should reflect the supervisory limits set forth in the Interagency Guidelines for Real Estate Lending Policies, which are shown in the following table.

Table 1—Supervisory Loan-to-Value Limits

Loan Category	*Loan-to-Value Limit*
Raw land	65%
Land development, including improved land loans	75%
Construction:	
Commercial, multifamily, and other nonresidential	80%
One- to four-family residential	85%
Improved property	85%
Owner-occupied one- to four-family and home equity	**

** A loan-to-value limit has not been established for permanent mortgage or home equity loans on owner-occupied one- to four-family residential property. However, for any such loan with a loan-to-value ratio that equals or exceeds 90 percent at origination, an institution should require appropriate credit enhancement in the form of either mortgage insurance or readily marketable collateral.

For purposes of these supervisory limits, the loan categories are defined as follows:

Raw land loan means an extension of credit in which the funds are used to acquire and/or hold raw land.

Land development loan means an extension of credit for the purpose of improving unimproved real property before the erection of any structures. Such improvements include the laying or placement of sewers, water pipes, utility cables, streets, and other infrastructure necessary for future development. This loan category also includes an extension of credit for the acquisition of improved land, such as residential lots in an established development. If there are minimal improvements to the land, and the timeframe for construction of the dwelling or building has not been scheduled to commence in the foreseeable future, the loan generally should be considered a raw land loan.

Construction loan means an extension of credit for the purpose of erecting or rehabilitating buildings or other structures, including any infrastructure necessary for development.

One- to four-family residential loan means an extension of credit for a property containing fewer than five individual dwelling units, including manufactured homes permanently affixed to the underlying property.

Multifamily construction loan means an extension of credit for a residential property containing five or more individual units, including condominiums and cooperatives.

Improved property loan refers to (1) farmland, ranchland, or timberland committed to ongoing management and agricultural production; (2) one- to four-family residential property that is not owner-occupied; (3) residential property containing five or more individual dwelling units; (4) completed commercial property; or (5) other income-producing property that has been completed and is available for occupancy and use, except income-producing owner-occupied one- to four-family residential property.

Owner-occupied one- to four-family residential property means that the owner of the underlying real property occupies at least one unit of the real property as a principal residence.

For loans that fund multiple phases of the same real estate project, the appropriate LTV limit is the supervisory LTV limit applicable to the final phase of the project. For example, when the loan is for the acquisition and development of land and the construction of an office building in continuous phases of development, the appropriate supervisory LTV limit for the project loan would be 80 percent (the supervisory LTV limit for commercial construction). However, this does not imply that the lender can finance the total acquisition cost of the land at the time the raw land is acquired by assuming that this financing would be less than 80 percent of the project's final value. The lender is expected to fund the loan according to prudent disbursement procedures that set appropriate levels for the borrower's hard equity contributions throughout the disbursement period and term of the loan. As a general guideline, the funding of the initial acquisition of the raw land should not exceed the 65 percent supervisory LTV limit; likewise, the project cost to fund the land development phase of the project should not exceed the 75 percent supervisory LTV limit.

For a multiple-phase one- to four-family residential loan in which the lender is funding both

the construction of the house and the permanent mortgage to a borrower who will be the owner-occupant, there is no supervisory LTV limit. However, if the LTV ratio equals or exceeds 90 percent, the bank should require an appropriate credit enhancement in the form of either mortgage insurance or readily marketable collateral.

When a loan is fully cross-collateralized by two or more properties, the maximum loan amount is determined by first multiplying each property's collateral value by the LTV ratio appropriate to that property and then deducting from that product any existing senior liens on that property. The resulting sum is the maximum loan amount that may be extended under cross-collateralization. To ensure that collateral margins remain within the supervisory limits, the bank should redetermine conformity whenever collateral substitutions are made to the collateral pool.

Loans in Excess of Supervisory LTV Limits

The Federal Reserve believes that it may be appropriate for a bank, in certain circumstances, to originate or purchase loans with LTV ratios in excess of supervisory limits, based on the support provided by other credit factors that the bank documented in its permanent credit files. While high LTV lending poses higher risk for lenders than traditional mortgage lending, high LTV lending can be profitable when these risks are effectively managed and loans are priced based on risk. Therefore, institutions involved in high LTV lending should implement risk-management programs that identify, measure, monitor, and control the inherent risks (see SR-99-26 and the attached "Interagency Guidance on High LTV Residential Real Estate Lending," October 8, 1998). The primary credit risks associated with this type of lending are increased default risk and losses, inadequate collateral, longer term and thus longer exposure, and limited default remedies.

Capital limits. A bank's nonconforming loans—those in excess of the supervisory LTV limits—should be identified in bank records, and the aggregate amount, along with the performace experience of the portfolio, should be reported at least quarterly to the bank's board of directors. There should be increased supervisory scrutiny of a bank as its level of loans in excess of supervisory LTV limits approaches the capital limitations. Nevertheless, a nonconforming loan should not be criticized solely because it does not adhere to supervisory limits.

The aggregate amount of nonconforming loans may not exceed 100 percent of a bank's total risk-based capital (referred to as the nonconforming basket). Within this limit, the aggregate amount of non–one- to four-family residential loans (for example, raw land, commercial, multifamily, and agricultural loans) that do not conform to supervisory LTV limits may not exceed 30 percent of total risk-based capital. The remaining portion of the nonconforming basket includes the aggregate amount of one- to four-family residential development and construction loans, non-owner-occupied one- to four-family residential loans with an LTV ratio greater than 85 percent, and owner-occupied one- to four-family residential loans with an LTV ratio equal to or exceeding 90 percent without mortgage insurance or readily marketable collateral.

For the purpose of determining the loans subject to the 100 percent of risk-based capital limitation, and for the purposes of determining the aggregate amount of such loans, institutions should include loans that are secured by the *same* property, when the combined loan amount equals or exceeds 90 percent LTV and there is no additional credit support. In addition, institutions should include the recourse obligation of any such loan sold with recourse. If there is a reduction in principal or senior liens or if the borrower contributes additional collateral or equity that brings the LTV ratio into supervisory compliance, the loan is no longer considered nonconforming and may be deleted from the quarterly nonconforming loan report to the directors.

The following guidance is provided for calculating the LTV when multiple loans and more than one lender are involved. The institution should include its loan and all senior liens on or interests in the property in the total loan amount when calculating the LTV ratio. The following examples are provided:

- Bank A holds a first-lien mortgage on a property and subsequently grants the borrower a home equity loan secured by the same property. In this case, the bank would combine both loans to determine if the total amount outstanding equaled or exceeded 90 percent of

the property's market value. If the LTV ratio equals or exceeds 90 percent and there is no other appropriate credit support, the entire amount of both loans is an exception to the supervisory LTV limits and is included in the aggregate capital limitation.

- Bank A grants a borrower a home equity loan secured by a second lien. Bank B holds a first-lien mortgage for the same borrower and on the same property. Bank A would combine the committed amount of its home equity loan with the amount outstanding on Bank B's first-lien mortgage to determine if the LTV ratio equaled or exceeded 90 percent of the property's market value. If the LTV ratio equals or exceeds 90 percent and there is no other appropriate credit support, Bank A's entire home equity loan is an exception to the supervisory LTV limits and is included in the aggregate capital limitation. Bank A does not report Bank B's first-lien mortgage loan as an exception, but must use it to calculate the LTV ratio.

When a loan's LTV ratio is reduced below 90 percent by amortization or additional credit support, it is no longer an exception to the guidelines and may be excluded from the institution's 100 percent of capital limitation.

Institutions will come under increased supervisory scrutiny as the total of all loans in excess of the supervisory LTV limits, including high-LTV residential real estate loan exceptions, approaches 100 percent of total capital. If an institution exceeds the 100 percent of capital limit, a supervisory assessment may be needed to determine whether there is any concern that warrants taking appropriate supervisory action. Such action may include directing the institution (1) to reduce its loans in excess of the supervisory LTV limits to an appropriate level, (2) to raise additional capital, or (3) to submit a plan to achieve compliance. The institution's capital level and overall risk profile, and the adequacy of its controls and operations, as well as other factors will be the basis for determining whether such actions are necessary.

Transactions Excluded from Supervisory LTV Limits

There are a number of lending situations in which other factors significantly outweigh the need to apply supervisory LTV limits, thereby excluding such transactions from the application of the supervisory LTV and capital limits. This includes loans—

- guaranteed or insured by the U.S. government or its agencies, provided the amount of the guaranty or insurance is at least equal to the portion of the loan that exceeds the supervisory LTV limit.
- backed by the full faith and credit of a state government, provided the amount of the guaranty or insurance is at least equal to the portion of the loan that exceeds the supervisory LTV limit.
- guaranteed or insured by a state, municipal, or local government or agency, provided the amount of the guaranty or insurance is at least equal to the portion of the loan that exceeds the supervisory LTV limit and that the guarantor or insurer has the financial capacity and willingness to perform.
- sold promptly (within 90 days) after origination. A supervisory determination may be made that this exclusion is not available for an institution that has consistently demonstrated significant weaknesses in its mortgage banking operations. (If a loan is sold with recourse and the LTV is in excess of supervisory limits, the recourse portion of the loan counts toward the bank's limit for nonconforming loans.)
- renewed, refinanced, or restructured—
  - without the advancement of new monies (except reasonable closing costs); or
  - in conjunction with a clearly defined and documented workout, either with or without the advancement of new funds.
- facilitating the sale of real estate acquired by the lender in the course of collecting a debt previously contracted in good faith.
- in which a lien on real property is taken through an abundance of caution; for example, the value of the real estate collateral is relatively low compared with the aggregate value of other collateral, or a blanket lien is taken on all or substantially all of the borrower's assets.[1c]
- for working-capital purposes in which the lender does not rely principally on real estate as security. The proceeds of the loan are not

1c. Any residential mortgage or home equity loan with an LTV ratio that equals or exceeds 90 percent and that does not have the additional credit support should be considered an exception to the guidelines and included in the calculation of loans subject to the 100 percent of capital limit.

used to acquire, develop, or construct real property.
- financing permanent improvements to real property, but in which no security interest is taken or required by prudent underwriting standards. For example, a manufacturing company obtains a loan to build an addition to its plant. The bank does not take a lien on the plant because the bank is relying on the company's operating income and financial strength to repay the debt.

Risk Management for Supervisory Loan-to-Value Limits

Loan review and monitoring. Institutions should perform periodic quality analyses through loan review and portfolio monitoring. These periodic reviews should include an evaluation of various risk factors, such as credit scores, debt-to-income ratios, loan types, location, and concentrations. At a minimum, the high-LTV loan portfolios should be segmented by their vintage (that is, age) and the performance of the portfolios should be analyzed for profitability, growth, delinquencies, classifications and losses, and the adequacy of the allowance for loan and lease losses based on the various risk factors. The ongoing performance of the high-LTV loans should be monitored by a periodic re-scoring of the accounts, or by periodically obtaining updated credit bureau reports or financial information on borrowers. In addition, institutions involved in high-LTV lending should adopt, as part of their loan-review program, the standards in the FFIEC's Uniform Retail-Credit Classification and Account-Management Policy. (See section 2130.1.)

Sales of high-LTV loans. When institutions securitize and sell high-LTV loans, all the risks inherent in such lending may not be transferred to the purchasers. Institutions that actively securitize and sell high-LTV loans must implement procedures to control the risks inherent in that activity. Only written counterparty agreements that specify the duties and responsibilities of each party and that include a regular schedule for loan sales should be entered into. A contingency plan should be developed that designates backup purchasers and servicers in the event that either party is unable to meet its contractual obligations. To manage liquidity risk, commitment limits should be established for the amount of pipeline and warehoused loans, and alternate funding sources should be identified.

Institutions should refer to the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 140 (FAS 140), "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities (a replacement of FASB statement 125)," for guidance on accounting for these types of transactions. If a securitization transaction meets FAS 140 sale or servicing criteria, the seller must recognize any gain or loss on the sale of the pool immediately and carry any retained interests in the assets sold (including servicing rights or obligations and interest-only strips) at fair value. Management should ensure that the key assumptions used to value these retained interests are reasonable and well supported, both for the initial valuation and for subsequent quarterly revaluations.

Compliance risk. Institutions that originate or purchase high-LTV real estate loans must take special care to avoid violating fair lending and consumer protection laws and regulations. Higher fees and interest rates combined with compensation incentives can foster predatory pricing or discriminatory "steering" of borrowers to high-LTV products for reasons other than the borrower's creditworthiness. An adequate compliance-management program must identify, monitor, and control the compliance risks associated with high-LTV real estate lending.

REAL ESTATE LENDING ACTIVITY AND RISKS

Real estate lending falls into two broad categories: short-term financing (primarily construction loans) and permanent financing (for example, a 30-year residential mortgage or a 10-year mortgage loan with payments based on a 25-year amortization schedule and a balloon payment due at the end of the 10 years on an existing commercial office building). Each type of lending carries with it unique underwriting risks as well as common risks associated with any type of lending. In all cases, the bank should understand the credit risks and structure of the proposed transaction, even if it is not the originating bank. This includes, at a minimum, understanding the borrower's ability to repay the debt and the value of the underlying real estate collateral.

Permanent financing, as the name implies, is long term and presents a funding risk since a bank's source of funds is generally of a shorter maturity. Accordingly, bank management should be aware of the source for funding this lending activity. While matching the maturity structures of assets to liabilities is particularly important for a bank's overall loan portfolio management, the importance of this task is even more evident in real estate lending activity. Many banks reduce their funding risk by entering into loan participations and sales with other institutions as well as asset securitization transactions.[2] For a detailed discussion on short-term financing, see section 2100.1, "Real Estate Construction Loans."

Unsound Lending Practices

Some banks have adversely affected their financial condition and performance by granting loans based on ill-conceived real estate projects. Apart from losses due to unforeseen economic downturns, these losses have generally been the result of poor or lax underwriting standards and improper management of the bank's overall real estate loan portfolio.

A principal indication of an unsound lending practice is an improper relationship between the loan amount and the market value of the property; for example, a high loan-to-value ratio in relationship to normal lending practice for a similar type of property. Another indication of unsound lending practices is the failure of the bank to examine the borrower's debt-service ability. For a commercial real estate loan, sound underwriting practices are critical to the detection of problems in the project's plans, such as unrealistic income assumptions, substandard project design, potential construction problems, and a poor marketing plan, that will affect the feasibility of the project.

Real Estate Loan Portfolio Concentration Risk

A bank should have in place effective internal policies, systems, and controls to monitor and manage its real estate loan portfolio risk. An indication of improper management of a bank's portfolio is an excessive concentration in loans to one borrower or related borrowers, in one type of real estate loan, or in a geographic location outside the bank's designated trade area.

In identifying loan concentrations, commercial real estate loans and residential real estate loans should be viewed separately when their performance is not subject to similar economic or financial risks. However, groups or classes of real estate loans should be viewed as concentrations when there are significant common characteristics and the loans are affected by similar adverse economic, financial, or business developments. Banks with asset concentrations should have in place effective internal policies, systems, and controls to monitor and manage this risk.

Concentrations that involve excessive or undue risks require close scrutiny by the bank and should be reduced over a reasonable period of time. To reduce this risk, the bank should develop a prudent plan and institute strong underwriting standards and loan administration to control the risks associated with new loans. At the same time, the bank should maintain adequate capital to protect it from the excessive risk while restructuring its portfolio.

Loan Administration and Servicing

Real estate loan administration is responsible for certain aspects of loan monitoring. While the administration may be segregated by property type, such as residential or commercial real estate loans, the functions of the servicing department may be divided into the following categories (although the organization will vary among institutions):

- *Loan closing and disbursement*—preparing the legal documents verifying the transaction, recording the appropriate documents in the public land records, and disbursing funds in accordance with the loan agreement.
- *Payment processing*—collecting and applying the loan payments.
- *Escrow administration*—collecting insurance premiums and property taxes from the borrower and remitting the funds to the insurance company and taxing authority.

2. See section 4030.1, "Asset Securitization," for additional information, including information on mortgage-backed securities (MBSs), collateralized mortgage obligations (CMOs), and real estate mortgage investment conduits (REMICs).

- *Collateral administration*—maintaining documents to reflect the status of the bank's lien on the collateral (i.e., mortgage/deed of trust and title policy/attorney's opinion), the value of the collateral (i.e., real estate appraisal or evaluation and verification of senior lien, if in existence), and the protection of the collateral (i.e., hazard/liability insurance and tax payments).
- *Loan payoffs*—determining the pay-off amount, preparing the borrower release or assumption documents, confirming the receipt of funds, and recording the appropriate lien-release documents in the public land records.
- *Collections and foreclosure*—monitoring the payment performance of the borrower and pursuing collection of past-due amounts in accordance with bank policy on delinquencies.
- *Claims processing*—seeking recoveries on defaulted loans that are covered by a government guarantee or insurance program or a private mortgage insurance company.

The bank should have adequate procedures to ensure segregation of duties for disbursal and receipt of funds control purposes. Additionally, the procedures should address the need for document control because of the importance of the timely recording of the bank's security interests in the public land records.

Some institutions provide various levels of loan services for other institutions, which may range from solely the distribution of payments received to the ultimate collection of the debt through foreclosure. In such cases, the bank will have the additional responsibility of remitting funds on a timely basis to the other institutions in accordance with a servicing agreement. The servicing agreement sets forth the servicer's duties, reporting requirements, timeframe for remitting funds, and fee structure. If a bank relies on another institution for servicing, the bank should have adequate control and audit procedures to verify the performance of the servicer (also see section 4030.1, "Asset Securitization"). For residential loans sold into the secondary mortgage market for which the bank has retained servicing, Fannie Mae, Freddie Mac, and the Government National Mortgage Corporation (Ginnie Mae) have specific standards the bank (that is, seller/servicer) must adhere to. Failure to meet these standards can result in the termination of the servicing agreement.

BANK ASSESSMENT OF THE BORROWER

Although the value of the real estate collateral is an important component of the loan-approval process, the bank should not place undue reliance on the collateral value in lieu of an adequate assessment of the borrower's ability to repay the loan. These assessment factors differ depending upon the purpose of the loan, such as single-family residential loans as compared with income-producing commercial property loans and commercial or residential development loans (referred to as "commercial real estate lending"). The loan documentation must adequately support the bank's assessment of the borrower and contain the appropriate legal documentation to protect the bank's interests.

Single-Family Residential Loans

For single-family residential loans, the bank should evaluate the loan applicant's creditworthiness and whether the individual has the ability to meet monthly mortgage payments as well as all other obligations and expenses associated with home ownership. This includes an assessment of the borrower's income, liquid assets, employment history, credit history, and existing obligations.[3] The bank should also consider the availability of private mortgage insurance; a government guarantee; or a government insurance program, such as loans through the FHA-insured or VA-guaranteed programs, in assessing the credit risk of a loan applicant.

If a bank delegates the loan-origination function to a third party, the bank should have adequate controls to ensure that its loan policies and procedures are being followed. The controls should include a review of the third party's qualifications; a written agreement between the bank and the third-party originator to set forth the responsibilities of the third party as an agent for the bank; a periodic review of the third party's operations to ensure that the bank's

3. There are restrictions on the information a bank can request. The Federal Reserve's Regulation B, Equal Credit Opportunity (12 CFR 202), details the information that may and may not be requested on a loan application and provides a model form for a residential mortgage transaction. The Federal Reserve's Regulation Z, Truth in Lending (12 CFR 226), describes the bank-disclosure requirements to the potential borrower on the cost of financing.

policies and procedures are being adhered to; and development of quality controls to ensure that loans originated by the third party meet the bank's lending standards, as well as those of the secondary mortgage market if the bank expects to sell the mortgages.

Abandoned Residential Real Estate Foreclosures

Banking organizations with residential mortgage-servicing operations should ensure that the following key concepts are addressed in their policies and practices governing the decision not to complete foreclosure proceedings after they have been initiated (abandoned foreclosures):

- *Notification to borrowers.* Supervised banking organizations should notify the borrower(s) when a decision is made not to pursue a foreclosure action, and should inform the applicable borrower(s) of their (1) rights to occupy their property until a sale or other title transfer action occurs, (2) financial obligations regarding the outstanding loan balance and the payment of applicable taxes and insurance premiums, and (3) property maintenance responsibilities.
- *Communications.* Supervised banking organizations should use all means possible to provide the notification described above to affected borrowers, particularly those who prematurely vacated their homes based on the servicers' initial communications regarding foreclosure actions. In particular, when attempting to provide the notification, supervised organizations should employ the same extensive methods they use to contact borrowers in connection with payment collection activities.
- *Notification to local authorities.* Supervised banking organizations should ensure that their procedures include reasonable efforts to notify appropriate state or local government authorities of the organization's decision to not pursue a foreclosure, including complying with applicable state or local government notification requirements. These local entities may include tax authorities, courts, or code enforcement departments.
- *Obtaining and monitoring collateral values.* Supervised banking organizations should have a process for obtaining the best practicable information on the collateral value of a residential property that may be subject to foreclosure; updating this information on a regular basis; and using current information in their assessment as to whether to initiate, continue, or abandon a foreclosure proceeding.[3a]

Supervisory Process

The objective of the supervisory process related to abandoned foreclosures is to confirm that a banking organization manages its decisions to initiate and/or discontinue foreclosure proceedings in a prudent manner. Examiners are to determine if an organization's policies and procedures include regular monitoring of property values. This review may be done as part of the regular assessments of banking organizations' appraisal and evaluation programs. (See SR-12-11/CA-12-10.)

Secondary Residential Mortgage Market

In the secondary market, a bank (the primary mortgage originator) sells all or a portion of its interest in residential mortgages to other financial institutions (investors). Thus, the secondary mortgage market provides an avenue for a bank to liquidate a long-term asset as the need for funds arises. The majority of the secondary mortgage market activity is supported by three government-related or -controlled institutions: Fannie Mae,[4] Freddie Mac,[5] and Ginnie Mae.[6]

3a. Refer to section 4140.1 or SR-10-16, "Interagency Appraisal and Evaluation Guidelines," for supervisory expectations as to a regulated banking organization's policies and procedures on collateral monitoring in support of its loan modification or workout activity.

4. Although Fannie Mae was originally created in 1938 as an organization within the federal government, it became a federally chartered, stockholder corporation in 1968 when some of its functions were placed under the newly created Ginnie Mae. Financial institutions can either sell mortgages directly to Fannie Mae or pool mortgages for placement in a Fannie Mae–guaranteed mortgage-backed security.

5. Freddie Mac was sponsored by the Federal Home Loan Bank Board and its members in 1970. Its primary purpose is to provide a secondary market for conventional mortgages originated by thrifts.

6. Ginnie Mae, a government agency under the Department of Housing and Urban Development (HUD), was created in 1968 when Fannie Mae became a private corporation. It has several functions to assist in government housing programs, such as managing and liquidating loans acquired by the government. In the secondary market, Ginnie Mae acts as a guarantor of mortgage-backed securities for pools of loans originated and securitized by financial institutions.

These entities were created or sponsored by the federal government to encourage the financing and construction of residential housing. Fannie Mae, Freddie Mac, and Ginnie Mae have specific underwriting standards and loan-documentation requirements for mortgages purchased or guaranteed by them. Generally, financial institutions enter into either a mandatory or a standby commitment agreement with these entities wherein the financial institution agrees to sell loans according to certain delivery schedules, terms, and performance penalties.

Commercial Real Estate Loans

As with other types of lending activities, the extent of commercial real estate lending activity should be contingent upon the lender's expertise and the bank's experience. In considering an application for a commercial real estate loan, a bank should understand the relationship of the actual borrower to the project being financed. The form of business ownership varies for commercial real estate projects and can affect the management, financial resources available for the completion of the project, and repayment of the loan.

Information on past and current projects constructed, rented, or managed by the potential borrower can help the bank assess the borrower's experience and the likelihood of the proposed project's success. For development and construction projects, the bank should closely review the project's feasibility study. The study should provide sensitivity and risk analyses of the potential impact of changes in key economic variables, such as interest rates, vacancy rates, or operating expenses. The bank should also conduct credit checks of the borrower and of all principals involved in the transaction to verify relationships with contractors, suppliers, and business associates.

Finally, the bank should assess the borrower's financial strength to determine if the principals of the project have the necessary working capital and financial resources to support the project until it reaches stabilization. As with any type of lending on income-producing properties,[7] the bank should quantify the degree of protection from the borrower's (or collateral's) cash flow, the value of the underlying collateral, and any guarantees or other collateral that may be available as a source of loan repayment.

BANK ASSESSMENT OF REAL ESTATE COLLATERAL

Banks should obtain an appraisal or evaluation, as appropriate, for all real estate–related financial transactions before making the final credit or other decision. The Federal Reserve's appraisal regulation requires institutions to obtain appraisals when certain criteria are met. See ''Real

7. Income-producing commercial properties include rental apartments, retail properties, office buildings, warehouses, and hotels.

Estate Appraisals and Evaluations'' section 4140.1, for a description of the related requirements a bank must follow for real estate–related financial transactions. The appraisal section explains the standards for appraisals, indicates which transactions require an appraisal or an evaluation, states qualifications for an appraiser and evaluator, provides guidance on evaluations, and describes the three appraisal approaches.

Management is responsible for reviewing the reasonableness of the appraisal's or evaluation's assumptions and conclusions. Also, management's rationale for accepting and relying upon the appraisal or evaluation should be documented in writing. In assessing the underwriting risks, management should reconsider any assumptions used by an appraiser that reflect overly optimistic or pessimistic values. If management, after its review of the appraisal or evaluation, determines that there are unsubstantiated assumptions, the bank may request the appraiser or evaluator to provide a more detailed justification of the assumptions or obtain a new appraisal or evaluation.

Single-Family Residential Loans

The assessment of a residential property's market value is critical to the bank's estimate of loan-to-value ratio. This assessment provides the bank with an estimate of the borrower's equity in the property and the bank's potential credit risk if the borrower should default on the loan. For mortgages over $250,000, a bank is required to obtain an appraisal in conformance with the Federal Reserve's appraisal regulation. As of January 1, 1993, the appraisal must be performed by a state-certified or -licensed appraiser, as specified in the regulation. While transactions under $250,000 do not require an appraisal, a bank is expected to perform an appropriate evaluation of the underlying real estate collateral. Loans that are wholly or partially insured or guaranteed by a U.S. government agency or government-sponsored agency are exempt from the Federal Reserve's appraisal regulation, so long as the loan meets the underwriting requirements of the federal insurer or guarantor. Additionally, state laws for appraisals may differ from the Federal Reserve's requirements.

Loans qualifying for sale to any U.S. government agency or government-sponsored agency or conforming to the appraisal standards of Fannie Mae and Freddie Mac are also exempt from the Federal Reserve's appraisal regulation. Fannie Mae and Freddie Mac jointly developed and adopted the Uniform Residential Appraisal Report (URAR) as the standard form for residential loans sold to them. As a result, a properly completed URAR form is considered the industry standard for appraising one- to four-family residential properties.

Commercial Real Estate Loans

Due to the variety of uses and the complexity of most commercial projects, there is not a uniformly accepted format for valuing commercial properties like there is for valuing one- to four-family residential properties. A bank relies on outside appraisers, or in some instances in-house expertise, to prepare appraisals. For the most part, appraisals on commercial real estate projects are presented in a narrative format with supporting schedules. As the complexity of a commercial project increases, the detail of the appraisal report or evaluation should also increase to fully support the analysis.

When estimating the value of income-producing real estate, the appraiser generally relies to a greater degree on the income approach to valuation than on the comparable-sales approach or the cost approach. The income approach converts all expected future net operating income into present-value terms, using different analytical methods. One method, known as the direct capitalization method, estimates the present value of a property by discounting its stabilized net operating income at an appropriate capitalization rate (commonly referred to as a cap rate). Stabilized net operating income is the net cash flow derived from a property when market conditions are stable and no unusual patterns of future rents and occupancy are expected. To approximate stabilized net operating income, the appraiser or bank may need to adjust the current net operating income of a property either up or down to reflect current market conditions. The direct capitalization method is appropriate only for use in valuing stabilized properties.

Another method, known as the discounted cash-flow method, requires the discounting of expected future cash flows at an appropriate

discount rate to ascertain the net present value of a property. This method is appropriate for use in estimating the values of new properties that have not yet stabilized, or for troubled properties that are experiencing fluctuations in income.

The discount rates and cap rates, used in estimating property values, should reflect reasonable expectations about the rate of return that investors and lenders require under normal, orderly, and sustainable market conditions. The appraiser's analysis and assumptions should support the discount and cap rates used in the appraisal. The appraiser should not use exaggerated, imprudent, or unsustainably high or low discount rates, cap rates, or income projections.

In assessing the reasonableness of the facts and assumptions associated with the valuation of commercial real estate, the bank should consider—

- current and projected vacancy and absorption rates;
- lease-renewal trends and anticipated rents;
- volume and trends in past-due leases;
- the project's feasibility study and market survey to determine support for the assumptions concerning future supply-and-demand factors;
- effective rental rates or sale prices (taking into account all concessions);
- net operating income of the property as compared with budget projections; and
- discount rates and direct capitalization rates.

Because the income approach is generally relied on to a greater degree than the other methods, with specific emphasis on arriving at stabilized values, the bank must use judgment in determining the time it will take for a property to achieve stabilized occupancy and rental rates. The analysis of collateral values should not be based on a simple projection of current levels of net operating income if markets are depressed or reflect speculative pressures but can be expected over a reasonable period of time to return to normal (stabilized) conditions.

The capacity of a property to generate cash flow to service a loan is evaluated on the basis of rents (or sales), expenses, and rates of occupancy that are reasonably estimated to be achieved over time. The determination of the level of stabilized occupancy, rental rates, and net operating income should be based on an analysis of current and reasonably expected market conditions, taking into consideration historical levels when appropriate.

EARLY INDICATIONS OF TROUBLED COMMERCIAL REAL ESTATE LOANS

Market-Related

To evaluate the collectibility of their commercial real estate portfolio, banks should be alert for economic indicators of weakness in their real estate markets as well as for indicators of actual or potential problems in the individual commercial real estate projects. Available indicators useful in evaluating the condition of the local real estate market include permits for and the value of new construction, absorption rates, employment trends, vacancy rates, and tenant lease incentives. Weaknesses disclosed by these types of statistics may signify that a real estate market is experiencing difficulties that may cause cash-flow problems for individual real estate projects, declining real estate values, and ultimately, troubled real estate loans.

Project-Related

Characteristics of potential or actual difficulties in commercial real estate projects may include—

- an excess supply of similar projects under construction in the same trade area.
- the lack of a sound feasibility study or analysis that reflects current and reasonably anticipated market conditions.
- changes in concept or plan (for example, a condominium project converted to an apartment project because of unfavorable market conditions).
- rent concessions or sales discounts, resulting in cash flow below the level projected in the original feasibility study, appraisal, or evaluation.
- concessions on finishing tenant space, moving expenses, and lease buyouts.
- slow leasing or lack of sustained sales activity and increasing sales cancellations that may reduce the project's income potential, resulting in protracted repayment or default on the loan.
- delinquent lease payments from major tenants.
- land values that assume future rezoning.
- tax arrearages.
- environmental hazards and liability for cleanup.

As the problems associated with a commercial real estate loan become more pronounced, the borrower/guarantor may experience a reduction in cash flow to service-related debts, which could result in delinquent interest and principal payments.

While some real estate loans become troubled because of a general downturn in the market, others become troubled because the loans were originated on an unsound or a liberal basis. Common examples of unsound loans include—

- loans with no or minimal borrower equity
- loans on speculative undeveloped property in which the borrower's only source of repayment is the sale of the property
- loans based on land values that have been driven up by rapid turnover of ownership, but without any corresponding improvements to the property or supportable income projections to justify an increase in value
- additional advances to service an existing loan without evidence that the loan will be repaid in full
- loans to borrowers with no development plans or noncurrent development plans
- renewals, extensions, and refinancings that lack credible support for full repayment from reliable sources and that do not have a reasonable repayment schedule[8]

EXAMINER REVIEW OF COMMERCIAL REAL ESTATE LOANS

The focus of an examiner's review of a real estate loan is on the ability of the loan to be repaid. The principal factors that bear on this review are the income-producing potential of the underlying collateral and the borrower's willingness and ability to repay the loan from other resources, if necessary, and according to existing loan terms. In evaluating the overall risk associated with a real estate loan, examiners should consider a number of factors, including the borrower's character, overall financial condition and resources, and payment history; the prospects for support from any financially responsible guarantors; and the nature and degree of protection provided by the cash flow and value of the underlying collateral.[9] As the borrower's and guarantor's ability to repay a troubled real estate loan decreases, the importance of the collateral value of the loan increases commensurately.

Examiner Review of the Real Estate Collateral

An examiner's analysis of the collateral value is based on the bank's most recent appraisal or evaluation and includes a review of the major facts, assumptions, and approaches used by the appraiser or person performing the evaluation (including any comments made by management relative to the reasonableness of the appraisal or evaluation assumptions and conclusions). While the examiner may make adjustments to the assessment of value, these adjustments should be made solely for purposes of an examiner's analysis and assessment of credit quality and should not involve an adjustment to the actual appraisal or evaluation.

Furthermore, examiners should not make adjustments to appraisal or evaluation assumptions for credit-analysis purposes based on worst-case scenarios that are unlikely to occur. For example, an examiner should not necessarily assume that a building will become vacant just because an existing tenant who is renting at a rate above today's market rate may vacate the property when the current lease expires. On the other hand, an adjustment to value may be appropriate for credit-analysis purposes when the valuation assumes renewal at the above-market rate, unless that rate is a reasonable estimate of the expected market rate at the time of renewal.

Assumptions, when recently made by qualified appraisers or persons performing the evalu-

8. As discussed more fully in the section on classification guidelines, the refinancing or renewing of loans to sound borrowers would not result in a supervisory classification or criticism unless well-defined weaknesses exist that jeopardize repayment of the loans. As consistent with sound banking practices, institutions should work appropriately and constructively with borrowers who may be experiencing temporary difficulties.

9. The primary basis for the review and classification of the loan should be the original source of repayment and the borrower's intent and ability to fulfill the obligation without relying on third-party guarantees. However, the examiner should also consider the support provided by any guarantees when determining the appropriate classification treatment for a troubled loan. The treatment of guarantees in the classification process is discussed in ''Classification of Credits,'' section 2060.1.

ation and when consistent with the discussion above, should be given a reasonable amount of deference. Examiners should not challenge the underlying assumptions, including discount rates and cap rates used in appraisals or evaluations, that differ only in a limited way from norms that would generally be associated with the property under review. However, the estimated value of the underlying collateral may be adjusted for credit-analysis purposes when the examiner can establish that underlying facts or assumptions are inappropriate and can support alternative assumptions.

CLASSIFICATION GUIDELINES

As with other types of loans, real estate loans that are adequately protected by the current sound worth and debt-service capacity of the borrower, guarantor, or the underlying collateral generally are not classified. The examiner should focus on the ability of the borrower, guarantor, or the collateral to provide the necessary cash flow to adequately service the loan. The loan's record of performance is also important and must be taken into consideration. As a general principle, a performing real estate loan should not be automatically classified or charged off solely because the value of the underlying collateral has declined to an amount that is less than the loan balance. Conversely, the fact that the underlying collateral value equals or exceeds the current loan balance, or that the loan is performing, does not preclude the loan from classification if well-defined weaknesses jeopardize the repayment ability of the borrower, such as the lack of credible financial support for full repayment from reliable sources.[10]

Similarly, loans to sound borrowers that are refinanced or renewed according to prudent underwriting standards, including loans to creditworthy commercial or residential real estate developers, should not be categorized as special mention unless potential weaknesses exist or should not be classified unless well-defined weaknesses exist that jeopardize repayment. An institution should not be criticized for working with borrowers whose loans are classified or categorized as special mention as long as the institution has a well-conceived and effective workout plan for such borrowers, along with effective internal controls to manage the level of these loans.

In evaluating real estate credits for special-mention categorization or classification, examiners should apply the standard definitions as set forth in "Classification of Credits," section 2060.1. In assessing credit quality, examiners should consider all important information regarding repayment prospects, including information on the borrower's creditworthiness, the value of and cash flow provided by all collateral supporting the loan, and any support provided by financially responsible guarantors.

These guidelines apply to individual credits, even if portions or segments of the industry to which the borrower belongs are experiencing financial difficulties. The evaluation of each credit should be based upon the fundamental characteristics affecting the collectibility of the particular credit. The problems broadly associated with some sectors or segments of an industry, such as certain commercial real estate markets, should not lead to overly pessimistic assessments of particular credits in the same industry that are not affected by the problems of the troubled sectors.

Troubled Project-Dependent Commercial Real Estate Loans

The following guidelines for classifying a troubled commercial real estate loan apply when the repayment of the debt will be provided solely by the underlying real estate collateral, and there are no other available and reliable sources of repayment. As a general principle, for a troubled project-dependent commercial real estate loan, any portion of the loan balance that exceeds the amount that is adequately secured by the value of the collateral, and that can be clearly identified as uncollectible, should be classified loss. The portion of the loan balance that is adequately secured by the value of the collateral should generally be classified no worse than substandard. The amount of the loan balance in excess of the value of the collateral, or portions thereof, should be classified doubtful

10. Another issue that arises in the review of a commercial real estate loan is its accrual or nonaccrual treatment for reporting purposes. The federal banking agencies, under the auspices of the FFIEC, have provided guidance on nonaccrual status in the instructions for the Reports of Condition and Income (call reports) and in related supervisory guidance of the agencies. This guidance is summarized in "Loan Portfolio Management," section 2040.1.

when the potential for full loss may be mitigated by the outcome of certain pending events, or when loss is expected but the amount of the loss cannot be reasonably determined. If warranted by the underlying circumstances, an examiner may use a doubtful classification on the entire loan balance. However, such a classification should occur infrequently.

Partially Charged-Off Loans

An evaluation based upon consideration of all relevant factors may indicate that a credit has well-defined weaknesses that jeopardize collection in full, although a portion of the loan may be reasonably assured of collection. When a charge-off has been taken in an amount sufficient to ensure that the remaining recorded balance of the loan (1) is being serviced (based upon reliable sources) and (2) is reasonably assured of collection, classification of the remaining recorded balance may not be appropriate. Classification would be appropriate when well-defined weaknesses continue to be present in the remaining recorded balance. In such cases, the remaining recorded balance would generally be classified no more severely than substandard.

A more severe classification than substandard for the remaining recorded balance would be appropriate, however, if the loss exposure cannot be reasonably determined—for example, when significant risk exposures are perceived, such as in the case of bankruptcy or loans collateralized by properties subject to environmental hazards. In addition, classifying the remaining recorded balance more severly than substandard would be appropriate when sources of repayment are considered unreliable.

Formally Restructured Loans

The classification treatment previously discussed for a partially charged-off loan would also generally be appropriate for a formally restructured loan when partial charge-offs have been taken. For a formally restructured loan, the focus of the examiner's analysis is on the ability of the borrower to repay the loan in accordance with its modified terms. Classification of a formally restructured loan would be appropriate if, after the restructuring, well-defined weaknesses exist that jeopardize the orderly repayment of the loan in accordance with reasonable modified terms.[11] Troubled commercial real estate loans whose terms have been restructured should be identified in the institution's internal credit-review system and closely monitored by management.

Home Equity Loans

Home equity loans (HELs) are defined as loans that are usually collateralized by a second mortgage or deed of trust on the borrower's principal residence or second residence; however, the collateral may be a first mortgage or deed of trust. The borrower's equity in the residence, pledged as collateral, provides protection for the loan and determines the maximum amount of credit that may be advanced. Traditionally, HELs were used to fund home improvements or to consolidate debt, and they were usually amortized without a revolving feature. Because of these characteristics, home equity loans were commonly maintained and administered in a bank's consumer or installment loan department and were monitored based on delinquency status. However, since enactment of the Tax Reform Act of 1986, which allows the deduction of home equity loan interest on debt of up to $100,000, the popularity and usage of HELs have expanded considerably. The proceeds of home equity loans are now used for increasingly diverse purposes, such as to make consumer purchases or personal investments, to provide working capital for small businesses, and to supplement personal income.

The structure and repayment terms of home equity loans have become more varied. Amortization periods may be as long as 15 years, with possible balloon maturities of three to five years. In some instances, the payment requirement is only interest due for an initial period. Revolving lines of credit have also gained popularity as a way to accommodate the many different uses of loan proceeds. Lines of credit to individuals with high incomes or high net worths may substantially exceed $100,000. These loans are often housed in the bank's private-banking

11. An example of a restructured commercial real estate loan that does not have reasonable modified terms would be a cash-flow mortgage, which requires interest payments only when the underlying collateral generates cash flow but provides no substantive benefits to the lending institution.

division or within the commercial loan portfolio, rather than in the consumer loan department.

In addition to the increasingly varied purposes of HELs, there has also been an upsurge in loans in which the combined first and second mortgages result in very high LTV ratios. To remain competitive with other residential lenders, some banks have relaxed their underwriting standards by permitting higher LTV ratios. In addition, some banks may have offset declines in residential mortgage refinancing during periods of higher interest rates by competing more aggressively for home equity loan business. Consumer demand for HELs may also increase during periods of higher interest rates because they provide an alternative source of financing for consumer purchases.

Examiners must ensure that a bank's policies for originating and acquiring HELs comply with the real estate lending standards and guidelines stipulated in the Board's Regulation H, subpart E. (See Regulation H, subpart E, 12 CFR 208.50–51.) While the guidelines permit banks to make residential real estate loans with LTV ratios in excess of 90 percent without the appropriate credit enhancements, these loans are treated as exceptions to the guidelines and are subject to the aggregate limitation of 100 percent of the bank's total capital.

For all types of lending, banks should have strong underwriting standards for HELs. In assessing these standards, the examiner should determine whether the bank primarily emphasizes the borrower's ability and willingness to repay the loan from income or cash flow versus the amount of equity in the real estate. Extended repayment terms and liberal loan structures can increase the risk of default on HELs. Normally, longer repayment terms increase the likelihood of events that could jeopardize the borrower's ability to repay, for example, the loss of a job, a change in marital status, a prolonged spike in prevailing interest rates, or a deflationary economic environment. Additionally, the examiner should review the bank's policy (or practice) for obtaining appraisals or evaluations to determine the lendable equity in the borrower's residence. The examiner should determine that the bank has not relaxed its appraisal and evaluation requirements to accommodate the growth of its HEL portfolio.

Economic periods of increasing unemployment, rising interest rates, or other recessionary factors can negatively affect the repayment ability of borrowers and erode the value and marketability of residential real estate. Moreover, most HELs are collateralized by junior lien positions. Therefore, if the bank forecloses, it must pay off or service the senior mortgage lender, further increasing its exposure. Foreclosure proceedings may entail lengthy and costly litigation, and real estate law commonly protects the home owner.

Examiners should ensure that banks have proper controls to manage HEL exposure, particularly those banks that have a high concentration of home equity loans with excessively high combined LTV ratios. (See the following subsection for interagency guidance on credit-risk management in home equity lending.) Banks with concentrations that lack proper controls and monitoring procedures should be criticized for these credit deficiencies. If the examiner judges the deficiencies to be severe, the bank should be cited for unsafe and unsound banking practices.

Interagency Credit-Risk Management Guidance for Home Equity Lending

The Federal Reserve and the other federal financial institutions regulatory agencies[12] collectively issued this interagency guidance on May 16, 2005. The guidance is intended to promote sound credit-risk management practices at financial institutionsthat have home equity lending programs, including open-end home equity lines of credit (HELOCs) and closed-end home equity loans (HELs). Home equity lending can be an attractive product for many homeowners and lenders. The quality of these portfolios, however, is subject to increased risk if interest rates rise and home values decline. Sound underwriting practices and effective risk-management systems are essential to mitigate this risk. Therefore, financial institutions' credit-risk management practices for home equity lending need to keep pace with any rapid growth in home equity lending and should emphasize compliance with sound underwriting standards and practices.

12. The Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Office of Thrift Supervision, and the National Credit Union Administration. Also, the interagency guidance frequently uses the term *financial institutions.* As used in this section, *financial institutions* means commercial banks and any of their various credit-extending nonbanking subsidiaries.

The risk factors listed below, combined with an inherent vulnerability to rising interest rates, suggest that financial institutions need to fully recognize the risk embedded in their home equity portfolios. Following are the specific product, risk-management, and underwriting risk factors and trends that deserve scrutiny:

- interest-only features that require no amortization of principal for a protracted period
- limited or no documentation of a borrower's assets, employment, and income (known as "low doc" or "no doc" lending)
- higher loan-to-value (LTV) and debt-to-income (DTI) ratios
- lower credit-risk scores for underwriting home equity loans
- greater use of automated valuation models (AVMs) and other collateral-evaluation tools for the development of appraisals and evaluations
- an increase in the number of transactions generated through a loan broker or other third party

Home equity lending can be conducted in a safe and sound manner if pursued with the appropriate risk-management structure, including adequate allowances for loan and lease losses and appropriate capital levels. Sound practices call for fully articulated policies that address marketing, underwriting standards, collateral-valuation management, individual-account and portfolio management, and servicing.

Financial institutions should ensure that risk-management practices keep pace with the growth and changing risk profile of home equity portfolios. Management should actively assess a portfolio's vulnerability to changes in consumers' ability to pay and the potential for declines in home values. Active portfolio management is especially important for financial institutions that project or have already experienced significant growth or concentrations, particularly in higher-risk products such as high-LTV, "low doc" or "no doc," interest-only, or third-party-generated loans. (See SR-05-11.)

Credit-Risk Management Systems

Product Development and Marketing

In the development of any new product offering, product change, or marketing initiative, management should have a review and approval process that is sufficiently broad to ensure compliance with the financial institution's internal policies and applicable laws and regulations[13] and to evaluate the credit, interest-rate, operational, compliance, reputation, and legal risks. In particular, risk-management personnel should be involved in product development, including an evaluation of the targeted population and the product(s) being offered. For example, material changes in the targeted market, origination source, or pricing could have a significant impact on credit quality and should receive senior management approval.

When HELOCs or HELs are marketed or closed by a third party, financial institutions should have standards that provide assurance that the third party also complies with applicable laws and regulations, including those on marketing materials, loan documentation, and closing procedures. (For further details on agent relationships, see "Third-Party Originations.") Finally, management should have appropriate monitoring tools and management information systems (MIS) to measure the performance of various marketing initiatives, including offers to increase a line, extend the interest-only period, or adjust the interest rate or term.

Origination and Underwriting

All relevant risk factors should be considered when establishing product offerings and underwriting guidelines. Generally, these factors should include a borrower's income and debt levels, credit score (if obtained), and credit history, as well as the loan size, collateral value (including valuation methodology), lien position, and property type and location.

Consistent with the Federal Reserve's regulations on real estate lending standards,[14] prudently underwritten home equity loans should include an evaluation of a borrower's capacity

13. Applicable laws include the Federal Trade Commission Act; the Equal Credit Opportunity Act (ECOA); the Truth in Lending Act (TILA), including the Home Ownership and Equity Protection Act (HOEPA); the Fair Housing Act; the Real Estate Settlement Procedures Act (RESPA); and the Home Mortgage Disclosure Act (HMDA), as well as applicable state consumer protection laws.

14. On December 23, 1992, the Federal Reserve announced the adoption of uniform rules on real estate lending standards and issued the Interagency Guidelines for Real Estate Lending Policies. See 12 CFR 208.51 and 12 CFR 208, appendix C.

to adequately service the debt.[15] Given the home equity products' long-term nature and the large credit amount typically extended to a consumer, an evaluation of repayment capacity should consider a borrower's income and debt levels and not just a credit score.[16] Credit scores are based upon a borrower's historical financial performance. While past performance is a good indicator of future performance, a significant change in a borrower's income or debt levels can adversely alter the borrower's ability to pay. How much verification these underwriting factors require will depend upon the individual loan's credit risk.

HELOCs generally do not have interest-rate caps that limit rate increases.[17] Rising interest rates could subject a borrower to significant payment increases, particularly in a low-interest-rate environment. Therefore, underwriting standards for interest-only and variable-rate HELOCs should include an assessment of the borrower's ability to amortize the fully drawn line over the loan term and to absorb potential increases in interest rates.

Third-Party Originations

Financial institutions often use third parties, such as mortgage brokers or correspondents, to originate loans. When doing so, institutions should have strong control systems to ensure the quality of originations and compliance with all applicable laws and regulations, and to help prevent fraud.

Brokers are firms or individuals, acting on behalf of either the financial institution or the borrower, who match the borrower's needs with institutions' mortgage-origination programs. Brokers take applications from consumers. Although they sometimes process the application and underwrite the loan to qualify the application for a particular lender, they generally do not use their own funds to close loans. Whether brokers are allowed to process and perform any underwriting will depend on the relationship between the financial institution and the broker. For control purposes, the financial institution should retain appropriate oversight of all critical loan-processing activities, such as verification of income and employment and independence in the appraisal and evaluation function.

Correspondents are financial companies that usually close and fund loans in their own name and subsequently sell them to a lender. Financial institutions commonly obtain loans through correspondents and, in some cases, delegate the underwriting function to the correspondent. In delegated underwriting relationships, a financial institution grants approval to a correspondent financial company to process, underwrite, and close loans according to the delegator's processing and underwriting requirements and is committed to purchase those loans. The delegating financial institution should have systems and controls to provide assurance that the correspondent is appropriately managed, is financially sound, and provides mortgages that meet the financial institution's prescribed underwriting guidelines and that comply with applicable consumer protection laws and regulations. A quality-control unit or function in the delegating financial institution should closely monitor the quality of loans that the correspondent underwrites. Monitoring activities should include post-purchase underwriting reviews and ongoing portfolio-performance-management activities.

Both brokers and correspondents are compensated based upon mortgage-origination volume and, accordingly, have an incentive to produce and close as many loans as possible. Therefore, financial institutions should perform comprehensive due diligence on third-party originators prior to entering a relationship. In addition, once a relationship is established, the financial institution should have adequate audit procedures and controls to verify that the third parties are not being paid to generate incomplete or fraudulent mortgage applications or are not otherwise receiving referral or unearned income or fees contrary to RESPA prohibitions.[18] Monitoring

15. See also section 226.34(a)(4) of Regulation Z, Truth in Lending (12 CFR 226.34(a)(4)).

16. The Interagency Guidelines Establishing Standards for Safety and Soundness also call for documenting the source of repayment and assessing the ability of the borrower to repay the debt in a timely manner. See 12 CFR 208, appendix D-1.

17. While there may be periodic rate increases, the lender must state in the consumer credit contract the maximum interest rate that may be imposed during the term of the obligation. See 12 CFR 226.30(b).

18. In addition, a financial institution that purchases loans subject to TILA's rules for HELs with high rates or high closing costs (loans covered by HOEPA) can incur assignee liability unless the financial institution can reasonably show that it could not determine the transaction was a loan covered by HOEPA. Also, the nature of its relationship with brokers and correspondents may have implications for liability under

the quality of loans by origination source, and uncovering such problems as early payment defaults and incomplete packages, enables management to know if third-party originators are producing quality loans. If ongoing credit or documentation problems are discovered, the financial institution should take appropriate action against the third party, which could include terminating its relationship with the third party.

Collateral-Valuation Management

Competition, cost pressures, and advancements in technology have prompted financial institutions to streamline their appraisal and evaluation processes. These changes, coupled with financial institutions underwriting to higher LTVs, have heightened the importance of strong collateral-valuation management policies, procedures, and processes.

Financial institutions should have appropriate collateral-valuation policies and procedures that ensure compliance with the Federal Reserve's appraisal regulations[19] and the Interagency Appraisal and Evaluation Guidelines (the guidelines).[20] In addition, the financial institution should—

- establish criteria for determining the appropriate valuation methodology for a particular transaction, based on the risk in the transaction and loan portfolio (For example, higher-risk transactions or nonhomogeneous property types should be supported by more-thorough valuations. The financial institution should also set criteria for determining the extent to which an inspection of the collateral is necessary.)
- ensure that an expected or estimated value of the property is not communicated to an appraiser or individual performing an evaluation
- implement policies and controls to preclude "value shopping" (Use of several valuation tools may return different values for the same property. These differences can result in systematic overvaluation of properties if the valuation choice becomes driven by the highest property value. If several different valuation tools or AVMs are used for the same property, the financial institution should adhere to a policy for selecting the most reliable method, rather than the highest value.)
- require sufficient documentation to support the collateral valuation in the appraisal or evaluation

AVMs

When AVMs are used to support evaluations or appraisals, the financial institution should validate the models on a periodic basis to mitigate the potential valuation uncertainty in the model. This validation work should be in conformance with SR-11-7. In particular, the financial institution should document the validation's analysis, assumptions, and conclusions. The validation process includes back-testing a representative sample of the valuations against market data on actual sales (where sufficient information is available). The validation process should cover properties representative of the geographic area and property type for which the tool is used.

Many AVM vendors, when providing a value, will also provide a "confidence score," which usually relates to the accuracy of the value provided. Confidence scores, however, come in many different formats and are calculated based on differing scoring systems. Financial institutions that use AVMs should have an understanding of how the model works as well as what the confidence scores mean. Institutions should also establish the confidence levels that are appropriate for the risk in a given transaction or group of transactions.

When tax-assessment valuations are used as a basis for the collateral valuation, the financial institution should be able to demonstrate and document the correlation between the assessment value of the taxing authority and the property's market value as part of the validation process.

Account Management

Since HELOCs often have long-term, interest-only payment features, financial institutions should have risk-management techniques that identify higher-risk accounts and adverse changes in account risk profiles, thereby enabling management to implement timely preventive action (e.g., freezing or reducing lines). Further, a financial institution should have risk-management

ECOA, and for reporting responsibilities under HMDA.

19. 12 CFR 208, subpart E, and 12 CFR 225, subpart G.
20. See SR-10-16, December 2, 2010, and its attachment.

procedures to evaluate and approve additional credit on an existing line or extending the interest-only period. Account-management practices should be appropriate for the size of the portfolio and the risks associated with the types of home equity lending.

Effective account-management practices for large portfolios or portfolios with high-risk characteristics include—

- periodically refreshing credit-risk scores on all customers;
- using behavioral scoring and analysis of individual borrower characteristics to identify potential problem accounts;
- periodically assessing utilization rates;
- periodically assessing payment patterns, including borrowers who make only minimum payments over a period of time or those who rely on the line to keep payments current;
- monitoring home values by geographic area; and
- obtaining updated information on the collateral's value when significant market factors indicate a potential decline in home values, or when the borrower's payment performance deteriorates and greater reliance is placed on the collateral.

The frequency of these actions should be commensurate with the risk in the portfolio. Financial institutions should conduct annual credit reviews of HELOC accounts to determine whether the line of credit should be continued, based on the borrower's current financial condition.[21]

When appropriate, financial institutions should refuse to extend additional credit or reduce the credit limit of a HELOC, bearing in mind that under Regulation Z such steps can be taken only in limited circumstances. These include, for example, when the value of the collateral declines significantly below the appraised value for purposes of the HELOC, default of a material obligation under the loan agreement, or deterioration in the borrower's financial circumstances.[22] In order to freeze or reduce credit lines due to deterioration in a borrower's financial circumstances, two conditions must be met: (1) there must be a "material" change in the borrower's financial circumstances and (2) as a result of this change, the financial institution must have a reasonable belief that the borrower will be unable to fulfill the plan's payment obligations.

Account-management practices that do not adequately control authorizations and provide for timely repayment of over-limit amounts may significantly increase a portfolio's credit risk. Authorizations of over-limit home equity lines of credit should be restricted and subject to appropriate policies and controls. A financial institution's practices should require over-limit borrowers to repay in a timely manner the amount that exceeds established credit limits. Management information systems should be sufficient to enable management to identify, measure, monitor, and control the unique risks associated with over-limit accounts.

Portfolio Management

Financial institutions should implement an effective portfolio credit-risk management process for their home equity portfolios that includes the following.

Policies. The Federal Reserve's real estate lending standards regulations require that a financial institution's real estate lending policies be consistent with safe and sound banking practices and that the financial institution's board of directors review and approve these policies at least annually. Before implementing any changes to policies or underwriting standards, management should assess the potential effect on the financial institution's overall risk profile, which would include the effect on concentrations, profitability, and delinquency and loss rates. The accuracy of these estimates should be tested by comparing them with actual experience.

Portfolio objectives and risk diversification. Effective portfolio management should clearly communicate portfolio objectives such as growth targets, utilization, rate-of-return hurdles, and

21. Under the Federal Reserve's risk-based capital guidelines, an unused HELOC commitment with an original maturity of one year or more may be allocated a zero percent conversion factor if the institution conducts at least an annual credit review and is able to unconditionally cancel the commitment (i.e., prohibit additional extensions of credit, reduce the credit line, and terminate the line) to the full extent permitted by relevant federal law. See 12 CFR 208, appendix A, III.D.4.

22. Regulation Z does not permit these actions to be taken in circumstances other than those specified in the regulation. See 12 CFR 226.5b(f)(3)(vi)(A)–(F).

default and loss expectations. For financial institutions with significant concentrations of HELs or HELOCs, limits should be established and monitored for key portfolio segments, such as geographic area, loan type, and higher-risk products. When appropriate, consideration should be given to the use of risk mitigants, such as private mortgage insurance, pool insurance, or securitization. As the portfolio approaches concentration limits, the financial institution should analyze the situation sufficiently to enable the financial institution's board of directors and senior management to make a well-informed decision to either raise concentration limits or pursue a different course of action.

Effective portfolio management requires an understanding of the various risk characteristics of the home equity portfolio. To gain this understanding, a financial institution should analyze the portfolio by segment, using criteria such as product type, credit-risk score, DTI, LTV, property type, geographic area, collateral-valuation method, lien position, size of credit relative to prior liens, and documentation type (such as "no doc" or "low doc").

Management information systems. By maintaining adequate credit MIS, a financial institution can segment loan portfolios and accurately assess key risk characteristics. The MIS should also provide management with sufficient information to identify, monitor, measure, and control home equity concentrations. Financial institutions should periodically assess the adequacy of their MIS in light of growth and changes in their appetite for risk. For institutions with significant concentrations of HELs or HELOCs, MIS should include, at a minimum, reports and analysis of the following:

- production and portfolio trends by product, loan structure, originator channel, credit score, LTV, DTI, lien position, documentation type, market, and property type
- delinquency and loss-distribution trends by product and originator channel with some accompanying analysis of significant underwriting characteristics (such as credit score, LTV, DTI)
- vintage tracking
- the performance of third-party originators (brokers and correspondents)
- market trends by geographic area and property type to identify areas of rapidly appreciating or depreciating housing values

Policy- and underwriting-exception systems. Financial institutions should have a process for identifying, approving, tracking, and analyzing underwriting exceptions. Reporting systems that capture and track information on exceptions, both by transaction and by relevant portfolio segments, facilitate the management of a portfolio's credit risk. The aggregate data is useful to management in assessing portfolio risk profiles and monitoring the level of adherence to policy and underwriting standards by various origination channels. Analysis of the information may also be helpful in identifying correlations between certain types of exceptions and delinquencies and losses.

High-LTV monitoring. To clarify the real estate lending standards regulations and interagency guidelines, the agencies issued Guidance on High Loan-To-Value LTV Residential Real Estate Lending (the HLTV guidance) in October 1999. The HLTV guidance clarified the Interagency Real Estate Lending Guidelines and the supervisory loan-to-value limits for loans on one- to four-family residential properties. Financial institutions are expected to ensure compliance with the supervisory loan-to-value limits of the Interagency Real Estate Lending Guidelines. The HLTV guidance places emphasis on certain controls that financial institutions should have in place when engaging in HLTV lending. Financial institutions should accurately track the volume of HLTV loans, including HLTV home equity and residential mortgages, and report the aggregate of such loans to the financial institution's board of directors. Specifically, financial institutions are reminded that:

- Loans in excess of the supervisory LTV limits should be identified in the financial institution's records. The aggregate of high-LTV one- to four-family residential loans should not exceed 100 percent of the financial institution's total capital.[23] Within that limit, high-

23. For purposes of the Interagency Real Estate Lending Standards Guidelines, high-LTV one- to four-family residential property loans include (1) a loan for raw land zoned for one- to four-family residential use with an LTV ratio greater than 65 percent; (2) a residential land development loan or improved lot loan with an LTV greater than 75 percent; (3) a residential construction loan with an LTV ratio greater than 85 percent; (4) a loan on non-owner occupied one- to four-family residential property with an LTV greater than 85 percent; and (5) a permanent mortgage or home equity loan on an owner-occupied residential property with an LTV equal to or exceeding 90 percent without mortgage insurance,

LTV loans for properties other than one- to four-family residential properties should not exceed 30 percent of capital.
- In calculating the LTV and determining compliance with the supervisory LTVs, the financial institution should consider all senior liens. All loans secured by the property and held by the financial institution are reported as an exception if the combined LTV of a loan and all senior liens on an owner-occupied one- to four-family residential property equals or exceeds 90 percent and if there is no additional credit enhancement in the form of either mortgage insurance or readily marketable collateral.
- For the LTV calculation, the loan amount is the legally binding commitment (that is, the entire amount that the financial institution is legally committed to lend over the life of the loan).
- All real estate secured loans in excess of supervisory LTV limits should be aggregated and included in a quarterly report for the financial institution's board of directors.

Certain insurance products have been developed to help financial institutions mitigate the credit risks of HLTV residential loans. Insurance policies that cover a "pool" of loans can be an efficient and effective credit-risk management tool. But if a policy has a coverage limit, the coverage may be exhausted before all loans in the pool mature or pay off. The Federal Reserve will consider pool insurance to be a sufficient credit enhancement to remove the HLTV designation in the following circumstances: (1) the policy is issued by an acceptable mortgage insurance company, (2) it reduces the LTV for each loan to less than 90 percent, and (3) it is effective over the life of each loan in the pool.

Stress testing for portfolios. Financial institutions with home equity concentrations as well as higher-risk portfolios are encouraged to perform sensitivity analyses on key portfolio segments. This type of analysis identifies possible events that could increase risk within a portfolio segment or for the portfolio as a whole. Institutions should consider stress tests that incorporate interest-rate increases and declines in home values. Since these events often occur simultaneously, the testing should be performed for these events together. Institutions should also periodically analyze markets in key geographic areas, including identified "soft" markets. Management should consider developing contingency strategies for scenarios and outcomes that extend credit risk beyond internally established risk tolerances. These contingency plans might include increased monitoring, tightening underwriting, limiting growth, and selling loans or portfolio segments.

readily marketable collateral, or other acceptable collateral.

Operations, Servicing, and Collections

Effective procedures and controls should be maintained for such support functions as perfecting liens, collecting outstanding loan documents, obtaining insurance coverage (including flood insurance), and paying property taxes. Credit-risk management should oversee these support functions to ensure that operational risks are properly controlled.

Lien recording. Financial institutions should take appropriate measures to safeguard their lien position. They should verify the amount and priority of any senior liens prior to closing the loan. This information is necessary to determine the loan's LTV ratio and to assess the credit support of the collateral. Senior liens include first mortgages, outstanding liens for unpaid taxes, outstanding mechanic's liens, and recorded judgments on the borrower.

Problem-loan workouts and loss-mitigation strategies. Financial institutions should have established policies and procedures for problem-loan workouts and loss-mitigation strategies. Policies should be in accordance with the requirements of the FFIEC's Uniform Retail Credit Classification and Account Management Policy, issued June 2000 (see SR-00-8 and the appendix to section 2130.1) and should, at a minimum, address the following:

- circumstances and qualifying requirements for various workout programs including extensions, re-ages, modifications, and re-writes (Qualifying criteria should include an analysis of a borrower's financial capacity to service the debt under the new terms.)
- circumstances and qualifying criteria for loss-mitigating strategies, including foreclosure
- appropriate MIS to track and monitor the effectiveness of workout programs, including tracking the performance of all categories of

workout loans (For large portfolios, vintage delinquency and loss tracking also should be included.)

While financial institutions are encouraged to work with borrowers on a case-by-case basis, a financial institution should *not* use workout strategies to defer losses. Financial institutions should ensure that credits in workout programs are evaluated separately for the allowance for loan and lease losses (ALLL), because such credits tend to have higher loss rates than other portfolio segments.

Secondary-Market Activities

More financial institutions are issuing HELOC mortgage-backed securities (i.e., securitizing HELOCs). Although such secondary-market activities can enhance credit availability and a financial institution's profitability, they also pose certain risk-management challenges. An institution's risk-management systems should address the risks of HELOC securitizations.[24]

Portfolio Classifications, Allowance for Loan and Lease Losses, and Capital

The FFIEC's Uniform Retail Credit Classification and Account Management Policy governs the classification of consumer loans and establishes general classification thresholds that are based on delinquency. Financial institutions and the Federal Reserve's examiners have the discretion to classify entire retail portfolios, or segments thereof, when underwriting weaknesses or delinquencies are pervasive and present an excessive level of credit risk. Portfolios of high-LTV loans to borrowers who exhibit inadequate capacity to repay the debt within a reasonable time may be subject to classification.

Financial institutions should establish appropriate ALLL and hold capital commensurate with the riskiness of their portfolios. In determining the ALLL adequacy, a financial institution should consider how the interest-only and draw features of HELOCs during the lines' revolving period could affect the loss curves for its HELOC portfolio. Those institutions engaging in programmatic subprime home equity lending or institutions that have higher-risk products are expected to recognize the elevated risk of the activity when assessing capital and ALLL adequacy.[25]

ALLOWANCE FOR LOAN AND LEASE LOSSES

A bank bases the adequacy of its allowance for loan and lease losses (ALLL), including amounts resulting from an analysis of the real estate portfolio, on a careful, well-documented, and consistently applied analysis of its loan and lease portfolio.[26] Guidance related to the ALLL is primarily addressed in section 2070.1. The following discussion summarizes general principles for assessing the adequacy of the ALLL.

Examiners should evaluate the methodology, documentation, and process that management has followed in arriving at an overall estimate of the ALLL to ensure that all of the relevant factors affecting the collectibility of the portfolio have been appropriately considered. In addition, the examiner should review the reasonableness of management's overall estimate of the ALLL, as well as the range of possible credit losses, by taking into account these factors. The examiner's analysis should also consider the quality of the bank's systems and management's ability to identify, monitor, and address asset-quality problems.

As discussed in the earlier subsection on classification guidelines, examiners should consider the value of the collateral when reviewing and classifying a loan. For a performing commercial real estate loan, however, the supervisory policy does not require automatic increases to

24. See SR-02,16, "Interagency Questions and Answers on Capital Treatment of Recourse, Direct Credit Substitutes, and Residual Interests in Asset Securitizations," (see also section 3020.1) and the risk management and capital adequacy of exposures arising from secondary-market credit activities discussion in SR-97-21.

25. Section 2133.1 incorporates the January 2001 Interagency Expanded Guidance for Subprime Lending Programs. That guidance sets forth the supervisory expectations regarding risk-management processes, the ALLL, and capital adequacy for institutions engaging in subprime-lending programs.

26. The estimation process described in this section permits a more accurate estimate of anticipated losses than could be achieved by assessing the loan portfolio solely on an aggregate basis. However, it is only an estimation process and does not imply that any part of the ALLL is segregated for, or allocated to, any particular asset or group of assets. The ALLL is available to absorb all credit losses originating from the loan and lease portfolio.

the ALLL solely because the value of the collateral has declined to an amount that is less than the loan balance.

In assessing the ALLL during examinations, it is important that the examiner recognize that management's process, methodology, and underlying assumptions require a substantial degree of judgment. Even when an institution maintains sound loan-administration and collection procedures and effective internal systems and controls, the estimation of anticipated losses may not be precise because of the wide range of factors that must be considered. Furthermore, the ability to estimate anticipated losses on specific loans and categories of loans improves over time as substantive information accumulates regarding the factors affecting repayment prospects. The examiner should give considerable weight to management's estimates in assessing the adequacy of the ALLL when management has (1) maintained effective systems and controls for identifying, monitoring, and addressing asset-quality problems and (2) analyzed all significant factors affecting the collectibility of the portfolio.

REGULATORY COMPLIANCE

Banks are expected to comply with laws, regulations, and Federal Reserve policy in all aspects of their real estate lending programs. Moreover, banks should establish adequate internal controls to detect deficiencies or exceptions to their lending policy that result in unsafe and unsound lending practices. In regard to lending limits, the examiner should review the bank's lending practices in accordance with the applicable state laws in the following areas, which prescribe limits on aggregate advances to a single borrower and related borrowers:

Transactions with affiliates. All transactions with affiliates should be on terms and conditions that are consistent with safe and sound banking practices. The bank is expected to comply with the limits and collateral requirements of sections 23A and 23B of the Federal Reserve Act (12 USC 371c and 371c-1) and Regulation W (12 CFR 223).

Tie-in provisions. Section 106 of the Bank Holding Company Act Amendments of 1970 states that a bank is prohibited from fixing or varying the consideration for extending credit, leasing or selling property of any kind, or furnishing any product or service on the condition or requirement that a customer—

- obtain additional credit, property, or service from the bank, other than a loan, discount, deposit, or trust service (a "traditional bank product");
- obtain additional credit, property, or service from the bank's parent holding company or the parent's other subsidiaries;
- provide additional credit, property, or service to the bank, other than those related to and usually provided in connection with a loan, discount, deposit, or trust service;
- provide additional credit, property, or service to the bank's parent holding company or any of the parent's other subsidiaries; or
- not obtain other credit, property, or service from the competitors of the bank, the bank's parent holding company, or the parent's other subsidiaries, except that the lending bank may impose conditions and requirements in a credit transaction to ensure the soundness of the credit.

See the statutory exceptions in section 106(b) of the Bank Holding Company Act Amendments and the exceptions in the Federal Reserve's Regulation Y (12 CFR 225.7).

Insider lending activities. Loans to insiders should not contain more-favorable terms than those afforded to other borrowers nor should these loans pose a more-than-normal risk of repayment. The bank is expected to maintain adequate loan documentation of insider loans showing that proper approval for the loan was obtained. Such loans should comply with the Federal Reserve's Regulation O, Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks (12 CFR 215, subpart A).

Loans to executives, officers, directors, and principal shareholders of correspondent banks. There should be no preferential treatment on loans to insiders of correspondent banks nor should there be the appearance of a conflict of interest. The bank should comply with title VIII of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRA)

(12 USC 1972(2)). (See also 12 CFR 215, subpart B.)

Appraisals and evaluations. Banks should obtain an appraisal or evaluation for all real estate–related financial transactions before making the final credit decision in conformance with title XI of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) (12 USC 3310, 3331–3351) and the Federal Reserve's Regulation H, Membership of State Banking Institutions in the Federal Reserve System (12 CFR 208), as set forth in subpart G of Regulation Y (12 CFR 225). The Federal Reserve's appraisal and evaluation requirements are separately discussed in section 4140.1, "Real Estate Appraisals and Evaluations."

Consumer compliance. The bank's residential lending program should ensure that the loan applicant is adequately informed of the annual interest rate, finance charges, amount financed, total payments, and repayment schedule as mandated in the Federal Reserve's Regulation Z, Truth in Lending (12 CFR 226). The bank's process for taking, evaluating, and accepting or rejecting a credit application is subject to the Federal Reserve's Regulation B, Equal Credit Opportunity (12 CFR 202).

1. To determine if policies, practices, procedures, and internal controls for real estate loans are adequate to identify and manage the risks the bank is exposed to.
2. To ascertain if the institution has implemented risk-management programs that identify, measure, monitor, and control the inherent risks involved in real estate lending.
3. To determine if bank officers and staff are operating in conformance with the bank's established guidelines.
4. To evaluate the portfolio for collateral sufficiency, performance, credit quality, and collectibility.
5. With respect to residential mortgage servicing, to review risk-management practices and controls in connection with a decision not to complete foreclosure proceedings after they have been initiated.
6. To determine compliance with applicable laws and regulations.
7. To initiate corrective action when policies, practices, procedures, objectives, or internal controls are deficient or when violations of laws or regulations have been noted.

Home Equity Lending

1. To determine if the financial institution has an appropriate review and approval process for new product offerings, product changes, and marketing initiatives.
2. To ascertain whether the financial institution has appropriate control procedures for third parties that generate loans on its behalf and if the control procedures comply with the laws and regulations that are applicable to the organization.
3. To determine if the financial institution has given full recognition to the risks embedded in its home equity lending.
4. To determine whether the financial institution's risk-management practices have kept pace with the growth and changing risk profile of its home equity portfolios and whether underwriting standards have eased.
5. To determine whether the financial institution's loan policy—
   a. ensures prudent underwriting standards for home equity lending, including standards to ensure that a thorough evaluation of a borrower's capacity to service the debt is conducted (that is, the institution is not relying solely on the borrower's credit score);
   b. provides risk-management safeguards for potential declines in home values;
   c. ensures that the standards for interest-only and variable-rate home equity lines of credit (HELOCs) include an assessment of a borrower's ability to (1) amortize the fully drawn line of credit over the loan term and (2) absorb potential increases in interest rates; and
   d. provides appropriate collateral-valuation policies and procedures and provides for the use and validation of automated valuation models.

1. Determine the scope of the examination, based on the evaluation of internal controls and the work performed by internal or external auditors.
2. Review the board of directors minutes to ensure that real estate loan policies are reviewed and approved at least annually.
3. Test real estate loans for compliance with policies, practices, and procedures by performing the remaining examination procedures in this section. Obtain a listing of any deficiencies noted in the latest internal or external audit report, and determine if appropriate corrections have been made. Additionally, obtain a list of personnel changes. Determine if these changes are significant enough to influence the scope of the examination.
4. Obtain a trial balance and delinquency listing for all real estate loans.
   a. Reconcile the real estate department's trial balance totals to the bank's general ledger accounts.
   b. Review reconciling items for reasonableness.
   c. Obtain information (for example, paid-to dates, last date paid, and date of nonaccrual status) on past-due loans and loans on nonaccrual status.
5. Evaluate the bank with respect to—
   a. the adequacy of written policies and procedures relating to real estate loans;
   b. the operating compliance with established bank policy;
   c. favorable or adverse trends in the overall real estate lending activity;
   d. the accuracy and completeness of the bank's records;
   e. the adequacy of internal controls;
   f. adherence to lending policies, procedures, and authority by all appropriate personnel;
   g. compliance with laws, regulations, and Federal Reserve policy on real estate lending activity, including lending limits and restrictions; loans to officers, directors, and shareholders; appraisal and evaluation of real estate collateral; and lending practices;
   h. compliance with the Interagency Guidelines for Real Estate Lending Policies, including whether the bank is adequately documenting exceptions to supervisory loan-to-value (LTV) limits, whether the volume of nonconforming loans exceeds the capital limitations, and whether risk-management programs have been established and maintained to identify, measure, monitor, and control the inherent risks associated with high-LTV lending;
   i. compliance with the Interagency Credit-Risk Management Guidance for Home Equity Lending; and
   j. other matters of significance, including mortgage servicing, warehousing operations, and the loan-origination/resale process.
6. Select loans for examination, using an appropriate sampling technique drawn from judgmental (cutoff-amount approach) or statistical sampling. Analyze the performance of the loans selected for review by transcribing the appropriate information from the following list onto the real estate loan line cards, when applicable:
   a. collateral records and credit files
   b. loan agreements relative to any purchases, transfers, participations, or sales that have been entered into since the last examination
   c. loan commitments and other contingent liabilities
   d. loan-modification agreements or restructuring terms to identify a reduction in interest rate or principal payments, deferral of interest or principal payments, or other restructurings of terms
   e. past-due/nonaccrual-related information
   f. loan-specific internal information from problem credit analyses
   g. escrow-analysis reports, including the status of property tax payments and escrow advances by the bank to cover delinquent property taxes
   h. the status of mortgage insurance claims either for government insurance or guarantee programs or for private mortgage insurance, including procedures for ensuring coverage and reporting procedures for filing claims and contested claims, if any

i. loans to insiders and their interests

7. In analyzing the selected real estate loans, consider the following procedures, taking appropriate action if necessary:
   a. Determine the primary source of repayment and evaluate its adequacy.
   b. Assess the quality of any secondary collateral afforded by the loan guarantors or partners.
   c. Compare collateral values with outstanding debt. Determine whether the loan's LTV ratio is in excess of the supervisory LTV limits. If so, ascertain whether the loan has been properly reported as a nonconforming loan.
   d. Assess the adequacy of the appraisal or evaluation.
   e. Ascertain whether the loan complies with established bank policy.
   f. Identify any deficiencies in the loan's documentation in the credit files, the collateral records, or both.
   g. Has the bank decided not to complete any foreclosures after the foreclosure process was initiated? If yes, continue with these examination procedures.
      1) Review the bank's policies and procedures for regular monitoring of property values to support the analysis to continue or abandon the foreclosure. Collateral valuation information should be sufficient to support a decision to initiate, continue, or abandon a foreclosure proceeding. Refer to the *Interagency Appraisal and Evaluation Guidelines* in section 4140.1 or see SR-10-16.
      2) Discuss findings with the organization's management and obtain any necessary commitment for corrective action. Assess whether these actions will address the noted deficiencies and weaknesses and, if not, determine whether supervisory action is necessary.
   h. Identify whether the loan is to an officer, a director, or a shareholder of the bank or to a correspondent bank. Determine whether an officer, a director, or a shareholder of the bank is a guarantor on the loan.
   i. Review the borrower's compliance with provisions of the loan agreement. Review the borrower's payment performance, indicating whether the loan is past due.
   j. Determine if there are any problems that may jeopardize the repayment of the real estate loan.
   k. Determine whether the loan was classified during the preceding examination, and, if the loan has been paid off, whether all or part of the funds for repayment came from another loan at the bank, from a participation or sale with another institution, or from the repossession of the property.
   l. Identify whether the loan is to a firm or to individuals who are principals of a firm that provided professional services to the bank, including attorneys, accountants, and appraisers. If so, determine if the loan has received preferential treatment.
8. For loan participations, either in whole or in part, to or with another lending institution, review, if applicable—
   a. participation certificates and agreements, on a test basis, to determine if the contractual terms are being adhered to;
   b. loan documentation to see if it meets the bank's underwriting procedures (that is, the documentation for loan participations should meet the same standards as the documentation for loans the bank originates);
   c. the transfer of loans immediately before the date of the examination to determine if the loan was either nonperforming or classified and if the transfer was made to avoid possible criticism during the current examination; and
   d. losses to determine if such losses are shared on a pro rata basis.
9. For participations between an institution that has a different primary regulator and loans in the Shared National Credit program—
   a. identify loans to be included in the Shared National Credit review;
   b. inform the Reserve Bank of any classified participation loans that were not covered by the Shared National Credit program and in which the participant(s) had a different primary regulator; and
   c. inform the Reserve Bank of those loans eligible for the Shared National Credit program that were not previously reviewed.
10. In connection with the examination of other lending activity in the bank—

a. check the central liability file on the borrower(s) and determine whether the total indebtedness of the borrower exceeds the lending limit to a single borrower; and
b. obtain information and related performance status on common borrowers and their interests from examiners assigned to other examination areas (such as non–real estate loans, leasing, overdrafts, and cash items). Determine the total indebtedness of these borrowers to the bank. Additionally, one examiner should be assigned to review the borrower's overall borrowing relationship with the bank.

11. Consult with the examiner responsible for the asset-liability management analysis portion of the examination to determine the appropriate maturity breakdown of real estate loans needed for the analysis. Prepare the necessary schedules.
12. Summarize the findings of the real estate loan portfolio review and address the following:
    a. the scope of the examination
    b. the quality of the policies, procedures, and controls
    c. the general level of adherence to policies and procedures
    d. the competency of management and loan officers, including the identification of individuals with an excessively high level of problem loans or documentation exceptions
    e. the quality of the loan portfolio
    f. loans not supported by current and complete financial information
    g. loans with incomplete documentation, addressing deficiencies related to items such as appraisals or evaluations, title policy, proof of insurance, deeds of trust, and mortgage notes
    h. loans to officers, directors, shareholders, or their interests
    i. causes of existing problems
    j. delinquent loans
    k. concentrations of credits
    l. classified loans
    m. violations of laws, regulations, and Federal Reserve policy
    n. action taken by management to correct previously noted deficiencies, and corrective actions recommended to management at this examination, with the bank's response to them

Home Equity Lending

1. Review the credit policies for home equity lending to determine if the underwriting standards address all relevant risk factors (that is, an analysis of a borrower's income and debt levels, credit score, and credit history versus the loan's size, the collateral value (including valuation methodology), the lien position, and the property type and location).
2. Determine whether the financial institution's underwriting standards include—
    a. a properly documented evaluation of the borrower's financial capacity to adequately service the debt;
    b. an adequately documented evaluation of the borrower's ability to (1) amortize the fully drawn line of credit over the loan term and (2) absorb potential increases in interest rates for interest-only and variable-rate home equity lines of credit (HELOCs).
3. Assess the reasonableness and adequacy of the analyses and methodologies underlying the financial institution's evaluation of borrowers.
4. If the financial institution uses third parties to originate home equity loans, find out—
    a. if the institution delegates the underwriting function to a broker or correspondent;
    b. if the institution's internal controls for delegated underwriting are adequate;
    c. whether the institution retains appropriate oversight of all critical loan-processing activities, such as verification of income and employment and the independence of the appraisal and evaluation function;
    d. if there are adequate systems and controls to ensure that a third-party originator is appropriately managed, is financially sound, provides mortgages that meet the institution's prescribed underwriting guidelines, and adheres to applicable consumer protection laws and regulations;
    e. if the institution has a quality-control unit or function that closely monitors (monitoring activities should include post-purchase underwriting reviews and ongoing portfolio-performance-management activities) the quality of

loans that the third party underwrites; and

f. whether the institution has adequate audit procedures and controls to verify that third parties are not being paid to generate incomplete or fraudulent mortgage applications or are not otherwise receiving referral or unearned income or fees contrary to Real Estate Settlement Procedures Act (RESPA) prohibitions.

5. Evaluate the adequacy of the financial institution's collateral-valuation policies and procedures. Ascertain whether the institution—
   a. establishes criteria for determining the appropriate valuation methodology for a particular transaction (based on the risk in the transaction and loan portfolio);
   b. sets criteria for determining when a physical inspection of the collateral is necessary;
   c. ensures that an expected or estimated value of the property is not communicated to an appraiser or individual performing an evaluation;
   d. implements policies and controls to preclude "value shopping"; and
   e. requires sufficient documentation to support the collateral valuation in the appraisal or evaluation.
6. If the financial institution uses automated valuation models (AVMs) to support evaluations or appraisals, find out if the institution—
   a. implements policies and controls to preclude "value shopping" in its use of AVMs;
   b. periodically validates the models, to mitigate the potential valuation uncertainty in the model;
   c. adequately documents the validation's analysis, assumptions, and conclusions;
   d. back-tests a representative sample of evaluations and appraisals supporting loans outstanding; and
   e. evaluates the reasonableness and adequacy of its procedures for validating AVMs.
7. If tax-assessment valuations are used as a basis for collateral valuation, ascertain whether the financial institution is able to demonstrate and document the correlation between the assessment value of the taxing authority and the property's market value, as part of the validation process.
8. Review the risk- and account-management procedures. Verify that the procedures are appropriate for the size of the financial institution's loan portfolio, as well as for the risks associated with the types of home equity lending conducted by the institution.
9. If the financial institution has large home equity loan portfolios or portfolios with high-risk characteristics, determine if the institution—
   a. periodically refreshes credit-risk scores on all customers;
   b. uses behavioral scoring and analysis of individual borrower characteristics to identify potential problem accounts;
   c. periodically assesses utilization rates;
   d. periodically assesses payment patterns, including borrowers who make only minimum payments over a period of time or those who rely on the credit line to keep payments current;
   e. monitors home values by geographic area; and
   f. obtains updated information on the collateral's value when significant market factors indicate a potential decline in home values, or when the borrower's payment performance deteriorates and greater reliance is placed on the collateral.

   Determine if the frequency of the above actions is commensurate with the risk in the portfolio.
10. Verify that annual credit reviews of HELOC accounts are conducted. Verify if the reviews of HELOC accounts determine whether the line of credit should be continued, based on the borrower's current financial condition.
11. Determine that authorizations of over-limit home equity lines of credit are restricted and subject to appropriate policies and controls.
    a. Verify that the financial institution requires over-limit borrowers to repay, in a timely manner, the amount that exceeds established credit limits.
    b. Evaluate the sufficiency of management information systems (MIS) that enable management to identify, measure, monitor, and control the risks associated with over-limit accounts.
12. Verify that the financial institution's real estate lending policies are consistent with safe and sound banking practices and that its board of directors reviews and approves the policies at least annually.
13. Determine whether the MIS—

   a. allows for the segmentation of the loan portfolios;
   b. accurately assesses key risk characteristics; and
   c. provides management with sufficient information to identify, monitor, measure, and control home equity concentrations.
14. Determine whether management periodically assesses the adequacy of its MIS, in light of growth and changes in the financial institution's risk appetite.
15. If the financial institution has significant concentrations of HELs or HELOCs, determine if the MIS includes, at a minimum, reports and analysis of the following:
   a. production and portfolio trends by product, loan structure, originator channel, credit score, loan to value (LTV), debt to income (DTI), lien position, documentation type, market, and property type
   b. the delinquency and loss-distribution trends by product and originator channel, with some accompanying analysis of significant underwriting characteristics (such as credit score, LTV, DTI)
   c. vintage tracking
   d. the performance of third-party originators (brokers and correspondents)
   e. market trends by geographic area and property type, to identify areas of rapidly appreciating or depreciating housing values.
16. Determine whether the financial institution accurately tracks the volume of high-LTV (HLTV) loans, including HLTV home equity and residential mortgages, and if the financial institution reports the aggregate of these loans to its board of directors.
17. Determine whether loans in excess of the supervisory LTV limits are identified as high-LTV loans in the financial institution's records. Determine whether the institution reports, on a quarterly basis, the dollar value of such loans to its board of directors.
18. Find out whether the financial institution has purchased insurance products to help mitigate the credit risks of its HLTV residential loans. If a policy has a coverage limit, determine whether the coverage may be exhausted before all loans in the pool mature or pay off.
19. Determine whether the financial institution's credit risk-management function oversees the support function(s). Evaluate the effectiveness of controls and procedures over staff who are responsible for perfecting liens, collecting outstanding loan documents, obtaining insurance coverage (including flood insurance), and paying property taxes.
20. Determine whether policies and procedures have been established for home equity problem-loan workouts and loss-mitigation strategies.
21. Summarize the findings of the home equity loan portfolio review.

Review the bank's internal controls, policies, practices, and procedures for making and servicing real estate loans. The bank's system should be documented completely and concisely and should include, where appropriate, narrative descriptions, flow charts, copies of forms used, and other pertinent information. Negative responses to the questions in this section should be explained, and additional procedures deemed necessary should be discussed with the examiner-in-charge. Items marked with an asterisk require substantiation by observation or testing.

LOAN POLICIES

1. Has the board of directors and management, consistent with their duties and responsibilities, adopted and, at least annually, reviewed and approved written real estate loan policies that define—
   a. the institution's target market?
   b. loan portfolio diversification standards?
   c. acceptable collateral types?
   d. prudent, clear, and measurable underwriting standards, including relevant credit factors such as—
      - maximum loan amount by type of property?
      - maximum loan maturity by type of property?
      - repayment terms?
      - pricing structure for each type of real estate loan?
      - loan-to-value (LTV) limits by type of property?
   e. procedures for reviewing real estate loan applications?
   f. loan-origination and -approval procedures (including loan-authority limits) by size and type of loan?
   g. review and approval procedures for exception loans?
   h. loan-administration procedures that include documentation, disbursement, collateral inspection, collection, and loan review?
   i. minimum loan-documentation standards, such as minimum frequency and type of financial information required for each category of real estate loan?
   j. LTV limits that are consistent with regulatory supervisory limits?
   k. real estate appraisal and evaluation programs consistent with the Federal Reserve's appraisal regulation (12 CFR 208.50–51), the Interagency Appraisal and Evaluation Guidelines (see section 4140.1), and the October 27, 2003, interagency statement on Independent Appraisal and Evaluation Functions (see SR-03-18)?
   l. reporting requirements to the board of directors relative to loan portfolio monitoring, including items such as compliance with lending policies and procedures, delinquency trends, and problem loans?
2. Are real estate policies and objectives appropriate to the size and sophistication of the bank, and are they compatible with changing market conditions?

LOAN RECORDS

*1. Are the preparation and posting of subsidiary real estate loan records performed or adequately reviewed by persons who do not also—
   a. issue official checks and drafts?
   b. handle cash receipts?
   c. reconcile subsidiary records to general ledger controls?

*2. Are the subsidiary real estate loan records reconciled at least monthly to the appropriate general ledger accounts? Are reconciling items adequately investigated by persons who do not also handle cash or prepare/post subsidiary controls?

3. Are loans in excess of supervisory LTV limits identified in the bank's records, and are the aggregate amounts of such loans reported at least quarterly to the board of directors, along with the experience of the high-LTV loan portfolio?
4. Are loan statements, delinquent-account-collection requests, and past-due notices reconciled to the real estate loan subsidiary records? Are the notices and reconcili-

ations handled by persons who do not also handle cash?

5. Are inquiries about loan balances received and investigated by persons who do not also handle cash?

*6. Are documents supporting recorded credit adjustments subsequently checked or tested by persons who do not also handle cash?

7. Does the bank maintain a daily record summarizing note-transaction details (loans made, payments received, and interest collected) to support applicable general ledger account entries?

8. Are note and liability trial balances frequently reconciled to the general ledger by employees who do not process or record loan transactions?

9. Are subsidiary payment records and files pertaining to serviced loans segregated and identifiable?

10. Are past-due-loan reports generated daily?

LOAN INTEREST AND COMMITMENT FEES

*1. Are the preparation and posting of loan interest and fee records performed or adequately reviewed by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?

2. Are any independent interest and fee computations made and compared with or adequately tested to loan interest records by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?

PROCESSING AND DOCUMENT CONTROL

*1. Are all real estate loan commitments issued in written form?

2. Are loan officers prohibited from processing loan payments?

*3. Are loan payments received by mail recorded upon receipt independently before being sent to and processed by a note teller?

*4. Regarding mortgage documents—
   a. Has the responsibility for the document files been established?
   b. Does the bank use a check sheet to ensure that required documents are received and on file?
   c. Are safeguards in effect to protect notes and other documents?
   d. Does the bank obtain a signed application form for all real estate mortgage loan requests?
   e. Are separate credit files maintained?
   f. Is there a program of systematic follow-up to determine that all required documents are received after the loan closing and from public recording offices?
   g. Does a designated employee conduct a review after loan closing to determine if all documents are properly drawn, executed, recorded, and filed within the loan files?
   h. Are all notes and other instruments pertaining to paid-off loans returned promptly to the borrower, canceled, and marked paid, where appropriate?
   i. Are charged-off notes and related files segregated and adequately controlled?

LOAN ORIGINATION

1. Does the bank have a written schedule of fees, rates, terms, and types of collateral for all new loans?

2. Does the bank have a mortgage errors and omission policy?

3. Are procedures in effect to ensure compliance with the requirements of governmental agencies that insure or guarantee loans or with the requirements of private mortgage insurance companies?

ESCROW PROCESSING

1. Regarding insurance and property taxes coverage—
   a. Is there a procedure for determining that private mortgage insurance premiums are current on insured loans?
   b. Is there a procedure for determining that property and hazard insurance premiums are current on properties securing loans?

c. Does the bank require that the hazard insurance policies include a loss-payable clause to the bank?
d. Are escrow accounts reviewed at least annually to determine if monthly deposits will cover anticipated disbursements?
e. Are disbursements for taxes and insurance supported by records showing the nature and purpose of the disbursement?
f. If advance deposits for taxes and insurance are not required, does the bank have a system to determine that taxes and insurance are being paid?

LOAN ADMINISTRATION

*1. Are approvals of real estate advances reviewed, before disbursement, to determine that such advances do not increase the borrower's total liability to an amount in excess of the bank's legal lending limit?
2. Are detailed statements of account balances and activity mailed to mortgagors at least annually?

COLLECTIONS AND FORECLOSURES

1. Does the bank have adequate collection procedures to monitor delinquencies and, as necessary, have procedures to pursue foreclosure?
2. Are properties under foreclosure proceedings segregated?
   a. Has the bank decided not to complete any foreclosures after the foreclosure process was initiated? If yes,
      1) Are there policies and procedures for regularly monitoring the property values to support the analysis—to continue or abandon the foreclosure? Is the collateral valuation information sufficient to support a decision to initiate, continue, or abandon a foreclosure proceeding?
      2) After discussing the examination findings with the organization's management, were the necessary commitments obtained for corrective action? Will these actions address the noted deficiencies and weaknesses? If not, is supervisory action is necessary?
3. Are properties to which the bank has obtained title appropriately transferred to other real estate owned (OREO)? See "Other Real Estate Owned," section 2200.1, for requirements.
4. Does the bank have an adequate management and sales disposition program for timely liquidation of OREO? Does the program take into account the maximum retention period for OREO allowed under state law?
5. Does the bank have adequate procedures for filing and monitoring its mortgage insurance claims for government-insured or -secured programs and for private mortgage insurance?

HOME EQUITY LENDING

Policies

1. Do the credit policies for home equity lending address the underwriting standards for all relevant risk factors, such as—
   a. an analysis of a borrower's income and debt levels?
   b. an analysis of a borrower's credit score and credit history versus the loan's size?
   c, the collateral value (including valuation methodology)?
   d. the lien position?
   e. the property type and location?
2. Are the financial institution's risk-and account-management procedures appropriate for the size of the institution's loan portfolio, as well as for the risks associated with the types of home equity lending conducted by the institution?
3. Does the financial institution have reasonable and adequate policies and procedures for home equity problem-loan workouts and loss-mitigation strategies?

Underwriting

4. Has the financial institution purchased insurance products to mitigate the credit risks of its high-LTV (HLTV) residential loans?

   a. If so, do any of those insurance policies have a coverage limit?
   b. Has the institution conducted reasonable and adequate analyses to determine whether the coverage may be exhausted before all loans in the pool covered by the insurance product mature or pay off?
5. Does the financial institution's credit-risk management function oversee the support function(s) for its real estate lending? Does the institution have effective controls and procedures over staff who are responsible for perfecting liens, collecting outstanding loan documents, obtaining insurance coverage (including flood insurance), and paying property taxes?
6. Do the financial institution's underwriting standards include—
   a. a properly documented evaluation of the borrower's financial capacity to adequately service the debt?
   b. an adequately documented evaluation of the borrower's ability to—
      - amortize the fully drawn line of credit over the loan term?
      - absorb potential increases in interest rates for interest-only and variable-rate home equity lines of credit (HELOCs)?
7. Are the analyses and methodologies underlying the institution's evaluation of borrowers reasonable and adequate?
8. Does the financial institution use third parties to originate home equity loans? If so, does the institution—
   a. delegate the underwriting function to a broker or correspondent?
   b. have adequate internal controls for its delegated underwriting?
   c. retain appropriate oversight of all critical loan-processing activities, such as verification of income and employment and the independence of the appraisal and evaluation function?
   d. have adequate systems and controls to ensure that a third-party originator is appropriately managed, is financially sound, provides mortgages that meet the institution's prescribed underwriting guidelines, and adheres to applicable consumer protection laws and regulations?
   e. have a quality-control unit or function that closely monitors (monitoring activities should include post-purchase underwriting reviews and ongoing portfolio-performance-management activities) the quality of loans that the third party underwrites?
   f. have adequate audit procedures and controls to verify that third parties are not being paid to generate incomplete or fraudulent mortgage applications and are not otherwise receiving referral or unearned income or fees contrary to Real Estate Settlement Procedures Act (RESPA) prohibitions?

Collateral Valuation

9. Does the financial institution have adequate collateral-valuation policies and procedures that—
   a. establish criteria for determining the appropriate valuation methodology for a particular transaction (based on the risk in the transaction and loan portfolio)?
   b. set criteria for determining when a physical inspection of the collateral is necessary?
   c. ensure that an expected or estimated value of the property is not communicated to an appraiser or individual performing an evaluation?
   d implement controls to preclude "value shopping?"
   e. require sufficient documentation to support the collateral valuation in the appraisal or evaluation?
10. Does the financial institution use automated valuation models (AVMs) to support evaluations or appraisals? If so, does the institution—
   a. periodically validate the models, to mitigate the potential valuation uncertainty in the model?
   b. adequately document the validation's analysis, assumptions, and conclusions?
   c. implement controls to preclude "value shopping" in its use of AVMs?
   d. back-test a representative sample of evaluations and appraisals supporting loans outstanding?
   e. evaluate the reasonableness and adequacy of its procedures for validating AVMs?

11. Are tax-assessment valuations used as a basis for collateral valuation? If so, is the financial institution able to demonstrate and document the correlation between the assessment value of the taxing authority and the property's market value, as part of the validation process?

Risk Concentrations

12. Does the financial institution have large home equity loan portfolios or portfolios with high-risk characteristics? If so, does the institution—
    a. periodically refresh credit-risk scores on all customers?
    b. use behavioral scoring and analysis of individual borrower characteristics to identify potential problem accounts?
    c. periodically assess utilization rates?
    d. periodically assess payment patterns, including borrowers who make only minimum payments over a period of time or those who rely on the credit line to keep payments current?
    e. monitor home values by geographic area?
    f. obtain updated information on the collateral's value when significant market factors indicate a potential decline in home values, or when the borrower's payment performance deteriorates and greater reliance is placed on the collateral?

    Are the frequency of these actions commensurate with the risk in the portfolio?

Management Information Systems

13. Are the financial institution's real estate lending policies consistent with safe and sound banking practices, and does its board of directors review and approve the policies at least annually?
14. Do the financial institution's management information systems (MIS) for real estate lending—
    a. allow for the segmentation of the loan portfolios?
    b. accurately assess key risk characteristics?
    c. provide management with sufficient information to identify, monitor, measure, and control home equity concentrations?
15. Does the financial institution's management periodically assess the adequacy of its MIS, in light of growth and changes in the institution's risk appetite?
16. Does the financial institution have significant concentrations of HELs or HELOCs? If so, does the MIS include, at a minimum, reports and analysis of—
    a. production and portfolio trends by product, loan structure, originator channel, credit score, loan to value (LTV), debt to income (DTI), lien position, documentation type, market, and property type?
    b. the delinquency and loss-distribution trends, by product and originator channel, with some accompanying analysis of significant underwriting characteristics (such as credit score, LTV, or DTI)?
    c. vintage tracking?
    d. the performance of third-party originators (brokers and correspondents)?
    e. market trends by geographic area and property type, to identify areas of rapidly appreciating or depreciating housing values?
17. Do the financial institution's records identify loans in excess of the supervisory LTV limits as high-LTV (HLTV) loans? Is the aggregate dollar value of such loans reported quarterly to the instution's board of directors? Does the volume of HLTV loans exceed 100 percent of the institution's capital?

Internal Loan Review

18. Does the financial institution conduct annual credit reviews of HELOC accounts? Does the review of HELOC accounts determine whether the line of credit should be continued, based on the borrower's current financial condition?
19. Are the financial institution's authorizations of over-limit home equity lines of credit restricted? Are they subject to appropriate policies and controls?
    a. Does the institution require over-limit borrowers to repay, in a timely manner, the amount that exceeds established credit limits?

b. Is MIS sufficient to enable management to identify, measure, monitor, and control the risks associated with over-limit accounts?

CONCLUSION

1. Does the foregoing information provide an adequate basis for evaluating internal control in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.

2. On the basis of a composite evaluation, are internal controls adequate, as evidenced by answers to the foregoing questions?

A construction loan is used to finance the construction of a particular project within a specified period of time and is funded by supervised disbursements of a predetermined amount over the construction period. When properly controlled, a bank can promote commercial or residential development through its construction lending as well as receive significant profits over a relatively short time frame. However, the higher rate of return demanded by construction lenders is indicative of the higher risks assumed.

Inasmuch as construction lending is a form of interim financing, loan repayment is contingent on whether the borrower either obtains permanent financing or finds a buyer with sufficient funds to purchase the completed project. Because many borrowers anticipate retaining ownership after construction, the cost and availability of funds from permanent financing is a primary factor to be considered by the bank in assessing the risk of a construction loan.

A construction loan is generally secured by a first mortgage or deed of trust on the land and improvements, which is often backed by a purchase agreement from a financially sound investor or by a takeout financing agreement from a responsible permanent lender. A long-term mortgage loan (permanent financing) is typically obtained before or simultaneously with the construction loan and is made to refinance the short-term construction loan. Additionally, the bank may require a borrower to provide secondary collateral in the form of a junior interest in another real estate project or a personal guarantee.

BANK LENDING POLICY

Banks can limit the risk inherent in construction lending by establishing policies that specify the type and extent of bank involvement. The bank's lending policies should reflect prudent lending standards and set forth pricing guidelines, limits on loan-to-value ratios and debt-coverage ratios, and yield requirements. Such policies should also address procedures relative to controlling disbursements in a manner that is commensurate with the progress of construction.

Lending Limits

A bank should have established and well-controlled construction lending limits that are within the acceptable standards of state banking regulations. State banking statutes governing construction lending may contain minimum standards of prudence without specifying actual loan terms.

The bank's internal limits should not exceed the supervisory loan-to-value (LTV) limits set forth in the Interagency Guidelines for Real Estate Lending Policies, as required by the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 USC 1828(c)) and included as appendix C of the Federal Reserve's Regulation H. These guidelines and the accompanying LTV limits are discussed in "Real Estate Loans," section 2090.1. Generally, the LTV ratio should not exceed the following supervisory limits:

- 65 percent for raw-land loans
- 75 percent for land-development and improved-land loans
- 80 percent for commercial, multifamily, and other nonresidential construction loans
- 85 percent for one- to four-family residential construction loans

For loans that fund multiple phases of the same real estate project, the appropriate LTV limit is the supervisory LTV limit applicable to the final phase of the project.

Lending Risks

Construction loans are vulnerable to a wide variety of risks. Critical to the evaluation of any construction loan is the analysis of the project's feasibility study to ascertain the developer's risk, which affects the lender's risk. The major portion of the risk is attributable to the need to complete a project within specified cost and time limits. Examples of difficulties that may arise include—

- completion of a project after takeout dates, which voids permanent funding commitments;

- cost overruns, which may exceed takeout commitments or sale prices;
- the possibility that the completed project will be an economic failure;
- the diversion of progress payments, resulting in nonpayment of material bills or subcontractors;
- a financial collapse or the failure of the contractors, subcontractors, or suppliers to perform before the completion date;
- increased material or labor costs;
- the destruction of improvements from unexpected natural causes; and
- an improper or lax monitoring of funds advanced by the bank.

TYPES OF CONSTRUCTION LOANS

The basic types of construction lending are unsecured front-money, land-development, residential construction, and commercial construction loans. It is not uncommon for a bank to provide the acquisition, development, and construction loans for a particular project.

Unsecured Front-Money Loans

Front-money loans are considered very risky and should not be undertaken unless the bank has the expertise to evaluate the credit risk. These loans may represent working-capital advances to a borrower who may be engaged in a new and unproven venture. The funds may be used to acquire or develop a building site, eliminate title impediments, pay architect or standby fees, and meet minimum working-capital requirements established by construction lenders. Because repayment often comes from the first draw against construction financing, many construction loan agreements prohibit the use of the first advance to repay nonconstruction costs. Unsecured front-money loans used as a developer's equity investment in a project or to cover initial cost overruns are symptomatic of an undercapitalized or possibly an inexperienced or inept builder.

Land-Development Loans

Land-development or off-site-improvement loans are intended to be secured-purchase loans or unsecured advances to creditworthy borrowers. A development loan involves the purchase of land and lot development in anticipation of further construction or sale of the property. In addition to funding the acquisition of the land, a development loan may be used to fund the preparation of the land for future construction, including the grading of land, installation of utilities, and construction of streets.

Effective administration of a land-development loan begins with a plan defining each step of the development. The development plan should incorporate cost budgets, including legal expenses for building and zoning permits, environmental impact statements, costs of installing utilities, and all other projected costs of the development. Bank management's review of the plan and related cost breakdowns should provide the basis for determining the size, terms, and restrictions for the development loan. Refer to the subsection below on the assessment of real estate collateral for further discussion.

The LTV ratio should provide for sufficient margin to protect the bank from unforeseen events (such as unplanned expenses) that would otherwise jeopardize the bank's collateral position or repayment prospects. If the loan involves the periodic development and sale of portions of the property under lien, each separately identifiable section of the project should be independently appraised, and any collateral should be released in a manner that maintains a reasonable margin. The repayment program should be structured to follow the sales or development program. Control over development loans can be best established when the bank finances both the development and the construction or sale phases of the project.

In the case of an unsecured land-development loan, it is essential to analyze the borrower's financial statements to determine the source of loan repayment. In establishing the repayment program, the bank should review sales projections to ensure that they are not overly optimistic. Additionally, banks should avoid granting loans to illiquid borrowers or guarantors who provide the primary support for a borrower (project).

Residential Construction Loans

Residential construction loans are made either on a speculative basis, where homes are built to

be sold later in the general market, or for a specific buyer with prearranged permanent financing. Loans financing residential projects that do not have prearranged homebuyer financing are usually limited to a predetermined number of speculative homes, which are permitted to get the project started. However, smaller banks are often engaged in this type of financing, and the aggregate total of individual speculative construction loans may equal a significant portion of their capital funds. It is important to ensure that the homebuyer has arranged permanent financing before the bank finances the construction; otherwise, the bank may find itself without a source of repayment. Construction loans without takeout commitments generally should be aggregated to determine whether a concentration of credit exists, that is, in those situations when the amount exceeds 25 percent of the bank's capital structure (tier 1 capital plus loan loss reserves).

Proposals to finance speculative construction should be evaluated according to predetermined policies that are compatible with the institution's size, the technical competence of its management, and the housing needs of its service area. The prospective borrower's reputation, experience, and financial condition should also be reviewed to assess the likelihood of completing the proposed project. Until the project is completed, the actual value of the real estate is questionable. Thus, the marketability of the project should be substantiated in a feasibility study, reflecting a realistic assessment of current favorable and unfavorable local housing market conditions. As in any real estate loan, the bank must also obtain an appraisal or evaluation for the project. The appraisal or evaluation and the feasibility study are important tools to be used by lenders in evaluating project risks. For projects located out of area, the lender may lack market expertise, which makes evaluating the reasonableness of the marketing plan and feasibility study more difficult, and therefore makes the loan inherently riskier.

A bank dealing with speculative builders should have control procedures tailored to the individual project. A predetermined limit on the number of unsold units to be financed at any one time should be included in the loan agreement to avoid overextending the builder's capacity. The construction lender should receive current inspection reports indicating the project's progress. In some instances, the construction lender is also the permanent mortgagor. Loans on larger residential construction projects are usually negotiated with prearranged permanent financing as part of the construction loan.

Commercial Construction Loans

A bank's commercial construction lending activity can encompass a wide range of projects—apartments, condominiums, office buildings, shopping centers, and hotels—with each requiring a special set of skills and expertise to successfully manage, construct, and market.

Commercial construction loan agreements should normally require the borrower to have a precommitted extended-term loan to "take out" the construction lender. Takeout-financing agreements, however, are usually voidable if construction is not completed by the final funding date, if the project does not receive occupancy permits, or if the preleasing or occupancy rate does not meet an agreed-upon level. A bank can also enter into an open-end construction loan where there is no precommitted source to repay the construction loan. Such loans pose an added risk because the bank may be forced into providing permanent financing, oftentimes in distressed situations. In evaluating this risk, the bank should consider whether the completed project will be able to attract extended-term financing, supportable by the projected net operating income.

The risk of commercial construction requires a complete assessment of the real estate collateral, borrower's financial resources, source of the extended-term financing, and construction plans. As it does any real estate loan, the bank must obtain an appraisal or evaluation of the real estate in accordance with the Federal Reserve's appraisal regulation. Additionally, the borrower should provide a feasibility study for the project that details the project's marketing plan, as well as an analysis of the supply-and-demand factors affecting the projected absorption rate. For an open-end construction loan, the feasibility study is particularly important to the bank's assessment of the credit because the repayment of the loan becomes increasingly dependent on the sales program or leasing of the project.

The bank also needs to assess the borrower's development expertise, that is, whether the borrower can complete the project within budget and according to the construction plans. The financial risk of the project is contingent on the

borrower's development expertise because the source of the extended-term loan may be predicated upon a set date for project completion. Until the project is completed, the actual value of the real estate is questionable.

A bank may reduce its financial risk by funding the construction loan after the borrower has funded its share of the project equity (for example, by paying for the feasibility study and land-acquisition and -development costs). An alternative approach would require the borrower to inject its own funds into the project at agreed-upon intervals during the project's management, construction, and marketing phases to coincide with the construction lender's contributions. In larger projects, equity injections can be provided by equity partners or joint ventures. These can take the form of equity syndications,[1] whose contributions are injected in the project in phases. A bank should assess the likelihood of the syndication being able to raise the necessary equity.

BANK ASSESSMENT OF THE BORROWER

The term *borrower* can refer to different types of entities. These forms can range from an entity whose sole asset is the project being financed to an entity that has other assets available to support the debt in addition to the project being financed (a multi-asset entity).

Although the value of the real estate collateral is an important component of the loan approval process, the bank should not place undue reliance on the collateral value in lieu of an adequate analysis of the borrower's ability to repay the loan. The analytical factors differ depending on the purpose of the loan, such as residential construction versus the various types of commercial construction loans.

The bank's analysis is contained in its documentation files, which should include background information on the borrower and partner/guarantor concerning their character and credit history, expertise, and financial statements (preferably audited) for the most recent fiscal years. Background information regarding a borrower's and partner's/guarantor's character and credit history is based upon their work experience and previous repayment practices, both relative to trade creditors and financial institutions. The documentation files should indicate whether the borrower has demonstrated it can successfully complete the type of project to be undertaken. The financial statements should be analyzed to ensure that the loan can be repaid in the event that a takeout does not occur.

The degree of analysis depends on whether the borrower is in reality a single-asset entity or a multi-asset entity. A loan to a single-asset entity is often predicated upon the strength of the partners/guarantors. Accordingly, understanding their financial strength, which frequently is made up of various partnership interests, is key to assessing the project's strength. In this example, it would be necessary to obtain financial information on the partner's/guarantor's other projects, even those not financed by the bank, to understand their overall financial condition. This is necessary because other unsuccessful projects may cause financial trouble for the partner/guarantor, despite a successful sales program by the bank's borrower. Issues to be considered, in addition to those raised in the preceding paragraph, include the vacancy rates of the various projects, break-even points, and rent rolls.

A loan to a multi-asset entity has similar characteristics to those found in the single-asset entity, in that it is necessary to evaluate all of the assets contained therein to ascertain the actual financial strength. In both cases, assessment of the project under construction would include pre-leasing requirements. For a loan with a takeout commitment, the financial strength and reputation of the permanent lender should be analyzed. For a loan without a takeout commitment, or one in which the construction lender provides the permanent financing for its construction loan, the long-term risks also need to be evaluated. See the ''Real Estate Loans'' section in this manual, on the bank's assessment of the borrower, for additional factors to be considered.

In instances where approval for the loan is predicated upon the strength of entities other than the borrower (partner/guarantor), the bank should obtain information on their financial condition, income, liquidity, cash flow, contingent liabilities, and any other relevant factors

1. *Syndication* generally refers to the act of bringing together a group of individuals or entities to invest in a real estate project and does not refer to any particular legal form of ownership. The legal form varies depending on the investors' investment objectives, division of tax benefits, responsibility for project management, and desire to limit personal liability. The investment vehicle may be a general partnership, limited partnership, joint venture, tenancy in common, corporation, real estate investment trust, or common law trust.

that exist to demonstrate their financial capacity to fulfill the obligation in the event that the borrower defaults.

Partners/guarantors generally have investments in other projects included as assets on their financial statements. The value of these investments frequently represents the partner's/guarantor's own estimate of the investment's worth, as opposed to a value based upon the investment's financial statements. As a result, it is necessary to obtain detailed financial statements for each investment to understand the partner's/guarantor's complete financial picture and capacity to support the loan. The statements should include detailed current and accurate cash-flow information since cash flow is often the source of repayment.

It is also important to consider the number and amount of the guarantees currently extended by a partner/guarantor to determine if they have the financial capacity to fulfill the contingent claims that exist. Furthermore, the bank should review the prior performance of the partner/guarantor to voluntarily honor the guarantee as well as the marketability of the assets collateralizing the guarantee. Since the guarantee can be limited to development and construction phases of a project, the bank should closely monitor the project before issuing a release to the partner/guarantor.

BANK ASSESSMENT OF REAL ESTATE COLLATERAL

Banks should obtain an appraisal or evaluation, as appropriate, for all real estate–related financial transactions before making the final credit or other decision. See "Real Estate Appraisals and Evaluations," section 4140.1, for a description of the related requirements a bank must follow for real estate–related financial transactions. The appraisal section explains the standards for appraisals, indicates which transactions require an appraisal or an evaluation, states qualifications for an appraiser and evaluator, provides guidance on evaluations, and describes the three appraisal approaches.

The appraisal or evaluation techniques used to value a proposed construction project are essentially the same as those used for other types of real estate. The aggregate principal amount of the loan should be based on an appraisal or evaluation that provides, at a minimum, the "as is" market value of the property.[2] Additionally, the bank will normally request the appraiser to report the "as completed" value.[3] Projections should be accompanied by a feasibility study explaining the effect of projected property improvements on the market value of the land. The feasibility study may be a separate report or incorporated into the appraisal report. If the appraiser uses the feasibility study, the appraiser's acceptance or rejection of the study and its effect on the value should be fully explained in the appraisal. An institution's board of directors is responsible for reviewing and adopting policies and procedures that establish and maintain an effective, independent real estate appraisal and evaluation program (the program) for all of its lending functions. The real estate lending functions include commercial real estate mortgage departments, capital-market groups, and asset-securitization and -sales units. Concerns about the independence of real estate appraisal and evaluation programs include the risk that improperly prepared appraisals and evaluations may undermine the integrity of credit-underwriting processes. More broadly, an institution's lending functions should not have undue influence that might compromise the program's independence. See the October 27, 2003, interagency statement on Independent Appraisal and Evaluation Functions (SR-03-18).

Management is responsible for reviewing the reasonableness of the appraisal's or evaluation's assumptions and conclusions. Also, management's rationale in accepting and relying upon the appraisal or evaluation should be in writing and made a part of loan documentation. In assessing the underwriting risks, management should reconsider any assumptions used by an appraiser that reflect overly optimistic or pessimistic values. If management, after its review of the appraisal or evaluation, determines that there

2. The "as is" value is the value of the property in its current physical condition and subject to the zoning in effect as of the date of appraisal.

3. The "as completed" value reflects the value of the land and the projected improvements. A bank may also request a value based on stabilized occupancy or a value based on the sum of retail sales. However, the sum of retail sales for a proposed development is not the market value of the development. For proposed residential developments that involve the sale of individual houses, units, or lots, the appraisal should reflect deductions and discounts for holding costs, marketing costs, and entrepreneurial profit. For proposed and rehabilitated income-producing properties, the appraisal should reflect appropriate deductions and discounts for leasing commissions, rent losses, and tenant improvements from the estimated value based on stabilized occupancy.

are unsubstantiated assumptions, the bank may request the appraiser or evaluator to provide a more detailed justification of the assumptions or a new appraisal or evaluation. The approval of the loan is based upon the value of the project after the construction is completed. Insofar as the value component of the loan-to-value ratio is concerned, it is important for the bank to closely monitor the project's progress (value) during the construction period. See "Real Estate Loans," section 2090.1, for additional information relative to the real estate collateral assessment.

LOAN DOCUMENTATION

The loan documentation should provide information on the essential details of the loan transaction, the security interest in the real estate collateral, and the takeout loan commitment, if any. The necessary documentation before the start of construction generally includes:

- Financial and background information on the borrower to substantiate the borrower's expertise and financial strength to complete the project.
- The construction loan agreement, which sets forth the rights and obligations of the lender and borrower, conditions for advancing funds, and events of default. In some states, the agreement must be cited in either the deed of trust or the mortgage.
- A recorded mortgage or deed of trust, which can be used to foreclose and obtain title to the collateral.
- A title insurance binder or policy, usually issued by a recognized title insurance company or, in some states, an attorney's opinion. The title should be updated with each advance of funds to provide additional collateral protection.
- Insurance policies and proof of payment as evidence that the builder has adequate and enforceable coverage for liability, fire and other hazards, and vandalism and malicious mischief losses.
- An appropriate appraisal or evaluation showing the value of the land and improvements to date or, possibly, a master appraisal based on specifications for a multiphase development.
- Project plans, a feasibility study, and a construction budget showing the development plans, project costs, marketing plans, and equity contributions. A detailed cost breakdown of land, "hard" construction costs, and indirect or "soft" construction costs (such as construction loan interest; organizational and administration costs; and architectural, engineering, and legal fees) should be included.
- Property surveys, easements, an environmental impact report, and soil reports that indicate construction is feasible on the selected development site. The bank should also obtain the architect's certification of the plan's compliance with all applicable building codes and zoning, environmental protection, and other government regulations, as well as the engineer's report on compliance with building codes and standards. If internal expertise is not available, a bank may need to retain an independent construction expert to review these documents to assess the reasonableness and appropriateness of the construction plans and costs.
- The takeout commitment from the permanent lender, if applicable, and the terms of the loan. The bank should verify the financial strength of the permanent lender to fund the takeout commitment.
- A completion or performance bond signed by the borrower that guarantees the borrower will apply the loan proceeds to the project being financed.
- An owners' affidavit or a borrowing resolution empowering the borrower or its representative to enter into the loan agreement.
- Evidence that property taxes have been paid to date.

These documents furnish evidence that the lending officer is obtaining the information necessary for processing and servicing the loan and protect the bank in the event of default.

Documentation for Residential Construction Loans on Subdivisions

The documents mentioned above are usually available for residential construction loans on subdivisions (tracts). Documentation of tract loans frequently includes a master note in the gross amount of the entire project, and a master deed of trust covering all of the land involved in the project. In addition to an appraisal or evaluation for each type of house to be constructed, the bank should also obtain a master appraisal

including a feasibility study for the entire development. The feasibility study compares the projected demand for housing against the anticipated supply of housing in the market area of the proposed tract development. This analysis should indicate whether there will be sufficient demand for the developer's homes given the project's location, type of homes, and unit sales price.

Documentation for the Takeout Commitment

Most construction lenders require the developer to have an arrangement for permanent financing for each house to be constructed. Exceptions include model homes, typically one for each style of home offered, and a limited number

of housing starts ahead of sales (speculative houses). The starts ahead of sales, however, contain additional risk. If the bank finances too many houses without purchase contracts, and housing sales decline rapidly, it may have to foreclose on the unsold houses and sell them for less than their loan value. A takeout of this type is usually an arrangement between the developer and a permanent mortgage lender, but construction lenders may also finance the permanent mortgages.

The essential information required for a commercial real estate takeout to proceed includes the floor and ceiling rental rates and minimum occupancy requirements; details of the project being financed; expiration date; standby fee requirement; assignment of rents; and, generally, a requirement that the construction loan be fully disbursed and not in any way in default at the time settlement occurs.

The commitment agreement, referred to as the buy/sell contract or the tri-party agreement, is signed by the borrower, the construction lender, and the permanent lender. The purpose of this agreement is to permit the permanent lender to buy the loan directly from the construction lender upon completion of the construction, with the stipulation that all contingencies have been satisfied. Examples of contingencies include project completion by the required date, clear title to the property, and minimum lease-up requirements. A commitment agreement also protects the construction lender against unforeseen possibilities, such as the death of a principal, before the permanent loan documents are signed.

ADMINISTERING THE LOAN

The bank and the borrower[4] must effectively cooperate as partners if controls relative to construction progress are to be maintained. The loan agreement specifies the performance of each party during the entire course of construction. Any changes in construction plans should be approved by both the construction lender and the takeout lender. Construction changes can result in increased costs, which may not necessarily increase the sale value of the completed project. On the other hand, a decrease in costs may not indicate a savings but may suggest the use of lesser quality materials or workmanship, which could affect the marketability of the project.

Disbursement of Loan Funds

Loan funds are generally disbursed through either a stage payment plan or a progress payment plan. Regardless of the method of disbursement, the amount of each construction draw should be commensurate with the improvements made to date. Funds should not be advanced unless they are used in the project being financed and as stipulated in the draw request. Therefore, the construction lender must monitor the funds being disbursed and must be assured, at every stage of construction, that sufficient funds are available to complete the project.

Stage Payment Plan

The stage payment plan, which is normally applied to residential and smaller commercial construction loans, uses a preestablished schedule for fixed disbursements to the borrower at the end of each specified stage of construction. The amount of the draw is usually based upon the stage of development because residential housing projects normally consist of houses in various stages of construction. Nevertheless, loan agreements involving tract financing typically restrict further advances in the event of an accumulation of completed and unsold houses. Disbursements are made when construction has reached the agreed-upon stages, verified by an actual inspection of the property. These typically include advances at the conclusion of various stages of construction, such as the foundation, exterior framing, the roof, interior finishing, and completion of the house. The final payment is made after the legally stipulated lien period for mechanic's liens has lapsed.

Disbursement programs of this type are usually required for each house constructed within a tract development. As each house is completed and sold, the bank makes a partial release relative to that particular house covered by its

4. The borrower may not be the entity responsible for the actual construction of the project. Depending on the size, type, and complexity of the project, the borrower may strictly be a developer who assembles the land, designs the project, and contracts with a construction company to handle the actual construction of the building. If this is the case, the bank should obtain financial and project history information on the builder/contractor.

master deed of trust. The amount of the release is set forth in the loan agreement, which specifies the agreed-upon release price for each house sold with any excess over the net sales proceeds remitted to the borrower.

Progress Payment Plan

The progress payment plan is normally used for commercial projects.[5] Under a progress payment system, funds are released as the borrower completes certain phases of construction as agreed upon in the loan agreement. Normally, the bank retains a percentage of the funds as a hold back (or retainage) to cover project cost overruns or outstanding bills from suppliers or subcontractors. Hold backs occur when a developer/contractor uses a number of subcontractors and maintains possession of a portion of the amounts owed to the subcontractors during the construction period. This is done to ensure that the subcontractors finish their work before receiving the final amount owed. Accordingly, the construction lender holds back the same funds from the developer/contractor to avert the risk of their misapplication or misappropriation.

The borrower presents a request for payment from the bank in the form of a "construction draw" request or "certification for payment," which sets forth the funding request by construction phase and cost category for work that has been completed. This request should be accompanied by receipts for the completed work (material and labor) for which payment is being requested. The borrower also certifies that the conditions of the loan agreement have been met—that all requested funds have been used in the subject project and that suppliers and subcontractors have been paid. Additionally, the subcontractors and suppliers should provide the bank with lien waivers covering the work completed for which payment has been received. Upon review of the draw request and independent confirmation on the progress of work, the bank will disburse funds for construction costs incurred, less the hold back. The percentage of the loan funds retained are released when a notice of the project's completion has been filed, and after the stipulated period has elapsed under which subcontractors or suppliers can file a lien.

Monitoring Progress of Construction and Loan Draws

It is critical that a bank has appropriate procedures and an adequate tracking system to monitor payments to ensure that the funds requested are appropriate for the given stage of development. The monitoring occurs through physical inspections of the project once it has started. The results of the inspections are then documented in the inspection reports, which are kept in the appropriate file. Depending on the complexity of the project, the inspection reports can be completed either by the lender or by an independent construction consulting firm, the latter generally staffed by architects and engineers. The reports address both the quantity and the quality of the work for which funds are being requested. They also verify that the plans are being followed and that the construction is proceeding on schedule and within budget.

The bank must be accurately informed of the progress to date in order to monitor the loan. It is also important that the bank ascertain whether draws are being taken in accordance with the predetermined disbursement schedule. Before any draw amount is disbursed, however, the bank must obtain verification of continued title insurance. Generally, this means verifying that no liens have been filed against the title of the project since the previous draw. The title insurance insuring the construction lender's mortgage or lien is then increased to include the new draw, which results in an increase in the title insurance commensurate with the disbursement of funds. The lender frequently examines title to the property securing the construction loan to also be certain that the borrower is not pledging it for other borrowings and to be sure that mechanic's liens are not being filed for unpaid bills. When the project is not proceeding as anticipated, that fact should be reflected in the inspection reports.

5. Other methods for disbursing commercial construction loans include the voucher system and the monthly draw method. The voucher system is similar to the progress system except that borrower prepares a voucher of all invoices to be paid with signatures of the subcontractors attesting to the invoiced amount. The bank then issues checks directly to the subcontractors or suppliers. The monthly draw method is used in long-term projects wherein the borrower makes a draw request each month for the previous month's work. In turn, the bank determines the amount of work completed to date and releases funds based on the value of work completed versus the value of the work remaining.

Another important component in the process is the ongoing monitoring of general economic factors that will affect the marketing and selling of the residential or commercial properties and affect their success upon completion of the project.

Monitoring Residential Projects

An inventory list is maintained for each tract or phase of the project. The inventory list should show each lot number, the style of house, the release price, the sale price, and the loan balance. The list should be posted daily with advances and payments indicating the balance advanced for each house, date completed, date sold, and date paid, and should age the builder's inventory by listing the older houses completed and unsold.

Inspections (usually monthly) during the course of construction of each house should be documented in progress reports. The progress report should indicate the project's activity during the previous month, reflecting the number of homes under construction, the number completed, and the number sold. The monthly report should indicate whether advances are being made in compliance with the loan agreement.

Monitoring Commercial Projects

To have an effective control over its commercial construction loan program, the bank must have an established loan administration process that continually monitors each project. The process should include monthly reporting on the work completed, the cost to date, the cost to complete, construction deadlines, and loan funds remaining. Any changes in construction plans should be documented and reviewed by the construction consulting firm and should be approved by the bank and takeout lender. A significant number of change orders may indicate poor planning or project design, or problems in construction, and should be tracked and reflected in the project's budget. Soft costs such as advertising and promotional expenses normally are not funded until the marketing of the project has started.

Final Repayment

Before the final draw is made, the construction loan should be in a condition to be converted to a permanent loan. Usually the final draw includes payment of the hold back stipulated in the loan agreement and is used to pay all remaining bills. The bank should obtain full waivers of liens (releases) from all contractors, subcontractors, and suppliers before the loan is released and the hold back is disbursed. The bank should also obtain a final inspection report to confirm the project is completed and meets the building specifications, including confirmation of the certificate of occupancy from the governing building authority.

Sources of permanent funding for commercial projects vary greatly, depending upon the type of project. For condominium projects, the construction lender may also be providing the funding for marketing the individual units and would be releasing the loan on a unit-by-unit basis similar to a residential development construction loan. If there is a precommitted takeout lender, the new lender could purchase the construction loan documents and assume the security interest from the construction lender. If the project is being purchased for cash, the bank would release its lien and cancel the note.

Additionally, as the commercial project is leased, the lender should ensure that the bank's position is protected in the event that extended-term funding is not obtained. The bank may require tenants to enter into subordination, attornment, and nondisturbance agreements, which protect the bank's interests in the lease by providing for the assumption of the landlord's position by the bank in the event the borrower declares bankruptcy. Furthermore, to ensure that the bank has full knowledge of all provisions of the lease agreements, tenants should be required to sign an estoppel certification.

In some cases, the takeout lender may only pay off a portion of the construction loan because a conditional requirement for full funding has not been met, such as the project not attaining a certain level of occupancy. The construction lender would then have a second mortgage on the remaining balance of the construction loan. When the conditions of the takeout loan are met, the construction lender is repaid in full and the lien is released.

Interest Reserves

A construction loan is generally an interest-only loan because of the fact that cash flow is not

available from most projects until they are completed. The borrower's interest expense is therefore borrowed from the construction lender as part of the construction loan for the purpose of "paying" the lender interest on the "portion" of the loan used for actual construction. The funds advanced to pay the interest are included as part of the typical monthly draw. As a result, the balance due to the lender increases with each draw by the full amount of construction costs, plus the interest that is borrowed.

The borrower's interest cost is determined by the amount of credit extended and the length of time needed to complete the project. This interest cost is referred to as an interest reserve. This period of time should be evaluated for reasonableness relative to the project being financed. In larger projects cash flow may be generated prior to the project's completion. In such cases, any income from the project should be applied to debt service before there is a draw on the interest reserve. The lender should closely monitor the lease-up of the project to ensure that the project's net income is being applied to debt service and not diverted to the borrower as a return of the developer's capital or for use in the developer's other projects.

Loan Default

The inherent exposure in construction financing is that the full value of the collateral is not realized until the project is completed. In default situations the bank must consider the alternatives available to recover its advances. For uncompleted projects, the bank must decide whether it is more advantageous to complete the project or to sell on an "as is" basis. The various mechanic's and materialmen's liens, tax liens, and other judgments that arise in such cases are distressing to even the most seasoned lender. Due to these factors, the construction lender may not be in the preferred position indicated by documents in the file. Therefore, the lender should take every precaution to minimize any third-party claim on the collateral. Because laws regarding the priority of certain liens may vary among states, the bank should take the necessary steps to ensure that its lien is recorded prior to the commencement of work or the delivery of materials and supplies.

Signs of Problems

To detect signs of a borrower's financial problems, the bank should review the borrower's financial statements on a periodic (quarterly) basis, assessing the liquidity, debt level, and cash flow. The degree of information the financial statements provide the bank, insofar as understanding the borrower's financial condition is concerned, depends primarily on whether the borrower is a single-asset entity or a multi-asset entity.

The financial statements of a single-asset entity only reflect the project being constructed; therefore, they are of a more limited use than statements of multi-asset entities. Nevertheless, one issue that is of importance to financial statements of both entities relates to monitoring changes in accounts and trade payables. Monitoring these payables in a detailed manner helps the bank to determine if trade payables are paid late or if there are any unpaid bills. In the event of problems, a bank might choose to either contact the payables directly or request an additional credit check on the borrower. Another source of information indicating borrower problems is local publications that list lawsuits or judgments that have been filed or entered against the borrower. Additionally, the bank should also verify that the borrower is making its tax payments on time.

In a multi-asset entity, on the other hand, more potential problems could arise due to the greater number of assets (projects/properties) that make up the borrower. As a result, it is necessary to obtain detailed financial statements of each of the assets (projects/properties) and the consolidating financial statements, as well as the consolidated financial statements. This is important because each kind of statement can provide significant insight into problems that could adversely affect the borrower's overall financial condition.

Assessing the financial condition of the multi-asset entity includes evaluating the major sources of cash and determining whether cash flow is dependent on income generated from completed projects, the sale of real estate, or infusion of outside capital. Additionally, the bank should also review the borrower's account receivables for the appropriateness of intercompany transactions and to guard against diversion of funds.

Depending upon the structure of the loan, it may also be desirable to obtain a partner's/

guarantor's financial statements on a periodic basis. In such cases it is important to obtain detailed current and accurate financial statements that include cash flow information on a project-by-project basis.

Slow unit sales, or excessive inventory relative to sales, indicate the borrower may have difficulty repaying the loan. Although sometimes there are mitigating factors beyond the control of the borrower, such as delays in obtaining materials and supplies, adverse weather conditions, or unanticipated site work, the borrower may be unable to overcome these problems. Such delays usually increase project costs and could hamper the loan's repayment.

The construction lender should be aware of funds being misused—for example, rebuilding to meet specification changes not previously disclosed, starting a new project, or possibly paying subcontractors for work performed elsewhere. The practice of "front loading," whereby a builder deliberately overstates the cost of the work to be completed in the early stages of construction, is not uncommon and, if not detected early on, will almost certainly result in insufficient loan funds with which to complete construction in the event of a default.

Loan Workouts

Sound workout programs begin with a full disclosure of all relevant information based on a realistic evaluation of the borrower's ability to manage the business entity (business, technical, and financial capabilities), and the bank's ability to assist the borrower in developing and monitoring a feasible workout/repayment plan. Management should then decide on a course of action to resolve the problems with the terms of the workout in writing and formally agreed to by the borrower. If additional collateral is accepted or substituted, the bank should ensure that the necessary legal documents are filed to protect the bank's collateral position.

In those cases where the borrower is permitted to finish the project, additional extensions of credit for completing the project, due to cost overruns or an insufficient interest reserve, may represent the best alternative for a workout plan. At the same time, the bank should evaluate the cause of the problem(s), such as mismanagement, and determine whether it is in its best interest to allow the borrower to complete the project.

SUPERVISORY POLICY

As a result of competitive pressures, many banks in the early 1980s made construction loans on an open-end basis, wherein the borrower did not have a commitment for longer-term or takeout financing before construction was started. Although there was sufficient demand for commercial real estate space when this practice commenced, the supply of space began to exceed demand. One symptom of the excess supply was an increase in vacancy rates, which led to declining rental income caused by the ever greater need for rent concessions. The commensurate declining cash flow from income-producing properties, and the uncertainty regarding future income, reduced the market value of many properties to levels considered undesirable by permanent mortgage lenders. As a result of the subsequent void created by the permanent lenders, banks in the mid- and late 1980s began to extend medium-term loans with maturities for up to seven years (also referred to as mini-perms). These mini-perms were granted with the expectation by banks that as the excess supply of space declined, the return on investment would improve, and permanent lenders would return.

As these loans mature in the 1990s, borrowers may continue to find it difficult to obtain adequate sources of long-term credit. In some cases, banks may determine that the most desirable and prudent course is to roll over or renew loans to those borrowers who have demonstrated an ability to pay interest on their debts, but who presently may not be in a position to obtain long-term financing for the loan balance.

The act of refinancing or renewing loans to sound borrowers, including creditworthy commercial or residential real estate developers, generally should not be subject to supervisory criticism in the absence of well-defined weaknesses that jeopardize repayment of the loans. Refinancings or renewals should be structured in a manner that is consistent with sound banking, supervisory, and accounting practices, and that protects the bank and improves its prospects for collecting or recovering on the asset.

1. To determine if policies, practices, procedures, and internal controls regarding real estate construction loans are adequate.
2. To determine if bank officers are operating in conformance with the bank's established guidelines.
3. To evaluate the portfolio for collateral sufficiency, performance, credit quality, and collectibility.
4. To determine compliance with applicable laws and regulations.
5. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of law or regulations have been noted.

1. Refer to the Real Estate Loan Examination Procedures section of this manual for examination procedures related to all types of real estate lending activity, and incorporate into this checklist those procedures applicable to the review of the real estate construction loans. The procedures in this checklist are unique to the review of a bank's construction lending activity.
2. Determine the scope of the examination based on the evaluation of internal controls and the work performed by internal/external auditors.
3. Test real estate construction loans for compliance with policies, practices, procedures, and internal controls by performing the remaining examination procedures in this section. Also, obtain a listing of any deficiencies noted in the latest internal/external audit reviews and determine if appropriate corrections have been made.
4. Review management reports on the status of construction lending activity, economic developments in the market, and problem loan reports.
5. Evaluate the bank with respect to—
   a. the adequacy of written policies and procedures relating to construction lending.
   b. operating compliance with established bank policy.
   c. favorable or adverse trends in construction lending activity.
   d. the accuracy and completeness of the bank's records.
   e. the adequacy of internal controls, including control of construction draws.
   f. the adherence of lending staff to lending policies, procedures, and authority as well as the bank's adherence to the holding company's loan limits, if applicable.
   g. compliance with laws, regulations, and Federal Reserve policy on construction lending activity, including supervisory loan-to-value (LTV) limits and restrictions; loans to officers, directors, and shareholders; appraisal and evaluation of real estate collateral; and prudent lending practices.
6. Select loans for examination, using an appropriate sampling technique drawn from judgmental (cut-off line) or statistical sampling. Analyze the performance of the loans selected for examination by transcribing the following kinds of information onto the real estate construction loan line cards, when applicable:
   a. Collateral records and credit files, including the borrower's financial statements, review of related projects, credit report of the borrower and guarantors, appraisal or evaluation of collateral, feasibility studies, economic impact studies, and loan agreement and terms.
   b. Loan modification or restructuring agreements to identify loans where interest or principal is not being collected according to the terms of the original loan. Examples include reduction of interest rate or principal payments, deferral of interest or principal payments, or renewal of a loan with accrued interest rolled into the principal.
   c. The commitment agreement—a buy/sell contract or the tri-party agreement—from the extended-term or permanent lender for the takeout loan.
   d. Cash-flow projections and any revisions to projections based on cost estimates from change orders.
   e. Estimates of the time and cost to complete construction.
   f. Inspection reports and evaluations of the cost to complete, construction deadlines, and quality of construction.
   g. Construction draw schedules and audits for compliance with the schedules.
   h. Documentation on payment of insurance and property taxes.
   i. Terms of a completion or performance bond.
   j. Past-due/nonaccrual–related information.
   k. Loan-specific internal problem credit analyses information.
   l. Loans to insiders and their interests.
   m. Loans classified during the preceding examination.
7. In analyzing the selected construction loans, the examiner should consider the following procedures, taking appropriate action if necessary:

a. Determine the primary source of repayment and evaluate its adequacy, including whether—
   - the permanent lender has the financial resources to meet its commitment.
   - the amount of the construction loan and its estimated completion date correspond to the amount and expiration date of the takeout commitment and/or completion bond.
   - the permanent lender and/or the bonding company have approved any modifications to the original agreement.
   - properties securing construction loans that are not supported by a takeout commitment will be marketable upon completion.

b. Analyze secondary support afforded by guarantors and partners.

c. Relate collateral values to outstanding debt by—
   assessing the adequacy of the appraisal and evaluation.
   - ascertaining whether inspection reports support disbursements to date.
   - determining whether the amount of undisbursed loan funds is sufficient to complete the project.
   - establishing whether title records assure the primacy of the bank's liens.
   - determining if adequate hazard, builder's risks, and worker's compensation insurance is maintained.

d. Determine whether the loan's loan-to-value (LTV) ratio is in excess of the supervisory LTV limits. If so, ascertain whether the loan has been properly reported as a nonconforming loan.

e. Ascertain whether the loan complies with established bank policy.

f. Identify any deficiencies in the loan's documentation in both the credit files and the collateral records.

g. Identify whether the loan is to an officer, director, or shareholder of the bank or a correspondent bank and whether an officer, director, or shareholder of the bank is a guarantor on the loan.

h. Review the borrower's compliance with the provisions of the loan agreement, indicating whether the loan is in default or in past-due status.

i. Determine if there are any problems that may jeopardize the repayment of the construction loan.

j. Determine whether the loan was classified during the preceding examination, and, if the loan has been paid off, whether all or part of the funds for repayment came from another loan at the bank or from the repossession of the property.

8. In connection with the examination of other lending activity in the bank, the examiner should—
   a. check the central liability file on the borrower(s) and determine whether the total construction lending activity exceeds the lending limit to a single borrower.
   b. obtain information and related performance status on common borrowers and their interests from examiners assigned to other examination areas (such as non–real estate loans, leasing, overdrafts, and cash items) and determine the total indebtedness of the borrower to the bank. Additionally, one examiner should be assigned to review the borrower's overall borrowing relationship with the bank.
   c. perform appropriate procedural steps as outlined in the Concentration of Credits section of this manual. Interim construction loans that do not have firm permanent takeout commitments are to be treated as concentrations of credit.

9. Consult with the examiner responsible for the asset/liability management analysis portion of the examination to determine the appropriate maturity breakdown of construction loans needed for the analysis and prepare the necessary schedules.

10. Summarize the findings of the construction loan portfolio review and address—
    a. the scope of the examination.
    b. the quality of the policies, procedures, and controls.
    c. the general level of adherence to policies and procedures.
    d. the competency of management.
    e. the quality of the loan portfolio.
    f. loans not supported by current and complete financial information.
    g. loans with incomplete documentation, addressing deficiencies related to items such as appraisals or evaluations, feasibility studies, the environmental impact study, takeout commitment, title policy, construction plans, inspection reports, change orders, proof of payment for

insurance and taxes, deeds of trust, and mortgage notes.

h. the adequacy of control over construction draws and advances.
i. loans to officers, directors, shareholders, or their interests.
j. causes of existing problems.
k. delinquent loans and the aggregate amount of statutory bad debts. Refer to the manual section on classification of credits for a discussion on statutory bad debts or A Paper.
l. concentrations of credits.
m. classified loans.
n. violations of laws, regulations, and Federal Reserve policy.
o. action taken by management to correct previously noted deficiencies and corrective actions recommended to management at this examination, with the bank's response to such recommendations.

Real Estate Construction Loans
Internal Control Questionnaire
Effective date May 2004

Section 2100.4

Review the bank's internal controls, policies, practices, and procedures for making and servicing real estate construction loans. The bank's system should be documented completely and concisely and should include, where appropriate, narrative descriptions, flow charts, copies of forms used, and other pertinent information. Negative responses to the questions in this section should be explained, and additional procedures deemed necessary should be discussed with the examiner-in-charge. Items marked with an asterisk require substantiation by observation or testing.

POLICIES AND OBJECTIVES

*1. Has the board of directors and management, consistent with their duties and responsibilities, adopted and, at least annually, reviewed and approved written construction lending policies that—
   a. outline construction lending objectives regarding—
      - the aggregate limit for construction loans?
      - concentrations of credit in particular types of construction projects?
   b. establish minimum standards for documentation?
   c. define qualified collateral and minimum margin requirements?
   d. define the minimum equity requirement for a project?
   e. define loan-to-value (LTV) limits that are consistent with supervisory LTV limits?
   f. require an appraisal or evaluation that complies with the Federal Reserve real estate appraisal regulation and guidelines?
   g. delineate standards for takeout commitments?
   h. indicate completion bonding requirements?
   i. establish procedures for reviewing construction loan applications?
   j. detail methods for disbursing loan proceeds?
   k. detail project-inspection requirements and progress-reporting procedures?
   l. require agreements by borrowers for completion of improvements according to approved construction specifications, and cost and time limitations?
2. Are construction lending policies and objectives appropriate to the size and sophistication of the bank, and are they compatible with changing market conditions?
3. Has the board of directors adopted, and does it periodically review, policies and procedures that establish and maintain an effective, independent real estate appraisal and evaluation program for the entire bank's lending functions? (The real estate lending functions include commercial real estate mortgage departments, capital-market groups, and asset-securitization and -sales units.)

REVIEWING LOAN APPLICATIONS

1. Does bank policy require a personal guarantee from the borrower on construction loans?
2. Does bank policy require personal completion guarantees by the property owner and/or the contractor?
3. Does the bank require a construction borrower to contribute equity to a proposed project in the form of money or real estate? If so, indicate which form of equity.
4. Does the project budget include the amount and source of the builder's and/or owner's equity contribution?
5. Does the bank require—
   a. background information on the borrower's, contractor's, and major subcontractors' development and construction experience, as well as other projects currently under construction?
   b. payment-history information from suppliers and trade creditors on the aforementioned's previous projects?
   c. credit reports?
   d. detailed current and historical financial statements, including cash flow–related information?

6. Do the borrower's project-cost estimates include—
   a. land and construction costs?
   b. off-site improvement expenses?
   c. soft costs, such as organizational and administrative costs, and architectural, engineering, and legal fees?
   d. interest, taxes, and insurance expenses?
7. Does the bank require an estimated cost breakdown for each stage of construction?
8. Does the bank require that cost estimates of more complicated projects be reviewed by qualified personnel: experienced in-house staff, an architect, a construction engineer, or an independent estimator?
9. Are commitment fees required on approved construction loans?

CONSTRUCTION LOAN AGREEMENTS

1. Is the construction loan agreement signed before an actual loan disbursement is made?
*2. Is the construction loan agreement reviewed by counsel and other experts to determine that improvement specifications conform to—
   a. building codes?
   b. subdivision regulations?
   c. zoning and ordinances?
   d. title and/or ground lease restrictions?
   e. health and handicap access regulations?
   f. known or projected environmental protection considerations?
   g. specifications required under the National Flood Insurance Program?
   h. provisions in tenant leases?
   i. specifications approved by the permanent lender?
   j. specifications required by the completion or performance bonding company and/or guarantors?
*3. Does the bank require all change orders to be approved in writing by the—
   a. bank?
   b. bank's counsel?
   c. permanent lender?
   d. architect or supervising engineer?
   e. prime tenants bound by firm leases or letters of intent to lease?
   f. completion bonding company?
4. Does the construction loan agreement set a date for project completion?
5. Does the construction loan agreement require that—
   a. the contractor not start work until authorized to do so by the bank?
   b. on-site inspections be permitted by the lending officer or an agent of the bank without prior notice?
   c. disbursement of funds be made as work progresses, supported by documentation that the subcontractors are receiving payment and that the appropriate liens are being released?
   d. the bank be allowed to withhold disbursements if work is not performed according to approved specifications?
   e. a percentage of the loan proceeds be retained pending satisfactory completion of the construction?
   f. the lender be allowed to assume prompt and complete control of the project in the event of default? If a commercial project, are the leases assignable to the bank?
   g. the contractor carry builder's risk and workers' compensation insurance? If so, has the bank been named as mortgagee or loss payee on the builder's risk policy?
   h. periodic increases in the project's value be reported to the builder's risk and title insurance companies?
6. Does the construction loan agreement for residential tract construction loans require—
   a. bank authorization for individual tract-housing starts?
   b. that periodic sales reports be submitted to the bank?
   c. that periodic reports on tract houses occupied under a rental, lease, or purchase-option agreement be submitted to the bank?
   d. limitations on the number of speculative houses and the completion of one tract before beginning another?

COLLATERAL

1. Are liens filed on non–real estate construction improvements, i.e., personal property that is movable from the project?
2. When entering into construction loans, does the bank, consistent with supervisory loan-to-value limits—

   a. limit the loan amount to a reasonable percentage of the appraised value of the project when there is no prearranged permanent financing?
   b. limit the loan amount to a percentage of the appraised value of the completed project when subject to the bank's own takeout commitment?
   c. limit the loan amount to the floor of a takeout commitment that is based upon achieving a certain level of rents or lease occupancy?
3. Are unsecured credit lines to contractors or developers, who are also being financed by secured construction loans, supervised by the construction loan department or the officer supervising the construction loan?
4. Does the bank have adequate procedures to determine whether construction appraisal or evaluation policies and procedures are consistently being followed in conformance with regulatory requirements, and that the appraisal or evaluation documentation supports the value indicated in the conclusions?

INSPECTIONS

1. Are inspection authorities noted in the—
   a. construction loan commitment?
   b. construction loan agreement?
   c. tri-party buy-and-sell agreement?
   d. takeout commitment?
2. Are inspections conducted on an irregular basis?
3. Are inspection reports sufficiently detailed to support disbursements?
4. Are inspectors rotated from project to project?
5. Are spot checks made of the inspectors' work?
6. Do inspectors determine compliance with plans and specifications as well as the progress of the work? If so, are the inspectors competent to make the determination?

DISBURSEMENTS

*1. Are disbursements—
   a. advanced on a prearranged disbursement plan?
   b. made only after reviewing written inspection reports?
   c. authorized in writing by the contractor, borrower, inspector, subcontractors, and/or lending officer?
   d. reviewed by a bank employee who had no part in granting the loan?
   e. compared with original cost estimates?
   f. checked against previous disbursements?
   g. made directly to subcontractors and suppliers?
   h. supported by invoices describing the work performed and the materials furnished?
2. Does the bank obtain waivers of subcontractor's and mechanic's liens as work is completed and disbursements are made?
3. Does the bank obtain sworn and notarized releases of mechanic's liens from the general contractor at the time construction is completed and before final disbursement is made?
4. Does the bank periodically review undisbursed loan proceeds to determine their adequacy to complete the projects?
5. Are the borrower's undisbursed loan proceeds and contingency or escrow accounts independently verified at least monthly by someone other than the individuals responsible for loan disbursements?

TAKEOUT COMMITMENTS

1. Does counsel review takeout agreements for acceptability?
2. Does the bank obtain and review the permanent lender's financial statements to determine the adequacy of its financial resources to fulfill the takeout commitment?
3. Is a tri-party buy-and-sell agreement signed before the construction loan is closed?
4. Does the bank require takeout agreements to include a force majeure—an act-of-God clause—that provides for an automatic extension of the completion date in the event that construction delays occur for reasons beyond the builder's control?

COMPLETION BONDING REQUIREMENTS

1. Does the bank require completion insurance for all construction loans?

2. Has the bank established minimum financial standards for borrowers who are not required to obtain completion bonding? Are these standards observed in all cases?
3. Does counsel review completion insurance bonds for acceptability?

DOCUMENTATION

1. Does the bank require and maintain documentary evidence of—
   a. the contractor's payment of—
      - employee withholding taxes?
      - builder's risk insurance?
      - workers' compensation insurance?
      - public liability insurance?
      - completion insurance?
   b. the property owner's payment of real estate taxes?
2. Does the bank require that documentation files include—
   a. loan applications?
   b. financial statements for the—
      - borrower?
      - builder?
      - proposed prime tenant?
      - takeout lender?
      - guarantors/partners?
   c. credit and trade checks on the—
      - borrower?
      - builder?
      - major subcontractor?
      - proposed tenants?
   d. a copy of plans and specifications?
   e. a copy of the building permit?
   f. a survey of the property?
   g. the construction loan agreement?
   h. an appraisal or evaluation and feasibility study?
   i. an up-to-date title search?
   j. the mortgage?
   k. ground leases?
   l. assigned tenant leases or letters of intent to lease?
   m. a copy of the takeout commitment?
   n. a copy of the borrower's application to the takeout lender?
   o. the tri-party buy-and-sell agreement?
   p. inspection reports?
   q. disbursement authorizations?
   r. undisbursed loan proceeds and contingency or escrow account reconcilements?
   s. insurance policies?
3. Does the bank employ standardized checklists to control documentation for individual files, and does it perform audit reviews for adequacy?
4. Does the documentation file indicate all of the borrower's other loans and deposit account relationships with the bank, and include a summary of other construction projects being financed by other banks? Does the bank analyze the status of these projects and the potential effect on the borrower's financial position?
5. Does the bank use tickler files that—
   a. control scheduling of inspections and disbursements?
   b. ensure prompt administrative follow-up on items sent for—
      - recording?
      - an attorney's opinion?
      - an expert review?
6. Does the bank maintain tickler files that provide advance notice (such as 30 days' prior notice) to staff of the expiration dates for—
   a. the takeout commitment?
   b. hazard insurance?
   c. workers' compensation insurance?
   d. public liability insurance?

LOAN RECORDS

*1. Are the preparation, addition, and posting of subsidiary real estate construction loan records performed or adequately reviewed by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?
   c. reconcile subsidiary records to general ledger controls?

*2. Are the subsidiary real estate construction loan records reconciled at least monthly to the appropriate general ledger accounts? Are reconciling items adequately investigated by persons who do not also handle cash or prepare/post subsidiary controls?

*3. Are loan statements, delinquent account-collection requests, and past-due notices reconciled to the real estate construction loan subsidiary records? Are the reconciliations handled by a person who does not also handle cash?

4. Are inquiries about construction loan balances received and investigated by persons who do not also handle cash?

*5. Are documents supporting recorded credit adjustments subsequently checked or tested by persons who do not also handle cash?
6. Is a delinquent-accounts report generated daily?
7. Are loans in excess of supervisory LTV limits identified in the bank's records, and are the aggregate amounts of such loans reported at least quarterly to the board of directors?
8. Does the bank maintain a daily record summarizing note transaction details (loans made, payments received, and interest collected) to support applicable general ledger account entries?
9. Are note and liability trial balances frequently reconciled to the general ledger by employees who do not process or record loan transactions?

LOAN INTEREST AND COMMITMENT FEES

*1. Are the preparation and posting of loan interest and fee records performed or adequately reviewed by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?
2. Are any independent interest and fee computations made and compared with or adequately tested to loan interest by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?

CONCLUSION

1. Does the foregoing information provide an adequate basis for evaluating internal control in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
2. On the basis of a composite evaluation, are internal controls adequate as evidenced by answers to the foregoing questions?

Concentrations in Commercial Real Estate Lending, Sound Risk-Management Practices

Effective date October 2013

Section 2103.1

This interagency supervisory guidance was developed to reinforce sound risk-management practices for institutions with high and increasing concentrations of commercial real estate loans on their balance sheets. The guidance, Concentrations in Commercial Real Estate (CRE) Lending, Sound Risk-Management Practices (the guidance), was issued on December 6, 2006 (effective on December 12, 2006).[1] However, institutions needing to improve their risk-management processes may have been provided the opportunity for some flexibility on the time frame for complying with the guidance. This time frame will be commensurate with the level and nature of CRE concentration risk, the quality of the institution's existing risk-management practices, and its levels of capital. (See 71 *Fed. Reg.* 74,580 [December 12, 2006], the Federal Reserve Board's press release dated December 6, 2006, and SR-07-01 and its attachments.)

SCOPE OF THE CRE CONCENTRATION GUIDANCE

The guidance focuses on those CRE loans for which the cash flow from the real estate is the primary source of repayment rather than loans to a borrower for which real estate collateral is taken as a secondary source of repayment or through an abundance of caution. For the purposes of this guidance, CRE loans include those loans with risk profiles sensitive to the condition of the general CRE market (for example, market demand, changes in capitalization rates, vacancy rates, or rents). CRE loans are land development and construction loans (including one- to four-family residential and commercial construction loans) and other land loans. CRE loans also include loans secured by multifamily property, and nonfarm nonresidential property where the primary source of repayment is derived from rental income associated with the property (that is, loans for which 50 percent or more of the source of repayment comes from third-party, nonaffiliated, rental income) or the proceeds of the sale, refinancing, or permanent financing of the property. Loans to real estate investment trusts and unsecured loans to developers also should be considered CRE loans for purposes of this guidance if their performance is closely linked to performance of the CRE markets. The scope of the guidance does *not* include loans secured by owner-occupied nonfarm nonresidential properties where the primary source of repayment is the cash flow from the ongoing operations and activities conducted by the party, or affiliate of the party, who owns the property. Rather than defining a CRE concentration, the guidance's "Supervisory Oversight" section describes the criteria that the Federal Reserve will use as high-level indicators to identify banks potentially exposed to CRE concentration risk.

CRE CONCENTRATION ASSESSMENTS

Banks that are actively involved in CRE lending should perform ongoing risk assessments to identify CRE concentrations. The risk assessment should identify potential concentrations by stratifying the CRE portfolio into segments that have common risk characteristics or sensitivities to economic, financial, or business developments. A bank's CRE portfolio stratification should be reasonable and supportable. The CRE portfolio should not be divided into multiple segments simply to avoid the appearance of concentration risk.

The Federal Reserve recognizes that risk characteristics vary among CRE loans secured by different property types. A manageable level of CRE concentration risk will vary by bank depending on the portfolio risk characteristics, the quality of risk-management processes, and capital levels. Therefore, the guidance does not establish a CRE concentration limit that applies to all banks. Rather, banks are encouraged to identify and monitor credit concentrations and to establish internal concentration limits, and all concentrations should be reported to senior management and the board of directors on a periodic basis. Depending on the results of the risk assessment, the bank may need to enhance its risk-management systems.

1. The guidance was jointly adopted by the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation.

CRE RISK MANAGEMENT

The sophistication of a bank's CRE risk-management processes should be appropriate to the size of the portfolio, as well as the level and nature of concentrations and the associated risk to the bank. Banks should address the following key elements in establishing a risk-management framework that effectively identifies, monitors, and controls CRE concentration risk:

1. board and management oversight
2. portfolio management
3. management information systems
4. market analysis
5. credit underwriting standards
6. portfolio stress testing and sensitivity analysis
7. credit risk review function

Board and Management Oversight of CRE Concentration Risk

A bank's board of directors has ultimate responsibility for the level of risk assumed by the bank. If the bank has significant CRE concentration risk, its strategic plan should address the rationale for its CRE levels in relation to its overall growth objectives, financial targets, and capital plan. In addition, the Federal Reserve's real estate lending regulations require that each bank adopt and maintain a written policy that establishes appropriate limits and standards for all extensions of credit that are secured by liens on or interests in real estate, including CRE loans. Therefore, the board of directors or a designated committee thereof should—

1. establish policy guidelines and approve an overall CRE lending strategy regarding the level and nature of CRE exposures acceptable to the bank, including any specific commitments to particular borrowers or property types, such as multifamily housing;
2. ensure that management implements procedures and controls to effectively adhere to and monitor compliance with the bank's lending policies and strategies;
3. review information that identifies and quantifies the nature and level of risk presented by CRE concentrations, including reports that describe changes in CRE market conditions in which the bank lends; and
4. periodically review and approve CRE risk exposure limits and appropriate sublimits (for example, by nature of concentration) to conform to any changes in the bank's strategies and to respond to changes in market conditions.

CRE Portfolio Management

Banks with CRE concentrations should manage not only the risk of individual loans but also portfolio risk. Even when individual CRE loans are prudently underwritten, concentrations of loans that are similarly affected by cyclical changes in the CRE market can expose a bank to an unacceptable level of risk if not properly managed. Management regularly should evaluate the degree of correlation between related real estate sectors and establish internal lending guidelines and concentration limits that control the bank's overall risk exposure.

Management should develop appropriate strategies for managing CRE concentration levels, including a contingency plan to reduce or mitigate concentrations in the event of adverse CRE market conditions. Loan participations, whole loan sales, and securitizations are a few examples of strategies for actively managing concentration levels without curtailing new originations. If the contingency plan includes selling or securitizing CRE loans, management should assess periodically the marketability of the portfolio. This should include an evaluation of the bank's ability to access the secondary market and a comparison of its underwriting standards with those that exist in the secondary market.

CRE Management Information Systems

A strong management information system (MIS) is key to effective portfolio management. The sophistication of the MIS will necessarily vary with the size and complexity of the CRE portfolio and level and nature of concentration risk. The MIS should provide management with sufficient information to identify, measure, monitor, and manage CRE concentration risk. This includes meaningful information on CRE portfolio characteristics that is relevant to the bank's lending strategy, underwriting standards, and risk tolerances. A bank should assess periodi-

cally the adequacy of the MIS in light of growth in CRE loans and changes in the CRE portfolio's size, risk profile, and complexity.

Banks are encouraged to stratify the CRE portfolio by property type, geographic market, tenant concentrations, tenant industries, developer concentrations, and risk rating. Other useful stratifications may include loan structure (for example, fixed-rate or adjustable), loan purpose (for example, construction, short-term, or permanent), loan-to-value (LTV) limits, debt service coverage, policy exceptions on newly underwritten credit facilities, and affiliated loans (for example, loans to tenants). A bank should also be able to identify and aggregate exposures to a borrower, including its credit exposure relating to derivatives.

Management reporting should be timely and in a format that clearly indicates changes in the portfolio's risk profile, including risk-rating migrations. In addition, management reporting should include a well-defined process through which management reviews and evaluates concentration and risk-management reports, as well as special ad hoc analyses in response to potential market events that could affect the CRE loan portfolio.

Market Analysis

Market analysis should provide the bank's management and board of directors with information to assess whether its CRE lending strategy and policies continue to be appropriate in light of changes in CRE market conditions. A bank should perform periodic market analyses for the various property types and geographic markets represented in its portfolio.

Market analysis is particularly important as a bank considers decisions about entering new markets, pursuing new lending activities, or expanding in existing markets. Market information also may be useful for developing sensitivity analysis or stress tests to assess portfolio risk.

Sources of market information may include published research data, real estate appraisers and agents, information maintained by the property taxing authority, local contractors, builders, investors, and community development groups. The sophistication of a bank's analysis will vary by its market share and exposure, as well as the availability of market data. While a bank operating in nonmetropolitan markets may have access to fewer sources of detailed market data than a bank operating in large, metropolitan markets, a bank should be able to demonstrate that it has an understanding of the economic and business factors influencing its lending markets.

Credit Underwriting Standards

A bank's lending policies should reflect the level of risk that is acceptable to its board of directors and should provide clear and measurable underwriting standards that enable the bank's lending staff to evaluate all relevant credit factors. When a bank has a CRE concentration, the establishment of sound lending policies becomes even more critical. In establishing its policies, a bank should consider both internal and external factors, such as its market position, historical experience, present and prospective trade area, probable future loan and funding trends, staff capabilities, and technology resources. Consistent with the Federal Reserve's real estate lending guidelines, CRE lending policies should address the following underwriting standards:

1. maximum loan amount by type of property
2. loan terms
3. pricing structures
4. collateral valuation[2]
5. LTV limits by property type
6. requirements for feasibility studies and sensitivity analysis or stress testing
7. minimum requirements for initial investment and maintenance of hard equity by the borrower
8. minimum standards for borrower net worth, property cash flow, and debt service coverage for the property

A bank's lending policies should permit exceptions to underwriting standards only on a limited basis. When a bank does permit an exception, it should document how the transaction does not conform to the bank's policy or underwriting standards, obtain appropriate management approvals, and provide reports to the board of directors or designated committee detailing the number, nature, justifications, and trends for exceptions. Exceptions to both the bank's internal lending standards and the Fed-

2. Refer to the Federal Reserve's appraisal regulations: 12 CFR 208 subpart E and 12 CFR 225, subpart G.

eral Reserve's supervisory LTV limits[3] should be monitored and reported on a regular basis. Further, banks would analyze trends in exceptions to ensure that risk remains within the bank's established risk tolerance limits.

Credit analysis should reflect both the borrower's overall creditworthiness and project-specific considerations as appropriate. In addition, for development and construction loans, the bank should have policies and procedures governing loan disbursements to ensure that the bank's minimum borrower equity requirements are maintained throughout the development and construction periods. Prudent controls should include an inspection process, documentation on construction progress, tracking pre-sold units, pre-leasing activity, and exception monitoring and reporting.

CRE Portfolio Stress Testing and Sensitivity Analysis

A bank with CRE concentrations should perform portfolio-level stress tests or sensitivity analysis to quantify the impact of changing economic conditions on asset quality, earnings, and capital. Further, a bank should consider the sensitivity of portfolio segments with common risk characteristics to potential market conditions. The sophistication of stress testing practices and sensitivity analysis should be consistent with the size, complexity, and risk characteristics of the CRE loan portfolio. For example, well-margined and seasoned performing loans on multifamily housing normally would require significantly less robust stress testing than most acquisition, development, and construction loans.

Portfolio stress testing and sensitivity analysis may not necessarily require the use of a sophisticated portfolio model. Depending on the risk characteristics of the CRE portfolio, stress testing may be as simple as analyzing the potential effect of stressed loss rates on the CRE portfolio, capital, and earnings. The analysis should focus on the more vulnerable segments of a bank's CRE portfolio, taking into consideration the prevailing market environment and the bank's business strategy.

3. The Interagency Guidelines for Real Estate Lending state that loans exceeding the supervisory LTV guidelines should be recorded in the bank's records and reported to the board at least quarterly.

Credit Risk Review Function

A strong credit risk review function is critical for a bank's self-assessment of emerging risks. An effective, accurate, and timely risk-rating system provides a foundation for the bank's credit risk review function to assess credit quality and, ultimately, to identify problem loans. Risk ratings should be risk sensitive, objective, and appropriate for the types of CRE loans underwritten by the bank. Further, risk ratings should be reviewed regularly for appropriateness.

SUPERVISORY OVERSIGHT OF CRE CONCENTRATION RISK

As part of its ongoing supervisory monitoring processes, the Federal Reserve will use certain criteria to identify banks that are potentially exposed to significant CRE concentration risk. A bank that has experienced rapid growth in CRE lending, has notable exposure to a specific type of CRE, or is approaching or exceeds the following supervisory criteria may be identified for further supervisory analysis of the level and nature of its CRE concentration risk:

1. total reported loans for construction, land development, and other land[4] represent 100 percent or more of the bank's total capital[5] or
2. total commercial real estate loans as defined in this guidance[6] represent 300 percent or

4. For commercial banks as reported in the Call Report FFIEC 031 and 041, schedule RC-C, item 1a(1) and 1a(2).

5. For purposes of this guidance, the term *total capital* means the total risk-based capital as reported for commercial banks in the Call Report FFIEC 031 and 041 schedule RC-R—Regulatory Capital, line 21.

6. For commercial banks as reported in the Call Report FFIEC 031 and 041 schedule RC-C, items 1a(1), 1a(2), 1d, 1e(2), and memorandum item 3. Effective with the March 31, 2008, Call Report revision, item 1a on Schedule RC-C was split into two components. Item 1a(1) reports 1–4 family residential construction loans, and item 1a(2) reports other construction loans and all land development and other land loans. Both items 1a(1) and 1a(2) are used to calculate total reported loans for construction, land development, and other land. Also effective with the March 31, 2008, Call Report, item 1e on Schedule RC-C was split into two components. Item 1e(1) reports the amount of owner-occupied CRE loans, and item 1e(2) reports the amount of non-owner-occupied CRE loans. The amendment enables the exclusion of owner-occupied CRE loans in the total CRE loan ratio in accordance with the scope of the 2006 CRE Guidance. The supervisory

more of the bank's total capital, and the outstanding balance of the bank's commercial real estate loan portfolio has increased by 50 percent or more during the prior 36 months.

The Federal Reserve will use the criteria as a preliminary step to identify banks that may have CRE concentration risk. Because regulatory reports capture a broad range of CRE loans with varying risk characteristics, the supervisory monitoring criteria do not constitute limits on a bank's lending activity but rather serve as high-level indicators to identify banks potentially exposed to CRE concentration risk. Nor do the criteria constitute a "safe harbor" for banks if other risk indicators are present, regardless of their measurements under (1) and (2).

Evaluation of CRE Concentrations

The effectiveness of a bank's risk-management practices will be a key component of the supervisory evaluation of the bank's CRE concentrations. Examiners will engage in a dialogue with the bank's management to assess CRE exposure levels and risk-management practices. Banks that have experienced recent, significant growth in CRE lending will receive closer supervisory review than those that have demonstrated a successful track record of managing the risks in CRE concentrations.

In evaluating CRE concentrations, the Federal Reserve will consider the bank's own analysis of its CRE portfolio, including consideration of factors such as—

1. portfolio diversification across property types
2. geographic dispersion of CRE loans
3. underwriting standards
4. level of pre-sold units or other types of take-out commitments on construction loans
5. portfolio liquidity (ability to sell or securitize exposures on the secondary market)

While consideration of these factors should not change the method of identifying a credit concentration, these factors may mitigate the risk posed by the concentration.

Assessment of Capital Adequacy for CRE Concentration Risk

The Federal Reserve's existing capital adequacy guidelines note that a bank should hold capital commensurate with the level and nature of the risks to which it is exposed. Accordingly, banks with CRE concentrations are reminded that their capital levels should be commensurate with the risk profile of their CRE portfolios. In assessing the adequacy of a bank's capital, the Federal Reserve will consider the level and nature of inherent risk in the CRE portfolio as well as management expertise, historical performance, underwriting standards, risk-management practices, market conditions, and any loan loss reserves allocated for CRE concentration risk. A bank with inadequate capital to serve as a buffer against unexpected losses from a CRE concentration should develop a plan for reducing its CRE concentrations or for maintaining capital appropriate to the level and nature of its CRE concentration risk.

screening criteria are not intended to limit an institution's CRE lending activity. The intent of these indicators is to encourage a dialogue between the supervisory staff and an institution's management about the level and nature of CRE concentration risk.

Concentrations in Commercial Real Estate Lending, Sound Risk-Management Practices

Examination Objectives

Effective date October 2007

Section 2103.2

When a bank has significant commercial real estate (CRE) credit concentrations, the inspection objectives are as follows:

1. To determine if the bank's risk-management practices and capital levels are commensurate with the level and nature of its CRE concentration risk.
2. To ascertain if the bank performs ongoing risk assessments to identify its CRE concentrations.
3. To evaluate whether the bank's CRE risk-management processes are appropriate for the size of its CRE loan portfolio, as well as for the level and nature of its concentrations and their associated risks to the bank.
   a. To determine whether the bank's strategic plan addresses the rationale for its CRE credit concentration levels in relation to its overall growth objectives, financial targets, and capital plan.
   b. To evaluate whether the bank manages not only the risk of individual loans but also its loan portfolio risks.
   c. To find out if the bank's management information system provides management with sufficient information that can be used to identify, measure, and manage the bank's CRE concentration risk.
   d. To verify whether the bank's market analyses provide the bank's management and board of directors with sufficient information to assess whether the bank's CRE lending strategy and policies continue to be appropriate in light of its changing CRE market conditions.
4. To determine if the bank's CRE lending policies reflect the level of credit risk that is acceptable to its board of directors.
   a. To evaluate whether the lending policies provide clear and measurable underwriting standards.
   b. To assess whether the bank's lending policies enable the bank's lending staff to evaluate all relevant credit factors.
5. To find out if the bank performs portfolio-level stress tests or sensitivity analyses in order to quantify the impact of changing economic conditions on asset quality, earnings, and capital.
6. To determine if the bank has a strong credit-review function that includes a self-assessment of its emerging credit and other risks.

Concentrations in Commercial Real Estate Lending, Sound Risk-Management Practices

Examination Procedures

Effective date October 2007

Section 2103.3

RISK MANAGEMENT

Board and Senior Management Oversight

1. Determine if the board of directors or its designated committee has—
   a. established policy guidelines and approved an overall commercial real estate (CRE) lending strategy on the level and nature of the bank's CRE exposures, including any specific commitments to particular borrowers or property types, such as multifamily housing;
   b. ensured that management implements procedures and controls to effectively adhere to and monitor compliance with the bank's lending policies and strategies;
   c. reviewed information that identifies and quantifies the nature and level of risk presented by CRE concentrations, including a review of reports that describe changes in the CRE market conditions in which the bank lends; and
   d. periodically reviewed and approved CRE risk exposure limits and appropriate sublimits (for example, by nature of concentration) to ensure they conform to any changes in the bank's strategies and respond to changes in market conditions.

Supervisory Oversight

2. Determine if the bank is (or is potentially) exposed to significant CRE credit concentration risk.
3. If the bank has experienced rapid growth in CRE lending or has notable exposure to a specific type of CRE, or if the bank is approaching or exceeds one or both of the following criteria, perform a preliminary analysis of the bank's CRE concentration risk:
   a. Total loans for construction, land development, and other land represent 100 percent or more of the bank's total capital.
   b. Total CRE loans represent 300 percent or more of the bank's total capital, and the outstanding balance of the bank's CRE loan portfolio has increased by 50 percent or more during the prior 36 months.

Portfolio Management

4. Ascertain whether the bank manages not only the risk from individual loans but also portfolio risk. Find out if management—
   a. regularly (1) evaluates the degree of correlation between related real estate sectors and (2) establishes internal lending guidelines and concentration limits that control the bank's overall risk exposure; and
   b. develops appropriate strategies for managing CRE concentration levels, including the development of a contingency plan to reduce or mitigate concentrations during adverse CRE market conditions (such a plan may include strategies involving loan participations, whole loan sales, and securitizations).
      - Find out if the bank's contingency plan includes selling or securitizing CRE loans.
      - Ascertain if management periodically assesses the marketability of the CRE portfolio and evaluates the bank's ability to access the secondary market.
      - Verify whether the bank compares its underwriting standards with those that exist in the secondary market.

Management Information Systems

5. Evaluate whether management information systems (MIS) provide sufficient information to identify, measure, monitor, and manage CRE concentration risk (MIS should include information on CRE portfolio characteristics that are consistent with and relevant to the bank's lending strategy, underwriting standards, and risk tolerances).
6. Verify that management reporting is timely and in a format that clearly indicates changes in the portfolio's risk profile, including risk-rating migrations.

Market Analysis

7. Determine if management reporting includes a well-defined process through which management reviews and evaluates concentration and risk-management reports, as well as special ad hoc analyses that are prepared in response to potential market events that could affect the CRE loan portfolio.
8. Find out if the bank's market analysis provides management and the board of directors with sufficient information to assess (1) the bank's CRE lending strategy and policies and (2) whether they continue to be appropriate in light of changes in CRE market conditions.

Credit-Underwriting Standards

9. Determine if CRE lending policies include the following underwriting standards:
   a. maximum loan amount by type of property
   b. loan terms
   c. pricing structures
   d. collateral valuation
   e. loan-to-value (LTV) limits by property type
   f. requirements for feasibility studies and sensitivity analyses or stress testing
   g. minimum requirements for initial investment and maintenance of hard equity by the borrower
   h. minimum standards for borrower net worth, property cash flow, and debt-service coverage for the property
10. Review the bank's permitted exceptions to its underwriting standards. Ascertain if the exceptions—
    a. have been granted on a limited basis only; and
    b. are supported by documentation and reports to management and the board of directors or a designated committee. The documentation and reports should indicate—
       - how the transactions did not conform to the bank's policy or underwriting standards;
       - whether appropriate management approvals were obtained; and
       - the details of the number and nature of and the justifications and trends for the exceptions.
11. Verify that exceptions to both the bank's internal lending standards and the Federal Reserve's supervisory LTV limits are monitored and reported on a regular basis.
12. Find out if the bank analyzes trends in its CRE lending exceptions in order to ensure that credit-underwriting risk remains within its established risk-tolerance limits.
13. Evaluate whether the bank's credit analyses reflect both the borrowers' overall creditworthiness and project-specific considerations, as appropriate.
14. For the bank's development and construction loans, determine if—
    a. the bank has policies and procedures governing loan disbursements in order to ensure that the bank's requirements for minimum borrower equity are maintained throughout the development and construction periods; and
    b. prudent controls, including the following, are in place:
       - an inspection process
       - documentation of construction progress
       - tracking of pre-sold units
       - pre-leasing activity
       - exception monitoring and reporting

Portfolio Stress Testing and Sensitivity Analysis

15. When the bank has CRE concentrations, determine if it performs portfolio-level stress tests or sensitivity analyses in order to quantify the impact of changing economic conditions on asset quality, earnings, and capital.
    a. Ascertain if the bank considers the sensitivity of portfolio segments with common risk characteristics to potential market conditions.
    b. Determine whether the sophistication of the bank's stress-testing practices and sensitivity analyses are consistent with the size, complexity, and risk characteristics of its CRE loan portfolio.
    c. Evaluate whether the bank's sensitivity analyses focus on the more vulnerable segments of its CRE portfolio, considering its prevailing market environment and business strategy.

Credit-Review Function

16. Find out if the bank has a credit-review function, and if it is supported by a credit-risk rating system that is used to assess credit quality and identify problem loans.
17. Determine if (1) the bank's risk ratings are risk-sensitive, objective, and appropriate for the types of CRE loans underwritten and (2) the risk ratings are regularly reviewed.

EVALUATION OF CRE CONCENTRATIONS

1. Engage in a dialogue with bank management in order to assess the bank's CRE exposure levels and risk-management practices. If the bank has experienced recent, significant growth in CRE lending, perform an expanded review of the bank's risk in CRE concentrations, including a review of the bank's analysis of its CRE concentrations. Consider factors such as—
   a. portfolio diversification across property types
   b. the geographic dispersion of CRE loans
   c. underwriting standards
   d. the level of pre-sold units or other types of take-out commitments on construction loans
   e. portfolio liquidity (the ability to sell or securitize exposures on the secondary market)

Assessment of Capital Adequacy

2. Evaluate whether the bank's holds capital commensurate with the risk profile of its CRE portfolios. Consider the level and nature of inherent risk in the bank's CRE portfolio, as well as management expertise, historical performance, underwriting standards, risk-management practices, market conditions, and any loan-loss reserves allocated for CRE concentration risk.
3. If a bank has inadequate capital to serve as a buffer against unexpected losses from its CRE concentration, reach agreement with the bank's senior management and board of directors on the development of a plan to reduce the bank's CRE concentrations or to maintain capital that is appropriate and commensurate with the level and nature of the bank's CRE concentration risk.

Concentrations in Commercial Real Estate Lending, Sound Risk-Management Practices

Internal Control Questionnaire

Effective date October 2007

Section 2103.4

CRE CONCENTRATION ASSESSMENTS

1. Are ongoing risk assessments performed to identify commercial real estate (CRE) concentrations?
2. Are CRE concentration limits established and monitored?
3. Is the CRE portfolio stratified into reasonable and supportable segments that have common risk characteristics or sensitivities to economic, financial, or business developments?
4. Are all CRE concentrations reported to senior management and the board of directors on a periodic basis?

RISK MANAGEMENT

1. Has a risk-management framework been established that effectively identifies, monitors, and controls CRE concentration risk? If such a framework has been established, does it address—
   a. board and management oversight?
   b. portfolio management?
   c. management information systems?
   d. market analysis?
   e. credit-underwriting standards?
   f. portfolio stress testing and sensitivity analysis?
   g. the credit-risk review function?

Board and Management Oversight

2. If the bank has significant CRE concentration risk, does it have a strategic plan that addresses the rationale for its CRE concentration levels in relation to the bank's overall growth objectives, financial targets, and capital plan?
3. Has the board of directors or its designated committee—
   a. established policy guidelines and approved an overall CRE lending strategy for the level and nature of CRE exposures, including any specific commitments to particular borrowers or property types, such as multifamily housing?
   b. ensured that the bank's management implements procedures and controls to effectively adhere to and monitor compliance with the bank's lending policies and strategies?
   c. reviewed information that identifies and quantifies the nature and level of risk presented by CRE concentrations, including a review of reports that describe changes in the conditions of the CRE market in which the bank lends?
   d. periodically reviewed and approved CRE risk exposure limits and appropriate sublimits (for example, by nature of concentration) in order to conform to any changes in the bank's strategies and respond to changes in market conditions?

Portfolio Management

4. Does the bank's management regularly perform an analysis of its CRE portfolio, considering factors such as—
   a. portfolio diversification across property types?
   b. the geographic dispersion of CRE loans?
   c. underwriting standards?
   d. the level of pre-sold units or other types of take-out commitments on construction loans?
   e. portfolio liquidity (the ability to sell or securitize exposures on the secondary market)?
5. Has the bank's board of directors and senior management—
   a. (1) regularly evaluated the degree of correlation between related real estate sectors and (2) established internal lending guidelines?
   b. established internal lending guidelines and concentration limits in order to control the bank's overall risk exposure?
   c. developed appropriate strategies to manage CRE concentration levels?
6. Has the bank's management developed a

contingency plan to reduce or mitigate CRE loan concentrations during adverse market conditions? If the bank's contingency plan includes selling or securitizing CRE loans, has management periodically assessed the marketability of the portfolio?

Management Information System

7. Does the bank's management information system (MIS) provide sufficient information to identify, monitor, and manage CRE concentration risk?
8. Is the bank's CRE portfolio stratified by property type, geographic market, tenant concentrations, tenant industries, developer concentrations, and risk rating?
9. Does the bank's MIS identify and aggregate exposures to a borrower, including its credit exposure relating to derivatives?
10. Are the bank's management reports timely and in a format that clearly indicates changes in the portfolio's risk profile?
11. Does the bank's management reporting include a well-defined process whereby management reviews and evaluates CRE concentrations, risk-management reports, and special ad hoc analyses prepared in response to potential market events that could affect the concentration risk in the bank's CRE portfolio?

Credit-Underwriting Standards

12. Are underwriting standards clear and measurable, and do they enable the bank's lending staff to evaluate relevant credit factors?
13. Do the bank's CRE lending policies address the following underwriting standards—
    a. maximum loan amount by type of property?
    b. loan terms?
    c. pricing structures?
    d. collateral valuation?
    e. loan-to-value (LTV) limits by property type?
    f. requirements for feasibility studies and sensitivity analyses or stress testing?
    g. minimum requirements for initial investment and maintenance of hard equity by the borrower?
    h. minimum standards for borrower net worth, property cash flow, and debt-service coverage for the property?
14. Do the bank's lending policies permit exceptions to its underwriting standards for CRE concentrations on a limited basis only?
15. Are permitted exceptions documented; that is, do the documented exceptions describe how the loan transaction does not conform to the bank's lending policy or underwriting standards?
16. Does management analyze trends in exceptions to ensure that the bank's CRE concentration risk remains within established risk-tolerance limits?
17. Does the bank have policies and procedures governing loan disbursements in order to ensure that its minimum requirements for borrower equity are maintained throughout development and construction periods?
18. Do the bank's internal controls consist of an inspection process, documentation on construction progress, tracking of pre-sold units, tracking of pre-leasing activity, and exception monitoring and reporting?

Portfolio Stress Testing and Sensitivity Analysis

19. Are portfolio stress tests or sensitivity analyses performed in order to quantify the impact of changing economic conditions on asset quality, earnings, and capital?
20. If performed, are portfolio stress tests or sensitivity analyses required to focus on the more vulnerable segments of the bank's CRE portfolio? Do they take into consideration the prevailing market environment and the bank's business strategy?

Credit-Review Function

21. Does the bank have an effective, accurate, and timely risk-rating system that supports its credit-review function?
22. Are credit-risk ratings reviewed regularly for appropriateness?

INTRODUCTION

Floor-plan lending is a form of credit extended to a dealer of consumer or commercial goods to finance inventory that is subsequently sold to the public. The facility is generally in the form of a revolving line of credit used to purchase inventory, which usually is comprised of durable goods, and serves as the bank's collateral. Banks often provide floor-plan loans to dealers of items that are sold under a sales-finance type of contract, such as automobiles, trucks, boats, and mobile homes.

As each unit of inventory is sold, the borrower/dealer repays the loan advancements. The basic risks inherent to inventory financing are the high loan-to-value ratio (that is the outstanding loan amount to the value of the collateral) and the potential for rapid depreciation in value of the collateral. When inventory does not sell as expected, the borrower/dealer may be required by the loan agreement to repay the debt from other cash sources. For this reason, the exposure to loss is generally higher for floor-plan lending (for example, a floor-plan loan to automobile dealer) than other types of inventory financing. See "Collateral" later in this section for more information.

In some cases, the bank providing the floor-plan loan may also provide the financing to the consumer purchasing the item, referred to as dealer financing. Under dealer financing, the dealer sells the goods to the consumer with financing and the bank provides the financing for the purchase, resulting in the bank financing both the dealer floor-plan and the consumer purchase. As a result, a bank expands its borrower base beyond the floor-plan loan by providing financing to the consumer who purchases an inventory item. See "Indirect Lending" later in this section for more information.

BANK/DEALER RELATIONSHIP

Two important facets of the bank's relationship with a dealer are (1) the quality of the consumer financing contracts and (2) the nature or extent of the overall banking relationship with the dealer, which may include deposit products, cash management services, and trust activities. The income derived from a floor-plan loan may not be sufficient for the bank to justify the credit risk assumed as a result of the floor-plan loan alone. However, income derived from the overall banking relationship with the dealer may support the credit risk associated with the floor-plan loan.

Examiners should review the flow of funds into and out of the dealer's account. The flow of funds may indicate that inventory has been sold without debt reduction; that the dealer is incurring abnormal expenses; or that unreported diversification, expansion, or other financial activity has occurred, warranting a reassessment of the credit arrangement. Examiners should also pay particular attention to persistent overdrawn balances of the dealer, as this could be an indicator of financial difficulties.

LOAN POLICY

In general, the bank's loan policy should address its floor-plan lending program. Examiners should determine whether the bank has established prudent standards to control the credit and operational risks associated with floor-plan lending. Refer to the examination procedures for more information on loan policy expectations.

COLLATERAL

The primary collateral for a floor-plan loan is the inventory financed by the dealer. As with all inventory financing, collateral value is fundamental to assessing the secondary source of payment as protection to the bank. In assessing the bank's management over the inventory, examiners should consider whether the bank (1) determines the value of collateral at the time the loan is being underwritten; (2) periodically inspects the collateral by reviewing the condition of the collateral, performing physical counts, and reconciling inventory to bank records; and (3) ensures timely payments by the dealer to the bank when inventory is sold. When the pace of sales is slower than anticipated when the loan was originated, the collateral remains in inventory longer, resulting in "dated" or "stale" inventory. In these cases, the bank's loan agreement may require the dealer to make additional payments (known as "curtailment") to reflect any

depreciation in the value of the dated inventory. In addition, the loan agreement may address periodic curtailment payments that are expected to commence on a set schedule and at a predetermined percentage of the amount financed. Curtailment payments are usually not required until the end of one model year and the start of the new model year. The introduction of new models may reduce the value of dealer's existing inventory and, in turn, the value of the bank's collateral.

SECURITY INTEREST

A new floor-plan loan agreement generally involves three parties: (1) the supplier of the goods being sold to the dealer, (2) the dealer (the borrower), and (3) the bank (the floor-plan lender). When a dealer enters into a financing arrangement with a bank, the dealer executes a master loan agreement that sets forth the basic conditions of the relationship among the three parties. This agreement grants the bank a continuing security interest in the dealer's inventory, receipts, and accounts receivable. The security interest to floor-plan inventory is evidenced by a trust receipt. A bank prepares a trust receipt document for the dealer receiving the floor-plan financing to execute when inventory is received. The trust receipt provides evidence that the dealer possesses the inventory being financed. This document establishes the bank's rights to the inventory collateral and the proceeds from the sale of the inventory and refers to other loan documents that set forth the rights of the bank.

Generally, banks create trust receipts in two ways. First, the bank may enter into a drafting agreement with the manufacturer, which is similar to a letter of credit. In this situation, the bank agrees to pay the manufacturer's drafting agreements when shipments of merchandise are sent to the dealer. The bank pays the manufacturer (that is, pays the draft) when the dealer receives the merchandise or, if the manufacturer permits, after a grace period. This grace period allows the dealer to prepare the inventory for sale. The drafting agreement usually provides limits on the number of units, the per-unit cost, and the aggregate cost that can be shipped at any one time. Drafting agreements are frequently used in conjunction with repurchase agreements when the manufacturer agrees to repurchase inventory from the dealer when inventory items remain unsold after a specified period of time. The inventory and ownership documents (that is, title to the collateral) remain with the dealer until inventory items are sold and are evidenced by a trust receipt. A bank's periodic physical inspection of the collateral should confirm that the bank has perfected its security interest in the collateral and that the dealer/borrower has not pledged the bank's collateral to another lender.

A second way a bank creates a trust receipt is when merchandise is shipped under an invoice system. The dealer receives the inventory accompanied by the manufacturer's invoice and title to the collateral, where appropriate. The dealer then presents the documents to the bank and the bank pays the manufacturer, attaching duplicates of the documents to a trust receipt that is signed by the borrower. Depending on the type of inventory and the dealer, the title to the collateral may remain with the bank until the collateral is sold by the dealer and the dealer makes a loan repayment to the bank. For example, used car inventories are usually financed with trust receipts listing each item of the inventory and a specific loan amount for each item.

A floor-plan facility often includes an agreement from the manufacturer to repurchase unsold inventory within specified time limits. The bank and manufacturer could execute other agreements on matters, such as loss sharing and recourse against the dealer. The method of perfecting a security interest varies from state to state, which may diverge from the Uniform Commercial Code (UCC). For information on UCC requirements regarding secured transactions, refer to section 2080.1, "Commercial and Industrial Loans."

INVENTORY INSPECTIONS

As with all inventory financing, collateral control and valuation are critical. Examiners should determine whether the bank's scope and frequency of collateral inspections are adequate and align with the floor-plan loan agreement. Examiners should review the bank's scope of the collateral inspection, and determine whether inspection is sufficiently comprehensive to detect irregularities and to support the value of the collateral. Floor-plan collateral inspections may be completed by internal bank staff, or delegated

to a third-party inspector. When inspections are delegated to a third party, examiners should consider whether bank management has included the vendor in its approved vendor risk management program. For more information, see SR letter 13-19/CA letter 13-21, "Guidance on Managing Outsourcing Risk."

Where practical, inspection duties should be rotated among the bank's staff or third-party providers. Inspectors can verify the floor-planned inventory by comparing product serial numbers, manufacturers' certificates of origin, or title information against bank collateral records. In addition, inspection reports typically reflect whether the floor-planned inventory is available for sale. See "Control Systems" later in this section for additional information.

DEALER FINANCIAL ANALYSIS

Many dealers have minimal liquidity and capital relative to total debt, therefore, examiners may consider the frequency with which the bank obtains and reviews the dealer's financial statements. Typically, dealer financial statements are reviewed at least annually, or more frequently as needed. The bank may request that the dealer provide copies of the periodic financial reports that the dealer sends to its franchiser. In addition, dealership financial statements prepared by the manufacturer may contain summary and detailed information on the dealer's financial condition and performance. In analyzing the data, the bank may review the number of units sold, the profitability of the sales, and compare the number of units sold with the number of units financed to determine whether inventory levels are reasonable.

A dealer's primary asset is the inventory. Therefore, the risk to the bank is that floor-plan loan exceeds the value of the dealer's inventory. The dealer's financial statement should show an inventory figure at least equal to the outstanding balance of related floor-plan loan. Unless the difference is represented by short-term sales receivables, including contracts in transit, a floor-plan liability that is greater than the amount of inventory is an indication that the dealer has sold inventory and has not made the appropriate loan payment. To assess credit quality of a bank's floor-plan loan, examiners should closely evaluate the level of the dealer's floor-plan debt relative to value of the inventory.

A bank that relies on sponsor or manufacturer support as a source of repayment should establish guidelines for evaluating the qualifications of the sponsor and the manufacturer and should implement a process to monitor their financial conditions regularly. A bank may consider sponsor and manufacturer supports in assigning a risk rating when the bank can document the history of demonstrated supports and their economic incentives, capacities, and stated intent to continue to support the transaction.

IDENTIFYING PROBLEMS

Missing inventory, reportedly sold and unpaid, is usually verified to related contracts-in-process. Examiners should ascertain whether the time to collect on contracts-in-process is reasonable and conforms to the floor-plan agreement. Floor-planned inventory sold and not in the process of payment is termed "sold out of trust" (banks may use the acronym SOT) and represents a breach of trust by the dealer—and a significant exposure to the bank as the floor-planned inventory sold and not in the process of payment is now an unsecured credit. If inventory has been SOT, the bank generally will require the dealer to repay immediately he loan associated with the SOT inventory. Inventory that has been SOT may indicate a potential fraud issue, and the bank may need to file a suspicious activity report (SAR). Examiners should request and review information (e.g., the bank's internal management reports and investigations) related to SOT situations that have occurred and determine whether management is dealing with such situations appropriately.

Recurring SOT positions that are not cleared by the dealer in a reasonable time should be a red flag to the bank to take further action. If a dealer is deliberately withholding funds or diverting funds received from the sale of pledged inventory, the bank management will generally meet with the borrower to discuss this situation and, if appropriate, consider appropriate action to minimize loss exposure. Bank lending staff should be aware that some large dealerships simultaneously finance inventory with multiple lenders based on the incentives offered to them. In underwriting and approving a floor-plan loan, a bank should consider whether or not the bank is financing only part of the dealer's total floor-plan debt that originates from one particu-

lar manufacturer or distributor. When assessing borrower quality, examiners should consider interest and curtailment payment delinquencies; extensions of maturities beyond reasonable expectations; slow turnover of inventory; and lack of financial statements from the borrower.

INDIRECT LENDING

Indirect lending involves a bank funding consumer purchases from the dealer. Indirect lending typically takes one of two forms: (1) the dealer may originate loans to customers, which the bank purchases ("dealer paper") or (2) the dealer may forward the loan application to the bank, which then originates the loan to the consumer.

Banks purchase loans from dealers through two basic arrangements: recourse and nonrecourse. With recourse agreements, the bank purchases the contract from the dealer and may exercise recourse by requiring the dealer to repurchase the contract or pay deficiencies in the event of nonperformance by the consumer. Conversely, with nonrecourse purchases, the bank assumes full responsibility for underwriting the loan and carries all the risk, even though the dealer handles the loan application and customer contact.

Examiners should determine whether banks engaged in indirect lending have established appropriate policies to govern such activities. The approval of a dealer for indirect lending is an expression of willingness to accept those loans that meet the bank's underwriting standards, and that there is no obligation on the part of the bank to buy these loans.

Examiners should review the bank's policy for indirect lending and assess whether the policy conforms to the bank's underwriting standards, regardless of whether the bank or the dealer underwrites the loan. See section 2130.1, "Consumer Credit" for additional details on indirect lending.

CONTROL SYSTEMS

Management Information Systems

Examiners should assess the accuracy and comprehensiveness of the bank's management information systems (MIS) to identify, measure, monitor, and control risks associated with floor-plan lending. Effective MIS monitors include inventory shipments, loan repayment status, inventory levels, inventory conditions, turnover rates, loan collection efforts, manufacturer/dealer recourse, loan curtailments, and credit concentrations within the floor-plan lending portfolio. Other portfolio management reports may typically include a summary risk rating profile of the dealers financed, composition of new versus used inventory, over-line accounts, past-due floor-plan inspections, and the level of exceptions to policy or underwriting guidelines.

Internal Loan Review

The bank's internal loan review system and risk management processes are essential to effective portfolio management and internal controls. Similar to any lending product, examiners should consider whether floor-plan loans are subject to regular credit reviews and compliance control processes. Internal loan review staff performing the review of floor-plan loans should ensure that bank lending staff have performed all procedures related to verifying the existence and value of the related collateral. Internal loan review staff should also assess compliance with the bank's policies and procedures; determine the effectiveness of collateral reviews and controls; and report any deficiencies in the floor-plan lending activity to senior management and the board of directors.

Internal Audit

The bank's internal audit program should include regular reviews of the floor-plan lending activities. Examiners should consider whether internal audit staff assess the adequacy of controls and adherence to policies and procedures. In addition, examiners should consider whether audit staff accompany the bank's floor-plan inspector during inventory inspections as an additional quality control measure and to deter bank staff collusion with the dealer. Appropriate audit staff should verify the inventory subject to each floor-plan loan during the regularly conducted audits. External audit services may be contracted by the dealer or the bank to provide independent assessments of the dealer's busi-

ness processes and controls. The bank may hire inventory audit servicers to assist on inspections of floor-plan loan inventory, however, bank management is still responsible for providing appropriate oversight of these third-party services.

Supervisory Considerations for Assessing the Risk Rating Floor-Plan Loans

Examiners should understand the primary and secondary sources of repayment when assessing the risk rating of floor-plan loans. A floor-plan loan's primary source of repayment is cash received from the sale of the assigned collateral. The secondary source of repayment is the dealer's cash flow from operations. Examiners should consider the following factors when assessing the appropriate regulatory risk rating of a floor-plan loan:

- quality and liquidity of inventory as demonstrated through the dealer's sales, inventory turnover, and payment history;
- strength of the credit's structure and controls;
- borrower's financial condition, including liquidity and capital;
- actual operating performance of the dealer versus planned operating performance;
- quality and performance of the indirect loans generated by the dealer under the floor-plan facility; and
- strength and reliability of the dealership's cash flow from operations.

In assessing the strength and reliability of a dealership's operating cash flow, examiners should consider whether the dealership can service the interest on the floor-plan facility, consistent with the expectation for a short-term working capital line of credit. A dealership's operating cash flow also should be able to meet the principal curtailment requirements and pay any residual amounts under the floor-plan facility, in case the dealer liquidates the inventory below the original loan amount. A dealership's operating cash flow becomes more important when the floor-plan lender does not exclusively finance all of the dealer's inventory or when the dealer has a broad range of income sources not directly related to the inventory under the floor-plan facility. Operating cash flow is also important because a floor-plan facility typically finances up to 100 percent of the cost of collateral and does not have the excess collateral protection typically seen with an asset-based loan with a strong borrowing base limit.

Examiners should review sources of repayment or other mitigating factors in assessing the credit rating of a poorly performing floor-plan facility. Examples of other sources of repayment and mitigating factors include other liquidity sources, guarantors, and manufacturer support programs.

1. Determine whether the floor-plan loan policy is adequate. An appropriate policy generally
   - defines qualified borrowers;
   - defines permissible types of merchandise to be financed;
   - establishes guidelines for granting and monitoring floor-plan loans;
   - establishes individual and aggregate limits based on relevant risk factors (such as product category, vehicle type, market) relative to capital and total loans;
   - establishes loan-to-value collateral requirements;
   - establishes collateral documentation standards and lien perfection procedures;
   - establishes guidelines for holding titles and other ownership documents;
   - establishes collateral inspection guidelines;
   - defines curtailment requirements;
   - details guidelines for obtaining and evaluating borrower financial statements at origination and periodically thereafter;
   - establishes guidelines for obtaining manufacturer repurchase agreements;
   - defines requirements for obtaining inter-creditor agreements; and
   - establishes guidelines for tri-party (manufacturer, dealer, and bank) floor-plan agreements.
2. Determine whether underwriting and administration procedures are appropriate. Appropriate procedures generally address expectations for bank staff to perform the following tasks (with adequate segregation of duties):
   - conduct floor-plan inspections (generally conducted monthly based on inventory turnover);
   - follow procedures for the reviewing and retaining inspection reports;
   - resolve discrepancies identified during floor-plan inspections;
   - evaluate dealers' financial statements (for new vehicle dealers, these are the statements submitted to the manufacturer that contain details regarding dealership operations and compliance with manufacturer standards); and
   - review floor-plan agreements and borrowers' compliance with the agreements.
3. Review a sample of floor-plan arrangements. Determine whether the files contain, as necessary, appropriate documentation. Appropriate documentation generally includes
   - periodic analysis of the creditworthiness and performance of the relationship;
   - floor-plan agreements;
   - hazard insurance with the bank named as loss payee;
   - collateral valuations, such as National Automobile Dealers Association used car guide;
   - manufacturer's invoices for new units;
   - drafting agreements with manufacturers;
   - floor-plan inspections;
   - financing statement (and related searches) filed with the applicable state agency;
     — Ideally, there are at least two Uniform Commercial Code searches with the Secretary of State or applicable state agency. The first search should be completed before filing to determine the existence of prior secured creditors. The second search should be after filing—and before disbursement—to determine whether the bank's security interest was appropriately recorded.
   - inter-creditor agreements, if the borrower has more than one floor-plan creditor;
   - Manufacturer's Statement of Origin (MSO), titles, and trust receipts;
     — Titles and MSOs may be retained by the borrower to facilitate the sales process, for example to get a new title issued for a sold vehicle. If the borrower is in weak financial condition, banks often hold these documents. In most banks, the security interest to floor-plan inventory is evidenced by a trust receipt. This document is issued to the lender by the dealer. It establishes the bank's rights to the inventory collateral.
   - wholesale letter of credit and drafting authority; and

- limited power of attorney giving the bank the authority to prepare and sign lien documents for the dealer.

4. Determine whether floor-plan agreements contain the following information:
   - maximum advances for each unit;
     — For new units, advance rates are usually expressed as a percentage of cost. For used units, the advance rate may be expressed as a maximum percentage of value from a defined valuation source, e.g., Kelley Blue Book.
   - method used to advance funds;
     — Methods may include advancing funds directly to the manufacturer or dealer. Drafts advanced directly to a dealer elevate risk to the bank.
   - method used to perfect the security interest (vary by state);
   - location of collateral;
   - frequency of floor-plan inspections;
   - repayment schedule, including the timing of payments following the sale of units;
     — The timing of payments is commonly referred to as the release period. The greater the release period, the more risk assumed by the bank.
   - insurance requirements;
   - repurchase agreement with the manufacturer for new units;
   - periodic curtailment program for unsold units (may not be necessary if there is a repurchase agreement); and
   - loan covenants relating to liquidity levels, working capital, and tangible equity.
     — Examiners should compare bank covenants with any manufacturer-required minimums.
5. Review changes in floor-plan lending activities since the previous examination and determine whether policy guidelines, credit administration practices, and staffing levels are appropriate for current and planned lending strategies.
6. Review dealers' financial statements and assess the ability to service the debt. (Debt and inventory levels should move in the same direction. Be aware that floor-planned items might be shifted between dealers.)
   - Compare the number of units sold as shown on the statement with floor-plan payoff activity.
   - Evaluate the mix of units/vehicles sold (new, used, full-size, compact, etc.).
   - Review the inventory reconcilement. Reconcilements for new and used inventory contain different elements, as shown in the following tables.

For New Inventory

New Unit Inventory (Before LIFO Adj.)	$X,XXXM
Plus New Unit Contracts in Transit*	$X,XXXM
Total New Assets	$X,XXXM
Less New Units Floor-plan Liability	($X,XXXM)
New Unit Equity (Deficit)	$X,XXXM

* Inventory sold through retail installment contracts for which the dealership has not yet been paid

Note: When there is a deficit balance, management typically assesses the deficit relative to the cost of vehicles expected to be sold during the dealership's release period (cost of average day's new vehicle sales times the number of days in the release period). A deficit that significantly exceeds the amount expected based on the release period may indicate a default of the floor-plan agreement. Management's assessment of whether the dealership maintains sufficient cash to offset a deficit should be reviewed in these cases.

For Used Inventory

Used Unit Inventory (Before LIFO Adj.)	$X,XXXM
Plus Used Unit Contracts in Transit	$X,XXXM
Total Used Assets	$X,XXXM
Less Lien Payoff Liability*	($X,XXXM)
Less Used Units Floor-plan Liability	($X,XXXM)
Used Unit Equity (Deficit)	$X,XXXM

* Units taken as trade-ins where the customer's existing loan has not yet been paid-off by the dealership

Because used units are not typically financed at full value, used inventory reconcilements nor-

mally show significant used equity. A reconcilement with an equity deficit may indicate a default in the floor-plan agreement and a lack of working capital at the dealership. Well-capitalized dealerships often maintain significant amounts of used-unit equity as a source of working capital, as these units can be quickly converted into cash.

- Evaluate the revenue mix to identify trends in new and used vehicle sales, parts and service revenue, and income from finance and insurance activities (i.e., fee income from financing the loan or the sale of credit life insurance).
- Review accounts payable. Determine whether the dealer owes other dealers for inventory purchases.
- If the dealer has more than one floor-plan creditor, determine how management ensures the dealer is not double pledging the collateral, such as use of an inter-creditor agreement governing collateral allocation in the event of default.
- Review account receivable/payable agings.
- Review all inventory turnover reports.
- Evaluate overdraft activity and returned items for dealers.
- Determine that drafting agreements are not abused by the dealer.
- Assess dealerships' global cash flow to determine its sufficiency to cover fixed and variable expenses, as well as service all debt (including dealership related debt personally owed by dealership principals). (A common reason for floor-plan defaults is the diversion of sale proceeds.)

7. Determine whether the bank is over-advancing funds compared to collateral values. Generally, new and used automobiles are financed at a maximum of 100 percent of invoice cost and 90 percent of wholesale value, respectively. Advance rates for other items (manufactured homes, boats, etc.) are typically capped at 100 percent of the invoice for new units and some percentage of market value for used items.
8. Determine whether the lending staff is familiar with the dollar fluctuations in floor-plan loans and periodically evaluate the level of floor-plan debt relative to inventory values.
9. Determine whether the lending staff is aware of risks associated with inventory financing. The following items may indicate problems with floor-plan arrangements:
   - delinquent notes, unpaid interest, lack of required curtailments, and maturities extended beyond reasonable expectation;
   - dealer errors are increasing (wrong vehicles paid off, wrong vehicles added to floor-plan, sold inventory not paid off, wrong retail draft submitted, etc.);
   - increased number of reversed sales;
   - transfer of vehicles between multiple business locations;
   - errors are predominantly in favor of the dealer;
   - an unusual number of follow-ups are required to resolve errors;
   - previously detected errors continue to occur;
   - employee turnover at the dealership is increasing;
   - the amount of missing information on retail sales is increasing (i.e., folders are missing copies of the sales contract, purchaser's insurance information, forms to register/title the vehicle, etc.);
   - floor-plan activity is not consistent with special promotions at the dealership;
   - vehicles added to demonstrator service occur right before or during a floor-plan inspection (which could indicate misuse of the units); and
   - changes in external factors, such as competition or the national, regional, and local economy.
10. Review floor-plan lending reports generated for senior management and the board of directors.
    - determine the adequacy of the bank's accounting system for floored units (i.e., identified by make, model, vehicle identification number, dealer control number, date floored, and curtailment history).
    - determine whether there are well-developed monitoring systems and risk management practices in place commensurate to the size and complexity of the institution's exposure. Reports for the floor-plan lending portfolio generally should include the following items:
      — overall portfolio exposures;
      — concentrations (i.e., dealers, vehicle types, geographic, risk ratings);
      — policy exceptions, including discrepancies that indicate out-of-trust activity; and
      — covenant compliance.
11. Assess the adequacy of the collateral inspec-

tions. Consideration should be given to the following:
- scope and frequency of collateral inspections should match risk profiles and include an element of surprise;
- expertise and independence of collateral inspectors, including sufficient rotation of inspectors to avert collusion;
- completeness and accuracy of the inventory reconcilement;
  — Inspections should evidence that the dealer's floored inventory list reconciles to the dealer's general ledger and to the bank's listing of floored units.
- timely reporting of, and responsiveness to, adverse inspection findings (such as payments outside of the dealership's release period, or use of units not designated as demonstrators);
- adequacy of the floor-plan inspection template (i.e., serial number, condition, location of unit, and date inspection performed); and
- independent review of the collateral inspection process.

12. Determine whether designated staff perform the following procedures during floor-plan inspections:
    - check financed units to confirm the accuracy of inventories, physical conditions, locations (if other than normal place of business) and odometer or hour-meter readings, as applicable;
    - investigate discrepancies;
    - promptly notify bank management of inventory not found on the dealer's premises during inspections;
    - maintain written documentation on all inspections, including follow-up on units not found on the dealer's premises;
    - verify that units reported as sold and unpaid are documented by related finance contracts in transit or payments-in-process, and that such processing is reasonable;
    - ensure the dealer immediately pays off units that are reported as sold, but are not in the process of payment and are outside of the established release period; and
    - report inspection results to senior management.
13. If the bank uses a third-party provider for collateral inspections, determine whether the bank has adequate processes and controls to evaluate, establish, maintain, and monitor the relationships.
14. If the situation warrants, examiners should perform a floor-plan inspection or direct management to obtain an independent third-party inspection given conditions, such as
    - infrequent or nonexistent floor-plan inspections;
    - items are consistently found missing during floor-plan inspections;
    - dealer is experiencing financial difficulties;
    - a significant out-of-trust situation was discovered during the bank's most recent inspection of units or reconciliation of the financial statement; and
    - inventory reconcilements reflect an equity deficit that significantly exceeds the amount expected based on the release period.

Leveraged lending has been a financing vehicle for transactions involving mergers and acquisitions, business recapitalizations, and business expansions.[1] It is an important type of financing for national and global economies, and the U.S. financial industry plays an integral role in making credit available and syndicating that credit to investors. Leveraged transactions are characterized by a degree of financial leverage that may significantly exceed industry norms as measured by ratios such as debt-to-assets, debt-to-equity, cash flow-to-total debt, or other ratios and standards that are unique to a particular industry. Leveraged borrowers, however, can have a diminished ability to respond to changing economic conditions or unexpected events, creating significant implications for an institution's overall credit-risk exposure and challenges for bank risk-management systems.

Leveraged lending activities can be conducted in a safe-and-sound fashion if pursued with a risk-management structure that provides for the appropriate underwriting, pricing, monitoring, and controls. Comprehensive credit analysis processes, frequent monitoring, and detailed portfolio reports are needed to better understand and manage the inherent risk in leveraged portfolios. Sound valuation methodologies must be used in addition to ongoing stress testing and monitoring.

Financial institutions should ensure they do not unnecessarily heighten risks by originating and then distributing poorly underwritten loans.[2] For example, a poorly underwritten leveraged loan that is pooled with other loans or is participated with other institutions may generate risks for the financial system. The leveraged lending guidance that follows is designed to assist financial institutions in providing leveraged lending to creditworthy borrowers in a safe-and-sound manner.

On March 21, 2013, the Federal Reserve Board, along with the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC), issued ''Interagency Guidance on Leveraged Lending.''[3] The statement provides guidance about risk rating leveraged-financed loans. See SR-13-3 and its attachment.

INTERAGENCY GUIDANCE ON LEVERAGED LENDING

The vast majority of community banks should not be affected by this guidance, as they have limited involvement in leveraged lending. Community and smaller institutions that are involved in leveraged lending activities should discuss with their primary regulator the implementation of cost-effective controls appropriate for the complexity of their exposures and activities.[4]

Risk-Management Framework

Given the high-risk profile of leveraged transactions, financial institutions engaged in leveraged lending should adopt a risk-management framework that has an intensive and frequent review and monitoring process. The framework should have as its foundation written risk objectives, risk-acceptance criteria, and risk controls. A lack of robust risk-management processes and controls at a financial institution with significant leveraged lending activities could contribute to supervisory findings that the financial institution

1. For the purpose of this guidance, references to leveraged finance, or leveraged transactions encompass the entire debt structure of a leveraged obligor (including loans and letters of credit, mezzanine tranches, senior and subordinated bonds) held by both bank and nonbank investors. References to leveraged lending and leveraged loan transactions and credit agreements refer to all debt with the exception of bond and high-yield debt held by both bank and nonbank investors.

2. For purposes of this guidance, the term ''financial institution'' or ''institution'' includes national banks, federal savings associations, and federal branches and agencies supervised by the OCC; state member banks, bank holding companies, savings and loan holding companies, and all other institutions for which the Federal Reserve is the primary federal supervisor; and state nonmember banks, foreign banks having an insured branch, state savings associations, and all other institutions for which the FDIC is the primary federal supervisor.

3. This guidance augments previously issued supervisory statements on sound credit-risk management. Refer to SR-98-18, ''Lending Standards for Commercial Loans'' (see also sections 2040.1, ''Loan Portfolio Management,'' and 2040.3, ''Loan Portfolio Management—Examination Procedures,'' in this manual).

4. The agencies do not intend that a financial institution that originates a small number of less complex, leveraged loans should have policies and procedures commensurate with a larger, more complex leveraged loan origination business. However, any financial institution that participates in leveraged lending transactions should follow applicable supervisory guidance provided in ''Participations Purchased'' of this section.

is engaged in unsafe and unsound banking practices. This guidance outlines the agencies' minimum expectations on the following topics:

- Leveraged Lending Definition
- General Policy Expectations
- Participations Purchased
- Underwriting Standards
- Valuation Standards
- Pipeline Management
- Reporting and Analytics
- Risk Rating Leveraged Loans
- Credit Analysis
- Problem-Credit Management
- Deal Sponsors
- Credit Review
- Stress Testing
- Conflicts of Interest
- Reputational Risk
- Compliance

Leveraged Lending Definition

The policies of financial institutions should include criteria to define leveraged lending that are appropriate to the institution.[5] For example, numerous definitions of leveraged lending exist throughout the financial services industry and commonly contain some combination of the following:

- proceeds used for buyouts, acquisitions, or capital distributions
- transactions where the borrower's Total Debt divided by EBITDA (earnings before interest, taxes, depreciation, and amortization) or Senior Debt divided by EBITDA exceed 4.0 * EBITDA or 3.0 * EBITDA, respectively, or other defined levels appropriate to the industry or sector[6]
- a borrower recognized in the debt markets as a highly leveraged firm, which is characterized by a high debt-to-net-worth ratio
- transactions when the borrower's post-financing leverage, as measured by its leverage ratios (for example, debt-to-assets, debt-to-net-worth, debt-to-cash flow, or other similar standards common to particular industries or sectors), significantly exceeds industry norms or historical levels[7]

A financial institution engaging in leveraged lending should define it within the institution's policies and procedures in a manner sufficiently detailed to ensure consistent application across all business lines. A financial institution's definition should describe clearly the purposes and financial characteristics common to these transactions, and should cover risk to the institution from both direct exposure and indirect exposure via limited-recourse financing secured by leveraged loans, or financing extended to financial intermediaries (such as conduits and special purpose entities (SPEs)) that hold leveraged loans.

General Policy Expectations

A financial institution's credit policies and procedures for leveraged lending should address the following:

- Identification of the financial institution's risk appetite, including clearly defined amounts of leveraged lending that the institution is willing to underwrite (for example, pipeline limits) and is willing to retain (for example, transaction and aggregate hold levels). The institution's designated risk appetite should be supported by an analysis of the potential effect on earnings, capital, liquidity, and other risks that result from these positions, and should be approved by its board of directors.
- A limit framework that includes limits or guidelines for single obligors and transactions, aggregate hold portfolio, aggregate pipeline exposure, and industry and geographic concentrations. The limit framework should identify the related management-approval authorities and exception-tracking provisions. In addition to notional pipeline limits, the agencies expect that financial institutions with significant leveraged transactions will imple-

5. This guidance is not meant to include asset-based loans unless such loans are part of the entire debt structure of a leveraged obligor. Asset-based lending is a distinct segment of the loan market that is tightly controlled or fully monitored, secured by specific assets, and usually governed by a borrowing formula (or "borrowing base").

6. Cash should not be netted against debt for purposes of this calculation.

7. The designation of a financing as "leveraged lending" is typically made at loan origination, modification, extension, or refinancing. "Fallen angels" or borrowers that have exhibited a significant deterioration in financial performance after loan inception and subsequently become highly leveraged would not be included within the scope of this guidance, unless the credit is modified, extended, or refinanced.

ment underwriting-limit frameworks that assess stress losses, flex terms, economic capital usage, and earnings at risk or that otherwise provide a more nuanced view of potential risk.[8]
- Procedures for ensuring the risks of leveraged lending activities are appropriately reflected in an institution's allowance for loan and lease losses (ALLL) and capital adequacy analyses.
- Credit and underwriting approval authorities, including the procedures for approving and documenting changes to approved transaction structures and terms.
- Guidelines for appropriate oversight by senior management, including adequate and timely reporting to the board of directors.
- Expected risk-adjusted returns for leveraged transactions.
- Minimum underwriting standards (see the ''Underwriting Standards'' section below).
- Effective underwriting practices for primary loan origination and secondary loan acquisition.

Participations Purchased

Financial institutions purchasing participations and assignments in leveraged lending transactions should make a thorough, independent evaluation of the transaction and the risks involved before committing any funds.[9] They should apply the same standards of prudence, credit assessment and approval criteria, and in-house limits that would be employed if the purchasing organization were originating the loan. At a minimum, policies should include requirements for

- obtaining and independently analyzing full credit information both before the participation is purchased and on a timely basis thereafter;
- obtaining from the lead lender copies of all executed and proposed loan documents, legal opinions, title insurance policies, Uniform Commercial Code (UCC) searches, and other relevant documents;
- carefully monitoring the borrower's performance throughout the life of the loan; and
- establishing appropriate risk-management guidelines as described in this document.

Underwriting Standards

A financial institution's underwriting standards should be clear, written, and measurable, and should accurately reflect the institution's risk appetite for leveraged lending transactions. A financial institution should have clear underwriting limits regarding leveraged transactions, including the size that the institution will arrange both individually and in the aggregate for distribution. The originating institution should be mindful of reputational risks associated with poorly underwritten transactions, as these risks may find their way into a wide variety of investment instruments and exacerbate systemic risks within the general economy. At a minimum, an institution's underwriting standards should consider the following:

- Whether the business premise for each transaction is sound and the borrower's capital structure is sustainable regardless of whether the transaction is underwritten for the institution's own portfolio or with the intent to distribute. The entirety of a borrower's capital structure should reflect the application of sound financial analysis and underwriting principles.
- A borrower's capacity to repay and the ability to de-lever to a sustainable level over a reasonable period. As a general guide, institutions also should consider whether base-case cash-flow projections show the ability to fully amortize senior secured debt or repay a significant portion of total debt over the medium term.[10] Also, projections should

8. Flex terms allow the arranger to change interest-rate spreads during the syndication process to adjust pricing to current liquidity levels.

9. Refer to other joint agency guidance regarding purchased participations: OCC *Loan Portfolio Management Handbook*, www.occ.gov/publications/publications-by-type/comptrollers-handbook/lpm.pdf, ''Loan Participations''; Board *Commercial Bank Examination Manual*, www.federalreserve.gov/boarddocs/supmanual/cbem/cbem.pdf, section 2045.1, ''Loan Participations, the Agreements and Participants''; and FDIC *Risk Management Manual of Examination Policies*, ''Section 3.2—Loans,'' www.fdic.gov/regulations/safety/manual/section3-2.html#otherCredit, Loan Participations (last updated Feb. 2, 2005).

10. In general, the base-case cash-flow projection is the borrower or deal sponsor's expected estimate of financial performance using the assumptions that are deemed most likely to occur. The financial results for the base case should be better than those for the conservative case but worse than those for the aggressive or upside case. A financial institution may adjust the base-case financial projections, if necessary. The most realistic financial projections should be used when

include one or more realistic downside scenarios that reflect key risks identified in the transaction.

- Expectations for the depth and breadth of due diligence on leveraged transactions. This should include standards for evaluating various types of collateral, with a clear definition of credit-risk-management's role in such due diligence.
- Standards for evaluating expected risk-adjusted returns. The standards should include identification of expected distribution strategies, including alternative strategies for funding and disposing of positions during market disruptions, and the potential for losses during such periods.
- The degree of reliance on enterprise value and other intangible assets for loan repayment, along with acceptable valuation methodologies, and guidelines for the frequency of periodic reviews of those values.
- Expectations for the degree of support provided by the sponsor (if any), taking into consideration the sponsor's financial capacity, the extent of its capital contribution at inception, and other motivating factors. Institutions looking to rely on sponsor support as a secondary source of repayment for the loan should be able to provide documentation, including, but not limited to, financial or liquidity statements, showing recently documented evidence of the sponsor's willingness and ability to support the credit extension.
- Whether credit-agreement terms allow for the material dilution, sale, or exchange of collateral or cash-flow-producing assets without lender approval.
- Credit-agreement covenant protections, including financial performance (such as debt-to-cash flow, interest coverage, or fixed-charge coverage), reporting requirements, and compliance monitoring. Generally, a leverage level after planned asset sales (that is, the amount of debt that must be serviced from operating cash flow) in excess of 6* Total Debt/EBITDA raises concerns for most industries.
- Collateral requirements in credit agreements that specify acceptable collateral and risk-appropriate measures and controls, including acceptable collateral types, loan-to-value guidelines, and appropriate collateral-valuation methodologies. Standards for asset-based loans that are part of the entire debt structure also should outline expectations for the use of collateral controls (for example, inspections, independent valuations, and payment lockbox), other types of collateral and account maintenance agreements, and periodic reporting requirements.
- Whether loan agreements provide for distribution of ongoing financial and other relevant credit information to all participants and investors.

Nothing in the preceding standards should be considered to discourage providing financing to borrowers engaged in workout negotiations, or as part of a pre-packaged financing under the bankruptcy code. Neither are they meant to discourage well-structured, standalone asset-based credit facilities to borrowers with strong lender monitoring and controls, for which a financial institution should consider separate underwriting and risk-rating guidance.

Valuation Standards

Institutions often rely on enterprise value and other intangibles when (1) evaluating the feasibility of a loan request; (2) determining the debt reduction potential of planned asset sales; (3) assessing a borrower's ability to access the capital markets; and (4) estimating the strength of a secondary source of repayment. Institutions may also view enterprise value as a useful benchmark for assessing a sponsor's economic incentive to provide financial support. Given the specialized knowledge needed for the development of a credible enterprise valuation and the importance of enterprise valuations in the underwriting and ongoing risk-assessment processes, enterprise valuations should be performed by qualified persons independent of an institution's origination function.

There are several methods used for valuing businesses. The most common valuation methods are assets, income, and market. Asset valuation methods consider an enterprise's underlying assets in terms of its net going-concern or liquidation value. Income valuation methods consider an enterprise's ongoing cash flows or earnings and apply appropriate capitalization or discounting techniques. Market valuation methods derive value multiples from comparable company data or sales transactions. However, final value estimates should be based on the

measuring a borrower's capacity to repay and de-lever.

method or methods that give supportable and credible results. In many cases, the income method is generally considered the most reliable.

There are two common approaches employed when using the income method. The "capitalized cash flow" method determines the value of a company as the present value of all future cash flows the business can generate in perpetuity. An appropriate cash flow is determined and then divided by a risk-adjusted capitalization rate, most commonly the weighted average cost of capital. This method is most appropriate when cash flows are predictable and stable. The "discounted cash flow" method is a multiple-period valuation model that converts a future series of cash flows into current value by discounting those cash flows at a rate of return (referred to as the "discount rate") that reflects the risk inherent therein. This method is most appropriate when future cash flows are cyclical or variable over time. Both income methods involve numerous assumptions, and therefore, supporting documentation should fully explain the evaluator's reasoning and conclusions.

When a borrower is experiencing a financial downturn or facing adverse market conditions, a lender should reflect those adverse conditions in its assumptions for key variables such as cash flow, earnings, and sales multiples when assessing enterprise value as a potential source of repayment. Changes in the value of a borrower's assets should be tested under a range of stress scenarios, including business conditions more adverse than the base-case scenario. Stress tests of enterprise values and their underlying assumptions should be conducted and documented at origination of the transaction and periodically thereafter, incorporating the actual performance of the borrower and any adjustments to projections. The institution should perform its own discounted cash-flow analysis to validate the enterprise value implied by proxy measures such as multiples of cash flow, earnings, or sales.

Enterprise value estimates derived from even the most rigorous procedures are imprecise and ultimately may not be realized. Therefore, institutions relying on enterprise value or illiquid and hard-to-value collateral should have policies that provide for appropriate loan-to-value ratios, discount rates, and collateral margins. Based on the nature of an institution's leveraged lending activities, the institution should establish limits for the proportion of individual transactions and the total portfolio that are supported by enterprise value. Regardless of the methodology used, the assumptions underlying enterprise value estimates should be clearly documented, well supported, and understood by the institution's appropriate decisionmakers and risk-oversight units. Further, an institution's valuation methods should be appropriate for the borrower's industry and condition.

Pipeline Management

Market disruptions can substantially impede the ability of an underwriter to consummate syndications or otherwise sell down exposures, which may result in material losses. Accordingly, financial institutions should have strong risk management and controls over transactions in the pipeline, including amounts to be held and those to be distributed. A financial institution should be able to differentiate transactions according to tenor, investor class (for example, pro-rata and institutional), structure, and key borrower characteristics (for example, industry).

In addition, an institution should develop and maintain the following:

- A clearly articulated and documented appetite for underwriting risk that considers the potential effects on earnings, capital, liquidity, and other risks that result from pipeline exposures.
- Written policies and procedures for defining and managing distribution failures and "hung" deals, which are identified by an inability to sell down the exposure within a reasonable period (generally 90 days from transaction closing). The financial institution's board of directors and management should establish clear expectations for the disposition of pipeline transactions that are not sold according to their original distribution plan. Such transactions that are subsequently reclassified as hold-to-maturity should also be reported to management and the board of directors.
- Guidelines for conducting periodic stress tests on pipeline exposures to quantify the potential impact of changing economic and market conditions on the institution's asset quality, earnings, liquidity, and capital.
- Controls to monitor performance of the pipeline against original expectations, and regular reports of variances to management, including the amount and timing of syndication and

distribution variances and reporting of recourse sales to achieve distribution.
- Reports that include individual and aggregate transaction information that accurately risk rates credits and portrays risk and concentrations in the pipeline.
- Limits on aggregate pipeline commitments.
- Limits on the amount of loans that an institution is willing to retain on its own books (that is, borrower, counterparty, and aggregate hold levels), and limits on the underwriting risk that will be undertaken for amounts intended for distribution.
- Policies and procedures that identify acceptable accounting methodologies and controls in both functional as well as dysfunctional markets, and that direct prompt recognition of losses in accordance with generally accepted accounting principles.
- Policies and procedures addressing the use of hedging to reduce pipeline and hold exposures, which should address acceptable types of hedges and the terms considered necessary for providing a net credit exposure after hedging.
- Plans and provisions addressing contingent liquidity and compliance with the Board's Regulation W (12 CFR part 223) when market illiquidity or credit conditions change, interrupting normal distribution channels.

Reporting and Analytics

The agencies expect financial institutions to diligently monitor higher-risk credits, including leveraged loans. A financial institution's management should receive comprehensive reports about the characteristics and trends in such exposures at least quarterly, and summaries should be provided to the institution's board of directors. Policies and procedures should identify the fields to be populated and captured by a financial institution's Management Information Systems, which should yield accurate and timely reporting to management and the board of directors that may include the following:

- Individual and portfolio exposures within and across all business lines and legal vehicles, including the pipeline.
- Risk rating distribution and migration analysis, including maintenance of a list of those borrowers who have been removed from the leveraged portfolio due to improvements in their financial characteristics and overall risk profile.
- Industry mix and maturity profile.
- Metrics derived from probabilities of default and loss given default.
- Portfolio performance measures, including noncompliance with covenants, restructurings, delinquencies, non-performing amounts, and charge-offs.
- Amount of impaired assets and the nature of impairment (that is, permanent, or temporary), and the amount of the ALLL attributable to leveraged lending.
- The aggregate level of policy exceptions and the performance of that portfolio.
- Exposures by collateral type, including unsecured transactions and those where enterprise value will be the source of repayment for leveraged loans. Reporting should also consider the implications of defaults that trigger pari passu (in a fair way) treatment for all lenders and, thus, dilute the secondary support from the sale of collateral.
- Secondary-market-pricing data and trading volume, when available.
- Exposures and performance by deal sponsors. Deals introduced by sponsors may, in some cases, be considered exposure to related borrowers. An institution should identify, aggregate, and monitor potential related exposures.
- Gross and net exposures, hedge counterparty concentrations, and policy exceptions.
- Actual versus projected distribution of the syndicated pipeline, with regular reports of excess levels over the hold targets for the syndication inventory. Pipeline definitions should clearly identify the type of exposure. This includes committed exposures that have not been accepted by the borrower, commitments accepted but not closed, and funded and unfunded commitments that have closed but have not been distributed.
- Total and segmented leveraged lending exposures, including subordinated debt and equity holdings, alongside established limits. Reports should provide a detailed and comprehensive view of global exposures, including situations when an institution has indirect exposure to an obligor or is holding a previously sold position as collateral or as a reference asset in a derivative.
- Borrower and counterparty leveraged lending reporting should consider exposures booked in other business units throughout the institu-

tion, including indirect exposures such as default swaps and total return swaps, naming the distributed paper as a covered or referenced asset or collateral exposure through repo transactions. Additionally, the institution should consider positions held in available-for-sale or traded portfolios or through structured investment vehicles owned or sponsored by the originating institution or its subsidiaries or affiliates.

Risk Rating Leveraged Loans

Previously, the agencies issued guidance on rating credit exposures and credit-rating systems, which applies to all credit transactions, including those in the leveraged lending category.[11]

The risk rating of leveraged loans involves the use of realistic repayment assumptions to determine a borrower's ability to de-lever to a sustainable level within a reasonable period. For example, supervisors commonly assume that the ability to fully amortize senior secured debt or the ability to repay at least 50 percent of total debt over a five- to seven-year period provides evidence of adequate repayment capacity. If the projected capacity to pay down debt from cash flow is nominal with refinancing the only viable option, the credit will usually be adversely rated even if it has been recently underwritten. In cases when leveraged loan transactions have no reasonable or realistic prospects to de-lever, a substandard rating is likely. Furthermore, when assessing debt service capacity, extensions and restructures should be scrutinized to ensure that the institution is not merely masking repayment capacity problems by extending or restructuring the loan.

If the primary source of repayment becomes inadequate, the agencies believe that it would generally be inappropriate for an institution to consider enterprise value as a secondary source of repayment unless that value is well supported. Evidence of well-supported value may include binding purchase and sale agreements with qualified third parties or thorough asset valuations that fully consider the effect of the borrower's distressed circumstances and potential changes in business and market conditions. For such borrowers, when a portion of the loan may not be protected by pledged assets or a well-supported enterprise value, examiners generally will rate that portion doubtful or loss and place the loan on nonaccrual status.

Credit Analysis

Effective underwriting and management of leveraged lending risk is highly dependent on the quality of analysis employed during the approval process as well as ongoing monitoring. A financial institution's policies should address the need for a comprehensive assessment of financial, business, industry, and management risks including, whether

- cash-flow analyses rely on overly optimistic or unsubstantiated projections of sales, margins, and merger and acquisition synergies;
- liquidity analyses include performance metrics appropriate for the borrower's industry, predictability of the borrower's cash flow, measurement of the borrower's operating cash needs, and ability to meet debt maturities;
- projections exhibit an adequate margin for unanticipated merger-related integration costs;
- projections are stress tested for one or more downside scenarios, including a covenant breach;
- transactions are reviewed at least quarterly to determine variance from plan, the related risk implications, and the accuracy of risk ratings and accrual status. From inception, the credit file should contain a chronological rationale for and analysis of all substantive changes to the borrower's operating plan and variance from expected financial performance;
- enterprise and collateral valuations are independently derived or validated outside of the origination function, are timely, and consider potential value erosion;
- collateral liquidation and asset sale estimates are based on current market conditions and trends;
- potential collateral shortfalls are identified and factored into risk rating and accrual decisions;
- contingency plans anticipate changing conditions in debt or equity markets when exposures rely on refinancing or the issuance of

11. Board SR Letter 98-25, "Sound Credit Risk Management and the Use of Internal Credit Risk Ratings at Large Banking Organizations"; OCC *Comptroller's Handbooks* "Rating Credit Risk" and "Leveraged Lending"; and FDIC *Risk Management Manual of Examination Policies*, "Loan Appraisal and Classification."

new equity; and
- the borrower is adequately protected from interest rate and foreign exchange risk.

Problem-Credit Management

A financial institution should formulate individual action plans when working with borrowers experiencing diminished operating cash flows, depreciated collateral values, or other significant plan variances. Weak initial underwriting of transactions, coupled with poor structure and limited covenants, may make problem-credit discussions and eventual restructurings more difficult for an institution as well as result in less favorable outcomes.

A financial institution should formulate credit policies that define expectations for the management of adversely rated and other high-risk borrowers whose performance departs significantly from planned cash flows, asset sales, collateral values, or other important targets. These policies should stress the need for workout plans that contain quantifiable objectives and measureable time frames. Actions may include working with the borrower for an orderly resolution while preserving the institution's interests, sale of the credit in the secondary market, or liquidation of collateral. Problem credits should be reviewed regularly for risk rating accuracy, accrual status, recognition of impairment through specific allocations, and charge-offs.

Deal Sponsors

A financial institution that relies on sponsor support as a secondary source of repayment should develop guidelines for evaluating the qualifications of financial sponsors and should implement processes to regularly monitor a sponsor's financial condition. Deal sponsors may provide valuable support to borrowers such as strategic planning, management, and other tangible and intangible benefits. Sponsors may also provide sources of financial support for borrowers that fail to achieve projections. Generally, a financial institution rates a borrower based on an analysis of the borrower's standalone financial condition. However, a financial institution may consider support from a sponsor in assigning internal risk ratings when the institution can document the sponsor's history of demonstrated support as well as the economic incentive, capacity, and stated intent to continue to support the transaction. However, even with documented capacity and a history of support, the sponsor's potential contributions may not mitigate supervisory concerns absent a documented commitment of continued support. An evaluation of a sponsor's financial support should include the following:

- the sponsor's historical performance in supporting its investments, financially and otherwise
- the sponsor's economic incentive to support, including the nature and amount of capital contributed at inception
- documentation of degree of support (for example, a guarantee, comfort letter, or verbal assurance)
- consideration of the sponsor's contractual investment limitations
- to the extent feasible, a periodic review of the sponsor's financial statements and trends, and an analysis of its liquidity, including the ability to fund multiple deals
- consideration of the sponsor's dividend and capital contribution practices
- the likelihood of the sponsor supporting a particular borrower compared to other deals in the sponsor's portfolio
- guidelines for evaluating the qualifications of a sponsor and a process to regularly monitor the sponsor's performance

Credit Review

A financial institution should have a strong and independent credit-review function that demonstrates the ability to identify portfolio risks and documented authority to escalate inappropriate risks and other findings to its senior management. Due to the elevated risks inherent in leveraged lending, and depending on the relative size of a financial institution's leveraged lending business, the institution's credit-review function should assess the performance of the leveraged portfolio more frequently and in greater depth than other segments in the loan portfolio. Such assessments should be performed by individuals with the expertise and experience for these types of loans and the borrower's industry. Portfolio reviews should generally be conducted at least annually. For many financial institutions, the

risk characteristics of leveraged portfolios, such as high reliance on enterprise value, concentrations, adverse risk rating trends, or portfolio performance, may dictate reviews that are more frequent.

A financial institution should staff its internal credit-review function appropriately and ensure that the function has sufficient resources to ensure timely, independent, and accurate assessments of leveraged lending transactions. Reviews should evaluate the level of risk, risk rating integrity, valuation methodologies, and the quality of risk management. Internal credit reviews should include the review of the institution's leveraged lending practices, policies, and procedures to ensure that they are consistent with regulatory guidance.

Stress Testing

A financial institution should develop and implement guidelines for conducting periodic portfolio stress tests on loans originated to hold as well as loans originated to distribute, and sensitivity analyses to quantify the potential impact of changing economic and market conditions on its asset quality, earnings, liquidity, and capital.[12] The sophistication of stress testing practices and sensitivity analyses should be consistent with the size, complexity, and risk characteristics of the institution's leveraged loan portfolio. To the extent a financial institution is required to conduct enterprise-wide stress tests, the leveraged portfolio should be included in any such tests.

Conflicts of Interest

A financial institution should develop appropriate policies and procedures to address and to prevent potential conflicts of interest when it has equity and lending positions. For example, an institution may be reluctant to use an aggressive collection strategy with a problem borrower because of the potential impact on the value of an institution's equity interest. A financial institution may encounter pressure to provide financial or other privileged client information that could benefit an affiliated equity investor. Such conflicts also may occur when the underwriting financial institution serves as financial advisor to the seller and simultaneously offers financing to multiple buyers (that is, stapled financing). Similarly, there may be conflicting interests among the different lines of business within a financial institution or between the financial institution and its affiliates. When these situations occur, potential conflicts of interest arise between the financial institution and its customers. Policies and procedures should clearly define potential conflicts of interest, identify appropriate risk-management controls and procedures, enable employees to report potential conflicts of interest to management for action without fear of retribution, and ensure compliance with applicable laws. Further, management should have an established training program for employees on appropriate practices to follow to avoid conflicts of interest and provide for reporting, tracking, and resolution of any conflicts of interest that occur.

Reputational Risk

Leveraged lending transactions are often syndicated through the financial and institutional markets. A financial institution's apparent failure to meet its legal responsibilities in underwriting and distributing transactions can damage its market reputation and impair its ability to compete. Similarly, a financial institution that distributes transactions, which over time have significantly higher default or loss rates and performance issues, may also see its reputation damaged.

Compliance

The legal and regulatory issues raised by leveraged transactions are numerous and complex. To ensure potential conflicts are avoided and laws and regulations are adhered to, an institu-

12. See interagency guidance "Supervisory Guidance on Stress Testing for Banking Organizations with More Than $10 Billion in Total Consolidated Assets" (see Board SR Letter 12-7 and its attachment), 77 *Fed. Reg.* 29458 (May 17, 2012), at www.gpo.gov/fdsys/pkg/FR-2012-05-17/html/2012-11989.htm, and the joint "Statement to Clarify Supervisory Expectations for Stress Testing by Community Banks," May 14, 2012, by the OCC at www.occ.gov/news-issuances/news-releases/2012/nr-ia-2012-76a.pdf; the Board at www.federalreserve.gov/newsevents/press/bcreg/bcreg20120514b1.pdf; and the FDIC at www.fdic.gov/news/news/press/2012/pr12054a.pdf. See also FDIC final rule, Annual Stress Test, 77 *Fed. Reg.* 62417 (Oct. 15, 2012) (to be codified at 12 CFR part 325, subpart C).

tion's independent compliance function should periodically review the institution's leveraged lending activity. This guidance is consistent with the principles of safety and soundness and other agency guidance related to commercial lending.

In particular, because leveraged transactions often involve a variety of types of debt and bank products, a financial institution should ensure that its policies incorporate safeguards to prevent violations of anti-tying regulations. Section 106(b) of the Bank Holding Company Act Amendments of 1970[13] prohibits certain forms of product tying by financial institutions and their affiliates. The intent behind Section 106(b) is to prevent financial institutions from using their market power over certain products to obtain an unfair competitive advantage in other products.

In addition, equity interests and certain debt instruments used in leveraged transactions may constitute ''securities'' for the purposes of federal securities laws. When securities are involved, an institution should ensure compliance with applicable securities laws, including disclosure and other regulatory requirements. An institution should also establish policies and procedures to appropriately manage the internal dissemination of material, nonpublic information about transactions in which it plays a role.

13. 12 USC 1972.

1. *Risk-Management Framework, Definition, and Policy Expectations.* To determine
   a. whether the institution has established a sound definition of leveraged lending that is appropriate for the types of leveraged loans that are underwritten and if it can be applied across all business lines;
   b. whether it has adjusted (if necessary) its risk appetite and limit structure (including pipeline limits and overall portfolio limits) to conform with the institution's definition of leveraged lending and whether it has the necessary reporting in place to assess conformance with limits.
   c. if there are appropriate policies and procedures limits in place and if the institution maintains sound leveraged lending standards both for transactions that it intends to hold as well as transactions that are underwritten to distribute.
   d. if the institution's risk-management structure has strong and effective processes and controls and if they are appropriate based on its leveraged lending activity.
2. *Participations Purchased.* To ensure that the institution applies the same standards of prudence and credit assessment techniques and in-house limits that would apply as if it had originated the loan(s).
3. *Underwriting Standards.* To assess the effectiveness of the institution's underwriting policy standards for leveraged lending to determine whether they
   a. are clear, written, and measurable;
   b. contain underwriting limits that reflect the institution's definition and risk appetite for leveraged lending;
   c. are applied equally to loans that are originated to be held and to loans that are originated to distribute; and
   d. fully reflect the underwriting standards listed in the guidance, including
      i. sound business premise and sustainable capital structure for each transaction
      ii. capacity to repay and ability to de-lever to a sustainable level over a reasonable period
      iii. appropriate depth and breadth of due diligence
      iv. standards for valuating expected risk-adjusted returns
      v. appropriate credit agreement covenant protections
      vi. acceptable collateral agreements.
4. *Valuation Standards.* To determine
   a. whether enterprise valuation methodologies are appropriate to the borrower's industry and condition;
   b. whether the assumptions are clearly documented, well supported, and understood by the institution's appropriate decision makers and risk-oversight units;
   c. whether enterprise valuations are performed by qualified persons independent of an institution's origination function;
   d. whether an institution has policies and provides for appropriate loan-to-value ratios, discount rates and collateral margins for loans dependent on enterprise value or illiquid and hard-to-value collateral.
5. *Pipeline Management.* To find out if there are strong risk-management standards and controls over transactions in and to the pipeline and if those standards are applied uniformly to transactions held in the portfolio and those that are distributed.
6. *Reporting and Analytics.*
   a. To determine if individual and portfolio exposures within and across all business lines and legal vehicles are captured and reported in the appropriate amount of detail to senior management and the board.
   b. To determine if the necessary risk information (as outlined in the guidance) about leveraged lending exposures (portfolio holds and pipeline exposures) are captured in reports that are distributed timely and that adequate information is distributed to senior management and the institution's board of directors at least quarterly.
7. *Risk Rating.* To verify that leveraged loans are risk rated based on the borrower's ability to repay and de-lever to a sustainable level.
8. *Credit Analysis.*
   a. To test transactions to determine if underwriting practices are effective and comprehensive.

b. To determine if individual leveraged lending exposures contain a comprehensive assessment of financial, business, industry, and management risks based on the elements of the guidance.

9. *Problem Credit Management.*
   a. To ascertain whether the institution formulates individual action plans and expectations.
   b. To evaluate workout plans to confirm that they contain quantifiable objectives and measureable time frames.
   c. To determine if problem credits are regularly reviewed for risk-rating accuracy, accrual status, impairment status, and charge off.
10. *Deal Sponsors.*
    a. To determine if the institution has guidelines for evaluating deal sponsors that are based on the sponsor's ability and willingness to support the transaction where sponsors are viewed as a source of repayment.
11. *Credit Review.*
    a. To ensure that the institution regularly conducts an independent credit review of the leveraged lending portfolio more frequently and in greater depth than other segments of the portfolio generally at least annually. For firms making significant changes to policies, underwriting standards, procedures, etc., ensure that a credit review is scheduled to test compliance with changes.
    b. To ensure that credit review personnel have the expertise and experience to evaluate leveraged loans.
12. *Stress Testing.*
    a. To determine if the institution is conducting periodic loan- and portfolio stress tests on leveraged loan portfolios or if the portfolio has been incorporated into enterprise-wide stress testing practices.
    b. To verify the effectiveness of the institution's periodic portfolio stress tests (in accordance with stress testing guidance) in identifying what effect economic and market events could have on the institution's financial condition and leveraged lending transactions.
13. *Conflict of Interest.* To determine
    a. if policies identify and if there are procedures to address transactions in which the institution holds both an equity and lending positions;
    b. the adequacy and effectiveness of controls and training programs that aim to curb any potential conflicts of interests that result from leveraged lending.
14. *Reputational Risk.*
    a. To determine if the institution has suffered reputational damage by failing to meet its legal responsibilities in underwriting and syndicating leveraged loan transactions into the wider financial market.

Complete or update the Leveraged Lending Internal Control Questionnaire if selected for implementation.

1. Based on an evaluation of internal controls, determine the scope of the examination. The scope should include exposures related through common ownership, guarantors, or sponsors. Also include direct and indirect leveraged lending exposure found in financial intermediaries formed to house or distribute leveraged loans (for example, CLOs, SPEs, conduits, etc.).
2. Examination procedures should include both a policy review and transaction testing approach to determine the effectiveness of the institution's leveraged lending control process.

If the institution is found to lack robust risk-management processes and controls around leveraged lending that reinforces the institution's risk profile, a supervisory finding of unsafe and unsound banking practices should be considered.

3. Applicability/Risk-Management Framework
   a. At the start of the examination, ascertain whether the institution has adopted an appropriate risk-management framework for leveraged lending that includes robust policies, procedures, and risk limits that have been approved by the board of directors.
   b. Implementation of this guidance should be consistent with the size and risk profile of the institution.
   c. All aspects of the guidance should be applied to institutions that originate and distribute leveraged loans.
   d. The section on Participations Purchased should be applied to banking organizations that have limited involvement in leveraged lending; community banks overall may not be materially affected by the guidance.
4. Definition of Leveraged Lending
   a. Determine if the institution has a written policy for leveraged lending and if that policy contains criteria for defining leveraged lending that are appropriate for the institution and consistent with the guidance standards.
   b. Determine if the institution's definition includes related exposures and direct and indirect exposures.
5. General Policy Expectations
   a. Review the policy for the key risk elements referred to in the guidance (See the section on General Policy Expectations in the guidance and in the Internal Control Questionnaire). Determine if the policy includes the following elements:
      - Risk Appetite that clearly defines the amount of leveraged lending the institution is willing to underwrite and is willing to retain.
      - Limit Framework for aggregate portfolio held on balance sheet, single obligors and transactions, aggregate pipeline exposure, industry and geographic concentrations. For institutions with significant underwriting exposure, determine if limits have been established for stress losses, flex terms, economic capital, or earnings at risk associated with leveraged loans.
      - Allowance for loan and lease losses (ALLL) and capital adequacy analysis that reflect the risk of leveraged lending activities.
      - Credit approval and underwriting authorities.
      - Guidelines for senior management oversight and timely reporting to senior management and the board of directors.
      - Expected risk adjusted returns.
      - Minimum underwriting standards.
      - Underwriting practices for origination and secondary loan acquisition.
6. Participations Purchased
   a. Ascertain if the institution participating or purchasing into a leveraged loan has a clear understanding of the credit and the risks involved and also has a clear understanding of its rights and responsibilities under the participation agreement.
   b. Determine if the institution has conducted its own independent underwriting of participations and has applied the same standards of prudence, credit assessment techniques, and in-house limits as if the institution had originated the loan(s).

c. Verify that the institution has received copies of all participation documents and any other documents relevant to the credit transaction(s).

7. Underwriting Standards
   a. Determine if the institution employs similar and consistent underwriting standards for leveraged loans it plans to hold or it plans to distribute.
      - Confirm that the institution's underwriting standards are clear, written, measurable, and reflect the institution's policy-based risk appetite for leveraged lending.
      - Evaluate the underwriting policies and standards and determine if they contain the elements found in guidance. (Refer to the section on Underwriting Standards in the guidance and in the Internal Control Questionnaire.)
8. Valuation Standards
   a. Confirm that the institution has policies and procedures in place for estimating enterprise value or for valuing other illiquid collateral. If enterprise value is relied on as a secondary source of repayment, determine the following:
      - If one or a combination of the three methods referred to in the guidance is used (asset, income, or market valuation).
      - If the underlying assumptions and the resulting values are well documented, supportable, and credible. (Refer to the Valuations Standards section of the guidance and the Internal Control Questionnaire.)
      - If enterprise value was calculated by qualified persons independent of the origination function.
      - If stress tests of key enterprise value variables and assumptions (such as cash flow earnings and sales multiples) are conducted.
      - That firms have policies that provide for appropriate loan-to-value ratios, discount rates and collateral margins.
      - If the institution has established limits for the proportion of individual transactions and the total portfolio that are supported by enterprise value.
9. Pipeline Management
   a. Determine if the institution has strong risk management and controls that are extended to deals in the pipeline, whether those deals are intended for hold, or if they are intended for distribution.
      - Determine if the institution has policies and procedures for handling distribution failures.
      - Determine if there are procedures for stress testing pipeline deals.
      - Ascertain if management reports show that transactions can be differentiated based on their key characteristics, tenor, and investor class (pro-rata and institutional), structure, and key borrower characteristics (for example, industry).
      - Determine if there are clearly articulated rationales for the effectiveness of hedging methods and if there is appropriate measurement and monitoring.
      - Confirm that the institution has developed and maintained the pipeline procedures referred to in the guidance (see the section on Pipeline Management in the guidance and in the Internal Control Questionnaire).
10. Reporting and Analytics
   a. Ascertain if the institution's risk-management framework includes an intensive and frequent review and monitoring process.
   b. Establish whether management receives comprehensive reports about the characteristics and trends of the institution's leveraged lending portfolio at least quarterly and if summaries are provided to the board of directors.
   c. Find out if internal reports provide a detailed and comprehensive view of global exposures, including situations when an institution has an indirect exposure to an obligor or is holding a previously sold position as collateral or as a reference asset in a derivative. Borrower and counterparty leveraged lending reporting should aggregate total exposure and consider exposures booked across business lines or legal entities.
   d. Verify that internal policies identify the data fields to be populated and captured by the institution's MIS and whether the reports are accurate, timely, and if the information is provided to management and the board of directors.
   e. Confirm that MIS reporting on the leveraged lending portfolio contains the applicable measures listed in the guidance. (Refer to the section on Reporting and

Analytics in the guidance and in the Internal Control Questionnaire.)

11. Credit Analysis
    a. Conduct transaction testing on individual leveraged lending credits to determine if the credit analysis contains a comprehensive assessment of financial, business, and industry and management risks.
    b. Evaluate individual credits to determine if they fit the institutions definition of a leveraged loan.
    c. Determine if individual credits were analyzed in conjunction with the parameters in the guidance. (Refer to the section on Credit Analysis in the guidance and in the Internal Control Questionnaire.)
    d. Verify that there are guidelines for evaluating deal sponsors and their willingness and ability to support the credit.
    e. Confirm that sponsors are used as a secondary and not a primary source of repayment.
    f. Assess the credit agreement to determine if it contains language for:
        - Material dilution, sale, or exchange of collateral or cash flow producing assets without lender approval.
        - Financial performance covenants; covenant-lite, and payment-in-kind (PIK) toggle loan structures.
        - Reporting requirements and compliance monitoring.
        - The distribution of reporting and other credit information to participants and investors.
        - Acceptable collateral types, loan to value guidelines and appropriate collateral valuation methodologies.
12. Internal Risk Rating
    a. Determine if individual loans are risk rated based on the borrower's demonstrated ability to repay the loan and de-lever over a reasonable period of time.
        - Confirm that the institution has evidence of adequate repayment capacity, for example borrowers demonstrate the ability to fully amortize senior debt or repay at least 50 percent of total debt over a 5–7 year period. Ensure that extensions or other restructuring are not masking an inability to repay.
        - Consider adversely rating credits that do not show the capacity to pay down debt from cash flow or if refinancing is the only option for repayment.
        - Consider a substandard rating if there are no reasonable or realistic prospects for repayment or de-levering.
13. Deal Sponsors
    a. If a deal sponsor is relied on as a secondary source of repayment, determine if management has developed guidelines for evaluating the sponsor's creditworthiness.
    b. Evaluate the sponsor based on the criteria listed in the guidance. (See the section on Deal Sponsors in the guidance and in the Internal Control Questionnaire).
14. Credit Review/Problem Credit Management
    a. Assess credit review staff's expertise relative to leveraged lending.
    b. Verify that the institution conducts frequent internal credit review of leveraged lending portfolio that is done independently of the origination function. Portfolio reviews should generally be conducted no less than annually.
    c. Evaluate the institution's procedures for dealing with problem credits including if work out plans contain quantifiable objectives and measurable time frames.
15. Stress Testing
    a. Determine if the institution has developed stress tests for leveraged loans or if the loans are included in the existing stress testing protocol.
16. Conflicts of Interest/Reputational Risk/Compliance
    a. Confirm that the institution is meeting its legal responsibilities by underwriting and distributing transactions that do not result in undue reputational risk.
    b. Determine if potential conflicts of interest exist if the institution has both equity and lending positions in a particular transaction. Confirm that policies and procedures are in place to handle conflicts of interest.
    c. Ascertain whether the institution's compliance function periodically reviews the institution's leveraged lending activity.
    d. Ascertain whether the institution's policies incorporate safeguards to prevent violations of anti-tying regulations.
    e. When securities are involved, determine how the institution ensures compliance with applicable securities laws, includ-

ing disclosure and other regulatory requirements.

f. Ascertain what plans and provisions have been developed to ensure compliance with the Board's Regulation W (12 CFR part 223).

Applicability/Risk-Management Framework

1. Has the institution adopted a risk-management framework around leveraged lending that includes:
   a. A leveraged lending policy that is based on risk objectives, risk acceptance criteria, and risk controls?
   b. Structuring transactions that reflect a sound business premise, have an appropriate capital structure, reasonable cash flow, and balance sheet leverage?
   c. A definition of leveraged lending that can be applied across all business lines?
   d. Well-defined underwriting standards that define acceptable leverage levels and amortization expectations?
   e. A limit framework?
   f. Sound MIS?
   g. Pipeline management procedures, hold limits, and expected timing for distributions?
   h. Guidelines for stress testing?
2. Is the institution able to identify leveraged exposures to related borrowers or guarantors?
3. Is the institution able to identify leveraged loans that are managed in non-lending portfolios (for example collateralized loan obligations (CLOs), special purpose entities (SPEs), or other indirect exposures)?
4. Is the institution originating leveraged loans, participating in leveraged loans, or both?

Definition of Leveraged Lending

1. Has the institution developed an appropriate written definition for leveraged lending and incorporated it into the leveraged lending policy?
2. Is the policy definition consistent with the amounts and types of leveraged loans that the institution is engaged in?

General Policy Expectations

1. Has the institution's leveraged lending policy been approved by the board of directors?
2. Does the leveraged lending policy contain the following elements:
   a. A clear statement of the amounts of leveraged lending that it is willing to underwrite and the amount(s) it is willing to hold in its own portfolio?
   b. A limit framework that establishes limits or guidelines around the following as applicable:
      1) Single obligors and transactions?
      2) Aggregate hold portfolio?
      3) Total pipeline exposure?
      4) Industry and geographic concentration?
      5) Notional pipeline limits?
      6) Stress losses, flex terms, economic capital usage, and earnings at risk?
      7) Other parameters particular to the portfolio?
      8) The required management approval authorities and exception tracking provisions?
   c. Procedures for insuring that leveraged lending risks are appropriately reflected in the institution's level of allowance for loan and lease losses (ALLL) and capital adequacy analysis?
   d. Credit and underwriting approval authorities, including the procedures for approving and documenting changes to approved transaction structures and terms?
   e. Guidelines for appropriate oversight by senior management, including adequate and timely reporting to the board of directors?
   f. Expected risk-adjusted returns for leveraged transactions?
   g. Minimum underwriting standards and underwriting practices for primary loan origination and secondary loan acquisition?

Participations Purchased

1. Has the institution, with respect to participations purchased, done its own independent underwriting of its portion of the transaction and has it adequately identified its risks?
2. Has the institution received copies of all

documentation relevant to the transaction?
3. Is there evidence that the institution has reviewed the participation agreement and has a clear understanding of its rights and responsibilities under the agreement?

Underwriting Standards

1. Is the institution using similar underwriting standards for leveraged loans it plans to hold as well as for leveraged loans it plans to distribute?
2. Are the institution's underwriting standards clear, written, and measurable?
3. Do underwriting standards require:
   - A sound business premise for each transaction and that the borrower's capital structure is sustainable?
   - A determination and documentation of the borrower's capacity to repay and ability to de-lever to a sustainable level over a reasonable period?
   - Standards for evaluating various types of collateral?
   - Standards for evaluating risk-adjusted returns?
   - The acceptable degree of reliance on enterprise value and other intangible assets for loan repayment?
   - Expectations for the degree of support expected to be provided by sponsors?
   - A prohibition on material dilution, sale, or exchange of collateral or cash flow producing assets without lender approval?
   - A credit agreement that contains financial covenants, reporting covenants, and compliance monitoring? Does the loan contain covenant-lite and PIK toggle loan structures? If so, does the borrower have the ability to repay the loan under the contractual terms?
   - Guidelines for acceptable collateral types, loan-to value-guidelines, and acceptable collateral valuation methodologies?
   - Loan agreements that provide for the distribution of financial information to participants and investors?

Valuation Standards

1. Does the institution have policies for valuing illiquid, intangible, or hard to value collateral that include appropriate LTV ratios, discount rates, and collateral margins?
2. Is the institution relying on enterprise value to confirm a secondary source of repayment?
   a. Has the institution documented its valuation approach to calculating enterprise value?
   b. Has the valuation been performed by qualified persons independent of the origination function?
   c. Has one or a combination of three methods been used for determining enterprise value, asset valuation, income valuation, or market valuation?
   d. If the income method is used, is it based on capitalized cash flow or discounted cash flow?
   e. Has the institution confirmed proxy measures such as multiples of cash flow earnings or sales by performing its own discounted cash flow analysis?
   f. Are stress tests of key variables and assumptions used in determining enterprise value (such as cash flow earnings and sales multiples) conducted at origination and periodically thereafter?
   g. Does the institution have established limits for the proportion of individual transactions and the total portfolio that are supported by enterprise value?

Pipeline Management

1. Do strong risk-management controls cover all transactions in the pipeline, including amounts planned for hold and those marked for distribution?
2. Does the institution have the capability to differentiate transactions based on their key characteristics, tenor, and investor class (pro-rata and institutional), structure, and key borrower characteristics (for example, industry)?
3. Does the institution have the following controls for pipeline exposure:
   - A documented appetite for underwriting pipeline risk that considers the potential effects on earnings, capital, and liquidity?
   - Written policies and procedures for "hung deals" or deals that are not sold down within a reasonable or 90-day period?

  - Have transactions reclassified as hold-to-maturity been reported to management and the board of directors?
- Guidelines for conducting periodic stress tests of pipeline exposures?
- Controls to monitor expected vs. actual performance?
- Reports that show individual and aggregate transaction information, risk ratings and concentrations?
- Limits on hold levels per borrower, counterparty, and aggregate hold levels?
- Limits on the amounts intended for distribution?
- Policies and procedures for acceptable accounting methods, including prompt recognition of losses?
- Policies and procedures around acceptable hedging practices if applicable?
- Plans to address contingent liabilities and compliance with Sections 23A and 23B of the Federal Reserve Act and Regulation W?

Reporting and Analytics

1. Does management receive quarterly comprehensive reports about the characteristics and trends of the institution's leveraged lending portfolio? Are summaries provided to the board of directors?
2. Do internal policies identify the data fields to be populated and captured by the institution's MIS? Are the reports accurate and timely?
3. As dictated by the size and complexity of the leveraged lending portfolio, does MIS reporting on the leveraged lending portfolio include the following:
   a. Individual and portfolio exposures within and across all business lines and legal vehicles including the pipeline?
   b. Risk-rating distribution and migration analysis?
   c. A list of borrowers who have been removed from the leveraged lending portfolio due to improvements in their financial characteristics and risk profile? Is the removal from the profile concurrent with a refinance, restructure or some other modification in the loan agreement?
   d. Industry mix and maturity profile?
   e. Metrics derived from probability of default and loss-given default?
   f. Portfolio performance measures including covenant breaches, restructurings, delinquencies, nonperforming asset amounts, and charge offs?
   g. Amount and nature of impaired assets and the amount of ALLL attributable to leveraged lending?
   h. The level of policy exceptions in the portfolio?
   i. Exposures by collateral type, including unsecured transactions when enterprise values will be the only source of repayment?
   j. Defaults that trigger *pari-passu* treatment for all lenders?
   k. Secondary market pricing data and trading volume (when available)?
   l. An aggregation of exposures by and performance of deal sponsors?
   m. An indication of gross and net exposures, hedge and counterparty concentrations; and indication of policy exceptions?
   n. Actual vs. projected distribution levels of the pipeline with reports of excess levels of exposure over hold targets?
   o. *Types of exposure in the pipeline:* committed exposures not accepted by the borrower; exposures committed and accepted but not closed; funded and unfunded commitments closed but not distributed?
   p. *Total and segmented exposures:* subordinated debt and equity holdings (compared to limits); global exposures; indirect exposure (to an obligor or if the institution is holding a previously sold position as collateral or as a reference asset in a derivative)?
   q. Exposures booked in other business units throughout the institution that are related to a leveraged loan or borrower? (For example, default swaps or total return swaps naming the distributed paper as a covered or referenced asset or as collateral exposure through repo transactions).
   r. Positions held in leveraged loans in available for sale or traded portfolios or held in structured-investment vehicles owned or operated by the originating institution or its subsidiaries or affiliates?

Internal Risk Rating

1. Does the institution have evidence of adequate repayment capacity? For example, do borrowers demonstrate the ability to fully amortize senior debt or repay at least 50 percent of total debt over a five- to seven-year period?
2. Are there extensions or other restructuring that are masking an inability to repay?
3. Has the primary source of repayment become inadequate? Is enterprise value being relied on as a secondary source of repayment? Is enterprise value well supported with binding purchase and sale agreements with qualified third parties? Does enterprise value consider the borrower's distressed circumstances?

Credit Analysis

1. Does transaction testing of individual leveraged lending credits contain the following elements and show that:
   a. *Cash flow analysis*—The analysis does not rely on overly optimistic or unsubstantiated projections of sales, margins, or merger and acquisition synergies?
   b. *Liquidity analysis*—There are measures to determine operating cash needs and cash needed to meet debt maturities? Analyze liquidity based on industry performance metrics?
   c. *Projections*—There is adequate margin for unanticipated merger-related integration costs?
   d. *Stress tests*—Projections are stress tested for one or more downside scenarios, including a covenant breach?
   e. *Variances from plan*—Transactions are reviewed at least quarterly to determine variance from plan; does the credit file contain a chronological rationale for and analysis of all changes to the operating plan and variances from the expected financial performance?
   f. *Enterprise value*—Were enterprise values independently derived and validated outside of the origination function? Were values calculated timely and did they consider value erosion?
   g. *Collateral shortfalls*—Have shortfalls been identified and factored into the risk rating?
   h. *Collateral liquidation and asset sales*—Are any liquidations and sales based on current market conditions and trends?
   i. *Contingency plans*—Are there contingency analyses to anticipate changing conditions in debt or equity markets? Do the exposures rely on refinancing or the issuance of new equity?
   j. *Interest rate risk and foreign exchange risk*—Have these risks been addressed in the analysis? Are mitigants in place?

Problem Credit Management

1. Has the institution formulated and established procedures for dealing with problem credits?
2. Do work out plans contain quantifiable objectives and measurable time frames?
3. Are problem credits regularly reviewed for risk-rating accuracy, accrual status, recognition of impairment through specific allocations and charge-offs.

Deal Sponsors

1. Has the institution developed guidelines for evaluating the willingness and ability of sponsors to support the credit exposure and a process to regularly monitor sponsor performance?
2. Determine if the credit analysis has considered:
   a. If the sponsor is relied on as a secondary source of repayment and not a primary source of repayment?
   b. If the sponsor has a historical pattern of supporting investments, financially or otherwise?
   c. If the degree of support has been documented via a guarantee, comfort level, or verbal assurance?
   d. If there has been a periodic review of the sponsor's financial statements, an analysis of liquidity, and an analysis of the sponsor's ability to support multiple deals?
   e. If consideration has been given to the sponsor's dividend and capital contribution practices and the likelihood that the sponsor will support the borrower as compared to other deals in the sponsor's portfolio?

Credit Review

1. Does the institution conduct an internal credit review of the leveraged lending portfolio regularly, but at least once per year?
2. Does the institution ensure that credit review personnel have the knowledge and ability to identify risks in the leveraged lending portfolio?

Stress Testing

1. Has the institution developed and implemented guidelines for conducting periodic portfolio stress tests on loans originated to hold and on loans originated to distribute?
2. Has the institution conducted periodic loan and leveraged lending portfolio level stress tests?
3. If applicable, has the leveraged lending portfolio been included in enterprise wide stress tests?
4. Does stress testing of leveraged credits include sensitivity analyses to quantify the potential impact of changing economic and market conditions on the institution's asset quality, earnings, liquidity, and capital?

Reputational Risk

1. Does the institution have procedures, safeguards, actions, training, and staff reminders about the potential reputational risk associated with poorly underwritten originated leveraged loans?
2. Has there been any failure or apparent failure by the institution to meet its legal responsibilities in underwriting and distributing transactions that could damage its reputation or its ability to compete?

Conflicts of Interest

1. Has the institution developed appropriate policies and procedures to address and to prevent potential conflicts of interest when it has both equity and lending positions?
2. Do policies and procedures:
   a. Clearly define potential conflicts of interest?
   b. Identify appropriate risk-management controls and procedures?
   c. Enable employees to report potential conflicts of interest to managements without fear of retribution?
   d. Ensure compliance with applicable laws?
3. Has management:
   a. Established a training program for employees on appropriate practices to follow to avoid conflicts of interest?
   b. Provided for reporting, tracking, and resolution of any conflicts?

Compliance

1. Does the institution maintain an independent compliance review function to periodically review its leveraged lending activity?
2. Do the institution's policies include safeguards to prevent violations of anti-tying regulations?
3. How does the institution ensure compliance with applicable securities laws, including disclosure and other regulatory requirements when equity interests and certain debt instruments have been used in leveraged transactions that may constitute ''securities'' under federal securities laws?
4. Have plans and provisions been developed to ensure compliance with sections 23A and 23B of the Federal Reserve Act and Regulation W?

INTRODUCTION

A direct financing lease is one in which the lessor's only source of revenue is interest. The lessor buys an asset and leases it to the lessee. This transaction is an alternative to the more customary lending arrangement in which a borrower uses the loan proceeds to purchase an asset. A direct financing lease is the functional equivalent of a loan.

Leasing is a recognized form of financing that provides a lessee (the customer) the right to use depreciable assets without tying up working capital. Leasing frequently offers the lessee greater flexibility than traditional bank term-loan financing. Leasing also provides the lessor (the owner of the asset) with a generally higher rate of return than lending, but this is in exchange for assuming greater risk or investing more resources in marketing and deal structuring. The higher risk inherent in a typical lease transaction is due to the higher advance to collateral value; a longer payment period; and, in some cases, the lessor's dependence on the sale of the leased property to recover a portion of the capital investment. In most instances, some or all of the higher rate of return for the lessor is derived from the tax benefits of depreciable asset ownership.

While leases differ from loans in some respects, they are similar from a credit viewpoint because the basic considerations are cash flow, repayment capacity, credit history, management, and projections of future operations. Additional considerations are the type of property being leased and its marketability in the event of default or termination of the lease. However, these latter considerations do not radically alter how an examiner evaluates collateral for a lease. The assumption is that the lessee/borrower will generate sufficient funds to liquidate the lease/debt. Leases are generally structured so that the bank recovers the full cost of the equipment plus an interest factor over the course of the lease term. Sale of the leased property/collateral remains a secondary source of repayment and, except for the estimated residual value at the expiration of the lease, will not, in most cases, become a factor in liquidating the advance.

In general, leasing activities of state member banks are governed by federal tax law and applicable state law. The leasing of personal or real property or acting as agent, broker, or adviser in leasing such property is considered a "closely related nonbanking activity" and is therefore permitted in accordance with the requirements of section 225.28(b)(3) of Regulation Y for a bank holding company (BHC) or subsidiary thereof. While not specifically applicable to banks, these Regulation Y requirements provide useful guidelines for reviewing the appropriateness and prudence of bank leasing activities as well as considering any safety-and-soundness implications.

A BHC can act as an agent, broker, or adviser in leasing personal or real property only if—

- the lease is on a nonoperating basis[1] and
- the initial term of the lease is at least 90 days.

For leases involving real property—

- the effect of the transaction at the inception of the initial lease must be to yield a return that will compensate the lessor for not less than the lessor's full investment in the property plus the estimated total cost of financing the property over the term of the lease, such return to be derived from rental payments, estimated tax benefits, and the estimated residual value of the property at the expiration of the initial lease; and
- the estimated residual value cannot exceed 25 percent of the acquisition cost of the property to the lessor.[2]

1. With respect to the "nonoperating basis" requirement, a BHC may not, directly or indirectly, engage in operating, servicing, maintaining, or repairing leased property during the term of the lease. For automobile leasing, this requirement means that a BHC may not, directly or indirectly, (1) provide servicing, repair, or maintenance of the leased vehicle during the lease term; (2) purchase parts and accessories in bulk or for an individual vehicle after the lessee has taken delivery of the vehicle; (3) provide the loan of an automobile during servicing of the leased vehicle; (4) purchase insurance for the lessee; or (5) provide for the renewal of the vehicle's license merely as a service to the lessee when the lessee could renew the license without authorization from the lessor. The BHC can arrange for a third party to provide these services or products.

2. For more information, see the *Bank Holding Company Supervision Manual* section entitled "Section 4(c)(8) of the BHC Act (Leasing Personal or Real Property)."

ACCOUNTING FOR DIRECT FINANCING LEASES

Leases should be accounted for in accordance with accounting standards issued by the Financial Accounting Standards Board (FASB). The lease accounting standard currently applied by public business entities, "Leases (Topic 842)," was issued by the FASB in February 2016, and will fully supersede ASC Topic 840, "Leases," by 2021.[3] In addition, more specific information on the capitalization of leases is provided in ASC Topic 840, "Accounting for Direct Financing Leases." The Consolidated Reports of Condition and Income (Call Report) and related instructions provide more information on the capitalization of leases and specify regulatory reporting requirements for leases.

Lessors employ a variety of methods to account for their investments in leases. A direct financing lease is a type of capital lease that transfers substantially all the benefits and risks inherent in the ownership of the leased property to the lessee. In addition, collection of the minimum lease payments must be reasonably predictable, and no important uncertainties may exist regarding costs to be incurred by the lessor under the terms of the lease. Although minor variations in accounting methods are still found, most investment-in-leases accounts will be equal to—

- the sum of the minimum lease payments to be received from the lessee, plus
- the unguaranteed residual value (estimated fair market value) of the property at the end of the lease term, reduced by
- the amount of unearned and deferred income to be recognized over the life of the lease.

For the purpose of illustration, assume that property costing $120,000 is leased for a period of 96 months at $1,605 per month, and the estimated residual value (ERV) of the property is $24,000. In this example, income is recognized monthly according to the sum of the months' digits method. The investment in this lease is calculated below, followed by an explanation of each component of the net investment.

Cost	$120,000
Unearned income	34,080
Rentals receivable (96 × $1,605)	154,080
Est. residual value	24,000
Gross investment	178,080
Less:	
Unearned income	34,080
Unearned income (ERV)	24,000
Net investment	120,000

Rentals Receivable

This account is established in the amount of total rental payments to be received from the lessee. The amount by which the rentals receivable ($154,080) exceeds the cost of the property ($120,000) is the functional equivalent of interest and represents a portion of the income to be recognized over the life of the lease. In the example below, the cost of the property is temporarily charged to a fixed-asset account, then transferred to rentals receivable.

Fixed assets	$120,000	
Cash		120,000
To record purchase or property for lease		
Rentals receivable	154,080	
Fixed assets		120,000
Unearned income		34,080
To record amount due from lessee		

3. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, for banks that are public business entities (PBEs). For banks that are not PBEs, the guidance is effective for fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. For further information, see the Glossary entries in the Call Report Instructions for "public business entity" and "private company." Early adoption is permitted for all banks. An institution that early adopts these standards must apply them in their entirety. If an institution chooses to early adopt these standards for financial reporting purposes, the institution should implement them in its Call Report for the same quarter-end report date.

Throughout the lease term, the rentals-receivable account is periodically reduced by the full amount of each rental payment received.

Cash	$1,605	
Rentals receivable		1,605
To record receipt of monthly payment		

Estimated Residual Value

The ERV represents the proceeds the lessor expects to realize at the end of the lease term from the sale or re-leasing of the property. Exactly as its title states, this account represents only an estimate of future value and does not represent current market value or depreciated book value. The residual value at the end of the lease term is considered to be income, and the corresponding credit for this asset account is posted to unearned income.

The balance of the ERV account does not normally change significantly during the lease term. The bank (lessor) should review the unguaranteed residual value at least annually to determine whether a decline, other than a temporary one, has occurred in its estimated value. If a decline is not temporary, the accounting for the lease transaction should be revised using the new estimate, and the resulting loss should be recognized in the period that the change is made. Upward adjustments or increases in the residual value are not recognized.

After the end of the term, the residual value account is eliminated from the books upon sale, re-lease, or other disposition of the property. If the amount of proceeds received differs from the recorded residual value, the difference will be recognized as either a gain or loss, whichever is appropriate.

Est. residual value	$24,000	
Unearned income		24,000
To record ERV of leased property		
Cash	26,000	
Est. residual value		24,000
Gain on sale		2,000
To record sale of property		

Any portion of the ERV guaranteed by a party unrelated to the lessor would be deducted from the ERV account and added to rentals receivable.

Unearned Income

This liability account has a credit balance and is netted against the total of rentals receivable and the ERV for balance-sheet presentation. Its component parts are the "interest" income equal to the excess of rentals receivable over the cost of the property and the income to be realized from disposition of the property at the end of the lease term. Each of these components is recognized as income throughout the life of the lease by periodic transfers to earned income. Unearned income is amortized to income over the lease term to produce a constant periodic rate of return on the net investment in the lease. Any other method, such as the sum-of-the-months'-digits method, may be used if the results obtained are not materially different from those that would result from the interest method described in the preceding sentence and if the resulting impact does not overstate income during the current period. Loan-origination fees and initial direct costs, such as commissions and fees that are incurred by the lessor in negotiating and consummating the lease, are offset against each other, and the resulting net amount is deferred and recognized over the lease term. Recognizing a portion of the unearned income at the inception of the lease to offset initial direct costs is not acceptable.

Depreciation

For certain leases, the lessor is entitled to claim depreciation for tax purposes. However, for financial statement purposes, no depreciation for leased property will appear on the income statement and no accumulated depreciation will appear on the balance sheet. If the lessor is entitled to the benefits of depreciation, then, for tax purposes only, depreciation will be calculated and will reduce the lessor's tax liability.

The lessor's entitlement to depreciation tax benefits is a function of the type of lease arrangement negotiated. When the lessor retains title to the asset and owns the asset at the expiration of the lease, the lessor may take depreciation into account for tax purposes. These

characteristics are typical of a "true," "net," or "capital" lease, terms often used interchangeably in the industry. In a "financing" lease, the lessee rather than the lessor acquires title to the property at the expiration of the lease and is entitled to depreciation tax benefits. Accordingly, the lessor will charge the lessee a higher periodic lease payment (for a higher "rate of return") to offset its loss of depreciation tax benefits.

Balance-Sheet Presentation

Lease receivables are to be reported on the balance sheet as the single amount "net investment" (see below). If the lessor has established an allowance for possible lease losses, this amount is included in the total allowance for loan and lease losses and represents a deduction from the net investment. Footnotes to the balance sheet should disclose the components of the net investment, as follows:

Rentals receivable	$154,080
Est. residual value	24,000
Gross investment	178,080
Less:	
Unearned income	58,080
Net investment	$120,000

For Call Report purposes, lease financing receivables are reported net of unearned income as part of an institution's total loans.

Classification

If it is deemed appropriate to classify a lease, the amount at which the lease would be classified is the net investment. For example, assume that 94 of the 96 payments have been received on the above lease, that income has been recognized monthly according to the sum-of-the-months'-digits method, and that the lease is now considered a loss. Its balance on the books is $27,173, as follows:

Rentals receivable	$ 3,210
Est. residual value	24,000
Gross investment	27,210
Less:	
Unearned income	22
Unearned income (ERV)	15
Net investment	27,173

Classification of the $27,173 balance of this lease involves classifying $3,188 of the unrecovered portion of the cost of the property ($3,210 less $22 unearned income) plus $23,985 of income that has already been recognized in anticipation of receiving the ERV ($24,000 less $15 not yet recognized). In short, the calculation is $3,188 + $23,985 = $27,173.

Charging off the ERV included in the net investment treats the lease as if the underlying property has no value and, in effect, reverses the unearned income that has been recognized in anticipation of selling the leased property at its recorded ERV. Accordingly, if the property does have value, the $27,173 classified should be reduced by the net amount that the lessor could realize by selling the property.

Delinquency

The percentage of delinquency in the lease portfolio is calculated by dividing the aggregate rentals receivable on delinquent leases (less the "interest" components of their unearned income accounts) by the total of rentals receivable on all leases (less the "interest" components of their unearned income accounts). ERVs would not be included in the delinquent amounts since they do not represent obligations of the lessees.[4]

If the lease obligation in the previously described classification example was the only delinquent obligation in a portfolio of leases with component accounts as shown below, the rate of delinquency in the portfolio would be 3.4 percent.

4. For more information on reporting delinquent leases in the report of examination, see section 1001.1, "Community Bank Supervision Process."

Rentals receivable	$ 94,411
Est. residual value	705,882
Gross investment	800,293
Less:	
Unearned income	647
Unearned income (ERV)	441
Net investment	$799,205

$$\frac{\$3{,}210 - 22}{\$94{,}411 - 647} = 3.4\%$$

Termination of a Lease

The termination of a lease is recognized in the income of the period in which the termination occurs by eliminating the remaining net investment from the lessor's account. The lease property is then recorded as an asset using the lower of the original cost, present fair value, or present carrying amount.

LEVERAGED LEASES

Leveraged leasing is a specialized form of direct financing lease that involves at least three parties: a lessee, a long-term creditor (the debt participant), and a lessor (the equity participant). This type of lease transaction is complex because it usually involves a large dollar amount, a significant number of parties, complex legal issues, and the unique advantages to all parties. In a leveraged lease, the lessor purchases and becomes owner of the equipment by providing only a percentage (usually 20 to 40 percent) of the capital needed. The rest of the purchase price is borrowed by the lessor from long-term lenders on a nonrecourse basis. The borrowings are secured by a first lien on the equipment, an assignment of the lease, and an assignment of the lease payments.

Legal expenses and administrative costs associated with leveraged leasing limit its use to financing large capital-equipment projects. Leveraged leases are generally used to take advantage of favorable tax benefits unique to this type of financing for the participants in the transaction. By tailoring the tax effects to the needs of the parties involved, the structure of a leveraged lease permits multiple tax benefits and maximum investment return. The lessor is in search of a tax shelter to offset income generated from other sources, while the lessee bargains for lower rental charges in exchange for the tax advantage the lessor receives. The result of this trade-off ideally produces an attractive rate of return on the lessor's invested dollars, while the lessee conserves working capital and obtains financing at a cost substantially below the lessee's usual borrowing rate.

If the equipment being purchased is costly, such as heavy construction equipment or a fleet of airplanes, there may be several equity owners and debtholders involved. In this case, an owner trustee may be named to hold title to the equipment and to represent the equity owners. An indenture trustee may be named to hold the chattel mortgage on the property for the benefit of the debtholders.

The lessor (equity holder), as the owner, is allowed to take accelerated depreciation based on the total cost of the equipment. The lessor might also receive a small portion of the rental payments, but the desired yield is obtained from the timing of depreciation. The effect gives the lessor a return through the tax benefits and a small amount of rental income and allows the lessor to retain the residual value rights to the equipment at the end of the lease period.

The bank should consider its present and anticipated future tax position, its future money rates, and the residual value of the property. The return on the bank's investment in leveraged leases depends largely on these factors. A slight change can precipitate significant changes in the bank's position. Anticipated proceeds from the sale or re-leasing of the property at the conclusion of the lease term (the residual value) is an important element of the return and should be estimated carefully. It will, in most cases, exceed 25 percent of the purchase price because of certain tax requirements. The bank should continually evaluate the property for misuse, obsolescence, or market decline, all of which can rapidly deteriorate the value of the property before the lease term expires. In these cases, the lessee may default, often with expensive consequences for the lessors.

A portion of the bank's recapture of its investment in leased property is often predicated on the inherent tax benefits. Accordingly, a decline in the bank's ability to use these tax benefits could reduce or eliminate the profitability of the venture.

Given the complexity of leveraged leasing it

is important to carefully scrutinize each indenture and all parties involved in the leveraged leasing transaction. It is important to consider each lease from the standpoint of the creditworthiness of the lessee and the assessed value of the leased property. If the lessee defaults, the loan participant is in a position to foreclose and take ownership of the property, which leaves the bank without a way to recapture the carrying value of its investment. Therefore, in assessing the credit risk of a leveraged lease transaction, a bank should evaluate the business risk associated with the lease's operating cash flows.

The lessor's net investment in a leveraged lease is recorded in a manner similar to that for a direct financing lease, but net of the principal and interest on the nonrecourse debt. The components of the net investment, including related deferred taxes, should be fully disclosed in the footnotes to the lessor's financial statements when leveraged leasing is a significant part of a bank's business activities.

ASC 840 provides guidance on how to account for a leveraged lease. In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)," which supersedes ASC 840. Leases classified as leveraged leases prior to the adoption of Topic 842 may continue to be accounted for under Topic 840 unless subsequently modified. Topic 842 eliminates leveraged lease accounting for leases that commence after an institution adopts the new accounting standard.

POLICY CONSIDERATIONS

1. Assess the adequacy of leasing policies, procedures, and practices by considering
   - the frequency and timeliness of policy reviews and updates by the board of directors;
   - whether policies address
     - — acceptable product lines and asset acquisition practices;
     - — pre-approval and on-going reviews of equipment vendors and lease brokers;
     - — prudent underwriting standards;
     - — securitization of leases (if applicable);
     - — minimum down payments or deposits for each type of equipment or auto leased;
     - — documentation required for each type of equipment lease;
     - — appraisals of equipment and procedures for selecting appraisers;
     - — the control, maintenance, insurance, and disposition of asset inventories;
     - — the review of completed lease documents by legal counsel, including tax opinions;
     - — the allowable percentage of leasing components (financing amount and recapture of residual value in relation to the total cash flows); and
     - — the methodology for determining the allowance for loan and lease losses on lease receivables and ensuring it is appropriate under ASC Subtopic 450-20, "Contingencies—Loss Contingencies"; and
   - whether management established appropriate guidelines for
     - — establishing estimated residual values, periodic re-evaluations, and periodic portfolio impairment analysis of leased assets;
     - — establishing mark-to-market values and associated accounting procedures if assets leased on operating terms are periodically marked to market to mitigate end-of-lease residual risks;
     - — pre-purchase analysis of assets leased on operating terms. (This is particularly important for long-lived assets, which can have multi-year delays in delivery, underutilization risks, and high carrying costs);
     - — limits on concentration risks by industry, lease broker, and equipment type;
     - — limits on leveraged leases where the bank takes an equity position; and
     - — managing differences in book and tax accounting (deferred tax assets/liabilities). (Note: Banks commonly classify the same lease as a capital lease for regulatory reporting purposes, which requires allowance for loan and lease losses (ALLL) treatment, and as an operating lease for tax reporting purposes, which allows the bank to depreciate the underlying fixed asset according to an accelerated depreciation schedule, thus reducing the overall tax liability.)

DOCUMENTATION

2. Review a sample of lease files to determine if they are properly documented. In addition to the standard documentation required for other types of lending (such as credit applications and credit reports), the following documents unique to lease financing should be in the file, particularly for larger leases:
   - master lease agreement
   - lease schedule
   - lessee's resolution
   - lessee's acceptance form
   - purchase order and purchase order requirement
   - standard UCC-1 filing
   - inspection reports post installation (expected on larger leases)

ADMINISTRATION

3. Determine whether the bank has appropriate insurance on leased assets identified as having potential liability. (Note: As owner of the equipment being leased, the bank may be liable for claims in the event of an accident involving the equipment.)
4. Review asset acquisition and disposition records to ascertain if any conflict of interest or self-dealing is evident involving insiders, sellers, servicers, insurers, or purchasers of equipment.

5. Determine whether property held in inventory, designated as to-be-sold or leased again, is appropriately accounted for, maintained, and controlled. Consider if any assets held in this category warrant classification.
6. Review the bank's methodology for assigning estimated residual values and performing annual re-evaluations. ASC Paragraph 840-30-35-25, "Leases: Capital Leases—Subsequent Measurement – Estimated Residual Value" requires the lessor to review estimated residual values at least annually. If a decline in an estimated residual value is judged to be other than temporary, the bank shall account for the decline as a change in estimate, and charge a period loss in earnings for the reduction in the net investment of the lease. Banks should not make provisions to the ALLL to account for declines in estimated residual values. (Note: Inflated residual values could indicate the bank is aggressively pricing its leases. While the reduced lease payments may be attractive to the lessee, residual losses could increase for the lessor.)
7. Determine whether management has an effective system for tracking residual gains and losses. (Note: Increasing residual losses may be a sign that pricing competition contributed to inflated residual values. Institutions often use a termination report that reflects all the relevant information concerning leases that have or will soon mature. Check appropriate state laws for determining how long leased assets may be held on the bank's books before disposition.)
8. Determine whether leases meet one or more of the criteria for capital leases plus two additional criteria at the inception of the lease. (Note: If a lease is not accounted for as a direct financing lease, sales-type lease, or leveraged lease, refer to the Consolidated Report of Condition and Income (Call Report) instructions concerning operating leases.)
   - A lease is accounted for as a capitalized lease if any one of the following criteria is met:
     - — Ownership of the property is transferred to the lessee by the end of the lease term.
     - — The lease contains a bargain purchase option.
     - — The lease term represents at least 75 percent of the estimated economic life of the leased property.
     - — The present value of the minimum lease payments at the beginning of the lease is at least 90 percent of the fair value of the leased property.
   - Does the lease meet one or more of the capital lease criteria? If the answer is no, the lease is an operating lease. If the answer is yes, does the lease meet both of the following two criteria?
     - — Collectability of minimum lease payments is reasonably predictable.
     - — No important uncertainties surround the amount of un-reimbursable costs yet to be incurred by the lessor under the lease.

     If the answers are yes, the lease is a capital lease and must be classified as either a sales-type lease, direct financing lease, or a leveraged lease.
   - Does the lease give rise to manufacturer's or dealer's profit? If the answer is no, the lease is either a direct financing or leveraged lease. If the answer is yes, the lease is a sales-type lease. (Note: Leveraged leases are a form of direct financing lease that involves at least three parties, a lessee, a long-term creditor, and a lessor or equity participant. The financing provided by the long-term creditor is nonrecourse as to the general credit of the lessor. The lessor's net investment declines during the early years once the investment has been completed and rises during the later years of the lease before its final elimination.)
9. Based on the criteria above, determine if any direct financing leases are leveraged leases. If there are leveraged leases, determine whether prudent limits were established on the percentage of capital that the bank can have as an equity participant. Because of the complexity of leveraged leases, management is expected to exhibit sufficient expertise. (Note: Refer to the definition of lease accounting in the Call Report instructions for additional information.)
10. Review the lease portfolio for any concentrations, and assess the adequacy of leasing policies and practices by considering:
    - concentration types, such as by equipment manufacturer, industry, lease broker, and lease product;

- the appropriateness of established risk limits;
- the adequacy of risk analysis on concentrations; and
- the sufficiency of internal reporting and board oversight.

(Note: Significant lease concentrations should be detailed in the report of examination.)

11. Review compliance with internal lending limits and state legal lending limits. (Note: Sections 23A (12 USC 371c) and 23B (12 USC 371c-1) of the Federal Reserve Act (Regulation W) limit transactions with affiliates.)
12. Determine whether management has an effective system for tracking yields in the leasing portfolio. The yield analysis should include information on contractual lease rates, residual gains and losses, and associated tax implications.
13. Determine whether the bank's procedures require depreciation expenses on operating leases be charged at least quarterly. (Note: Operating leases do not transfer the risks and benefits of ownership to the lessee. The lessor is the owner of the property and is entitled to any tax benefits such as accelerated depreciation.)
14. Assess the appropriateness of management's reporting on delinquent and/or nonaccrual capital leases. Also, when an operating lease is past due 30 days or more, or in nonaccrual status, ensure that reporting includes operating lease payment receivables that have been recorded as other assets in the Call Report, Schedule RC, item 11.

LEASING COMPANY PARTNERSHIPS OR BROKERS—THIRD-PARTY RELATIONSHIPS

Note: Complete this section if leases are acquired through a partnership with a third party. Often banks form partnerships with independent leasing companies and fund the leasing company's originations. Refer to outstanding guidance for discussion of third-party risks (SR 13-19, "Guidance on Managing Outsourcing Risk").

15. Determine whether the bank funds leases originated by third parties. If applicable, assess the method the bank uses to fund leases originated by the third party by considering
    - the level of communication with the lessee prior to and after the lease origination;
    - the adequacy of independent credit analysis and underwriting of the proposed lease transaction; and
    - the method used by the bank to collect payments (lockbox, direct, periodic settlements with lessor, etc.).
16. Review legal agreements between the bank and the leasing company. Assess and document key items, such as lease servicing obligations, recourse provisions, remarketing of equipment at lease-end, and compliance issues.
17. Determine whether funding arrangements result in a concentration of risk for the bank. (Note: Reviewing the leasing company's financial statements may reveal whether the leasing arrangement transferred to the bank or remained with the leasing company. If the leasing arrangement remains with the leasing company, the bank's funding would likely show up as a liability (i.e., a borrowing) on the leasing company's balance sheet and be reported by the bank as a loan(s) to the leasing originator.)
18. Assess the adequacy of the bank's ongoing oversight and reporting of significant third-party funding arrangements. Consider the following:
    - financial reviews and monitoring of portfolio performance;
    - periodic independent reviews;
    - monitoring of, and reporting on, credit support provided by the leasing company (such as when the leasing company advances funds on delinquent leases or pays off the bank if a lessee's financial condition deteriorates); and
    - periodic reports provided by the leasing company on serviced assets (e.g., collection and delinquency reports).
19. Evaluate the bank's controls for and reviews of leasing companies that service assets for the bank by considering
    - the independence and qualifications of reviewers,
    - the scope of reviews,
    - the adequacy of transaction testing, and
    - the adequacy of review documentation.

CLASSIFICATION

20. Classify credits and assign allocations to the ALLL as appropriate. When evaluating the credit quality of a capital lease, consider the following:
    - the lessee's ability to properly amortize the fixed obligation;
    - the lessee's ability to pay any unamortized balance (balloon payment) at lease maturity;
    - the lessee's projected cash flows compared to its achieved operational results;
    - the reasonableness of estimated residual values and exposure to loss at the end of the lease term;
    - whether the estimated residual value was reviewed in the last 12 months;
    - support of the collateral; and
    - support by guarantors, if applicable. (Note: If the collateral is a long-lived, depreciable asset (e.g., commercial aircraft, oil/natural gas tanker, oil drilling/rigging equipment) and value erosion is uneven during the lease term, amortization should likely be accelerated to ensure that loan-to-value ratios (LTVs) remain within policy during the life of the lease. Such leases look much like mortgages on real estate with respect to the size of exposures and term; however, the collateral value is expected to erode. As such, accelerated amortization is usually necessary to keep LTVs within policy limits.)

This section applies to most types of loans found in a consumer loan department. Consumer credit, also referred to as retail credit, is defined as credit extended to individuals for household, family, and other personal expenditures, rather than credit extended for use in a business or for home purchases. Consumer credit loans are loans not ordinarily maintained by either the commercial or real estate loan departments. Consumer loans frequently make up the largest number of loans originated and serviced by the bank, but their dollar volume may be significantly less than for other types of loans. Consumer credit loans may be secured or unsecured and are usually structured with short- or medium-term maturities. Broadly defined, consumer credit includes all forms of *closed-end credit (installment credit)* and *open-end credit (revolving credit),* such as check credit and credit card plans. Consumer credit also includes loans secured by an individual's personal residence, such as home equity and home-improvement loans. Home equity loans are discussed in "Real Estate Loans," section 2090.1.

The examiner should determine the adequacy of the consumer credit department's overall policies, procedures, and credit quality. The examiner's goal should not be limited to identifying current portfolio problems but should also include identifying potential problems that may result from liberal lending policies, unfavorable trends, potentially imprudent concentrations, or nonadherence to established policies. Banks lacking written policies, or failing to implement or follow established policies effectively, should be criticized in the report of examination.

TYPES OF CONSUMER CREDIT

Installment Loans

Many traditional forms of installment credit have standard monthly payments and fixed repayment schedules of one to five years. These loans are made with either fixed or variable interest rates that are based on specific indices. Installment loans fill a variety of needs, such as financing the purchase of an automobile or household appliance, financing home improvement, or consolidating debt. These loans may be unsecured or secured by an assignment of title, as in an automobile loan, or by money in a bank account.

A bank's installment loan portfolio usually consists of a large number of small loans, each scheduled to be amortized over a specific period. Most installment loans are made for consumer purchases; however, amortizing commercial loans are sometimes placed in the installment loan portfolio to facilitate their servicing. In addition, the installment loan portfolio can consist of both loans made by the bank and loans purchased from retail merchants who originated the loans to finance the sale of goods to their customers.

Indirect Installment Loans

Indirect installment loans are also known as dealer loans, sales-finance contracts, or dealer paper. In this type of consumer credit, the bank purchases, sometimes at a discount, loans originated by retailers of consumer goods, such as a car dealer. This type of lending is called indirect lending because the dealer's customer indirectly becomes a customer of the bank.

The sales-finance contracts purchased from dealers of consumer goods are generally closed-end installment loans with a fixed rate of interest. These loans are purchased in one of three ways depending on the dealer and the circumstances of purchase:

- *Without recourse.* The bank is responsible for collecting the account, curing the delinquency, or applying the deficiency against dealer reserves or holdback accounts. The majority of sales-finance contracts with dealers are without recourse.
- *Limited recourse.* The dealer will repurchase the loan, cure the default, or replace the loan only under certain circumstances in accordance with the terms of the agreement between the bank and the dealer.
- *With recourse.* The dealer is required to repurchase the loan from the bank on demand, typically within 90 to 120 days of default.

In the case of recourse and limited-recourse loans, legal lending limitations need to be considered.

Sales-finance contracts purchased without recourse from dealers should be based on the

individual's creditworthiness, *not* on the financial strength of the dealership itself. The contracts purchased should comply with the bank's loan policy for similar consumer loans. Exceptions to the bank's policies and procedures should be documented in the credit file and have the appropriate level of approval. For sales-finance contracts purchased with recourse that do not meet the bank's normal credit criteria and are purchased on the basis of the added strength of the dealer, the bank should document the minimum criteria for such loans and the specific bank-approved financial covenants with which the dealer must comply.

Check Credit and Overdraft Protection

Check credit is defined, for the purpose of this manual, as the granting of unsecured, interest-bearing revolving lines of credit to individuals or businesses. Such extensions of credit are subject to the disclosure requirements of the Truth in Lending Act (TILA). Banks provide check-credit services through overdraft protection, cash reserves, and special drafts.

The most common product is overdraft line-of-credit protection, whereby a transfer is made from a preestablished line of credit to a customer's deposit account when a check is presented that would cause the account to be overdrawn. Transfers normally are made in specific increments, up to a maximum line of credit approved by the bank.

In a cash reserve system, the customer must request that the bank transfer funds from a preestablished line of credit to his or her deposit account. To avoid overdrawing the account, the customer must request the transfer before negotiating a check against the account.

In a special draft system, the customer negotiates a special check drawn directly against a preestablished line of credit. In this method, deposit accounts are not affected.

In all three systems, the bank periodically provides its check-credit customers with a statement of account activity. Required minimum payments are computed as a fraction of the balance in the account on the cycle date and may be made by automatic charges to the deposit account.

Banks also provide credit through ad hoc and automated overdraft-protection programs. Typically, ad hoc programs involve insured depository institutions' providing discretionary coverage of customers' overdrafts on a case-by-case basis. Automated overdraft-protection programs, also referred to as *bounced-check protection* or *overdraft protection,* are credit programs increasingly offered by institutions to transaction-account (typically deposit-account) customers as an alternative to traditional check-credit and ad hoc programs for covering overdrafts.

Under both the ad hoc and automated programs, regardless of whether an overdraft is paid, institutions typically impose a fee when an overdraft occurs. This fee is referred to as a nonsufficient-funds, or NSF, fee. Unlike the discretionary ad hoc accommodation typically provided to those lacking a line of credit or other type of overdraft service (such as linked accounts), automated programs are often marketed to consumers and may give consumers the impression that the service is a guaranteed short-term credit facility. These marketed programs typically provide consumers with an express overdraft "limit" that applies to their account.

Neither the ad hoc nor the automated overdraft programs are subject to the annual percentage rate (APR) disclosure requirements of TILA. These programs are, however, subject to the disclosure requirements of the Truth in Savings Act (TISA) and Regulation DD.

The specific details of institutions' overdraft-protection programs have varied over time. The programs currently offered by institutions incorporate some or all of the following characteristics:

- Institutions inform consumers that overdraft protection is a feature of their accounts and promote consumers' use of the service. Institutions may also inform consumers of their aggregate dollar limit under the overdraft-protection program.
- Coverage is automatic for consumers who meet the institution's criteria (for example, the account has been open a certain number of days, and deposits are made regularly). Typically, the institution performs no credit underwriting.
- Overdrafts generally are paid up to the aggregate limit set by the institution for the specific class of accounts. Limits are typically $100 to $500.
- Many program disclosures state that payment of an overdraft is discretionary on the part of the institution and may disclaim any legal

obligation of the institution to pay any overdraft.

- The service may extend to check transactions as well as other transactions, such as withdrawals at automated teller machines (ATMs), transactions using debit cards, preauthorized automatic debits from a consumer's account, telephone-initiated funds transfers, and online banking transactions.
- A flat fee is charged each time the service is triggered and an overdraft item is paid. Commonly, a fee in the same amount would be charged even if the overdraft item was not paid for nonsufficient funds. A daily fee may also apply for each day the account remains overdrawn.
- Some institutions offer closed-end loans to consumers who do not bring their accounts to a positive balance within a specified time period. These repayment plans allow consumers to repay their overdrafts and fees in installments.

To assist insured depository institutions in the responsible disclosure and administration of overdraft-protection services, particularly those that are marketed to consumers (a depository institution's customers), the federal banking and thrift agencies issued Joint Guidance on Overdraft Protection Programs. The interagency guidance, issued on February 18, 2005, addresses the agencies' concerns about the potentially misleading implementation, marketing, disclosure, and operation of these programs. (See the "Best Practices" section of the guidance.) The guidance also discusses the agencies' safety-and-soundness considerations and the legal risks of such programs. Institutions are encouraged to carefully review their programs to ensure that their marketing and other communications concerning the programs (1) do not mislead consumers into believing that their programs are traditional lines of credit (when they are not) or that payment of overdrafts is guaranteed, (2) do not mislead consumers about their account balance or the costs and scope of the overdraft protection offered, and (3) do not encourage irresponsible consumer financial behavior that may potentially increase the institution's risk. See SR-05-3 and the attached interagency guidance for detailed discussions of the agencies' concerns and best practices (for marketing and communication with consumers and program features and operation). See also section 3000.1.

Safety-and-Soundness Considerations

When overdrafts are paid, credit is extended to an institution's customers. To the extent overdraft-protection programs lack individual account underwriting, these programs may expose an institution to more credit risk (higher delinquencies and losses) than overdraft lines of credit and other traditional overdraft-protection options.

Institutions providing overdraft-protection programs should adopt written policies and procedures adequate to address the credit, operational, and other risks associated with these types of programs. Prudent risk-management practices include the establishment of express account-eligibility standards and well-defined and properly documented dollar-limit decision criteria. Institutions should also monitor these accounts on an ongoing basis and be able to identify consumers who may represent an undue credit risk to the institution. Overdraft-protection programs should be administered and adjusted, as needed, to ensure that credit risk remains in line with expectations. Program adjustments may include, as appropriate, disqualification of a consumer from future overdraft protection. Management should regularly receive reports sufficient to enable it to identify, measure, and manage overdraft volume, profitability, and credit performance.

Institutions are also expected to incorporate prudent risk-management practices related to account repayment and suspension of overdraft-protection services. These practices include the establishment of specific time frames for when consumers must pay off their overdraft balances. For example, procedures should be established for the suspension of overdraft services when an account holder no longer meets the eligibility criteria (such as when the account holder has declared bankruptcy or defaulted on another loan at the bank) as well as for when an account holder does not repay an overdraft. In addition, overdraft balances should generally be charged off when considered uncollectible, but no later than 60 days from the date first overdrawn. In some cases, an institution may allow a consumer to cover an overdraft through an extended repayment plan when the consumer is unable to bring the account to a positive balance within the required time frames. The existence of the repayment plan, however, would not extend the charge-off determination period beyond 60 days (or a shorter period if applicable), as measured from the date of the overdraft. Any payments

received after the account is charged off (up to the amount charged off against the allowance for loan and lease losses) should be reported as a recovery.

Some overdrafts are rewritten as loan obligations in accordance with an institution's loan policy and are supported by a documented assessment of that consumer's ability to repay. In those instances, the institution should use the charge-off time frames described in the Federal Financial Institutions Examination Council's Uniform Retail Credit Classification and Account Management Policy (revised June 6, 2000; effective December 31, 2000). (See SR-00-8.)

Institutions should follow generally accepted accounting principles and the instructions for the Reports of Condition and Income (Call Reports) to report income and loss recognition on overdraft-protection programs. Overdraft balances should be reported on the Report of Condition of the bank Call Report as loans. Accordingly, overdraft losses should be charged off against the allowance for loan and lease losses. All institutions are expected to adopt rigorous loss-estimation processes to ensure that overdraft-fee income is accurately measured. Such methods may include providing loss allowances for uncollectible fees or, alternatively, only recognizing that portion of earned fees estimated to be collectible.[1] The procedures for estimating an adequate allowance should be documented in accordance with the July 2, 2001, interagency Policy Statement on the Allowance for Loan and Lease Losses Methodologies and Documentation for Banks and Savings Institutions.[2] (See SR-01-17.)

If an institution advises account holders of the available amount of overdraft protection, for example, when accounts are opened or on depositors' account statements or automated teller machine (ATM) receipts, the institution should report the available amount of overdraft protection with its other legally binding commitments, for Call Report purposes. These available amounts, therefore, should be reported as "unused commitments."

1. Uncollected overdraft fees may be charged off against the allowance for loan and lease losses if such fees are recorded with overdraft balances as loans and if estimated credit losses on the fees are provided for in the allowance for loan and lease losses.

2. The interagency policy statement was issued by the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision.

Risk-Based Capital Treatment of Overdraft Balances

Banks are expected to provide proper risk-based capital treatment of outstanding overdrawn balances and unused commitments. Overdraft balances should be risk-weighted according to the obligor. Under the risk-based capital guidelines, the capital charge on the unused portion of commitments is generally based on an off-balance-sheet credit-conversion factor and the risk weight appropriate to the obligor. (See section 3020.1.) In general, the capital guidelines provide that the unused portion of a commitment is subject to a zero percent credit-conversion factor if the commitment has an original maturity of one year or less, or to a 50 percent credit-conversion factor if the commitment has an original maturity over one year. Under the guidelines, a zero percent conversion factor also applies to the unused portion of a "retail credit card line" or "related plan" if it is unconditionally cancelable by the institution in accordance with applicable law. (See 12 CFR 208, appendix A, section III.D.5.) The phrase "related plans" in the guidelines includes overdraft checking plans. The overdraft-protection programs discussed in the agencies' February 18, 2005, guidance fall within the meaning of "related plans" as a type of "overdraft checking plan" for the purposes of the federal banking agencies' risk-based capital guidelines. Consequently, overdraft-protection programs that are unconditionally cancelable by the institution in accordance with applicable law would qualify for a zero percent credit-conversion factor.

Institutions entering into overdraft-protection contracts with third-party vendors must conduct thorough due-diligence reviews before signing a contract. The November 30, 2000, interagency guidance Risk Management of Outsourced Technology Services outlines the agencies' expectations for prudent practices in this area. (See section 4060.1 and SR-00-17.)

Legal Risks

Overdraft-protection programs must comply with all applicable federal laws and regulations, including the Federal Trade Commission Act (as outlined below). State laws may also be applicable, including usury and criminal laws, as well as laws on unfair or deceptive acts or practices. Before implementing an overdraft-protection

program, institutions should have their program reviewed by counsel for compliance with all applicable laws. Further, although the agencies' guidance outlines the applicable federal laws and regulations as of February 2005, such laws and regulations are subject to amendment. Accordingly, institutions should monitor applicable laws and regulations for revisions and ensure that their overdraft-protection programs are fully compliant.

Federal Trade Commission Act. Section 5 of the Federal Trade Commission Act (the FTC Act) prohibits unfair or deceptive acts or practices (15 USC 45). The banking agencies enforce this section pursuant to their authority in section 8 of the Federal Deposit Insurance Act (12 USC 1818).[3] An act or practice is unfair if it causes or is likely to cause substantial injury to consumers that is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition. An act or practice is deceptive if, in general, it is a representation, omission, or practice that is likely to mislead a consumer acting reasonably under the circumstances and if the representation, omission, or practice is material.

Overdraft-protection programs may raise issues under the FTC Act, depending on how the programs are marketed and implemented. Institutions should closely review all aspects of their overdraft-protection programs, especially any materials that inform consumers about the programs, to avoid engaging in deceptive, inaccurate, misrepresentative, or unfair practices.

Examiner's Review of Delinquencies Involving Check-Credit (Overdraft-Protection) Plans

Delinquencies are often experienced when an account is at or near the customer's maximum credit line. Examiners should verify that the following reports are generated for and reviewed by bank management, and examiners should also analyze them as part of the examination process:

- aging of delinquent accounts
- accounts on which payments are made (either on this account or other loans) by drawing on reserves
- accounts with steady usage

Many banks offer check-credit plans to small businesses; these plans may have a higher-than-normal degree of risk unless they are offered under very stringent controls. In these situations, the examiner's review should be based on the same factors and criteria used for the review of unsecured commercial loans.

Credit Card Plans

Most bank credit card plans are similar. The bank solicits retail merchants, service organizations, and others who agree to accept a credit card in lieu of cash for sales or services performed. The bank assumes the credit risk and charges the nonrecourse sales draft to the individual customer's credit card account. The bank sends monthly statements to the customer, who may elect to pay the entire amount or to pay in monthly installments, with an additional percentage charge on the outstanding balance each month. A cardholder may also obtain cash advances, which accrue interest from the transaction date, from the bank or automated teller machines.

A bank can be involved in a credit card plan in various ways. Also, the terminology used to describe the manner in which a bank is involved in a credit card plan may vary. The examiner first needs to determine the type of credit card plan that the bank has and then ascertain the degree of risk that the plan poses to the bank.

Both the bank's customers and the bank itself can generate potential risk in the credit card department. On the customer side, the risk is generally divided into two categories: the misuse of credit and the misuse of the credit card. The potential for credit misuse is reduced by careful screening of cardholders before cards are issued and by monitoring individual accounts for abuse. Credit card misuse may be reduced by establishing controls to prevent the following abuses:

- employees or others from intercepting the card before delivery to the cardholder
- merchants from obtaining control of cards
- fraudulent use of lost or stolen cards

3. See the March 2002 OCC Advisory Letter 2002-3 and the March 11, 2004, joint Federal Reserve Board and FDIC interagency guidance Unfair or Deceptive Acts or Practices by State-Chartered Banks.

Because credit cards may be easily misused by the cardholders and others who may obtain the cards, strict adherence to appropriate internal controls and operating procedures is essential in any credit card department. The examiner should determine if adequate controls and procedures exist.

Account Management, Risk Management, and the Allowance for Loan and Lease Losses

Credit card lending programs can generate risk through inappropriate account-management, risk-management, and loss-allowance practices. Banks should have and follow prudent policies for credit-line management, over-limit practices, minimum payments, negative amortization, workout and forbearance practices, and recovery practices. In addition, banks should follow generally accepted accounting principles (GAAP), existing interagency policies, and Call Report instructions for income-recognition and loss-allowance practices. In arriving at an overall assessment of the adequacy of a bank's account-management practices for its credit card lending business, examiners should incorporate the risk profile of the bank, the quality of management reporting, and the adequacy of the bank's charge-off policies and its allowance for loan and lease losses methodologies and documentation practices. (See SR-03-01 and the FFIEC January 8, 2003, interagency guidance on credit card lending.)

Credit-line management. Banks should carefully consider the repayment capacity of borrowers when assigning initial credit lines or significantly increasing borrowers' existing credit lines. When a bank inadequately analyzes the repayment capacity of a borrower, practices such as liberal line-increase programs and multiple card strategies can increase the risk profile of a borrower quickly and result in rapid and significant portfolio deterioration.

Credit-line assignments should be managed conservatively using proven credit criteria. Support for credit-line management should include documentation and analysis of decision factors such as a borrower's repayment history, risk scores, behavior scores, or other relevant criteria.

Banks can significantly increase their credit exposure by offering customers additional cards, including store-specific private-label cards and affinity-relationship cards, without considering their entire relationship with a customer. In extreme cases, some banks may grant additional cards to borrowers who are already experiencing payment problems on their existing cards. Banks that offer multiple credit lines should have sufficient internal controls and management information systems (MIS) to aggregate related exposures and analyze performance before they offer additional credit lines to customers.

Over-limit practices. Account-management practices that do not adequately control authorization and provide for timely repayment of over-limit amounts may significantly increase the credit-risk profile of a bank's portfolio. While prudent over-limit practices are important for all credit card accounts, such practices are especially important for subprime accounts. Liberal over-limit tolerances and inadequate repayment requirements in subprime accounts can magnify the high risk exposure of the lending bank, and deficient reporting and loss-allowance methodologies can understate the credit risk.

All banks should carefully manage their over-limit practices and focus on reasonable control and timely repayment of amounts that exceed established credit limits. A bank's MIS should be sufficient to enable its management to identify, measure, manage, and control the unique risks associated with over-limit accounts. Over-limit authorization on open-end accounts, particularly those that are subprime, should be restricted and subject to appropriate policies and controls. The bank's objective should be to ensure that the borrower remains within prudent established credit limits that increase the likelihood of responsible credit management.

Minimum payment and negative amortization. Competitive pressures and a desire to preserve outstanding balances can lead to a bank's easing of minimum-payment requirements, which in turn can increase credit risk and mask portfolio quality. These problems are exacerbated when minimum payments consistently fall short of covering all finance charges and fees assessed during the billing cycle and when the outstanding balance continues to build (known as "negative amortization"). In these cases, the lending bank is recording uncollected income by capitalizing the unpaid finance charges and fees into the account balance the customer owes. The pitfalls of negative amortization are magnified when subprime accounts are involved—and are

even more damaging when the condition is prolonged by programmatic, recurring over-limit fees and other charges that are primarily intended to increase recorded income for the lending bank rather than enhance the borrowers' performance or their access to credit.

The Federal Reserve expects lending banks to require minimum payments that will amortize the current balance over a reasonable period of time, consistent with the unsecured, consumer-oriented nature of the underlying debt and the borrower's documented creditworthiness. Examiners should criticize prolonged practices involving negative amortization and inappropriate fees, as well as other practices that inordinately compound or protract consumer debt and disguise portfolio performance and quality, all of which raise safety-and-soundness concerns.

Workout and forbearance practices. Banks should properly manage workout programs.[3a] Areas of concern involve liberal repayment terms with extended amortizations, high charge-off rates, moving accounts from one workout program to another, multiple re-agings, and poor MIS to monitor program performance. Examiners should criticize management and require appropriate corrective action when workout programs are not managed properly. Such actions may include adversely classifying entire segments of portfolios, placing loans on nonaccrual, increasing loss allowances to adequate levels, and accelerating charge-offs to appropriate time frames.

Workout programs should be designed to maximize principal reduction and should generally strive to have borrowers repay credit card debt within 60 months. Repayment terms for workout programs should be consistent with these time frames; exceptions should be clearly documented and supported by compelling evidence that less conservative terms and conditions are warranted. To meet the appropriate time frames, banks may need to substantially reduce or eliminate interest rates and fees on credit card debt so that more of the payment is applied to reducing the principal.

In lieu of workout programs, banks sometimes negotiate settlement agreements with borrowers who are unable to service their unsecured open-end credit. In a settlement arrangement, the bank forgives a portion of the amount owed. In exchange, the borrower agrees to pay the remaining balance either in a lump-sum payment or by amortizing the balance over several months.

Income-recognition and ALLL methodologies and practices. Most banks use historical net charge-off rates, which are based on a migration analysis of the roll rates[3b] to charge-off, as the starting point for determining appropriate loss allowances. Banks then typically adjust the historical charge-offs to reflect current trends and conditions and other factors.

Banks should evaluate the collectibility of accrued interest and fees on credit card accounts because a portion of accrued interest and fees is generally not collectible.[3c] Although regulatory reporting instructions do not require consumer credit card loans to be placed on nonaccrual on the basis of their delinquency status, all banks should employ appropriate methods to ensure that income is accurately measured. Such methods may include providing loss allowances for uncollectible fees and finance charges or placing delinquent and impaired receivables on nonaccrual status. Banks must account for the owned portion of accrued interest and fees, including related estimated losses, separately from the retained interest in accrued interest and fees from credit card receivables that have been securitized.

A bank's allowance for loan and lease losses should be adequate to absorb credit losses that are probable and estimable on all loans. While some banks provide for an ALLL on all loans, others may only provide for an

3a. A workout is a former open-end credit card account in which credit availability has been closed and the balance owed has been placed on a fixed (dollar or percentage) repayment schedule in accordance with modified, concessionary terms and conditions. Generally, the repayment terms require amortization or liquidation of the balance owed over a defined payment period. Such arrangements are typically used when a customer is either unwilling or unable to repay the open-end credit card account in accordance with the original terms but shows the willingness and ability to repay the loan in accordance with modified terms and conditions.

Workout programs generally do not include temporary-hardship programs that help borrowers overcome temporary financial difficulties. However, temporary-hardship programs longer than 12 months, including renewals, should be considered workout programs.

3b. *Roll rate* is the percentage of balances or accounts that move from one delinquency stage to the next delinquency stage.

3c. AICPA Statement of Position 01-6, *Accounting by Certain Entities (Including Entities with Trade Receivables) That Lend to or Finance the Activities of Others,* provides guidance on accounting for delinquency fees.

ALLL on loans that are delinquent. This last practice may result in an inadequate ALLL. Banks should ensure that their loan-impairment analysis and ALLL methodology, including the analysis of roll rates, consider the losses inherent in both delinquent and nondelinquent loans.

A bank's allowance methodologies should always fully recognize the losses inherent in over-limit portfolio segments. For example, if a bank requires borrowers to pay monthly over-limit and other fees in addition to the minimum monthly payment amount, roll rates and estimated losses may be higher than indicated in the overall portfolio migration analysis. Accordingly, banks should ensure that their allowance methodology addresses the incremental losses that may be inherent in over-limit accounts.

A bank's allowances should appropriately provide for the inherent probable loss in workout programs, particularly when a program has liberal repayment periods with little progress in reducing principal. Accounts in workout programs should be segregated for performance-measurement, impairment-analysis, and monitoring purposes. When multiple workout programs with different performance characteristics exist, a bank should track each program separately and establish and maintain adequate allowances for each program. Generally, the allowance allocation should equal the estimated loss in each program based on historical experience as adjusted for current conditions and trends. These adjustments should take into account changes in economic conditions, the volume and mix of loans in each program, the terms and conditions of each program, and loan collection activities.

Banks should ensure that they establish and maintain adequate loss allowances for credit card accounts that are subject to settlement arrangements. In addition, the FFIEC Uniform Retail Credit Classification and Account Management Policy states that "actual credit losses on individual retail loans should be recorded when the bank becomes aware of the loss." In general, the amount of debt forgiven in a settlement arrangement should be classified as loss and charged off immediately. Immediate charge-off, in some circumstances, however, may be impractical. In such cases, banks may treat amounts forgiven in settlement arrangements as specific allowances.[4] Upon receipt of the final settlement payment, banks should charge off deficiency balances within 30 days.

Recovery practices. After a credit card loan is charged off, banks must properly report any subsequent collections on the loan.[5] Typically, banks report some or all of such collections on charged-off credit card loans as recoveries to the ALLL. If the total amount a bank credits to the ALLL as the recovery on an individual credit card loan (which may include principal, interest, and fees) exceeds the amount previously charged off against the ALLL on that loan (which may have been limited to principal), then the bank's net charge-off experience—an important indicator of the credit quality and performance of its portfolio—will be understated. Banks must ensure that the total amount credited to the ALLL as recoveries on a loan (which may include amounts representing principal, interest, and fees) is limited to the amount previously charged off against the ALLL on that loan. Any amounts collected in excess of this limit should be recognized as income.

Re-aging of credit card receivables. The examiner should review the bank's credit card receivables to determine if re-aging occurs. Re-aging refers to the removal of a delinquent account from normal collection activity after the borrower has demonstrated over time that he or she is capable of fulfilling contractual obligations without the intervention of the bank's collection department. The bank may use re-aging when a customer makes regular and consecutive payments over a period of time that maintain the account at a consistent delinquency level or reduce the delinquency level with minimal collection effort. Re-aging, in effect, changes the delinquency-payment status of a credit card receivable from a past-due to a current status. The examiner should determine if the bank re-ages its accounts on an exception basis or as a regular practice. The bank should document those accounts that have been re-aged, obtain appropriate approval, and ensure that re-aging is done in conformance with internal policies and procedures. (See "Bank Classification and Charge-Off Policy" later in this section and SR-00-8 for further guidance.)

4. For regulatory reporting purposes, banks should report the creation of a specific allowance as a charge-off in Schedule RI-B of the call report.

5. AICPA Statement of Position 01-6 provides recognition guidance for recoveries of previously charged-off loans.

Exceptions to examiner guidance. From time to time, banks with well-managed programs may authorize, and provide a basis for granting, limited exceptions to the FFIEC Uniform Retail Credit Classification and Account Management Policy. The basis for granting exceptions to the policy should be identified and described in the bank's policies and procedures. Such policies and procedures should address the types of exceptions allowed and the circumstances for permitting them. The volume of accounts granted exceptions should be small and well controlled, and the performance of these accounts should be closely monitored. Examiners will evaluate whether a bank uses its exceptions prudently. Examiners should criticize management and require corrective action when exceptions are not used prudently, are not well managed, result in improper reporting, or mask delinquencies and losses.

LOAN POLICY

A written consumer credit policy provides bank management with the framework to underwrite and administer the risk inherent in lending money while establishing a mechanism for the board of directors or senior management to monitor compliance. The policy should establish the authority, rules, and guidelines to operate and administer the bank's consumer loan portfolio effectively; that is, the policy should help manage risk while ensuring profitability. The policy should set basic standards and procedures clearly and concisely. The policy's guidelines should be derived from a careful review of internal and external factors that affect the bank. To avoid any discriminatory policies or practices, the policy should include guidelines on the various consumer credit laws and regulations.

The composition of the loan portfolio will differ considerably among banks because lending activities are influenced by many factors, including the type of institution, management's objectives and philosophies on diversification and risk, the availability of funds, and credit demand. An effective lending policy and commensurate procedures are integral components of the lending process. The bank's consumer credit policy should accomplish the following:

- define standards, rules, and guidelines for the credit-evaluation process, with the following specific goals:
  - — establish minimum and maximum loan maturities
  - — establish minimum levels of creditworthiness
  - — create consistency within the bank's underwriting process
  - — ensure uniformity in how the bank's consumer credit products are offered to borrowers
- provide a degree of flexibility, which allows credit officers and management to use their knowledge, skills, and experience
- provide specific guidelines for determining the creditworthiness of applicants; these guidelines might include the following:
  - — minimum income levels
  - — maximum debt-to-income ratios
  - — job or income stability
  - — payment history on previous obligations
  - — the type and value of collateral
  - — maximum loan-to-value ratios on various types of collateral
  - — a minimum score on a credit scoring system
- provide guidelines for the level and type of documentation to be maintained, including—
  - — a signed application
  - — the identity of the borrower and his or her occupation
  - — documentation of the borrower's financial capacity
  - — a credit bureau report
  - — the purpose of all loans granted to the borrower, the sources of repayment, and the repayment programs
  - — documentation of the collateral, its value, and the source of the valuation
  - — documents perfecting the lien on the collateral
  - — verification worksheets and supporting documentation
  - — a credit scoring worksheet, if applicable
  - — the sales contract and related security agreements, if applicable
  - — evidence of insurance coverage, if applicable
  - — any other documentation received or prepared in conjunction with the credit request
- define procedures for handling delinquent consumer credit loans and the subsequent charge-off and possible re-aging of those loans

The consumer credit policy should also provide

guidelines for granting loans that do not conform to the bank's written lending policy or procedures. The policy should require that the reason for the exception be detailed in writing, submitted for approval to a designated authority, and documented in the loan file. Credit exceptions should be reviewed by the appropriate bank committee. The frequency of exceptions granted may indicate a lessening of underwriting standards or a need to adjust the policy to allow flexibility within safe and sound parameters. The examiner should assess the exceptions and make recommendations accordingly.

Obtaining and maintaining complete and accurate information on every consumer credit applicant is essential to approving credit in a safe and sound manner. The loan policy should establish what information will be required from the borrower during the application process and what, if any, subsequent information the borrower will be required to submit while the credit remains outstanding. Credit files should be maintained on all borrowers, regardless of the credit amount, with the exception of the latitude provided by the March 30, 1993, Interagency Policy Statement on Documentation of Loans. Each borrower's credit file should include the names of all other borrowers who are part of the same borrowing relationship, or the bank should have some other system for informing the reader of a credit file that the borrower is part of a more extensive credit relationship. A current credit file should provide the loan officer, loan committee, and internal and external reviewers with all information necessary to (1) analyze the credit before it is granted and (2) monitor the credit during its life.

Documentation requirements will vary according to the type of loan, borrower, and collateral. For example, the bank may not require a financial statement from a borrower whose loans are fully secured by certificates of deposit issued by the bank. For most consumer credit loans, the borrower's financial information is collected only at the time of the loan application.

OPERATIONAL RISK

The management of the consumer credit function and the accompanying internal controls is of primary importance to the safe, sound, and profitable operation of a bank. In evaluating controls for consumer credit administration, the examiner should review (1) the bank's adherence to policies and procedures and (2) the operational controls over recordkeeping, payments, and collateral records to ensure that risks are controlled properly. (See "Loan Portfolio Management," section 2040.1, for an overview of the various types of risk that the bank should be aware of and the controls it should implement to effectively manage risk.) Risks that are inherent to the consumer credit function and that require internal controls include, but are not limited to, the following:

- *Insurance.* All insurance policies on file should name the bank as loss payee. The bank should maintain a tickler system to monitor the expiration of insurance policies. In addition, the bank should implement procedures to ensure single-interest insurance coverage is obtained in case the borrower's insurance is canceled or expires.
- *Security agreements.* The bank should implement procedures to ensure that lien searches are performed and that liens are perfected by appropriate filings.
- *Indirect installment loans.* The bank should implement procedures to reduce the risk that can occur in this area. These procedures should ensure the following:
  - — payments are made directly to the bank and not through the dealer
  - — dealer lines are reaffirmed at least annually
  - — selling prices as listed by the dealer are accurate
  - — credit checks on the borrowers are performed independently of the dealer
  - — overdrafts are prohibited in the dealer reserve and holdback accounts
  - — past-due accounts are monitored in aggregate per dealer to assess the quality of loans received from each individual dealer

CREDIT SCORING SYSTEM

Credit scoring is a method for predicting how much repayment risk consumer credit borrowers present. Credit scoring systems are developed using application or credit bureau data on consumers whose performance has already been categorized as creditworthy or noncreditworthy. Items of information that help predict acceptable performance are identified and assigned point values relative to their overall importance. These values are then totaled to calculate an overall credit score.

The credit score is used to approve credit, and frequently allows a bank to avoid the costly and time-consuming process of individual underwriting. Management determines a minimum score, which is sometimes called the cutoff score. Borrowers whose credit scores are not within the approved cutoff-score range for the type of loan requested do not meet the bank's minimum underwriting criteria. However, the bank may override a borrower's unacceptable credit score when other mitigating factors are present that may not have been included in the credit score. Exceptions to the bank's credit scoring system should be documented.

A number of banks have developed and implemented credit scoring systems as part of the approval process for consumer credit; other banks use traditional methods that rely on a credit officer's subjective evaluation of an applicant's creditworthiness. Credit scoring systems are replacing credit officers' subjective evaluation of borrowers' creditworthiness in more and more banks, particularly in larger institutions. Credit scoring systems are divided into two categories: (1) empirically derived, demonstrably and statistically sound credit systems and (2) judgmental systems.

Empirically derived credit scoring systems are generally defined as systems that evaluate creditworthiness by assigning points to various attributes of the applicant and, perhaps, to attributes of the credit requested. The points assigned are derived from a statistical analysis of recent creditworthy and noncreditworthy applicants of the bank. An empirically derived credit scoring system is statistically sound when it meets the following requirements:

- The data used to develop the system are derived from an empirical comparison of sample groups or from the population of creditworthy and noncreditworthy applicants who applied for credit within a reasonably recent period of time.
- The system is developed to evaluate the creditworthiness of applicants in order to serve the legitimate business interests of the bank using the system.
- The system is developed and validated using statistical principles and methodology.
- The bank periodically reevaluates the predictive ability of the system by using statistical principles and methodologies and adjusts the system as necessary.

An empirically derived credit scoring system may take the age of an applicant into account as a predictive variable, provided that the age of an elderly applicant is not assigned a negative factor or value. In a judgmental system, which relies on a credit officer's personal evaluation of a potential borrower's creditworthiness, a creditor may not take age directly into account. However, the applicant's age may be related to other information that the creditor considers in evaluating creditworthiness. For example, a creditor may consider the applicant's occupation and length of time to retirement to ascertain whether the applicant's income (including retirement income) will support the extension of credit to maturity. Consumer credit regulations allow any system of evaluating creditworthiness to favor an applicant who is 62 or older.

If the bank has a credit scoring system, the examiner should review the items or customer attributes that are included in it. In general, credit scoring systems are built on an experiential or historical database. Credit scoring methods analyze the experiences of individuals who have been previously granted credit and divide them into creditworthy and noncreditworthy accounts for purposes of predicting future extensions of consumer credit.

A successful credit scoring system provides a standardized way of measuring the inherent risk of the borrower. An important measure of any credit scoring system is its definition of risk and the care with which explanatory variables are defined, data are collected, and the system is tested. The standardized risk measurement should be fundamentally sound, be based on historical data, measure the risk of default (or loss), and produce consistent results across time for a wide range of borrowers. The bank should further investigate potential borrowers who do not meet the credit scoring criteria.

Some banks may use more than one type of credit scoring methodology in their underwriting and account-management practices. The following are three examples of credit scoring systems:

- *Credit bureau scoring.* The bank uses a consumer's credit bureau information in a scoring formula. The scoring model is developed by the various credit bureaus, using the reported experience of all credit grantors with whom the applicant has or has had a relationship.
- *Custom-application scoring.* The bank uses both a consumer's application and credit

bureau data in a scoring formula. This scoring model is developed using only information on the bank's applicants and borrowers.
- *Behavioral scoring.* The bank uses a formula that includes a borrower's repayment history, account utilization, and length of time with the bank to calculate a risk score for revolving accounts.

Applicants who fail the scoring process may still be judgmentally reviewed if additional information exists that may not have been included in the scoring formula. In addition, if an applicant passes the scoring process, but other information indicates that the loan should not be made, the applicant can be denied but the reason for the credit denial should be documented.

BANK CLASSIFICATION AND CHARGE-OFF POLICY

Consumer credit loans, based on their volume and size, are generally classified using criteria that are different from the classification of other types of loans. The examiner should use the Uniform Retail Credit Classification and Account Management Policy[6] when determining consumer credit classifications. (See the appendix to this section.)

A bank should have procedures detailing when consumer credit loans become watch list or problem credits. In addition, the bank should have charge-off procedures for consumer credit loans. The examiner should review the bank's policies and procedures for adequacy and compliance.

Identification of unfavorable trends must include the review of past-due percentages and income and loss trends in the consumer credit department, which management should monitor closely. Unfortunately, in banks that lack a well-enforced charge-off program, loss ratios are often meaningless for periods of less than a year. As a result, bank management may not become aware of downward trends until year-end or examiner-initiated charge-offs are made. Recognition and implementation of any necessary corrective action are thus delayed.

The examiner should determine whether the bank has adopted a well-enforced charge-off procedure. If so, his or her review should be limited to ascertaining that exceptions meet established guidelines. If the bank is properly charging off delinquent consumer credit loans in the normal course of business under a policy that generally conforms to that of the Federal Reserve System, no specific request for charge-off should be necessary. When the bank has not established a program to ensure the timely charge-off of delinquent accounts, such a program should be recommended in the examination report. If material misstatements in the FFIEC Consolidated Reports of Condition and Income (Call Reports) for previous quarters have resulted from management's failure to charge off loans, management should be instructed to amend the Call Reports for each affected quarter. The following loans are subject to the uniform classification policy:

- All loans to individuals for household, family, and other personal expenditures as defined in the Call Reports.
- Mobile home paper, except when applicable state laws define the purchase of a mobile home as the purchase of real property and the loan is secured by the purchased mobile home as evidenced by a mortgage or similar document.
- Federal Housing Authority (FHA) title 1 loans. These loans are also subject to the following classification criteria:
  - — Uninsured portions should be charged off when claims have been filed.
  - — When claims have not been filed, uninsured delinquent portions should be classified in accordance with the delinquent-installment-loan classification policy.
  - — The portion covered by valid insurance is not subject to classification.

The uniform classification policy includes consumer credit loans. Small, delinquent consumer credit loans may be listed for classification purposes in the report of examination without detailed comments. Larger classified consumer loans might need to be supported with detailed comments. When no specific proce-

6. The 1980 Federal Financial Institutions Examination Council (FFIEC) policy was revised and issued in February 1999 and June 2000. The June 2000 policy replaces the 1980 policy and its February 1999 revision. Reporting on the FFIEC Call Report, based on the revised policy, is not required until December 31, 2000. In addition to discussing the revised policy statement, SR-00-8 advises examiners to consider the methodology used for aging retail loans. In accordance with the FFIEC Call Report instructions, banks and their consumer finance subsidiaries are required to use the contractual method, which ages loans based on the status of contractual payments.

dures have been established, or when adherence to the established procedures is not evident, the examiner should make every effort to encourage the bank to adopt and follow acceptable procedures.

REPOSSESSED PROPERTY

Repossessed property should be booked at its fair value, less cost to sell, on the date the bank obtains clear title and possession of the property. Any outstanding loan balance in excess of the fair value of the property, less selling costs, should be charged off. Periodic repricing should be performed, and appropriate accounting entries should be made when necessary. Generally, repossessed property should be disposed of within 90 days of obtaining possession, unless legal requirements stipulate a longer period.

VIOLATIONS OF LAW

The consumer credit department is particularly susceptible to violations of the various consumer credit laws and regulations. These types of violations may result in serious financial penalties and loss of public esteem. Therefore, the examiner must be aware of any violations discovered during the consumer compliance examination and ensure that corrective action has been effected. All examiners should be familiar with the various consumer credit laws and regulations and be alert to potential violations.

APPENDIX—RETAIL-CREDIT CLASSIFICATION POLICY

The revised June 2000 Uniform Retail Credit Classification and Account Management Policy issued by the FFIEC and approved by the Federal Reserve Board is reproduced below. The Board has clarified certain provisions of this policy. In this text, the Board's revisions are in brackets.

The Uniform Retail Credit Classification and Account Management Policy[1] establishes standards for the classification and treatment of retail credit by financial institutions. Retail credit consists of open- and closed-end credit extended to individuals for household, family, and other personal expenditures, and includes consumer loans and credit cards. For purposes of this policy, retail credit also includes loans to individuals secured by their personal residence, including first mortgage, home equity, and home-improvement loans. Because a retail-credit portfolio generally consists of a large number of relatively small-balance loans, evaluating the quality of the retail-credit portfolio on a loan-by-loan basis is inefficient and burdensome for the institution being examined and for examiners.

Actual credit losses on individual retail credits should be recorded when the institution becomes aware of the loss, but in no case should the charge-off exceed the time frames stated in this policy. This policy does not preclude an institution from adopting a more conservative internal policy. Based on collection experience, when a portfolio's history reflects high losses and low recoveries, more conservative standards are appropriate and necessary.

The quality of retail credit is best indicated by the repayment performance of individual borrowers. Therefore, in general, retail credit should be classified based on the following criteria:

- Open- and closed-end retail loans past due 90 cumulative days from the contractual due date should be classified substandard.
- Closed-end retail loans that become past due 120 cumulative days and open-end retail loans that become past due 180 cumulative days from the contractual due date should be classified loss and charged off.[2] In lieu of charging off the entire loan balance, loans with non–real estate collateral may be written down to the value of the collateral, less cost to sell, if repossession of collateral is assured and in process.
- One- to four-family residential real estate loans and home equity loans that are past due 90 days or more with loan-to-value ratios

1. [For the Federal Reserve's classification guidelines, see section 2060.1, "Classification of Credits."]

2. For operational purposes, whenever a charge-off is necessary under this policy, it should be taken no later than the end of the month in which the applicable time period elapses. Any full payment received after the 120- or 180-day charge-off threshold, but before month-end charge-off, may be considered in determining whether the charge-off remains appropriate.

OTS regulation 12 CFR 560.160(b) allows savings institutions to establish adequate (specific) valuation allowances for assets classified loss in lieu of charge- offs.

Open-end retail accounts that are placed on a fixed repayment schedule should follow the charge-off time frame for closed-end loans.

greater than 60 percent should be classified substandard. Properly secured residential real estate loans with loan-to-value ratios equal to or less than 60 percent are generally not classified based solely on delinquency status. Home equity loans to the same borrower at the same institution as the senior mortgage loan with a combined loan-to-value ratio equal to or less than 60 percent need not be classified. However, home equity loans where the institution does not hold the senior mortgage, that are past due 90 days or more should be classified substandard, even if the loan-to-value ratio is equal to, or less than, 60 percent.

- For open- and closed-end loans secured by residential real estate, a current assessment of value should be made no later than 180 days past due. Any outstanding loan balance in excess of the value of the property, less cost to sell, should be classified loss and charged off.
- Loans in bankruptcy should be classified loss and charged off within 60 days of receipt of notification of filing from the bankruptcy court or within the time frames specified in this classification policy, whichever is shorter, unless the institution can clearly demonstrate and document that repayment is likely to occur. Loans with collateral may be written down to the value of the collateral, less cost to sell. Any loan balance not charged off should be classified substandard until the borrower re-establishes the ability and willingness to repay for a period of at least six months.
- Fraudulent loans should be classified loss and charged off no later than 90 days of discovery or within the time frames adopted in this classification policy, whichever is shorter.
- Loans of deceased persons should be classified loss and charged off when the loss is determined or within the time frames adopted in this classification policy, whichever is shorter.

Other Considerations for Classification

If an institution can clearly document that a past-due loan is well secured and in the process of collection, such that collection will occur regardless of delinquency status, then the loan need not be classified. A well-secured loan is collateralized by a perfected security interest in, or pledges of, real or personal property, including securities with an estimable value, less cost to sell, sufficient to recover the recorded investment in the loan, as well as a reasonable return on that amount. "In the process of collection" means that either a collection effort or legal action is proceeding and is reasonably expected to result in recovery of the loan balance or its restoration to a current status, generally within the next 90 days.

Partial Payments on Open- and Closed-End Credit

Institutions should use one of two methods to recognize partial payments. A payment equivalent to 90 percent or more of the contractual payment may be considered a full payment in computing past-due status. Alternatively, the institution may aggregate payments and give credit for any partial payment received. For example, if a regular installment payment is $300 and the borrower makes payments of only $150 per month for a six-month period, [the institution could aggregate the payments received ($150 × six payments, or $900). It could then give credit for three full months ($300 × three payments) and thus treat the loan as] three full months past due. An institution may use either or both methods in its portfolio, but may not use both methods simultaneously with a single loan.

Re-aging, Extensions, Deferrals, Renewals, and Rewrites

Re-aging of open-end accounts, and extensions, deferrals, renewals, and rewrites of closed-end loans[3] can be used to help borrowers overcome

3. These terms are defined as follows. *Re-age*: Returning a delinquent, open-end account to current status without collecting [at the time of aging] the total amount of principal, interest, and fees that are contractually due. *Extension*: Extending monthly payments on a closed-end loan and rolling back the maturity by the number of months extended. The account is shown current upon granting the extension. If extension fees are assessed, they should be collected at the time of the extension and not added to the balance of the loan. *Deferral*: Deferring a contractually due payment on a closed-end loan without affecting the other terms, including maturity [or the due date for subsequently scheduled payments] of the loan. The account is shown current upon granting the deferral. *Renewal*: Underwriting a matured, closed-end loan generally at its outstanding principal amount and on similar terms. *Rewrite*: Underwriting an existing loan by significantly chang-

temporary financial difficulties, such as loss of job, medical emergency, or change in family circumstances like loss of a family member. A permissive policy on re-agings, extensions, deferrals, renewals, or rewrites can cloud the true performance and delinquency status of the portfolio. However, prudent use is acceptable when it is based on a renewed willingness and ability to repay the loan, and when it is structured and controlled in accordance with sound internal policies.

Management should ensure that comprehensive and effective risk management and internal controls are established and maintained so that re-ages, extensions, deferrals, renewals, and rewrites can be adequately controlled and monitored by management and verified by examiners. The decision to re-age, extend, defer, renew, or rewrite a loan, like any other modification of contractual terms, should be supported in the institution's management information systems. Adequate management information systems usually identify and document any loan that is re-aged, extended, deferred, renewed, or rewritten, including the number of times such action has been taken. Documentation normally shows that the institution's personnel communicated with the borrower, the borrower agreed to pay the loan in full, and the borrower has the ability to repay the loan. To be effective, management information systems should also monitor and track the volume and performance of loans that have been re-aged, extended, deferred, renewed, or rewritten and/or placed in a workout program.

Open-End Accounts

Institutions that re-age open-end accounts should establish a reasonable written policy and adhere to it. To be considered for re-aging, an account should exhibit the following:

- The borrower has demonstrated a renewed willingness and ability to repay the loan.
- The account has existed for at least nine months.
- The borrower has made at least three consecutive minimum monthly payments or the equivalent cumulative amount. Funds may not be advanced by the institution for this purpose.

Open-end accounts should not be re-aged more than once within any twelve-month period and no more than twice within any five-year period. Institutions may adopt a more conservative re-aging standard; for example, some institutions allow only one re-aging in the lifetime of an open-end account. Additionally, an over-limit account may be re-aged at its outstanding balance (including the over-limit balance, interest, and fees), provided that no new credit is extended to the borrower until the balance falls below the predelinquency credit limit.

Institutions may re-age an account after it enters a workout program, including internal and third-party debt-counseling services, but only after receipt of at least three consecutive minimum monthly payments or the equivalent cumulative amount, as agreed upon under the workout or debt-management program. Re-aging for workout purposes is limited to once in a five-year period and is in addition to the once-in-twelve-months/twice-in-five-years limitation described above. To be effective, management information systems should track the principal reductions and charge-off history of loans in workout programs by type of program.

Closed-End Loans

Institutions should adopt and adhere to explicit standards that control the use of extensions, deferrals, renewals, and rewrites of closed-end loans. The standards should exhibit the following:

- The borrower should show a renewed willingness and ability to repay the loan.
- The standards should limit the number and frequency of extensions, deferrals, renewals, and rewrites.
- Additional advances to finance unpaid interest and fees should be prohibited.

Management should ensure that comprehensive and effective risk management, reporting, and internal controls are established and maintained to support the collection process and to ensure timely recognition of losses. To be effective, management information systems should track the subsequent principal reductions and charge-off history of loans that have been granted an extension, deferral, renewal, or rewrite.

ing its terms, including payment amounts, interest rates, amortization schedules, or its final maturity.

Examination Considerations

Examiners should ensure that institutions adhere to this policy. Nevertheless, there may be instances that warrant exceptions to the general classification policy. Loans need not be classified if the institution can document clearly that repayment will occur irrespective of delinquency status. Examples might include loans well secured by marketable collateral and in the process of collection, loans for which claims are filed against solvent estates, and loans supported by valid insurance claims.

The Uniform Retail Credit Classification and Account Management Policy does not preclude examiners from classifying individual retail-credit loans that exhibit signs of credit weakness regardless of delinquency status. Similarly, an examiner may also classify retail portfolios, or segments thereof, where underwriting standards are weak and present unreasonable credit risk, and may criticize account-management practices that are deficient.

In addition to reviewing loan classifications, the examiner should ensure that the institution's allowance for loan and lease losses provides adequate coverage for probable losses inherent in the portfolio. Sound risk- and account-management systems, including a prudent retail-credit lending policy, measures to ensure and monitor adherence to stated policy, and detailed operating procedures, should also be implemented. Internal controls should be in place to ensure that the policy is followed. Institutions that lack sound policies or fail to implement or effectively adhere to established policies will be subject to criticism.

Issued by the FFIEC on June 12, 2000.

1. To determine the quality and adequacy of operations (including the adequacy of lending policies, practices, procedures, internal controls, and management information systems) for consumer credit and credit card plans.
2. To determine if bank officers and employees are operating in conformance with the established guidelines.
3. To evaluate the consumer credit portfolio for credit quality, performance, adequate collateral, and collectibility.
4. To determine the scope and adequacy of the audit and loan-review function.
5. To determine the level of risk inherent in a bank's consumer credit and credit card lending departments and what actions management has taken to identify, measure, control, and monitor the level and types of risks.
6. To determine that the goals and objectives of specific credit card plans are being achieved and that the plans are profitable.
7. To determine compliance with the board of directors' and senior management's policies and procedures and with applicable laws and regulations.
8. To initiate corrective action when policies, procedures, practices, or internal controls are deficient or when violations of law or regulations have been noted.

GENERAL CONSUMER CREDIT

1. If selected for implementation, complete or update the installment loan section of the internal control questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal or external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Obtain a listing of any deficiencies noted in the latest review conducted by internal or external auditors. If applicable, also determine if the latest consumer compliance examination disclosed any violation of laws or regulations. Determine if corrective action has been taken.
4. Request that the bank supply the following:
   a. a listing of all dealers who have indirect-paper, fleet-leasing, or discounted-lease lines, along with respective codes
   b. an indirect paper or a fleet-leasing or discounted fleet-leasing report by code, along with the respective delinquency report for all loans past due 30 days or more
   c. a listing of dealer reserves, holdback accounts, or both showing the dealer, account number, and balance
   d. the latest month-end extension and renewal reports
   e. a schedule of all loans with irregular or balloon payments or both
   f. a schedule of all loans with more than five prepaid installments
   g. a listing of loans generated by brokers or finders
   h. a listing of current repossessions, including the name of the borrower, a description of the item, the date of repossession, the date title was acquired, and the balance
   i. a copy of each monthly installment-loan charge-off report since the preceding examination (If the monthly reports do not include all the information necessary to support the charge-off of the installment loans, request a revised listing that includes the missing information for each charge-off.)
   j. management reports that are prepared by department personnel and that are not forwarded in their entirety to the board of directors or its committee
   k. a listing of the amount of recoveries on charged-off installment loans, by month, since the preceding examination
   l. a listing of all outstanding loans that have been assigned to an attorney for collection
   m. an identification of all columns and codes on the computer printout
5. Obtain a trial balance of installment loans. Use of the bank's latest trial balance is acceptable. If exact figures are required, update the trial balance from the daily transaction journals. Using the trial balance—
   a. agree or reconcile balances to department controls and the general ledger and
   b. review reconciling items for reasonableness.
6. Using an appropriate sampling technique, select borrowers' loans to be reviewed during the examination.
7. Using an appropriate technique, select indirect dealers and fleet-leasing and indirect-lease lines from indirect-dealer or leasing reports. Transcribe the following onto consumer finance indirect line cards:
   a. the amount and number of contracts, indicating whether they are with or without recourse
   b. the amount and number of contracts still accruing that are past due 30–89 days and 90 days or more
   c. the balance in dealer reserve or holdback accounts or both
8. Obtain the following schedules from the bank or the appropriate examiner if they are applicable to this area:
   a. past-due loans (obtain separate schedules by branch, if available)
   b. loans transferred, either in whole or in part, to another lending institution as a result of a sale, participation, or asset swap since the previous examination
   c. loans acquired from another lending institution as a result of a purchase, participation, or asset swap since the previous examination

d. loan commitments and other contingent liabilities
e. extensions of credit to employees, officers, directors, principal shareholders, and their interests, specifying which officers are considered executive officers
f. correspondent banks' extensions of credit to executive officers, directors, and principal shareholders and their interests
g. a list of correspondent banks
h. miscellaneous loan debit-and-credit suspense accounts
i. loans considered "problem loans" by management
j. each officer's current lending authority
k. the current structure of interest rates
l. any useful information obtained from the review of the minutes of the loan and discount committee or any similar committee
m. reports furnished to the loan and discount committee or any similar committee
n. reports furnished to the board of directors
o. loans classified during the preceding examination
p. the extent and nature of loans serviced

9. Review the information received and perform the following for—
   a. Loans transferred, either in whole or in part, to or from another lending institution as a result of a participation, sale or purchase, or asset swap:
      - Participations only:
        — Test participation certificates and records and determine that the parties share in the risks and contractual payments on a pro rata basis.
        — Determine that the bank exercises similar controls and procedures over loans serviced for others as for loans in its own portfolio.
      - Procedures pertaining to *all* transfers:
        — Investigate any situations in which loans were transferred immediately before the date of examination to determine if any were transferred to avoid possible criticism during the examination.
        — Determine whether any of the loans transferred were either nonperforming at the time of transfer or classified at the previous examination.
        — Determine that low-quality loans transferred to or from the bank are properly reflected on its books at fair value (while fair value may be difficult to determine, it should at a minimum reflect both the rate of return being earned on such loans as well as an appropriate risk premium).
        — Determine that low-quality loans transferred to the parent holding company or a nonbank affiliate are properly reflected at fair value on the books of both the bank and its affiliate.
        — If low-quality loans were transferred to or from another lending institution for which the Federal Reserve is not the primary regulator, prepare a memorandum to be submitted to the Reserve Bank supervisory personnel. The Reserve Bank will then inform the local office of the primary federal regulator of the other institution involved in the transfer. The memorandum should include the following information, as applicable:
          (1) name of originating institution
          (2) name of receiving institution
          (3) type of transfer (i.e., participation, purchase/sale, swap)
          (4) date of transfer
          (5) total number of loans transferred
          (6) total dollar amount of loans transferred
          (7) status of the loans when transferred (e.g., nonperforming, classified, etc.)
          (8) any other information that would be helpful to the other regulator
   b. Miscellaneous loan debit-and-credit suspense accounts:
      - Discuss with management any large or old items.
      - Perform additional procedures as considered appropriate.
   c. For loan commitments and other contingent liabilities, if the borrower has been advised of the commitment and it exceeds the cutoff alone or in combination with any outstanding debt, prepare a line card for subsequent analysis and review.
   d. For loans classified during the previous examination, determine the disposition

of loans so classified by—
- obtaining current balances and their payment status, or the date the loan was repaid and source of payment;
- investigating any situations in which all or part of the funds for the repayment came from the proceeds of another loan at the bank or were a result of a participation, sale, or swap with another lending institution; and
- referring to step 9a of this section for the appropriate examination procedures, determine if repayment was a result of a participation, sale, or swap.

e. Select loans that require in-depth review on the basis of information derived from the above schedules.

10. Consult with the examiner responsible for the asset-liability management analysis to determine the appropriate maturity breakdown of loans needed for the analysis. If requested, compile the information using bank records or other appropriate sources. See section 6000.1, ''Instructions for the Report of Examination,'' for considerations to be taken into account when compiling maturity information for the gap analysis.
11. Obtain liability and other information on common borrowers from examiners assigned to overdrafts, lease financing, and other loan areas. Together decide who will review the borrowing relationship.
12. Obtain the credit files of all direct nonconsumer borrowers, indirect dealers, and fleet-leasing and discounted-leasing lines for which line cards have been developed. Transcribe and analyze the following as appropriate:
    a. the purpose of the loan
    b. collateral information, including its value and the bank's right to hold and negotiate it
    c. the source of repayment
    d. ancillary information, including the type of business, its officers, and its affiliation
    e. fiscal and interim financial exhibits
    f. guarantors and the amount of any guarantee
    g. personal statements of borrowers, endorsers, or guarantors
    h. external credit checks and credit bureau reports
    i. loan officer's credit memoranda
    j. subordination agreements
    k. a corporate resolution to borrow or guarantee
    l. provisions of the loan agreement or master lease agreement
    m. the type of dealer endorsement:
        - full recourse
        - limited recourse
        - nonrecourse
    n. dealer repurchase agreements
    o. reserve and holdback requirements
    p. the amount of insurance coverage
13. Check the central liability file on borrowers indebted above the cutoff or borrowers displaying credit weakness who are suspected of having additional liability in other loan areas.
14. Transcribe significant liability and other information on officers, principals, and affiliations of borrowers for which line cards have been developed. Cross-reference, if appropriate.
15. Review a listing of loans generated by brokers or finders:
    a. Check the quality of the paper being acquired.
    b. Determine that sufficient financial data have been obtained to support the credits.
    c. Evaluate performance.
16. Review the current past-due (delinquent) loan list and determine that loans are aged using the contractual method, which ages a loan on the basis of its contractual repayment terms, as required by the Call Report instructions. Discuss with management selected delinquent loans from the listings of delinquent loans and repossessed collateral.
17. Determine if management has a general policy for the timely classification and charge-off of past-due loans and ascertain whether the policy is adhered to. Determine if loan-classification practices follow the board of directors' respective policies. Ascertain whether those policies comply with the provisions of the FFIEC's Uniform Retail Credit Classification and Account Management Policy and with Federal Reserve policy. Review with management individual accounts that have not been charged off in line with these policies.
18. Review voluntary charge-offs made since the preceding examination and, on a test basis, review files on borrowers and ascertain the correctness of the charge-off.
19. Review any reports being submitted on

delinquent and defaulted loans guaranteed by government agencies:
   a. Determine that management is informed accurately and is complying with the reporting requirements.
   b. Determine that claims are being promptly filed after default.

OVERDRAFT-PROTECTION PROGRAMS

1. Determine if the bank has developed and implemented adequate written overdraft-protection-program policies and procedures for its ad hoc, automated, and other overdraft programs. Determine if the policies and procedures comply with the February 18, 2005, interagency Joint Guidance on Overdraft Protection Programs.
2. Ascertain whether the bank's management emphasizes and monitors adherence to its overdraft policies and procedures, applies generally accepted accounting principles to overdraft transactions, and applies the bank Call Report's accounting and reporting instructions and requirements to overdrafts. Evaluate whether the bank maintains and monitors safe and sound overdraft business practices to control the credit, operational, and other risks associated with overdraft programs.
3. Apply the additional examination procedures for overdraft-protection programs (see section 3000.3) when weaknesses are found in (1) the bank's compliance with the February 2005 interagency guidance and (2) the bank's evaluation of the risks associated with overdraft-protection programs.

CREDIT CARD LENDING

The examiner's analysis of operating policies and procedures is key to the examination of credit card banks and credit card operations. Credit card lending is characterized by a high volume of accounts, homogeneous loan pools, and small-dollar balances. A concentrated review of individual accounts, therefore, may not be practical. Examination procedures should focus on evaluating policies, procedures, and internal controls in conjunction with performing other selected functions. The goal is not confined to identifying current portfolio problems. The examination process should include an investigation of potential problems that may result from ineffective policies, unfavorable trends, lending concentrations, or nonadherence to policies. The following examination procedures should be performed.

1. Review UBPR data to determine the volume of credit card activity.
2. Determine if management has recently offered or plans to offer new products or if management plans to enter new market niches or expand the credit card portfolio significantly (new offerings may include affinity cards, co-branded cards, secured cards, or purchasing cards).
3. Determine whether the bank is engaged or plans to engage in subprime credit card lending. If subprime lending exists or is planned, perform the subprime-lending examination procedures in section 2133.3.
4. Review correspondence that the bank has received or exchanged with credit card networks (i.e.,Visa, MasterCard). These agencies perform periodic reviews of their members.

Policy Considerations

1. Review the credit card policy. Policy guidelines should include the following items:
   a. adequate screening of account applicants
   b. standards for approving accounts and determining credit-line size
   c. minimum standards for documentation
   d. internal controls to prevent and detect fraud, such as—
      - review procedures, including frequent review of delinquent accounts;
      - delinquency notification and collection procedures;
      - criteria for freezing accounts and charging off balances;
      - criteria for curing and re-aging delinquent accounts;
      - controls to avoid reissuances of expired cards to obligors who have unsatisfactory credit histories;
      - approvals of and controls over over-limits and overrides; and
      - cardholder information security controls
   e. due diligence before engaging the service of a third party, as well as the

ongoing management of credit card operations

Audit

1. Review the adequacy of the audit function regarding credit card operations.
   a. Determine if the audit program identifies contraventions of internal policy, credit card network (i.e., Visa, MasterCard) regulations, and written contracts.
   b. Determine if audit procedures include reviewing the accuracy and integrity of the bank's system for reporting the past-due status of credit card loans, over-limit accounts, and other management information systems.
   c. Determine if audit procedures include reviewing computer-driven models.
   d. Determine if independent tests of automated procedures are performed (for example, a sample of automatically re-aged accounts may be independently reviewed to test the integrity of automated systems).
   e. Determine whether audit procedures include a review of credit card processing operations. Ascertain if the product control file governing credit card processing was reviewed and whether it revealed any significant internal control weaknesses, such as a lack of segregation of duties and access controls. Determine whether management is aware of the risks and if the audit staff has the expertise to adequately evaluate procedures and suggest controls commensurate with the risks.
   f. Determine if audit procedures include a review of the services provided by outside vendors (services such as telemarketing, data processing, and direct mail). Ascertain if the audit procedures included a review of the performance of the vendors and documentation of the relationships.
2. Determine if management has reviewed and appropriately responded to audit findings regarding credit card operations.

Fraud

1. Evaluate management's strategy for controlling fraud, including whether the strategies frequently emphasize review of credit card applications to prevent fraudulent accounts from being booked or whether neural networks are used to identify fraudulent transactions. Common controls include the following items:
   a. methods of preventing application fraud, such as name and address verification, duplicate-application detection, Social Security number verification, etc.
   b. physical aspects of cards such as holograms and enriched information on the magnetic stripe
   c. adequate staffing and training of the fraud-detection department
   d. computer systems to identify suspicious activity
   e. procedures for issuing cards to prevent their interception and activation
   f. procedures for handling returned cards, statements, PINs, checks, and lost and stolen cards
   g. investigation and documentation of cases of suspected fraud
   h. freezing of accounts with suspicious activity
   i. procedures for filing a Suspicious Activity Report (See the FFIEC BSA/AML Examination Manual), the requirements for suspicious-activity reporting in section 208.62 of the Board's Regulation H (12 CFR 208.62), and the Bank Secrecy Act compliance program in section 208.63 (12 CFR 208.63).)
   j. procedures for access to and alteration of customer information
   k. controls over cardholder payments, account-balance records, and chargeback administration
   l. account-authorization procedures
2. Determine whether management receives adequate fraud-monitoring reports, such as—
   a. out-of-pattern-purchase or sequence-of-purchase reports that identify suspicious transactions that do not fit an individual cardholder's established purchasing pattern or
   b. suspicious-purchasing-pattern reports that identify certain types of purchases, such as electronics or jewelry, that can correlate with fraudulent activity.
3. Review consumer complaint correspon-

dence from cardholders that is on file with the bank or primary federal regulator for irregularities or patterns of activity.

Account Solicitation

1. Determine management's general approach to account solicitations (a variety of approaches or a combination of approaches can exist). Solicitations may be for preapproved or non-preapproved accounts. The latter are usually solicited through mass mailings, telemarketing, or counter displays.
2. Determine the extent to which outside contractors are used in marketing programs (for example, outsourced mass-mailing and telemarketing operations).
3. Review management's product and marketing program, including the goals of the program, the basis of the marketing approach, and product pricing. Ascertain whether adequate supporting evidence exists to indicate (1) that management has a marketing program and a product that appeal to the bank's targeted markets and (2) that the projected product and marketing program results will be obtained.
4. Determine how management identifies markets for new solicitations and evaluates expected performance.
   a. Identify the analytical procedures (for example, response rates, usage rates, credit-score distributions, and future delinquency and loss rates) management uses to project the results of a particular solicitation.
   b. Determine how management verifies projections before proceeding with a full-scale solicitation program (test marketing).
5. Determine if management monitors solicitation results for each major account segment and if management incorporates the findings into future solicitations.
6. Determine if management monitors and responds to trends in adverse selection (such as when a disproportionate number of respondents that are poor credit risks answer an offer, which may result in a larger-than-projected percentage of riskier accounts being including in the solicitation-response pool).
7. Review affinity and co-branding relationships. Determine if the bank has control over the approval and acceptance of such accounts. (In co-branding, a third-party relationship exists between a broad base of cardholders and a jointly sponsored credit card. Usually, the sponsors are the bank and a retail merchant for the affinity and co-branding relationships. These cards have some type of value-added feature such as cash rebates or discounts on merchandise.)
8. Review new-product offerings and the adequacy of management's market identification, testing, and ongoing monitoring of new products. Ascertain if management monitored and controlled key new-product concerns, including whether—
   a. the amount of historical and test-sample data available to analyze the product or solicitation was adequate;
   b. the speed at which the new product was introduced was compatible with the internal controls for credit authorizations; and
   c. the size of solicitations introduced was adequately controlled, considering operational and managerial capabilities.
9. Determine if management had any problems with the wording of solicitations or applications and if any imprecise offer terms contributed to asset-quality and earnings problems. Ascertain if there were errors such as the following:
   a. no expiration date on the offer
   b. an absence of wording giving management discretion in setting credit lines
   c. insufficient information requirements on applications
10. Review balance-transfer policies and monitoring practices. Determine if balance transfers generally resulted in higher credit exposures and a tendency to distort financial condition and performance ratios due to the immediate booking of relatively large balances.
11. Review teaser interest-rate practices. Determine if controls are adequate to prevent teaser rates from disguising a borrower's repayment capacity and from resulting in higher attrition when the teaser rates expire.

Predictive Models

1. Review the integrated models management uses to identify and select prospective cus-

tomers. (Management usually uses two distinct credit card predictive models. The first model, the credit-scoring model, is used in the initial application process. The second model, a behavioral model, is used in the management of existing accounts. These models use a credit scorecard, which is a table of characteristics, attributes, and scores that enable a credit grantor to calculate default risk. Information derived from these models assists management with quantifying and minimizing credit risk and fraud losses.)

Credit Scoring

1. Determine the nature and extent that credit scores are used in the underwriting process.
2. Determine the degree of reliance placed on credit bureau score ''good'' and ''bad'' odds charts. Ascertain if management develops and calibrates its own good and bad odds chart with a sufficient quantity and quality of historical account data (a customized odds chart is more predictive than a credit bureau odds chart).
3. Determine if a single- or dual-score model is used. (A single-score model uses credit bureau scores; a dual-score matrix calculates a score based on the combination of a custom score, usually based on credit application data, and a credit bureau score. For the more complex operations, management should be using the more sophisticated dual-scoring model.)

Behavior-Scoring System

1. Determine whether management has implemented a behavior-scoring system to manage existing accounts. (The score is derived from a cardholder's payment and usage behavior with the credit cardholder's issuing bank. A cardholder's historical performance with a particular bank is typically the best indicator of future performance with that bank. Behavior scores are frequently supplemented with credit bureau scores to enhance their predictive value.)
2. Ascertain if management continually refines existing, or if it considers new, predictive models.
   a. Determine whether a champions and challengers system is used. (Such a system involves continual portfolio analysis and identification of predictive characteristics. Based on this analysis, existing models are revised and enhanced. The revised challenger model is then compared with the existing champion model. If the challenger is more predictive, it is adopted. This procedure is an ongoing system of refinement.)
   b. Determine if management has adopted or is considering new predictive models (for example, revenue, revolving, bankruptcy, and payment-predictor models).

Validation

1. If credit scoring is used, determine if management is validating scores by comparing account-quality rankings of accepted applications with those predicted by the system (when the rank orderings remain substantially the same, the scoring system remains valid).
   a. Review the statistical techniques used to validate each model used, and determine whether common statistical techniques are being used, such as the K/S test, the chi square, the goodness-of-fit test, divergence statistics, and the population stability test.
   b. Determine if high and low override controls are in place and if they are detailed on exception reports (overrides can skew a statistical population and distort analysis).

Portfolio Analysis

1. Review and analyze the bank's customized credit card reports, which usually include performance and industry peer-group analysis data (be alert to the possibility that the data may have been distorted by niche marketing, specialized card products, or extensive affiliate support).
2. Determine if management is segmenting portfolios (such as by geographic or demographic distribution, affinity relationship (cardholders belonging to a particular union, corporation, professional association, etc.), product type (premium or standard cards), or credit bureau scores). Consider the particular characteristics of each segment for delinquency, profitability, future marketing programs, ALLL calculations, and other purposes.
3. Determine whether geographic, customer-base, card-type, or other concentrations exist, and identify the unique risks posed by any of these portfolio segments or concentrations. Evaluate their degree of risk and consider mitigating factors.
4. Review how management uses portfolio information to identify developing trends, make strategic decisions, and detect potential problems.
   a. Determine how management reports identify the number and volume of workout and re-aged credits.[1]
   b. Evaluate the portfolio information that management reviews, such as asset-quality ratios and vintage analysis (an analysis of the account performance of homogeneous loans booked at a similar time using the same credit and pricing criteria).
5. Determine if cash advances are monitored and authorization procedures are in place

1. A workout is a former open-end credit card account in which credit availability has been closed and in which the balance owed has been placed on a fixed (dollar or percentage) repayment schedule in accordance with modified, concessionary terms and conditions. Generally, the repayment terms require amortization or liquidation of the balance owed over a defined payment period. Such arrangements are typically used when a customer is either unwilling or unable to repay the open-end credit card account in accordance with the original terms but shows the willingness and ability to repay the loan in accordance with modified terms and conditions. In a re-aged credit account, the bank changes the delinquency status of an account without the full collection of its delinquent payments.

(cardholders with excessive debt may obtain cash advances to pay other debts).

6. Review the level and trend of the following portfolio ratios:
   a. average balance of delinquent accounts (by 30-day time frames) to average balance of nondelinquent accounts
   b. lagged delinquency rate and nine-month net charge-offs to lag rates
   c. net charge-off rate and lagged net charge-off rate
   d. re-aged accounts and partial-payment plans to total active accounts and to average total loans
   e. total past-due loans to gross loans
   f. noncurrent loans to gross loans
7. Consider indicators of possible deterioration in asset quality and criticize prolonged practices that result in negative amortization (that is, when minimum payments consistently fall short of covering all finance charges and fees assessed during the billing cycle and when the outstanding balance continues to increase), inappropriate fees, and other practices that inordinately compound or protract consumer debt and disguise portfolio performance and quality. Be alert to other indicators and practices that can reflect a deterioration of asset quality, such as—
   a. rapid growth that may indicate a lowering of underwriting standards;
   b. lower minimum-payment requirements and extended principal-payment cycles, which may result in negative amortization and may also indicate less creditworthy accounts;
   c. a heightened ratio of total accounts being charged off to the number of accounts or a high average balance of accounts that may indicate a lax policy toward the number and level of credit lines granted to cardholders;
   d. lower payment rates combined with higher average balances, which may indicate that borrowers are having trouble paying their debt;
   e. an inordinately high ratio of income earned not collected on loans to total loans when compared with the percentage of total past-due loans to gross loans, which may indicate frequent re-agings, inadequate collection procedures, or a failure to charge off credit card receivables on a timely basis; and
   f. the average age of accounts, which may indicate that loss rates will rise for unseasoned accounts (loss rates are usually low for new offerings and peak at 18 to 24 months after issue).
8. Evaluate management's practices for cure programs, such as re-aging, loan extensions, deferrals, fixed payment, and forgiveness.
9. Develop an overall assessment of the adequacy of a bank's account-management practices for its credit card lending business, incorporating the risk profile of the bank, the quality of management reporting, and the adequacy of the bank's charge-off policies and loss-allowance methodologies.
10. Evaluate whether the bank clearly documents in its policies and procedures the basis for using the exceptions to the FFIEC Uniform Retail Credit Classification and Account Management Policy and whether the bank documents the types of exceptions used and the circumstances giving rise to their use. Determine if the bank prudently limits the use of exceptions. If it does not, criticize the bank's management and require corrective action when the exceptions are not well managed, result in improper reporting, or mask delinquencies and losses.
11. Criticize management and recommend appropriate supervisory corrective action when workout programs are not managed properly (characteristics of improperly managed workout programs include workout programs that do not strive to have the borrowers repay credit card debt within 60 months, the existence of liberal repayment terms with extended amortizations, high charge-off rates, accounts being moved from one workout program to another, multiple re-agings, and poor MIS to monitor program performance).
12. Determine that the bank complies with the FFIEC Uniform Retail Credit Classification and Account Management Policy.
13. Determine whether management monitors and analyzes the performance of each workout program (whether the program achieves the objective of improving the borrower's subsequent performance, the effect of the program on delinquency ratios, etc.)
14. Assess the current and potential impact the workout programs have on reported performance and profitability, including their ALLL implications.
15. Determine if third parties purchase or fund

loan payments to cure loan delinquencies and, if so, assess the impact.

16. Determine whether management developed contingent strategies to deal with rising delinquency levels, which are generally the first sign of account deterioration. Strategies could include the following issues:
    a. reviewing accounts more frequently
    b. decreasing the size of credit lines
    c. freezing or closing accounts
    d. increasing collection efforts
17. Ascertain the bank's compliance with its credit card policies and procedures by reviewing a sample of the bank's credit card loans that were originated since the prior examination.
18. Determine the level of classifications for credit card loans:
    a. Review a sample of loans to ascertain the accuracy and integrity of the bank's system for reporting past-due status.
    b. Verify that the bank's classification and charge-off procedures adhere to, at a minimum, the guidance of the FFIEC Uniform Retail Credit Classification and Account Management Policy.

Allowance for Loan and Lease Losses

1. Ascertain whether an allowance for loan and lease losses (ALLL) policy exists for credit card loans and if adequate ALLL analytical procedures are in place. Roll-rate analysis (analysis of the migration of an account from one billing cycle to the next), which is generally performed for each portfolio segment, is the industry standard. However, some banks use the following additional or alternative methods:
    a. delinquency analysis using a set percentage of loans over 60 days delinquent
    b. exposure analysis that projects net charge-off rates to each 30-day period of delinquency
    c. charge-off projections based on vintage analysis
    d. a historical rolling average based on charge-off rates for the last six months
    e. analysis based on external economic forecasting services
2. Review ALLL-calculation techniques for reasonableness (variables such as aggregating seasoned and unseasoned portfolios can significantly distort the calculation of required reserves).
3. Determine if ALLL calculations are comprehensive and if they consider the following factors:
    a. contingent liabilities, or the risk associated with undisbursed funds
    b. bankrupt and deceased cardholders (such losses are usually not predicted by a simple roll-rate analysis)
    c. economic conditions, such as unemployment and bankruptcy rates, that can significantly affect asset quality
    d. the number and volume of workout and re-aged credits
4. Determine if the ALLL methodologies adequately provide for the use of cure programs, settlement arrangements,[2] workout programs, existing over-the limit portfolio segments, any resulting estimable probable losses on those accounts, and any other credit card loan accounts.
5. Review the accounting practices for crediting recoveries on credit card loans. Determine that the total amount credited to the ALLL as recoveries on individual credit card loans is limited to the amounts previously charged off against the ALLL for the credit card loan. Any excess recovery amount must be recognized as income.
6. Verify that fraud losses are not charged to the ALLL or included in ALLL calculations and that the losses are recorded as a noninterest expense.

Asset Securitization

Perform the following examination procedures when the bank has securitized its credit card receivables (removed designated credit card receivables from its balance sheet to a special-purpose vehicle (SPV) while the bank retains its account ownership).

1. Determine if the credit card loan delinquency and loss rates are similar for both the owned portfolio and the securitized portfolio. (Slightly higher delinquency and net charge-off ratios on securitized assets

2. In a settlement arrangement, the bank forgives a portion of the amount owed. In exchange, the borrower agrees to pay the remaining balance either in a lump-sum payment or by amortizing the balance over several months.

will be prevalent if the bank is experiencing high growth and possesses a significant portion of unseasoned accounts.) When the delinquency and loss rates deviate significantly, determine if management is prioritizing credit card receivables for securitization by selecting credit card accounts that have either a high credit quality or superior past credit history. For example, in the following two ratios, the resulting percentages on a managed and owned basis should approximate one another: (1) noncurrent loans to gross loans and (2) total past-due loans to gross loans.

2. Determine the on- and off-balance-sheet effects of asset securitization. (For example, what is the on- and off-balance-sheet effect of removing seasoned accounts?) (A performance analysis is important because the level of a credit card bank's earnings and capital is largely dependent on the quality of its average total assets under management and not merely on the owned credit card portfolio.)

Third Parties

1. Determine whether any credit card–related activities are outsourced. If so, complete the third parties review located in the Subprime Lending Loan Reference. Third parties may include brokers, marketing firms, collection or servicing firms, correspondents, affinity partners, and information systems firms.
2. Determine whether the bank shares a BIN (bank identification number) with a third party. (Sharing of BINs can create financial liability. A bank sharing a BIN should have a process to identify, monitor, and control the risks associated with BIN sharing. Certain Visa and MasterCard members are assigned BINs (represented by a series of numbers on the credit card) for clearing and settlement of their credit card activities. Members that are licensed specific BINs may allow other members to deposit and receive transactions through those BINs. However, the BIN licensee (holder of the BIN) has primary responsibility for transactions processed through its BIN. In addition, users of a BIN other than the BIN licensee (BIN holder) may share responsibility for transactions processed under that BIN if the licensee fails to meet its membership obligations.)

BANK POLICIES AND PROCEDURES AND STATUTORY AND REGULATORY REQUIREMENTS

1. Determine compliance with laws, regulations, and Federal Reserve Board policies pertaining to lending by performing the following steps.
   a. *Lending limits:*
      - Determine the bank's lending limits as prescribed by state law.
      - Determine advances or combinations of advances whose aggregate balances are above the limit.
   b. *Sections 23A and 23B of the Federal Reserve Act (12 USC 371c and 371c-1) and the Federal Reserve's Regulation W—Transactions with Affiliates:*
      - Obtain a listing of loans and other extensions of credit to affiliates.
      - Test-check the listing against the bank's customer liability records to determine the list's accuracy and completeness.
      - Obtain a listing of other covered transactions with affiliates (i.e., purchase of an investment or securities issued by an affiliate; purchase of loans or other credit-related assets, including assets subject to an agreement to repurchase from an affiliate; the issuance of a guarantee, acceptance, or letter of credit, including an endorsement or standby letter of credit, on behalf of an affiliate; or acceptance of affiliate's securities as collateral for a loan to any person).
      - Determine the volume of transactions with third parties when the proceeds were used or transferred for the benefit of any affiliate.
      - Ensure that covered transactions with affiliates do not exceed the limits of section 23A.
      - Ensure that covered transactions with affiliates meet the collateral requirements of section 23A.
      - Determine that low-quality loans or other assets have not been purchased from an affiliate.

- Determine that all transactions with affiliates are on market terms and conditions that are consistent with safe and sound banking practices.
- Determine that the transactions were conducted on terms and conditions that reflect pricing that is generally available to unaffiliated parties.

c. *18 USC 215—Commission or Gift for Procuring Loan:*
- While examining the installment loan area, determine the existence of any possible cases in which a bank officer, director, employee, agent, or attorney may have received anything of value for procuring or endeavoring to procure any extension of credit.
- Investigate any such suspected situation.

d. *Federal Election Campaign Act (2 USC 441b)—Political Contributions:*
- While examining the installment loan area, determine the existence of any loans in connection with any election to any political office.
- Review each such credit to determine whether it is made in accordance with applicable banking laws and regulations and in the ordinary course of business.

e. *12 USC 1972—Tie-In Provisions.* While reviewing credit and collateral files (especially loan agreements), determine whether any extension of credit is conditioned upon the customer's—
- obtaining additional credit, property, or services from the bank, other than a loan, discount, deposit, or trust service;
- obtaining additional credit, property, or service from the bank's parent holding company or the parent's other subsidiaries;
- providing an additional credit, property, or service to the bank, other than those related to and usually provided in connection with a loan, discount, deposit, or trust service;
- providing additional credit, property, or service to the bank's parent holding company or any of the parent's other subsidiaries; or
- not obtaining other credit, property, or service from a competitor of the bank, the bank's parent holding company, or the parent's other subsidiaries, except that the lending bank may impose conditions and requirements in a credit transaction to ensure the soundness of the credit.

f. *Insider lending activities.* The examination procedures for checking compliance with the relevant law and regulation covering insider activities and reporting requirements are as follows (the examiner should refer to the appropriate sections of the statutes for specific definitions, lending limitations, reporting requirements, and conditions indicating preferential treatment):
- *Regulation O (12 CFR 215)—Loans to Executive Officers, Directors, and Principal Shareholders and Their Interests*. While reviewing information relating to insiders received from the bank or appropriate examiner (including information on loan participations, loans purchased and sold, and loan swaps)—
  - Test the accuracy and completeness of information about installment loans by comparing it with the trial balance or loans sampled.
  - Review credit files on insider loans to determine that required information is available.
  - Determine that loans to insiders do not contain terms more favorable than those afforded to other borrowers.
  - Determine that loans to insiders do not involve more than the normal risk of repayment or present other unfavorable features.
  - Determine that loans to insiders, as defined by the various sections of Regulation O, do not exceed the lending limits imposed by those sections.
  - If prior approval by the bank's board was required for a loan to an insider, determine that such approval was obtained.
  - Determine compliance with the various reporting requirements for insider loans.
  - Determine that the bank has made provisions to comply with the public disclosure requirements for insider loans.

— Determine that the bank maintains records of such public requests and the disposition of the requests for a period of two years.

- *Title VIII of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRA) (12 USC 1972(2))—Loans to Executive Officers, Directors, and Principal Shareholders of Correspondent Banks.*
  — Obtain from or request that the examiners reviewing due from banks and deposit accounts verify a list of correspondent banks provided by bank management, and ascertain the profitability of those relationships.
  — Determine that loans to insiders of correspondent banks are not made on preferential terms and that no conflict of interest appears to exist.

g. *Federal Reserve Board Policy Statement on the Disposition of Credit Life Insurance Income (67* Fed. Res. Bull. *431 (1981), FRRS 3–1556).* Test for compliance with the policy statement by determining—
   - that the income generated from the sale of credit life, health, and accident insurance[3] is—
     — not distributed directly to employees, officers, directors, or principal shareholders in the form of commissions or other income for their personal profit; however, such individuals may participate in a bonus or incentive plan in an amount not exceeding, in any one year, 5 percent of the recipient's annual salary, and paid not more often than quarterly; and
     — for accounting purposes, credited to the bank's income account, the income account of an affiliate operating under the Bank Holding Company Act, or in the case of an individual shareholder, to a trust for the benefit of all shareholders.
   - whether an insurance agent or agency acted as an intermediary in arranging the bank's credit life insurance coverage and what the relationship of the agent or agency is to the bank. Is the agent or agency in compliance with the provisions of this policy?
   - which employees, officers, directors. and principal shareholders are licensed insurance agents.
   - whether bank officers have entered into reciprocal arrangements with officers of other banks to act as agent for sale of credit life insurance and to receive commissions.
   - if the credit life insurance income is credited to an entity other than the bank and whether the bank is being appropriately reimbursed for the use of its premises, personnel, and goodwill. Compute the percentage compensation paid to the bank (total credit life insurance income). Include that percentage in the confidential section of the commercial report of examination. As a general rule, a reasonable compensation would be an amount equivalent to at least 20 percent of the credited entity's *net* income (if available) attributable to the credit life insurance sales.

h. *Financial Recordkeeping and Reporting of Currency and Foreign Transactions (31 CFR 1010.410)—Records to Be Retained by Financial Institutions.* Review operating procedures and credit life documentation and determine whether the bank retains records of each extension of credit over $10,000, specifying the name and address of the borrower, the amount of the credit, the nature and purpose of the loan, and the date therefor. Loans secured by an interest in real property are exempt.

2. Perform appropriate procedural steps for the separate area, concentration of credits.
3. Discuss with the appropriate officer (or officers) and prepare comments to the examiner-in-charge stating your findings on the following:
   a. delinquent loans, including breakout of "A" paper
   b. violations of laws and regulations
   c. concentration of credits
   d. classified loans
   e. loans not supported by current and complete financial information
   f. loans on which collateral documentation is deficient

3. This policy also applies to income derived from the sale of mortgage life insurance; therefore, consult with the examiner assigned real estate loans to coordinate work to avoid any duplication of efforts.

g. inadequately collateralized loans
h. extensions of credit to major stockholders, employees, officers, directors, and/or their interests
i. Small Business Administration or other government-guaranteed delinquent or criticized loans
j. a list of installment loans requested to be charged off
k. the adequacy of written policies relating to installment loans
l. the manner in which bank officers are operating in conformance with established policy
m. adverse trends within the installment area
n. the accuracy and completeness of the schedules obtained from the bank or other examination areas
o. internal-control deficiencies or exceptions
p. recommended corrective action when policies, practices, or procedures are deficient
q. the quality of departmental management
r. other matters of significance

4. Update the workpapers with any information that will facilitate future examinations.

Consumer Credit
Internal Control Questionnaire
Effective date May 2005

Section 2130.4

Review the bank's internal controls, policies, practices, and procedures for making and servicing installment loans. The bank's system should be documented completely and concisely and should include, where appropriate, narrative descriptions, flow charts, copies of forms used, and other pertinent information. In the questionnaire below, items marked with an asterisk require substantiation by observation or testing.

POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written installment-loan policies that establish—
   a. procedures for reviewing installment-loan applications?
   b. standards for determining credit lines?
   c. minimum standards for documentation?
2. Are installment-loan policies reviewed at least annually to determine if they are compatible with changing market conditions?
3. Does the bank have adequate written overdraft-protection-program policies and procedures that follow the February 28, 2005, interagency Joint Guidance on Overdraft Protection Programs?
4. Does the bank's management emphasize and monitor adherence to its overdraft policies and procedures, apply generally accepted accounting principles, and apply the bank Call Report's accounting and reporting requirements to overdrafts? Does the bank maintain and monitor safe and sound overdraft business practices to control the credit, operational, and other risks associated with overdraft programs?

RECORDS

*1. Is the preparation and posting of subsidiary installment-loan records performed or reviewed by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?

*2. Are the subsidiary installment-loan records reconciled daily to the appropriate general ledger accounts, and are reconciling items investigated by persons who do not also handle cash?

3. Are delinquent-account collection requests and past-due notices checked to the trial balances that are used in reconciling installment-loan subsidiary records to general ledger accounts, and are requests and notices handled only by persons who do not also handle cash?
4. Are loan-balance inquiries received and investigated by persons who do not also handle cash?

*5. Are documents supporting recorded credit adjustments checked or tested subsequently by persons who do not also handle cash? (If not, explain why briefly.)

6. Is a daily record maintained that summarizes loan-transaction details, i.e., loans made, payments received, and interest collected, to support applicable general ledger account entries?
7. Are frequent note and liability ledger trial balances prepared and reconciled with controlling accounts by employees who do not process or record loan transactions?
8. Are two authorized signatures required to effect a status change in an individual customer's account?
9. Does operating management produce and review an exception report that encompasses extensions, renewals, or any factors that would result in a change in a customer's account status?
10. Do customer account records clearly indicate accounts that have been renewed or extended?

LOAN INTEREST

1. Is the preparation and posting of interest records performed or reviewed by persons who do not also—
   a. issue official checks or drafts?
   b. handle cash?
2. Are any independent tests of loan-interest computations made and compared with initial and subsequent borrowers' interest records by other persons who do not—
   a. issue official checks or drafts?
   b. handle cash?

COLLATERAL

1. Are multicopy, prenumbered records maintained that—
   a. detail the complete description of collateral pledged?
   b. are typed or completed in ink?
   c. are signed by the customer?
2. Are receipts issued to customers for each item of collateral deposited?
3. Are the functions of receiving and releasing collateral to borrowers and of making entries in the collateral register performed by different employees?
4. Is negotiable collateral held under joint custody?
5. Is all collateral for a single loan maintained in a separate file?
6. Are receipts obtained and filed for released collateral?
7. Is a record maintained of entry to the collateral vault?
8. Are the following controls on collateral in effect:
   a. When the bank customers' savings passbooks are held as collateral, the savings department is notified and the account is so noted on the deposit ledger.
   b. Descriptions of motor vehicles, as set forth on the certificate of title and insurance policies, are checked to the chattel mortgages or other appropriate documents granting security interest in the vehicle.
   c. An insurance-maturity tickler file is maintained.
   d. Procedures are in effect to ensure single-interest insurance coverage is obtained in case regular insurance is canceled or expires.
   e. All insurance policies on file include a loss-payable clause in favor of the bank.
   f. Filings are made on all security agreements.
   g. Supporting lien searches and property appraisals are performed when a judgment action is returned involving real property.
9. Are control records maintained that identify loans secured by junior liens on real estate?
10. Do those records indicate the current balance for loans secured by superior liens on the same property?

DEALER LOANS

1. On dealer loans, are—
   a. separate controls maintained or can they be easily generated?
   b. payments made directly to the bank and not through the dealer?
   c. coupon books, if used in connection with loans, mailed to the borrowers, instead of the dealer?
   d. monthly summaries of the total paper discounted and outstanding for each dealer prepared and reviewed?
   e. dealer lines reaffirmed at least annually?
   f. required documents on file in connection with the establishment of each dealer line?
   g. signed extension agreements obtained from dealers before extending accounts originally discounted on a repurchase agreement or other recourse basis?
   h. downpayment amounts checked to ensure they do not misrepresent the sales price?
   i. procedures in effect to prevent the dealer from making late payments?
   j. prohibitions against bringing loans current by charges to the dealer's reserve accounts in effect?
   k. selling prices, as listed by the dealer, verified?
   l. overdrafts prohibited in the dealer reserve and holdback accounts?
   m. procedures in effect to have the title application controlled by someone other than the purchaser?
   n. credit checks on borrowers performed independently of the dealer, or are the dealer's credit checks independently verified?
   o. delinquencies verified directly with the customers?

DISCOUNTED LEASING PAPER

1. If the bank discounts leasing paper—
   a. are separate controls maintained or can they be easily generated?
   b. are payments made directly to the bank?
   c. are controls established or are audits of lessor's books conducted if the lessor is permitted to accept payments (if so, explain why briefly)?
   d. are monthly summaries of total paper

discounted for each lessor prepared and reviewed?
   e. are lines for each lessor reaffirmed at least annually?
   f. is a master lease required and properly recorded when fleet-leasing or blanket purchase of leasing paper is handled?
   g. is the value of leased goods verified to ensure that it is not less than the amount advanced?
   h. is lease paper screened for the credit quality of the lessee?
   i. are lease terms and payment amounts required to be adequate to liquidate the debt in full?

CREDIT CARD LENDING

1. Has the bank tested, analyzed, and documented line-assignment and line-increase criteria prior to broad implementation of a new credit card plan?
2. Is a borrower's repayment capacity carefully considered when the bank assigns an initial credit line or significantly increases existing credit lines?
   a. Are credit-line assignments managed conservatively using proven credit criteria?
   b. Does the bank have documentation and analyses of decision factors such as repayment history, risk scores, behavior scores, or other relevant criteria?
   c. Does the bank consider its entire relationship with a borrower when making decisions about credit-line assignments?
   d. If the bank offers multiple credit lines to borrowers, does it have sufficient controls and management information systems to aggregate related exposures and analyze borrowers' performance before offering them additional lines of credit?
3. Do the bank's policies and procedures focus on adequate control, authorizations, and the timely repayment of amounts that exceed established credit limits?
   a. Are the bank's management information systems sufficient to enable management to identify, measure, manage, and control the risks associated with over-limit accounts?
   b. Does the bank have appropriate policies and controls for over-limit authorizations on open-end accounts, particularly subprime accounts?
4. Do the bank's policies and procedures require that minimum payments on credit card accounts amortize the current balances over a reasonable period of time, consistent with the nature of the underlying debt and the borrower's documented creditworthiness? Do the bank's policies and practices foster or encourage prolonged negative amortization, inappropriate fees, and other practices that inordinately compound or protract consumer debt?
5. Are workout programs designed to maximize principal reduction, and do they strive to have borrowers repay their credit card debt within 60 months? Has the bank documented and supported, with compelling evidence, any exceptions to the 60-month time frame for workout programs? Has the bank also documented and supported any less conservative loan terms and conditions that may be warranted?
6. Has the bank established and maintained adequate loss allowances for credit card accounts subject to settlement arrangements?
   a. Does the bank classify as a loss and charge off immediately amounts of debt forgiven in settlement arrangements?
   b. Are specific allowances for such settlement accounts reported as a charge-off in Schedule RI-B of the call report?
   c. Does the bank charge off any deficiency balances within 30 days from the receipt of a final settlement payment?
7. Does the bank evaluate the collectibility of accrued interest and fees on credit card accounts and recognize and properly account for the amounts that are uncollectible?
   a. Are appropriate methods employed to ensure that income is accurately measured (such methods include providing loan-loss allowances for uncollectible fees and finance charges or placing delinquent and impaired receivables on nonaccrual status)?
   b. Is the owned portion of accrued interest and fees, including related estimated losses, accounted for separately from the retained interest in accrued interest and fees from securitized credit card receivables?
8. Does the bank's allowance for loan and lease losses (ALLL) methodology fully recognize the incremental losses that may be inherent in over-limit accounts and portfolio segments?

9. Are accounts in workout programs segregated for performance-measurement, impairment-analysis, and monitoring purposes?
   a. Are multiple workout programs with different performance characteristics tracked separately?
   b. Is the allowance allocation for each workout program equal to the estimated loss in each program, based on historical experience adjusted for current conditions and trends?
10. Is the total amount credited to the ALLL as recoveries on a loan limited to the amount previously charged off against the ALLL, and are any amounts that are collected in excess of this limit recognized as income?
11. Do the bank's policies and procedures address the types of allowed exceptions to the FFIEC's Uniform Retail Credit Classification and Account Management Policy and also the circumstances permitting those exceptions?
   a. Is the volume of accounts that are granted exceptions small and well controlled?
   b. Is the performance of accounts that are granted exceptions closely monitored?
   c. Does the bank use exceptions prudently? If not, has management been criticized and has appropriate supervisory corrective action been recommended?

REPOSSESSIONS

1. Are procedures established on repossessions so that—
   a. management takes timely action to receive full advantage of any dealer endorsement or repurchase agreement?
   b. the notice of intention to sell is mailed to all parties who are liable on the account?
   c. bids are required before the sale of the item?
   d. bids are retained in the borrower's credit file?
   e. open repossessions are physically checked monthly?
   f. surplus funds received from the sale of a repossession are mailed back to the borrower in the form of a cashier's check?
   g. any deficiency balance remaining after the sale of repossession is charged off?
   h. the bill of sale is properly completed and signed by an officer?
   i. separate general ledger control is maintained?

DELINQUENT ACCOUNTS AND OPERATING REVIEW SYSTEM

1. Are collection policies established so that—
   a. a delinquent notice is sent before a loan becomes 30 days past due?
   b. collection effort is intensified when a loan becomes two payments past due?
   c. records of collection efforts are maintained in the customer's file?
   d. field or outside collectors are under the supervision of an officer and are required to submit progress reports?
   e. all collections are acknowledged on multicopy prenumbered forms?
   f. all documents that are held outside the regular files and that pertain to installment loans under collection are evidenced by a transmittal sheet and receipt?
   g. delinquency lists are generated on a timely basis (indicate the frequency)?
2. Is an operating review system in place that—
   a. determines that duties are properly segregated and that loan officers are prohibited from processing loan payments?
   b. recomputes the amount of credit life and accident and health insurance on new loans?
   c. recomputes the amount of discount on new loans?
   d. recomputes the rebates on prepaid loans?
   e. test-checks daily transactions to subsequent general ledger postings?
   f. reviews new-loan documentation?
   g. reviews all information in reports being submitted to the board of directors, or any committee thereof, for errors or omissions?
   h. conducts a periodic review of income accruals for accuracy?
   i. reviews entries to unearned discount or income accounts?
   j. reviews all charged-off loans for proper approval?
   k. periodically reconciles charged-off notes to controls?

l. reviews dealer's reserve and holdback agreements and periodically determines the adequacy of the balances in the deposit account?
m. periodically verifies dealer reserve balances?
n. determines that payments are accurately and promptly posted?
o. reviews collection or reversal of late charges?
p. determines that extension fees are collected on all extended loans?
q. determines that discounted dealer paper is properly endorsed?
r. determines that discounted dealer paper is within established guidelines?
s. reviews compliance with laws and regulations?
t. reviews trial balance reconcilements to the general ledger?

CONCLUSION

1. Is the foregoing information an adequate basis for evaluating internal control that is, there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly and indicate any additional examination procedures deemed necessary.
2. On the basis of a composite evaluation (as evidenced by answers to the foregoing questions), is internal control considered adequate or inadequate?

Federally insured banks tend to avoid lending to customers with poor credit histories because of the higher risk of default and resulting loan losses. However, some lenders[1] extend their risk-selection standards to attract lower-credit-quality accounts.

Subprime lending involves extending credit to borrowers who exhibit characteristics that indicate a significantly higher risk of default than traditional bank lending customers.[2] The risk of default may be measured by traditional credit-risk measures (such as credit or repayment history or debt-to-income levels) or by alternative measures such as credit scores.

Subprime borrowers represent a broad spectrum of debtors, ranging from those who have repayment problems because of an adverse event, such as job loss or medical emergency, to those who persistently mismanage their finances and debt obligations. Subprime borrowers typically have weakened credit histories that include payment delinquencies and possibly more severe problems, such as charge-offs, judgments, and bankruptcies. They may also display reduced repayment capacity as measured by credit scores, debt-to-income ratios, or other criteria that may encompass borrowers with incomplete credit histories. Generally, subprime borrowers will display a range of one or more credit-risk characteristics, such as—

- two or more 30-day delinquencies in the last 12 months, or one or more 60-day delinquencies in the last 24 months;
- judgment, foreclosure, repossession, or charge-off in the prior 24 months;
- bankruptcy in the last five years;
- relatively high default probability as evidenced by, for example, a credit bureau risk score (FICO) of 660 or below (depending on the product or collateral), or other bureau or proprietary scores with an equivalent default-probability likelihood; or
- debt-service-to-income ratio of 50 percent or greater, or an otherwise limited ability to cover family living expenses after deducting total monthly debt-service requirements from monthly income.

Subprime loans are loans to borrowers displaying one or more of these characteristics at the time of origination or purchase.

SUPERVISORY GUIDANCE FOR SUBPRIME LENDING

The subprime supervisory guidance applies to direct extensions of credit; the purchase of subprime loans from other lenders, including delinquent or credit-impaired loans purchased at a discount; the purchase of subprime automobile or other financing "paper" from lenders or dealers; and the purchase of loan companies that originate subprime loans.

Subprime lending does not include loans to borrowers who have had minor, temporary credit difficulties but are now current. Also, the subprime-lending guidance does not generally apply to prime loans that develop credit problems after acquisition; loans that were initially extended in subprime programs and are later upgraded, as a result of their performance, to programs targeted to prime borrowers; and community development loans, as defined in the Community Reinvestment Act (CRA) regulations, that may have some higher risk characteristics, but are otherwise mitigated by guarantees from government programs, private credit enhancements, or other appropriate risk-mitigation techniques.

Subprime lending poses unique and significant risks to banking institutions engaged in the activity. Market events have raised supervisory issues about how well subprime lenders are prepared to manage and control the risks. Subprime-lending institutions need strong risk-management practices and internal controls, as well as board-approved policies and procedures that appropriately identify, measure, monitor, and control all associated risks. Institutions considering or engaging in this type of lending should recognize the additional risks inherent in this activity and determine if these risks are acceptable and controllable, given their organization's financial condition, asset size, level of capital support, and staff size. Well-managed subprime lenders should recognize the heightened loss characteristics in their portfolios and internally classify their delinquent accounts well

1. The terms *lenders*, *financial institutions*, and *institutions* refer to federally insured banks and their subsidiaries.

2. For purposes of this section, loans to customers who are not subprime borrowers are referred to as *prime*.

before the time frames in their respective interagency supervisory policy.

Interagency guidance on subprime lending was issued on March 1, 1999, to alert examiners and financial institutions to some of the pitfalls and hazards involved in this type of lending.[3] (See SR-99-06.) Additional interagency examination guidance was issued on January 31, 2001, to further strengthen the supervision of certain institutions, primarily those institutions having subprime-lending programs with an aggregate credit exposure equaling or exceeding 25 percent of their tier 1 capital.[4] (See SR-01-04.) The aggregate exposure includes principal outstanding and committed, accrued and unpaid interest, and any retained residual interests[5] relating to securitized subprime loans. The Federal Reserve may also apply the additional guidelines to certain smaller subprime portfolios, such as those experiencing rapid growth or adverse performance trends, those administered by inexperienced management, and those with inadequate or weak controls.

Subprime loans command higher interest rates and loan fees than those offered to standard-risk borrowers. Subprime loans can be profitable, provided the price charged by the lender is sufficient to cover higher loan-loss rates and overhead costs related to underwriting, servicing, and collecting the loans. The ability to securitize and sell subprime portfolios at a profit while retaining the servicing rights makes subprime lending attractive to a larger number of institutions, further increasing the number of subprime lenders and loans. Some financial institutions have experienced losses attributable to ill-advised or poorly structured subprime-lending programs. These losses have attracted greater supervisory attention to subprime lending and the ability of an insured bank to manage the unique risks associated with this activity.

Risk Management

The following items are essential components of a well-structured risk-management program for subprime lenders.

Planning and Strategy

Before engaging in subprime lending, the board and management should ensure that proposed activities are consistent with the institution's overall business strategy and risk tolerances, and that all involved parties have properly acknowledged and addressed critical business-risk issues. These issues include the costs associated with attracting and retaining qualified personnel, investments in the technology necessary to manage a more complex portfolio, a clear solicitation and origination strategy that allows for after-the-fact assessment of underwriting performance, and the establishment of appropriate feedback and control systems. The risk-assessment process should extend beyond credit risk and appropriately incorporate operating, compliance, and legal risks. Finally, the planning process should set clear objectives for performance, including the identification and segmentation of target markets or customers, as well as set performance expectations and benchmarks for each segment and the portfolio as a whole. Institutions establishing a subprime-lending program should proceed slowly and cautiously into this activity to minimize the impact of unforeseen personnel, technology, or internal-control problems and to determine if favorable initial profitability estimates are realistic and sustainable.

Staff Expertise

Subprime lending requires specialized knowledge and skills that many financial institutions may not possess. Marketing, account-origination, and collections strategies and techniques often differ from those employed for prime credit; thus, it may not be sufficient to have the same lending staff responsible for both subprime loans and other loans. Additionally, servicing and

3. The March 1999 and January 2001 statements were adopted and issued by the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

4. The March 1999 and January 2001 subprime-lending interagency guidance is consolidated within this section. To focus on the supervisory guidance that applies primarily to institutions having subprime-lending programs equaling or exceeding 25 percent of tier 1 capital, see the January 2001 release. The March 1999 interagency supervisory guidance applies to all subprime-lending institutions.

5. Residual interests are on-balance-sheet assets that represent interests (including beneficial interests) in transferred financial assets retained by a seller (or transferor) after a securitization or other transfer of financial assets. They are structured to absorb more than a pro rata share of credit loss related to the transferred assets through subordination provisions or other credit-enhancement techniques.

collecting subprime loans can be very labor intensive. If necessary, the institution should implement programs to train staff. The board should ensure that staff possess sufficient expertise to appropriately manage the risks in subprime lending and that staffing levels are adequate for the planned volume of subprime activity. The experience, or seasoning, of staff and loans should be taken into account as performance is assessed over time.

Lending Policy

A subprime-lending policy should be appropriate to the size and complexity of the institution's operations and should clearly state the goals of the subprime-lending program. While not exhaustive, the following lending standards should be addressed in any subprime-lending policy:

- types of products offered as well as those that are not authorized
- portfolio targets and limits for each credit grade or class
- lending and investment authority clearly stated for individual officers, supervisors, and loan committees
- a framework for pricing decisions and profitability analysis that considers all costs associated with the loan, including origination costs, administrative or servicing costs, expected charge-offs, and capital
- evaluation of collateral and appraisal standards
- well-defined and specific underwriting parameters (that is, on acceptable loan term, debt-to-income ratios, and loan-to-collateral-value ratios for each credit grade and a minimum acceptable credit score) that are consistent with any applicable supervisory guidelines[6]
- procedures for the separate tracking and monitoring of loans approved as exceptions to stated policy guidelines
- credit-file documentation requirements, such as applications, offering sheets, loan and collateral documents, financial statements, credit reports, and credit memoranda to support the loan decision
- correspondent/broker/dealer approval process, including measures to ensure that loans originated through this process meet the institution's lending standards

If the institution elects to use credit scoring (including applications scoring) for approvals or pricing, the scoring model should be based on a development population that captures the behavioral and credit characteristics of the subprime population targeted for the products offered. Because of the significant variance in characteristics between the subprime and prime populations, institutions should not rely on models developed solely for products offered to prime borrowers. Further, the model should be reviewed frequently and updated as necessary to ensure that assumptions remain valid.

Purchase Evaluation

As they evaluate expected profits, institutions that purchase subprime loans from other lenders or dealers must give due consideration to the cost of servicing these assets and to the loan losses that may be experienced. For instance, some lenders who sell subprime loans charge borrowers high up-front fees, which are usually financed into the loan. This provides incentive for originators to produce a high volume of loans with little emphasis on quality, to the detriment of a potential purchaser. Further, subprime loans, especially those purchased from outside the institution's lending area, are at special risk for fraud or misrepresentation (that is, the quality of the loan may be less than the loan documents indicate).

Institutions should perform a thorough due-diligence review before committing to purchase subprime loans. Institutions should not accept loans from originators that do not meet their underwriting criteria, and they should regularly review loans offered to ensure that loans purchased continue to meet those criteria. Deterioration in the quality of purchased loans or in the portfolio's actual performance versus expectations requires a thorough reevaluation of the lenders or dealers who originated or sold the loans, as well as a reevaluation of the institution's criteria for underwriting loans and selecting dealers and lenders. Any such deterioration may also highlight the need to modify or termi-

6. Extensions of credit secured by real estate, whether the credit is subprime or otherwise, are subject to the Interagency Guidelines for Real Estate Lending Policies, which establish supervisory loan-to-value (LTV) limits on various types of real estate loans and impose limits on an institution's aggregate investment in loans that exceed the supervisory LTV limits. (See 12 CFR 208, appendix C.)

nate the correspondent relationship or to adjust underwriting and dealer or lender selection criteria.

Loan-Administration Procedures

After the loan is made or purchased, loan-administration procedures should provide for the diligent monitoring of loan performance and establish sound collection efforts. To minimize loan losses, successful subprime lenders have historically employed stronger collection efforts, such as calling delinquent borrowers frequently, investing in technology (for example, using automatic dialing for follow-up telephone calls on delinquent accounts), assigning more experienced collection personnel to seriously delinquent accounts, moving quickly to foreclose or repossess collateral, and allowing few loan extensions. This aspect of subprime lending is very labor intensive but critical to the program's success. To a large extent, the cost of such efforts can be a tradeoff with future loss expectations, when an institution analyzes the profitability of subprime lending and assesses its appetite to expand or continue this line of business. Subprime-loan administration procedures should be in writing and at a minimum should detail—

- billing and statement procedures;
- collection procedures;
- content, format, and frequency of management reports;
- asset-classification criteria;
- methodology to evaluate the adequacy of the allowance for loan and lease losses (ALLL);
- criteria for allowing loan extensions, deferrals, and re-agings;
- foreclosure and repossession policies and procedures; and
- loss-recognition policies and procedures.

Loan Review and Monitoring

Once an institution books the loans, designated staff must perform an ongoing analysis of subprime loans, not only on an aggregate basis but also for subportfolios. Information systems should be in place to segment and stratify the institution's portfolio (for example, by originator, loan-to-value, debt-to-income ratios, or credit scores). Assigned staff should produce reports that management can use to evaluate the performance of subprime loans. The review process should focus on whether performance meets expectations. Institutions then need to consider the source and characteristics of loans that do not meet expectations and make changes in their underwriting policies and loan-administration procedures to restore performance to acceptable levels.

When evaluating actual performance against expectations, it is particularly important that management review credit scoring, pricing, and any ALLL-adequacy models. Models driven by the volume and severity of historical losses experienced during an economic expansion may have little relevance in an economic slowdown, particularly in the subprime market. Management should ensure that models used to estimate credit losses or to set pricing allow for fluctuations in the economic cycle and are adjusted to account for other unexpected events.

Consumer Protection

Institutions that originate or purchase subprime loans must take special care to avoid violating fair lending and consumer protection laws and regulations. Higher fees and interest rates combined with compensation incentives can foster predatory pricing or discriminatory ''steering'' of borrowers to subprime products for reasons other than the borrower's underlying creditworthiness. An adequate compliance-management program must identify, monitor, and control the consumer protection hazards associated with subprime lending.

Subprime mortgage lending may trigger the special protections of the Home Ownership and Equity Protection Act of 1994, subtitle B of title I of the Riegle Community Development and Regulatory Improvement Act of 1994. This act amended the Truth in Lending Act to provide certain consumer protections in transactions involving a class of nonpurchase, closed-end home mortgage loans. Institutions engaging in this type of lending must also be thoroughly familiar with the obligations set forth in Regulation Z (12 CFR 226.32), Regulation X (24 CFR 3500), and the Real Estate Settlement Procedures Act (RESPA) (12 USC 2601) and should adopt policies and implement practices that ensure compliance.

The Equal Credit Opportunity Act makes it unlawful for a creditor to discriminate against an

applicant on a prohibited basis regarding any aspect of a credit transaction. Similarly, the Fair Housing Act prohibits discrimination in connection with residential real estate–related transactions. Loan officers and brokers must treat all similarly situated applicants equally and without regard to any prohibited-basis characteristic (for example, race, sex, or age). This is especially important with respect to how loan officers or brokers assist customers in preparing their applications or otherwise help them to qualify for loan approval.

Securitization and Sale

To increase their loan-production and -servicing income, some subprime lenders originate loans and then securitize and sell them in the asset-backed securities market. Strong demand from investors and favorable accounting rules often allow securitization pools to be sold at a gain, providing further incentive for lenders to expand their subprime-lending program. However, the securitization of subprime loans carries inherent risks, including interim credit risk and liquidity risks, which are potentially greater than those for securitizing prime loans. Accounting for the sale of subprime pools requires assumptions that can be difficult to quantify, and erroneous assumptions could lead to the significant overstatement of an institution's assets. Moreover, the practice of providing support and substituting performing loans for nonperforming loans to maintain the desired level of performance on securitized pools has the effect of masking credit-quality problems.

Institutions should recognize the volatility of the secondary market for subprime loans and the significant liquidity risk incurred when originating a large volume of loans intended for securitization and sale. Investors can quickly lose their appetite for risk in an economic downturn or when financial markets become volatile. As a result, institutions that have originated, but have not yet sold, pools of subprime loans may be forced to sell the pools at deep discounts. If an institution lacks adequate personnel, risk-management procedures, or capital support to hold subprime loans that were originally intended for sale, these loans may strain an institution's liquidity, asset quality, earnings, and capital. Consequently, institutions actively involved in the securitization and sale of subprime loans should develop a contingency plan that addresses backup purchasers of the securities or the attendant servicing functions, alternate funding sources, and measures for raising additional capital.

Institutions should refer to the Statement of Financial Accounting Standards No. 140 (FAS 140), "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities," for guidance on accounting for these transactions. If a securitization transaction meets FAS 140 sale or servicing criteria, the seller must recognize any gain or loss on the sale of the pool immediately and carry any retained interests in the assets sold (including servicing rights or obligations and interest-only strips) at fair value. Management should ensure that the key assumptions used to value these retained interests are reasonable and well supported, both for the initial valuation and for subsequent quarterly revaluations. In particular, management should consider the appropriate discount rates, credit-loss rates, and prepayment rates associated with subprime pools when valuing these assets. Since the relative importance of each assumption varies with the underlying characteristics of the product types, management should segment securitized assets by specific pool, as well as by predominant risk and cash-flow characteristics, when making the underlying valuation assumptions. In all cases, however, institutions should take a conservative approach when developing securitization assumptions and capitalizing expected future income from subprime-lending pools. Institutions should also consult with their auditors as necessary to ensure that their accounting for securitizations is accurate.

Reevaluation

Institutions should periodically evaluate whether the subprime-lending program has met profitability, risk, and performance goals. Whenever the program falls short of original objectives, an analysis should be performed to determine the cause, and the program should be modified appropriately. If the program falls far short of the institution's expectations, management should consider terminating it. Questions that management and the board need to ask may include the following:

- Have cost and profit projections been met?
- Have projected loss estimates been accurate?

- Has the institution been called upon to provide support to enhance the quality and performance of loan pools it has securitized?
- Were the risks inherent in subprime lending properly identified, measured, monitored, and controlled?
- Has the program met the credit needs of the community that it was designed to address?

Examination Review and Analysis

The following supervisory guidance (up to the examination objectives) applies only to banks that have subprime-lending programs equaling or exceeding 25 percent of tier 1 capital and to banks that have other designated subprime programs referenced in SR-01-4.

The heightened risk levels and potential volatility in delinquency and loss rates posed by subprime-lending programs warrant examiners' increased ongoing attention. The risks inherent in subprime-lending programs call for frequent reviews. There are generally two levels of review appropriate for subprime activities:

- *Portfolio-level reviews* include assessments of underwriting standards, marketing practices, pricing, management information and control systems (quality control, audit and loan review, vendor management, compliance), portfolio performance, and the appropriate application of regulatory and internal allowance and capital policies.
- *Transaction-level testing* includes the testing of individual loans for compliance with underwriting and loan-administration guidelines; the appropriate treatment of loans under delinquency, re-aging, and cure programs; and the appropriate application of regulatory and internal allowance and capital policies.

During each regularly scheduled examination cycle, examiners should perform a portfolio-level review and some transaction testing at each institution engaged in subprime lending. The Federal Reserve will perform regular off-site supervisory monitoring and may require subprime lenders to supply supplementary information about their subprime portfolios between examinations. The examiner's findings from transaction-level testing and portfolio-level reviews should be incorporated into the conclusions about overall asset quality, the adequacy of the ALLL and capital, and the adequacy of portfolio risk-management practices.

Transaction-Level Testing

Subprime-loan portfolios contain elevated risks, and actual subprime-lending practices often can deviate from stated policy and procedural guidance. Therefore, examiners should supplement the portfolio-level examination procedures with transaction-level testing to determine whether—

- individual loans adhere to existing policy, underwriting, risk-selection, and pricing standards;
- individual loans and portfolios are classified in accordance with the subprime-lending guidelines described in this section, or in other Federal Reserve credit-extending supervisory guidance;
- management, board, and regulatory reporting is accurate and timely;
- existing loans conform to specified account-management standards (such as over-limits, line increases, reductions, cancellations, re-scoring, or collections);
- key risk controls and control processes are adequate and functioning as intended;
- roll rates and other loss-forecasting methods used to determine ALLL levels are accurate and reliable; and
- lending practices exist that may appear unsafe, unsound, or abusive and unfair.

Adequacy of the ALLL

Examiners should assess the adequacy of the ALLL to ensure that the portion allocated to the subprime portfolio is sufficient to absorb estimated credit losses for this portfolio. Consistent with interagency policy,[7] the term *estimated credit losses* means an estimate of the amount that is not likely to be collected; that is, net charge-offs that are likely to be realized given the facts and circumstances as of the evaluation date.[8] These estimated losses should meet the

7. The 2006 Interagency Policy Statement on the Allowance for Loan and Lease Losses was issued December 13, 2006. (See SR-06-17.) The Supplemental Interagency policy statement on the ALLL methodologies and documentation was issued July 2, 2001. (See SR-01-07.)

8. Estimates of credit losses should include accrued interest and other accrued fees (for example, uncollected credit card

criteria for accrual of loss contingency, as set forth under generally accepted accounting principles (GAAP), consistent with supervisory ALLL policy.

New Entrants to the Business

In some instances, an institution (for example, a newly chartered institution or an existing institution entering the subprime-lending business) may not have sufficient previous loss experience to estimate an allowance for subprime-lending activities. In such cases, industry statistics or another institution's loss data for similar loans may be a better starting point to determine the ALLL than the institution's own data for developing loss rates. When an institution uses loss rates developed from industry statistics or from other institutions to determine its ALLL, it should demonstrate and document that the attributes of the loans in its portfolio or portfolio segment are similar to those in the other institution's (or industry's) portfolio.

Pools of Subprime Loans—Not Classified

The ALLL required for subprime loans should be sufficient to absorb at least all estimated credit losses on outstanding balances over the current operating cycle, typically 12 months. The board of directors and management are expected to ensure that the institution's process for determining an adequate level for the ALLL is based on a comprehensive and adequately documented analysis of all significant factors. The consideration factors should include historical loss experience, ratio analysis, peer-group analysis, and other quantitative analysis as a basis for the reasonableness of the ALLL. To the extent that the historical net charge-off rate is used to estimate expected credit losses, it should be adjusted for changes in trends, conditions, and other relevant factors, including business volume, underwriting, risk selection, account-management practices, and current economic or business conditions that may alter such experience. The allowance should represent a prudent, conservative estimate of losses that allows a reasonable margin for imprecision. Institutions should clearly document loss estimates and the allowance methodology in writing. This documentation should describe the analytical process used, including—

- portfolio-segmentation methods applied;
- loss-forecasting techniques and assumptions employed;
- definitions of terms used in ratios and model computations;
- relevance of the baseline loss information used;
- rationale for adjustments to historical experience; and
- a reconciliation of forecasted loss rates to actual loss rates, with significant variances explained.

Classification Guidelines for Subprime Lending

Well-managed subprime lenders should recognize the heightened loss characteristics in their portfolios and internally classify their delinquent accounts well before the time frames outlined in the retail classification policy issued by the Federal Financial Institutions Examination Council (FFIEC) on June 12, 2000. Examiners should classify subprime loans and portfolios in accordance with the guidelines in this section and other applicable Federal Reserve supervisory guidelines. Classified loans are loans that are not protected adequately by the current sound worth and paying capacity of the borrower or the collateral pledged. As such, full liquidation of the debt may be in jeopardy. Pools of classified subprime loans (to include, at a minimum, all loans past due 90 days or more) should be reviewed for impairment, and an adequate allowance should be established consistent with existing interagency policy.

Individual Loans

Examiners should not automatically classify or place loans in special mention merely because they are subprime. Rather, classifications should

fees or uncollected late fees) that have been added to the loan balances and, as a result, are reported as part of the institution's loans on the balance sheet. An institution may include these types of estimated losses in either the ALLL or a separate valuation allowance, which would be netted against the aggregated loan balance for regulatory reporting purposes. When accrued interest and other accrued fees are not added to the loan balances and are not reported as part of loans on the balance sheet, the collectibility of these accrued amounts should nevertheless be evaluated to ensure that the institution's income is not overstated.

reflect the borrower's capacity and willingness to repay and the adequacy of collateral pledged.

Loans to borrowers that do not have the capacity to service their loans generally will be classified substandard. When repayment capacity is insufficient to support the orderly liquidation of the debt, and the collateral pledged is insufficient to mitigate risk of loss, then a more severe classification and nonaccrual is warranted. Subprime loans that are past due 90 days or more should be classified at least substandard based on a reasonable presumption that their past-due status indicates an inadequate capacity or unwillingness to repay. A more stringent classification approach may be appropriate based on the historical loss experience of a particular institution. Classification of other subprime loans as doubtful or loss will be based on examiners' analysis of the borrower's capacity to repay, and on the quality of institution underwriting and account-management practices as evidenced in the loan file or by other documentation.

In some cases, the repayment of principal, interest, and fees on some subprime loans may be overly dependent on collateral pledged. This occurs when the risk of default is so high that an abundance of collateral is taken to mitigate risk of loss in the event of default. From a safety-and-soundness perspective, institutions should be discouraged from lending solely on the basis of collateral pledged. Such loans will generally be classified substandard. Further, when the borrower does not demonstrate the capacity to service the loan from sources other than collateral pledged, the loan may be placed on nonaccrual.

Portfolios

When the portfolio review or loan sample indicates serious concerns with credit-risk selection practices, underwriting standards, or loan quality, examiners should consider classifying or criticizing the entire portfolio or segments of the portfolio. Such a decision may be appropriate in cases where risk is inordinately high or delinquency reports reflect performance problems. Some subprime-lending portfolios may pose very high risk. These may include portfolios of unsecured loans or secured, high loan-to-value loans to borrowers who clearly exhibit inadequate capacity to repay the debt in a reasonable time frame. Most such portfolios should be classified at least substandard.

Required Documentation for Cure Programs

Cure programs, including such practices as re-aging, extensions, renewals, rewrites, or other types of account restructuring, are subject to the standards outlined in the retail classification policy. In accordance with that policy, cure programs should be used *only* when the institution has substantiated the customer's renewed willingness and ability to repay. Examiners will expect institutions to maintain documentation supporting their analysis of the customer's renewed ability and willingness to repay the loan at the time it is extended, renewed, or deferred. When the institution cannot demonstrate both the willingness and ability of the customer to repay, the loan should not be renewed, extended, deferred, or rewritten, and the loan should be moved back to its pre-cure delinquency status. Documentation should include one or more of the following:

- a new verification of employment
- a recomputed debt-to-income ratio indicating sufficient improvement in the borrower's financial condition to support orderly repayment
- a refreshed credit score or updated bureau report
- a file memo evidencing discussion with the customer

When documentation of the customer's renewed willingness and ability to repay the loan is absent or deficient, management practices should be criticized.

Predatory or Abusive Lending Practices

The term "subprime" is often misused to refer to certain predatory or abusive lending practices. Lending practices can be designed to responsibly provide service to customers and enhance credit access for borrowers with special credit needs. Subprime lending that is appropriately underwritten, priced, and administered can serve these goals.

Some forms of subprime lending may be abusive or predatory, however. Lending practices may be designed to transfer wealth from the borrower to the lender or loan originator without a commensurate exchange of value.

This is sometimes accomplished when the lender structures a loan to a borrower who has little or no ability to repay the loan from sources other than the collateral pledged. When default occurs, the lender forecloses or otherwise takes possession of the borrower's property (generally the borrower's home or automobile). In other cases, the lender may use the threat of foreclosure or repossession to induce duress on the borrower for payment. Typically, predatory lending involves at least one, and perhaps all three, of the following elements:

- making unaffordable loans based on the assets of the borrower rather than on the borrower's ability to repay an obligation
- inducing a borrower to refinance a loan repeatedly in order to charge high points and fees each time the loan is refinanced (that is, "loan flipping")
- engaging in fraud or deception to conceal the true nature of the loan obligation or ancillary products from an unsuspecting or unsophisticated borrower

Loans to borrowers who do not demonstrate the capacity to repay the loan, as structured, from sources other than the collateral pledged are generally considered unsafe and unsound. Such lending practices should be criticized in the examination report as imprudent. Further, examiners should refer any loans with the aforementioned characteristics to Federal Reserve consumer compliance/fair lending specialists for additional review.

Capitalization

The Federal Reserve's minimum capital requirements generally apply to portfolios that exhibit substantially lower risk profiles than those that exist in subprime-loan programs. Therefore, these requirements may not be sufficient to reflect the risks associated with subprime portfolios. Subprime-lending activities can present a greater-than-normal risk for financial institutions and the deposit insurance funds; therefore, the level of capital institutions need to support this activity should be commensurate with the additional risks incurred. Each subprime lender is responsible for quantifying the amount of capital needed to offset the additional risk in subprime-lending activities, and for *fully documenting* the methodology and analysis supporting the amount specified.

The amount of additional capital necessary will vary according to the volume and type of subprime activities conducted and the adequacy of the institution's risk-management program. An institution's overall capital adequacy will be evaluated on a case-by-case basis through onsite examinations and off-site monitoring procedures, considering, among other factors, the institution's own documented analysis of the capital needed to support subprime lending. Institutions that are determined to have insufficient capital must correct the deficiency within a reasonable time frame or be subject to supervisory action. In light of the higher risks associated with this type of lending, higher minimum-capital requirements may be imposed on institutions engaging in subprime lending.

The sophistication of this analysis should be commensurate with the size, concentration level, and relative risk of the institution's subprime-lending activities and should consider the following elements:

- portfolio-growth rates
- trends in the level and volatility of expected losses
- the level of subprime-loan losses incurred over one or more economic downturns, if such data or analyses are available
- the impact of planned underwriting or marketing changes on the credit characteristics of the portfolio, including the relative levels of risk of default, loss in the event of default, and the level of classified assets
- any deterioration in the average credit quality over time due to adverse selection or retention
- the amount, quality, and liquidity of collateral securing the individual loans
- any asset, income, or funding-source concentrations
- the degree of concentration of subprime credits
- the extent to which current capitalization consists of residual assets or other potentially volatile components
- the degree of legal or reputation risk associated with the subprime business lines pursued
- the amount of capital necessary to support the institution's other risks and activities

Given the higher risk inherent in subprime-lending programs, examiners should reasonably expect, as a starting point, that an institution

would hold capital against such portfolios in an amount that is *one and one-half to three times greater* than what is appropriate for non-subprime assets of a similar type. Refinements should depend on the factors analyzed above, with particular emphasis on the trends in the level and volatility of loss rates, and on the amount, quality, and liquidity of collateral securing the loans. Institutions should have capital ratios that are well above the averages for their traditional peer groups or other similarly situated institutions that are not engaged in subprime lending.

Some subprime asset pools warrant increased supervisory scrutiny and monitoring, but not necessarily additional capital. For example, well-secured loans to borrowers who are slightly below what is considered prime quality may entail minimal additional risks compared with prime loans, and they may not require additional capital if adequate controls are in place to address the additional risks. On the other hand, institutions that underwrite higher-risk subprime pools, such as unsecured loans or high loan-to-value second mortgages, may need significantly higher levels of capital, perhaps as high as 100 percent of the loans outstanding, depending on the level and volatility of risk.

Stress Testing

An institution's capital adequacy analysis should include stress testing as a tool for estimating unexpected losses in its subprime-lending pools. Institutions should project the performance of their subprime-loan pools under conservative stress-test scenarios, including an estimation of the portfolio's susceptibility to deteriorating economic, market, and business conditions. Portfolio stress testing should include "shock" testing of basic assumptions, such as delinquency rates, loss rates, and recovery rates on collateral. Stress tests should also consider other potentially adverse scenarios, such as changing attrition or prepayment rates; changing utilization rates for revolving products; changes in credit-score distribution; and changes in the capital-market demand for whole loans or asset-backed securities supported by subprime loans. These are representative examples; actual factors will vary by product, market segment, and the size and complexity of the portfolio relative to the institution's overall operations. Whether stress tests are performed manually, or through automated modeling techniques, it is expected that—

- the process is clearly documented, rational, and easily understood by the institution's board and senior management;
- the inputs are reliable and relate directly to the subject portfolios (for example, baseline loss history or default probabilities should reflect each segment of the institution's portfolio and not just a blend of prime and subprime borrowers);
- assumptions are well documented and conservative; and
- any models are subject to a comprehensive validation process.

The results of the stress-test exercises should be a documented factor in the analysis and determination of capital adequacy for the subprime portfolios.

Institutions that engage in subprime-lending programs without adequate procedures to estimate and document the level of capital necessary to support their activities should be criticized. Where capital is deemed inadequate to support the risk in subprime-lending activities, examiners should consult with their Reserve Bank supervisory official to determine the appropriate course of action. Such actions may include requiring additional capital in accordance with the Federal Reserve's capital adequacy rules, or requiring the institution to submit an acceptable capital plan in accordance with safety-and-soundness guidelines.

Subprime-Lending Examiner Responsibilities

Using the interagency guidance and any supplemental Federal Reserve guidelines, examiners should assess carefully management's ability to administer the higher risk in subprime portfolios. The examiner should judge management's ability to manage the risk involved in the subprime-lending program, in particular, the quality of the risk-management and control processes in place, and more importantly, the extent to which management is adhering to those processes. When examiners determine that risk-management practices are deficient, they should criticize management and initiate corrective action. Such actions may include formal or

informal enforcement actions or a plan to achieve adequate capitalization. When a primary supervisor determines that an institution's risk-management practices are materially deficient, the primary supervisor may instruct the institution to discontinue its subprime-lending programs.

APPENDIX—QUESTIONS AND ANSWERS FOR EXAMINERS REGARDING THE EXPANDED GUIDANCE FOR SUBPRIME-LENDING PROGRAMS

To assist examiners who review subprime-lending activities, the following questions and answers were developed to provide additional guidance on the expanded interagency guidance that was issued on January 31, 2001.

Applicability of the Guidance

Question 1: Does the guidance apply to all institutions?

No. The guidance will not affect the vast majority of insured institutions engaged in traditional consumer lending. The guidance applies to institutions that *systematically* target the subprime market through *programs* that employ tailored marketing, underwriting standards, and risk selection.

The guidance does not address traditional consumer lending that has historically been the mainstay of community banking. It does not apply to institutions extending credit to subprime borrowers as part of their standard community-lending process, or making loans to subprime borrowers as an occasional exception to a prime-lending program, even if the aggregate of these loans totals more than 25 percent of tier 1 capital. Such institutions continue to be subject to the normal supervisory process.

Institutions engaging in subprime-lending programs generally have knowingly and purposefully focused on the subprime-lending markets through planned business strategies, tailored products, and explicit borrower targeting. In instances where significant exposures to subprime borrowers are identified, examiners should consider the institution's marketing program, loan products, pricing, underwriting standards and practices, and portfolio performance to determine if the institution has a program that warrants the supervision and safeguards outlined in the guidance.

Question 2: Does the guidance apply when an institution offers a product that attracts a disproportionate number of subprime borrowers, but which the institution does not explicitly identify as subprime?

A subprime program commonly features products specifically tailored to borrowers with weakened credit histories. Such products often differ substantially in pricing and terms from products offered to prime borrowers, and usually have separate and distinctly different underwriting standards. An institution offering a product that attracts a disproportionate number of borrowers with weakened credit histories likely has a subprime program whether or not the activity is called a subprime program. The guidance will apply to these programs when the resultant aggregate credit exposure is at least 25 percent of the institution's tier 1 capital.

Institutions with significant programs are expected to have the necessary risk-management and internal-control systems in place to properly identify, measure, monitor, and control the inherent risks in its subprime portfolio. Risk management and controls for these programs typically involve enhanced performance monitoring, intensive collection activities, and other loss-mitigation strategies. If an institution systematically targets the subprime market but does not segregate these loans from its prime portfolio, it is doubtful that the institution has the necessary risk-management and control systems in place to safely engage in the activity.

Subprime Characteristics

Question 3: Why does the Expanded Guidance for Subprime Lending Programs use a credit bureau risk score (FICO) of 660 as a cutoff point for subprime lending?

The guidance does not use credit scores, or any other single risk factor, as a definitive cutoff point for subprime lending. The characteristics listed are not explicit, bright-line definitions. The range of credit characteristics used to describe subprime borrowers is intended to help

examiners identify lenders that are engaged in subprime-lending programs. These characteristics describe borrowers with varying, but significantly higher, probabilities of default than prime borrowers. The guidance states that "this list is illustrative rather than exhaustive and is not meant to define specific parameters for all borrowers."

A credit bureau score of 660 (FICO) is used only as an example to illustrate a credit score that generally indicates a higher default probability. The guidance indicates the probability of default, as evidenced by the credit score, will vary by product and collateral. The subprime guidance lists *several* characteristics that denote a higher probability of default. Examiners are directed to use these characteristics as a starting point to expand their review of lending programs targeting subprime borrowers in accordance with risk-focused examination procedures. The severity of risk may vary significantly for the different characteristics listed, as well as for the type and quality of collateral. Examiners should take this into consideration when reviewing the portfolio and determining the adequacy of loan-loss reserves and capital.

The characteristics used in the guidance are well recognized in the investment and lending industries. A number of public debt rating agencies and financial institutions, including the government-sponsored enterprises (GSEs), use similar credit characteristics to differentiate risk among borrowers. Specific examples include the following:

- Fitch defines a subprime borrower as "...one with a credit profile worse than that of a prime A quality borrower, whose credit report would typically reveal no recent mortgage delinquencies and whose credit profile would yield a [FICO] credit score in the range above 680." Fitch's mortgage credit grade matrix lists the following credit-history elements for A-, the highest subprime grade: one 30-day delinquency in the last 12 months on a mortgage debt; one 30-day delinquency in the last 24 months on installment debt, or two 30-day delinquencies in the last 24 months on revolving debt; bankruptcy in past five years; charge-off or judgments exceeding $500 in the past 24 months; and/or a debt-to-income ratio of 45 percent.[1]
- Standard & Poor's subprime-mortgage underwriting guidelines define subprime A-characteristics as two or more 30-day delinquencies on mortgage and consumer credit, one 60-day delinquency on consumer credit, debt-to-income ratio of 45 percent, and no bankruptcy in the past five years. Standard & Poor's also "...considers subprime borrowers to have a FICO credit score of 659 or below."[2]
- Standard & Poor's has classified nonprime B auto securitization pools as having occasional delinquencies and minor charge-offs on revolving debt, static pool net losses of 3.1 percent to 7.5 percent, and FICO credit scores ranging from 620–679.[3]
- Freddie Mac has used the FICO score of 660 or below to designate higher-risk borrowers requiring more comprehensive review. Freddie Mac views a score in the 620–660 range as an indication that the "borrower's willingness to repay debt as agreed is uncertain." FICO scores below 620 are placed in the "cautious-review category," and Freddie Mac considers scores below 620 "as a strong indication that the borrower's credit reputation is not acceptable..."[4]

Capital Guidance

Question 4: If an institution is engaged in subprime lending as described by the guidance, does the 1.5-to-3 times capital described in the guidance automatically apply?

No. The expanded interagency guidance on subprime lending is flexible examination guidance; the capital range does not automatically apply because the guidance is not a capital rule or regulation. Rather, the guidance describes an expectation that subprime lenders hold sufficient loan-loss reserves and capital to offset the additional risks that may exist in subprime activities. The agencies expect institutions to have methodologies and analyses in place to support and document the level of reserves and capital needed

1. Fitch IBCA, Duff & Phelps, "Rating U.S. Residential Subprime Mortgage Securities, March 16, 2001: 2.

2. Standard & Poor's, "U.S. Residential Subprime Mortgage Criteria," Structured Finance, 1999: 12, 169.

3. Standard & Poor's, "Auto Loan Criteria and Market Overview 1998," Structured Finance Ratings Asset-Backed Securities, 6.

4. Freddie Mac, Single-Family Seller/Servicer Guide, chapter 37, section 37.6, "Using FICO Scores in Underwriting," March 7, 2001.

for the additional risks assumed. The higher the risk, the more reserves and capital needed to support the activity. Institutions with lower-risk subprime portfolios may not need additional reserves and capital. In addition, examiners are reminded that subprime lending is only one element in the evaluation of the institution's overall capital adequacy. If the analysis shows that the institution has adequate capital for all its assets and activities, including subprime lending, there is no additional capital requirement arising from the guidance.

Examiners are instructed not to unilaterally require additional reserves and capital based on the guidance. Any determination made by an examiner that an institution's reserves or capital are deficient will be discussed with the institution's management and with each agency's appropriate supervisory office before a final decision is made.

Question 5: Are the regulatory expectations for higher capital levels consistent with capital levels supporting subprime assets outside the insured banking industry?

Yes. The regulatory expectations of higher capital maintenance are consistent with expectations in the capital markets. The 1.5-to-3-times-capital multiple is risk based, e.g., the level of additional capital varies by relative loan quality and is applied only to the subprime portfolio, not the institution's entire asset structure. This is consistent with the financial marketplace's assessment of relative risk in subprime assets outside the banking industry. For example, the amount of credit enhancement required for subprime securitization structures varies according to the level and volatility of perceived credit risk in the underlying assets. In addition, publicly traded subprime-finance companies (that are not currently suffering from adverse ratings) maintain equity-capital-to-managed-asset ratios that are 1.5 to as much as 6 times (depending on loan type and relative quality) those of finance companies that do not specialize in subprime loans.

1. To assess and evaluate the extent of subprime-lending activities; whether management has adequately planned for this activity; and whether management has developed and maintains board-approved policies and procedures, systems, and internal controls that identify, measure, monitor, and control the additional risks.
2. To ascertain whether management has established adequate subprime-lending standards that are commensurate with the risks associated with the subprime-lending program.
3. To conduct portfolio-level reviews and transaction-level testing of the subprime-lending activities, assessing the quality and performance of the subprime-loan portfolios and subprime-lending program, including its profitability, delinquency, and potential and actual loss experience.
4. To assess the adequacy of the allowance for loan and lease losses (ALLL) for the subprime-loan portfolio.

1. Determine whether the subprime-lending activities are consistent with the bank's overall business strategy and risk tolerances, and that the critical business risks have been identified and considered.
2. Assess whether the bank has the financial capacity, including capital adequacy, to conduct the high-risk activity of subprime lending safely, without any undue concentrations of credit.
3. Ascertain if management has committed the necessary resources, that is, technology and skilled personnel, to manage and control the risks associated with the volume and complexity of the subprime-lending program.
4. Determine whether the banking institution's contingency plans are adequate to address the issues of (1) alternative funding sources, (2) back-up purchasers of the securities or the attendant servicing functions, and (3) methods of raising additional capital during an economic downturn or when financial markets become volatile.
5. Determine if management has established adequate lending standards that are appropriate for the size and complexity of the banking organization's operations, and if management is maintaining proper controls over the program. (See ''Risk Management'' in section 2133.1 for the lending standards that should be included in the subprime-loan program.)
6. Review and evaluate loan-administration and loan-monitoring procedures for subprime loans originated or purchased, including—
   a. collection, repossession, and disclosure procedures;
   b. the management of the number of staff members, the level and effective use of skilled staffing, and advanced technology;
   c. the adequacy of the allowance for loan and lease losses (ALLL); and
   d. the adequacy and accuracy of models used to estimate credit losses or set pricing, making certain that the models account for economic cycles and other unexpected events.
7. Perform a portfolio-level review and conduct some transaction testing. Incorporate examination findings from the portfolio-level and transaction-level testing reviews into the conclusions about overall asset quality, the adequacy of the ALLL and capital, and the adequacy of portfolio risk-management practices.
8. Review securitization transactions for compliance with Statement of Financial Accounting Standards No. 140 (FAS 140) and this guidance, including whether the banking organization has provided any support to maintain the credit quality of loan pools it has securitized.
9. Evaluate the ALLL and regulatory capital allocated to support subprime-lending programs, including whether the total protection for subprime-asset programs and the levels for each component are adequate. Ascertain that a sound risk-management program exists that includes the ability of management to determine and quantify appropriate levels for each component.
10. Analyze the performance of the program, including its profitability, delinquency, and loss experience.
11. Consider management's response to adverse performance trends, such as higher-than-expected prepayments, delinquencies, charge-offs, customer complaints, and expenses.
12. Determine if the banking institution's subprime-lending program effectively manages the credit, market, liquidity, reputational, operational, and legal risks associated with subprime-lending operations.
13. Evaluate the documented analysis of the institution's capital needed to support its subprime-lending activities. Ascertain whether the capital levels are risk sensitive, that is, does allocated capital reflect the level and variability of loss estimates within reasonably conservative parameters? Determine if there is a direct link between the expected loss rates used to determine the required ALLL and the unexpected loss estimates used to determine capital. Document and reference each institution's subprime capital evaluation in the examination comments and conclusions regarding capital adequacy.
14. Classify loans according to the following criteria:

a. Classify as substandard loans to borrowers that do not have the capacity to service their loans.
b. Classify as at least substandard subprime loans that are 90 days or more past due based on a reasonable presumption that their past-due status indicates an inadequate capacity or unwillingness to repay.
c. Consider classifying or criticizing the entire portfolio or segments of the portfolio when the portfolio review or loan sample indicates serious concerns with credit-risk selection practices, underwriting standards, or loan quality.
d. Classify as substandard high-risk unsecured loan portfolios or secured high loan-to-value loans to borrowers who clearly exhibit inadequate capacity to repay the debt in a reasonable time frame.

15. Report as unsafe and unsound imprudent loans to borrowers who do not demonstrate the capacity to repay the loan, as structured, from sources other than the pledged collateral. Refer such loans to a consumer compliance/fair lending specialist for review.
16. Carefully assess management's ability to administer the higher risk in subprime portfolios. If risk-management practices are deficient, criticize management and reach specific agreements with senior management and the board of directors to initiate corrective action.

An interagency Statement on Subprime Mortgage Lending (the subprime statement) was issued on July 10, 2007 (72 *Fed. Reg.* 37569) by the agencies[1] (same effective date). The subprime statement address issues and questions related to certain adjustable-rate mortgage (ARM) products marketed to subprime borrowers. The statement clarifies how institutions can offer certain ARM products in a safe and sound manner, and in a way that clearly discloses the risks that a borrower may assume from certain ARMs. The statement applies to all banks and their subsidiaries and bank holding companies and their nonbank subsidiaries. See SR-07-12/CA-07-3 and its attachment (the full text of the interagency statement).

The guidance was developed to address emerging risks associated with certain subprime mortgage products and lending practices. The agencies are particularly concerned about the growing use of ARM products[2] that provide low initial payments based on a fixed introductory rate that expires after a short period, and then adjusts to a variable rate plus a margin for the remaining term of the loan. These products could result in payment shock to the borrower. Also, there is concern that these products, typically offered to subprime borrowers, present heightened risks to lenders and borrowers. Often, these products have additional characteristics that increase risk. These include qualifying borrowers based on limited or no documentation of income or imposing substantial prepayment penalties or prepayment penalty periods that extend beyond the initial fixed-interest-rate period.

ARM products originally were extended to customers primarily as a temporary credit accommodation in anticipation of early sale of the property or in expectation of future earnings growth. However, these loans have been offered to subprime borrowers as ''credit repair'' or ''affordability'' products. The agencies had concerns that many of these subprime borrowers may not have sufficient financial capacity to service a higher debt load, especially if they were qualified based on a low introductory payment. Also, there was concern that the subprime borrowers may not fully understand the risks and consequences of obtaining these types of ARM products. Borrowers who obtain these loans may face unaffordable monthly payments after the initial rate adjustment, difficulty in paying real estate taxes and insurance that were not escrowed, or expensive refinancing fees, any of which could cause borrowers to default and potentially lose their homes.

SCOPE OF THE SUBPRIME STATEMENT

The subprime statement emphasizes the need for prudent underwriting standards and clear and balanced consumer information so that institutions and consumers can assess the risks arising from certain ARM products with discounted or low introductory rates. The statement is focused on these types of ARMs and uses the interagency Expanded Guidance for Subprime Lending (the expanded guidance)[3] issued in 2001 to determine subprime borrower characteristics. While the statement is focused on subprime borrowers, the principles in the statement are also relevant to ARM products offered to nonsubprime borrowers.

RISK-MANAGEMENT PRACTICES

The risk-management practices discussed in the subprime statement are generally consistent with existing interagency guidance regarding real estate lending, subprime lending, and nontraditional mortgage products.[4] Like the nontradi-

1. The Board of Governors of the Federal Reserve System (the Board), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Office of Thrift Supervision (OTS), and the National Credit Union Administration (NCUA).

2. See footnote 8.

3. As discussed in the 2001 interagency Expanded Guidance for Subprime Lending Programs, the term ''subprime'' refers to the characteristics of individual borrowers. Subprime borrowers typically have weakened credit histories that include payment delinquencies and possibly more severe problems, such as charge-offs, judgments, and bankruptcies. They may also display reduced repayment capacity as measured by credit scores, debt-to-income ratios, or other criteria that may encompass borrowers with incomplete credit histories.

4. The 1993 Interagency Guidelines for Real Estate Lending (see SR-93-1 and sections 2090.1–2090.4); the 1999 Interagency Guidance on Subprime Lending (see SR-99-6 and sections 2133.1–2133.3); the 2001 Expanded Guidance for Subprime Lending Programs (see SR-01-4 and sections 2133.1–2133.3); and the 2006 Interagency Guidance on Nontraditional Mortgage Product Risks (see SR-06-15/CA-06-12 and sections 2043.1–2043.4).

tional mortgage guidance issued in 2006, the subprime statement encourages institutions to evaluate the borrower's repayment capacity and ability to repay the loan by final maturity at the fully indexed rate, assuming a fully amortizing repayment schedule.[5] Further, the subprime statement emphasizes that an institution's assessment of a borrower's repayment capacity should include an evaluation of the borrower's debt-to-income ratio and states that this assessment should include total monthly housing-related payments (i.e., principal, interest, taxes, and insurance).

WORKOUT ARRANGEMENTS

The subprime statement reiterates the principles in the interagency Statement on Working with Borrowers (April 2007) in which the agencies encouraged institutions to work constructively with residential borrowers who are in default or whose default is reasonably foreseeable. Both documents indicate that prudent workout arrangements that are consistent with safe and sound lending practices are generally in the long-term best interest of both the financial institution and the borrower. The Federal Reserve will not criticize institutions that pursue reasonable workout arrangements with borrowers.

SUPERVISORY REVIEW

Federal Reserve examiners are expected to carefully review an institution's risk management, consumer-disclosure practices, and consumer compliance, concerns which are contained in the subprime statement as a part of ongoing examination activities. Examiners will take action against institutions that exhibit predatory lending practices, violate consumer protection or fair lending laws, engage in unfair or deceptive acts or practices, or otherwise engage in unsafe or unsound lending practices.

5. The nontraditional mortgage (NTM) guidance covers mortgage products that allow borrowers to defer payment of principal and sometimes interest, including interest-only mortgages when a borrower pays no loan principal for the first few years of the loan and payment-option ARMs when a borrower has flexible payment options with the potential for negative amortization. Because certain ARM products offered to subprime borrowers are fully amortizing, the NTM guidance does not cover such products.

STATEMENT ON SUBPRIME MORTGAGE LENDING

The Statement on Subprime Mortgage Lending (the subprime statement) was developed by the agencies to address emerging issues and questions relating to certain subprime[6] mortgage lending practices. The agencies stated their concern that borrowers may not fully understand the risks and consequences of obtaining products that can cause payment shock.[7] In particular, they have concerns with certain adjustable-rate mortgage (ARM) products typically offered to subprime borrowers that have one or more of the following characteristics:

- low initial payments based on a fixed introductory rate that expires after a short period and then adjusts to a variable index rate plus a margin for the remaining term of the loan;[8]
- very high or no limits on how much the payment amount or the interest rate may increase (''payment or rate caps'') on reset dates;
- limited or no documentation of borrowers' income;
- product features likely to result in frequent refinancing to maintain an affordable monthly payment; and/or
- substantial prepayment penalties and/or prepayment penalties that extend beyond the initial fixed-interest-rate period.

Products with one or more of these features present substantial risks to both consumers and lenders. These risks are increased if borrowers are not adequately informed of the product features and risks, including their responsibility for paying real estate taxes and insurance, which may be separate from their monthly mortgage payments. The consequences to borrowers could

6. The term ''subprime'' is described in the 2001 Expanded Guidance for Subprime Lending Programs. (See SR-01-4 and sections 2133.1–2133.3)

7. *Payment shock* refers to a significant increase in the amount of the monthly payment that generally occurs as the interest rate adjusts to a fully indexed basis. Products with a wide spread between the initial interest rate and the fully indexed rate that do not have payment caps or periodic interest rate caps, or that contain very high caps, can produce significant payment shock.

8. For example, ARMs known as ''2/28'' loans feature a fixed rate for two years and then adjust to a variable rate for the remaining 28 years. The spread between the initial fixed interest rate and the fully indexed interest rate in effect at loan origination typically ranges from 300 to 600 basis points.

include being unable to afford the monthly payments after the initial rate adjustment because of payment shock; experiencing difficulty in paying real estate taxes and insurance that were not escrowed; incurring expensive refinancing fees, frequently due to closing costs and prepayment penalties, especially if the prepayment penalty period extends beyond the rate adjustment date; and losing their homes. Consequences to lenders may include unwarranted levels of credit, legal, compliance, reputation, and liquidity risks due to the elevated risks inherent in these products.

Many of these concerns are addressed in existing interagency guidance. The most prominent are the 1993 Interagency Guidelines for Real Estate Lending (real estate guidelines) (see SR-93-1 and sections 2090.1–2090.4), the 1999 Interagency Guidance on Subprime Lending (see SR-99-6 and sections 2133.1–2133.3)) and the 2001 Expanded Guidance for Subprime Lending Programs (expanded subprime guidance) (see SR-01-4 and sections 2133.1–2133.3).

While the 2006 Interagency Guidance on Nontraditional Mortgage Product Risks (NTM guidance)[9] may not explicitly pertain to products with the characteristics addressed in this statement, it outlines prudent underwriting and consumer protection principles that institutions also should consider with regard to subprime mortgage lending. This statement reiterates many of the principles addressed in existing guidance relating to prudent risk-management practices and consumer protection laws.[10]

Risk-Management Practices

Predatory Lending Considerations

Subprime lending is not synonymous with predatory lending, and loans with the features described above are not necessarily predatory in nature. However, institutions should ensure that they do not engage in the types of predatory lending practices discussed in the expanded subprime guidance. Typically, predatory lending involves at least one of the following elements:

- making loans based predominantly on the foreclosure or liquidation value of a borrower's collateral rather than on the borrower's ability to repay the mortgage according to its terms;
- inducing a borrower to repeatedly refinance a loan in order to charge high points and fees each time the loan is refinanced ("loan flipping"); or
- engaging in fraud or deception to conceal the true nature of the mortgage loan obligation, or ancillary products, from an unsuspecting or unsophisticated borrower.

Institutions offering mortgage loans such as these face an elevated risk that their conduct will violate section 5 of the Federal Trade Commission Act (FTC Act), which prohibits unfair or deceptive acts or practices.[11]

Underwriting Standards

Institutions should refer to the real estate guidelines, which provide underwriting standards for all real estate loans.[12] The real estate guidelines state that prudently underwritten real estate loans should reflect all relevant credit factors, including the capacity of the borrower to adequately service the debt. The 2006 NTM guidance details similar criteria for qualifying borrowers for products that may result in payment shock.

Prudent qualifying standards recognize the potential effect of payment shock in evaluating a borrower's ability to service debt. An institution's analysis of a borrower's repayment capacity should include an evaluation of the borrower's ability to repay the debt by its final maturity at the fully indexed rate,[13] assuming a fully

9. See SR-06-1, sections 2043.1–2043.4, and 71 *Fed. Reg.* 58609 (October 4, 2006).

10. As with the NTM guidance, this statement applies to all banks and their subsidiaries as well as to bank holding companies and their nonbank subsidiaries.

11. The Board, the OCC, the OTS, and the FDIC enforce this provision under section 8 of the Federal Deposit Insurance Act. The Board, the OCC, and the FDIC also have issued supervisory guidance to the institutions under their respective jurisdictions concerning unfair or deceptive acts or practices. See OCC Advisory Letter 2002-3, Guidance on Unfair or Deceptive Acts or Practices, March 22, 2002, and 12 CFR 30, appendix C; Joint Board and FDIC Guidance on Unfair or Deceptive Acts or Practices by State-Chartered Banks, March 11, 2004.

12. Refer to 12 CFR 208, subpart C.

13. The fully indexed rate equals the index rate prevailing at origination plus the margin to be added to it after the expiration of an introductory interest rate. For example, assume that a loan with an initial fixed rate of 7 percent will reset to the six-month London Interbank Offered Rate (LIBOR) plus a margin of 6 percent. If the six-month LIBOR rate

amortizing repayment schedule.[14]

One widely accepted approach in the mortgage industry is to quantify a borrower's repayment capacity by a debt-to-income (DTI) ratio. An institution's DTI analysis should include, among other things, an assessment of a borrower's total monthly housing-related payments (e.g., principal, interest, taxes, and insurance, or what is commonly known as PITI) as a percentage of gross monthly income.

This assessment is particularly important if the institution relies upon reduced documentation or allows other forms of risk layering. Risk-layering features in a subprime mortgage loan may significantly increase the risks to both the institution and the borrower. Therefore, an institution should have clear policies governing the use of risk-layering features, such as reduced-documentation loans or simultaneous second-lien mortgages. When risk-layering features are combined with a mortgage loan, an institution should demonstrate the existence of effective mitigating factors that support the underwriting decision and the borrower's repayment capacity.

Recognizing that loans to subprime borrowers present elevated credit risk, institutions should verify and document the borrower's income (both source and amount), assets, and liabilities. Stated-income and reduced-documentation loans to subprime borrowers should be accepted only if there are mitigating factors that clearly minimize the need for direct verification of repayment capacity. Reliance on such factors also should be documented. Typically, mitigating factors arise when a borrower with favorable payment performance seeks to refinance an existing mortgage with a new loan of a similar size and with similar terms, and the borrower's financial condition has not deteriorated. Other mitigating factors might include situations where a borrower has substantial liquid reserves or assets that demonstrate repayment capacity and can be verified and documented by the lender. However, a higher interest rate is not considered an acceptable mitigating factor.

equals 5.5 percent, lenders should qualify the borrower at 11.5 percent (5.5 percent + 6 percent), regardless of any interest rate caps that limit how quickly the fully indexed rate may be reached.

14. The fully amortizing payment schedule should be based on the term of the loan. For example, the amortizing payment for a "2/28" loan would be calculated based on a 30-year amortization schedule. For balloon mortgages that contain a borrower option for an extended amortization period, the fully amortizing payment schedule can be based on the full term the borrower may choose.

Workout Arrangements

As discussed in the April 2007 Interagency Statement on Working with Borrowers (see SR-07-6/CA-07-1), financial institutions are encouraged to work constructively with residential borrowers who are in default or whose default is reasonably foreseeable. Prudent workout arrangements that are consistent with safe and sound lending practices are generally in the long-term best interest of both the financial institution and the borrower.

Financial institutions should follow prudent underwriting practices in determining whether to consider a loan modification or a workout arrangement.[15] Such arrangements can vary widely based on the borrower's financial capacity. For example, an institution might consider modifying loan terms, including converting loans with variable rates into fixed-rate products to provide financially stressed borrowers with predictable payment requirements.

The agencies will not criticize financial institutions that pursue reasonable workout arrangements with borrowers. Further, existing supervisory guidance and applicable accounting standards do not require institutions to immediately foreclose on the collateral underlying a loan when the borrower exhibits repayment difficulties. Institutions should identify and report credit risk, maintain an adequate allowance for loan losses, and recognize credit losses in a timely manner.

Consumer Protection Principles

Fundamental consumer protection principles relevant to the underwriting and marketing of mortgage loans include—

- approving loans based on the borrower's ability to repay the loan according to its terms; and
- providing information that enables consumers to understand material terms, costs, and risks of loan products at a time that will help the consumer select a product.

Communications with consumers, including

15. Institutions may need to account for workout arrangements as troubled-debt restructurings and should follow generally accepted accounting principles in accounting for these transactions.

advertisements, oral statements, and promotional materials, should provide clear and balanced information about the relative benefits and risks of the products. This information should be provided in a timely manner to assist consumers in the product-selection process, not just upon submission of an application or at consummation of the loan. Institutions should not use such communications to steer consumers to these products to the exclusion of other products offered by the institution for which the consumer may qualify.

Information provided to consumers should clearly explain the risk of payment shock and the ramifications of prepayment penalties, balloon payments, and the lack of escrow for taxes and insurance, as necessary. The applicability of prepayment penalties should not exceed the initial reset period. In general, borrowers should be provided a reasonable period of time (typically at least 60 days prior to the reset date) to refinance without penalty.

Similarly, if borrowers do not understand that their monthly mortgage payments do not include taxes and insurance, and they have not budgeted for these essential homeownership expenses, they may be faced with the need for significant additional funds on short notice.[16] Therefore, mortgage-product descriptions and advertisements should provide clear, detailed information about the costs, terms, features, and risks of the loan to the borrower. Consumers should be informed of—

- *payment shock*: potential payment increases, including how the new payment will be calculated when the introductory fixed rate expires;[17]
- *prepayment penalties*: the existence of any prepayment penalty, how it will be calculated, and when it may be imposed;
- *balloon payments*: the existence of any balloon payment;
- *cost of reduced-documentation loans*: whether there is a pricing premium attached to a reduced-documentation or stated-income loan program; and
- *responsibility for taxes and insurance*: the requirement to make payments for real estate taxes and insurance in addition to their loan payments, if not escrowed, and the fact that taxes and insurance costs can be substantial.

Control Systems

Institutions should develop strong control systems to monitor whether actual practices are consistent with their policies and procedures. Systems should address compliance and consumer information concerns, as well as safety and soundness, and encompass both institution personnel and applicable third parties, such as mortgage brokers or correspondents.

Important controls include establishing appropriate criteria for hiring and training loan personnel, entering into and maintaining relationships with third parties, and conducting initial and ongoing due diligence on third parties. Institutions also should design compensation programs that avoid providing incentives for originations inconsistent with sound underwriting and consumer protection principles, and that do not result in the steering of consumers to these products to the exclusion of other products for which the consumer may qualify.

Institutions should have procedures and systems in place to monitor compliance with applicable laws and regulations, third-party agreements, and internal policies. An institution's controls also should include appropriate corrective actions in the event of failure to comply with applicable laws, regulations, third-party agreements, or internal policies. In addition, institutions should initiate procedures to review consumer complaints to identify potential compliance problems or other negative trends.

Supervisory Review

The agencies will continue to carefully review risk-management and consumer compliance processes, policies, and procedures. The agen-

16. Institutions generally can address these concerns most directly by requiring borrowers to escrow funds for real estate taxes and insurance.

17. To illustrate: a borrower earning $42,000 per year obtains a $200,000 "2/28" mortgage loan. The loan's two-year introductory fixed interest rate of 7 percent requires a principal and interest payment of $1,331. Escrowing $200 per month for taxes and insurance results in a total monthly payment of $1,531 ($1,331 + $200), representing a 44 percent DTI ratio. A fully indexed interest rate of 11.5 percent (based on a six-month LIBOR index rate of 5.5 percent plus a 6 percent margin) would cause the borrower's principal and interest payment to increase to $1,956. The adjusted total monthly payment of $2,156 ($1,956 + $200 for taxes and insurance) represents a 41 percent increase in the payment amount and results in a 62 percent DTI ratio.

cies will take action against institutions that exhibit predatory lending practices, violate consumer protection laws or fair lending laws, engage in unfair or deceptive acts or practices, or otherwise engage in unsafe or unsound lending practices.

INTRODUCTION

Agricultural loans can be broadly defined as loans made to agricultural producers to finance the production of crops or livestock. The term ''crops'' is meant to include any of the many types of plants that produce grains, fruits, vegetables, or fibers that can be harvested. Similarly, a variety of animals is produced for profit, although cattle, swine, sheep, and poultry are by far the most common. Production cycles vary with the type of crop or livestock, from a few weeks or months to several years; in the case of an orchard crop or timber, the time from planting to harvest (from cash outlay to the generation of income) is quite lengthy. The type of crop or livestock to be produced will determine the nature of the financing needed, including its timing, collateral considerations, and repayment terms.

Repayment terms for farm loans normally correspond to anticipated cash flows. Since repayment of agricultural-related loans usually comes from the sale of crops or livestock, annual repayment terms are not uncommon. Depending on the type of operation and timing of cash income, payments may be set to come due semiannually, quarterly, or on an irregular schedule. However, many smaller farm operators also receive income from nonfarm employment, which allows them to make monthly payments on some loans.

Agricultural producers need access to land (often with buildings and other improvements) and equipment, in addition to the shorter-term operating inputs directly involved in crop or livestock production. Not all producers own land; some are tenants who pay the landowners cash rent or a portion of the crop yield. Many producers both own and rent or lease land in an effort to maximize efficiency and income. Accordingly, individual producers may need a variety of types of loans, including—

- real estate loans,
- equipment loans,
- livestock loans, and
- operating (or production) loans.

Information on each of these types of agricultural loans follows, as well as general comments on agricultural lending and the examiner's review of agricultural loans.

AGRICULTURAL REAL ESTATE LOANS

Real estate loans are not intended as a primary focus of this manual section. However, real estate loans are a significant portion of total debt for many agricultural producers, and the examiner should consider them when evaluating other types of loans to agricultural producers. For a more thorough discussion of real estate loans, refer to section 2090.1, ''Real Estate Loans.'' Loans to finance agricultural land, together with related improvements (frequently including the producer's residence) comprise the most common type of real estate loan made by agricultural banks. These loans are subject to the same general lending principles and legal and regulatory requirements[1] as loans on other types of real estate. Even if a bank has not made a real estate loan to the agricultural borrower, any real estate debt owed elsewhere must be considered in analyzing the borrower's creditworthiness, along with amounts due to the bank and any other creditors. Additionally, any state laws on homestead exemptions should be noted.

Agricultural real estate loans tend to have special characteristics, particularly with regard to valuation and repayment considerations. For instance, farmland appraisers need special knowledge of soil types, topography, data on rainfall or water tables, and crop production data, as well as a knowledge of area market conditions and other extenuating information. Prevailing market values for farmland tend not to permit as high a level of cash return as those for other types of income-producing property. Values always reflect supply and demand, and, probably due to a number of factors, the demand for farmland has traditionally been relatively strong from neighboring landowners, other area farmers, nonfarmers, and absentee owners who have a strong desire to own land. A lower level of return generally dictates a lower loan-to-value ratio, although a borrower may be able to

1. In connection with the supervisory loan-to-value limits set forth in the ''Interagency Guidelines for Real Estate Lending Policies,'' farmland, ranchland, or timberland committed to ongoing management and agricultural production is considered ''improved property,'' subject to a loan-to-value limit of 85 percent. However, a bank may set a lower limit for itself and, as a matter of policy, probably will loan less than 85 percent of appraised value on farmland in most cases.

service debt at a higher level from other income sources such as less-heavily encumbered land, rented land, or nonfarm income. For example, it would not be unusual for a bank to advance 100 percent of the purchase price of land if a lien on additional land is taken to lower the overall loan-to-value ratio.

There is generally a well-established market for agricultural land. Although values fluctuate based on a variety of factors (just as they do with other types of real estate), there is normally a recognized range of values at any given time for particular land types within a general area. The examiner should gain some knowledge of current area land prices and trends through published data from local universities or private organizations, interviews with bank management, and the review of appraisal reports. This knowledge will be vital in assessing collateral values and the borrower's overall financial condition and future prospects.

An amortization period of up to 20 years is not uncommon for agricultural real estate loans by banks. Longer-term loans (up to 30 years) on farm real estate are sometimes made by commercial banks, but are more common with other lenders such as Federal Land Banks. Many banks structure real estate loans so that required payments are based on a 20- to 30-year amortization, but they write the notes with a 5- to 10-year maturity, at which time a balloon payment is due. Major improvements, such as livestock-confinement buildings or grain-handling facilities, commonly have a shorter amortization period of 10 years or less.

AGRICULTURAL MACHINERY AND EQUIPMENT LOANS

Agricultural producers often need to finance the purchase of machinery, equipment, vehicles, and implements. Typically, these loans are secured by the durable goods being financed and are amortized over an intermediate term of up to seven years. As with any equipment loan, some borrower equity should be required, the amortization period should be no longer than the expected useful life of the equipment, and scheduled payments should correlate reasonably with the timing and amount of anticipated income. In some cases, equipment loan payments may be advanced under the borrower s operating line of credit.

Loans to farmers and ranchers may include individual notes to finance the purchase of specific pieces of equipment or vehicles. However, many agricultural borrowers provide the bank with a blanket lien on all equipment and vehicles to secure any and all debts owed the bank. Frequently, borrowers have both purchase money loans on specific equipment and other loans secured by a blanket equipment lien.

Under the Uniform Commercial Code, a security interest in equipment is created with a security agreement signed by the borrower and a bank officer, and the lien is perfected by a centrally filed financing statement. Many banks file the financing statement in both the county and state in which the borrower resides *and* in the county and state in which the equipment is located. The filing is a public record that notifies lenders or other interested parties that the assets identified have been pledged, as well as to whom and when they were pledged.

Since the filing record provides vital information for potential lenders, bank management must check it before extending credit to determine whether the collateral is already pledged to another lender. In many cases, a bank might approve a loan request only if it were to be in a first lien position, but there can be exceptions. For example, a bank may agree to advance on a second lien position in a large piece of equipment in which the borrower has substantial equity or take a blanket lien on all equipment, including one or a few items of equipment pledged elsewhere (such as a purchase money lien held by an equipment dealer). As a matter of prudent lending and sound loan administration, lien searches should be performed periodically on at least larger borrowers or on those borrowers known to be or suspected of having problems or of being involved with other lenders.

Sound bank lending policies should prescribe a maximum loan-to-value ratio for equipment, as well as maximum repayment terms. The same is true for vehicles, although the loan-to-value limits on vehicles for highway use (automobiles and trucks) tend to be higher because they have a less-specialized use and are more liquid. Maximum loan-to-value limits, particularly for loans to purchase specific pieces of farm equipment, may range to more than 80 percent or even to 100 percent for strong borrowers. However, many farm lines of credit are supported in part by blanket liens on all the borrower's

equipment. Typically, overall loan-to-value ratios on a line of equipment do not exceed 60 percent.

LIVESTOCK LOANS

Livestock loans vary with the animal species and the nature of the individual producer's operation, but the same general lending principles apply to virtually all types of livestock loans. The borrower should have an equity position in the livestock financed, ample feed on hand, or another underlying financial strength that will protect the lender from risks such as losses from animal diseases and deaths, rising feed costs, or market fluctuations. The size of the livestock operation should be commensurate with the borrower's physical facilities and management capability. Total debt should not overburden the borrower, and the timing and source of repayment for loans should be understood when they are originated. The term of a livestock loan normally bears a close relationship to the length of time the animals are to be held.

Feed is a necessity for livestock producers and a major expense for those involved in finishing animals for slaughter, dairy herds, or egg-laying operations. On the other hand, stocker cattle feed mainly on pasture or silage, which reduces feed costs. Some livestock producers also raise feed crops, which may improve their overall efficiency. Many producers, however, need to buy feed. In any event, the loan officer should have a firm understanding of how much feed the borrower has on hand (or will be harvesting) and how much will have to be purchased. Still, even though both borrower and banker may be experienced and capable at projecting feed costs, variables beyond their control impose some risk of increased costs. These variables might include perils such as unfavorable weather or disease affecting feed crop yields or rising feed prices or shortages brought on by other unanticipated forces.

Many banks will advance up to 100 percent of the cost of livestock if the borrower has sufficient feed on hand and a sound overall financial position. Since the animals gain weight and value as feedstocks are consumed, the bank's collateral position normally strengthens as the livestock matures toward market weight. For borrowers without adequate feedstocks on hand, advance rates may be limited to 70 to 80 percent of the purchase price.

TYPES OF LIVESTOCK OPERATIONS AND LOAN CONSIDERATIONS

Livestock producers usually specialize in particular kinds or breeds of animals or in certain phases of an animal's life cycle. This specialization may vary depending on geographic area, climate, topography, soil type, or the availability of water and feed, or on the producer's preferences, experience, or physical facilities. A producer may change his specialization from time to time based on recurring market cycles or more fundamental shifts in economic factors, such as consumer demand. Some producers are involved in more than one type of livestock operation at any given time.

The following is a brief discussion of the most common types of livestock operations, as well as the lending and loan analysis considerations for each.

Cattle

Beef Breeds

- *Cow-calf operation.* A producer has breeding stock that produces calves, which are then sold as either feeder calves or future breeding stock or are kept until the animal reaches full maturity.

  The typical cow-calf loan is for financing the breeding stock (cows and bulls) of a herd. The loan term is usually three to five years, with annual payments of principal and interest to fully amortize the loan within that term. Often, loans for this type of operation are written with one-year maturities and no predetermined amount of principal reduction at maturity. However, this kind of loan structure is more suitable for borrowers who are not highly leveraged.

  Repayment is from the annual sale of calves and cull cows (older cows or those that fail to produce offspring). Approximately 10 to 15 percent of a cow herd is culled each year; most cows are retained for seven to as many as twelve years. Bulls are typically stocked at one for each 20 to 25 cows; pregnancy rates are generally 80 to 100 percent, depending on the age and health of the cows and on feed availability.

Most calves are born in late winter and early spring, weighing around 100 pounds. Cows may be winter-fed on hay, but cows and calves graze on pastureland from spring to around October when the calves weigh 500 to 550 pounds. At this time, the calves may be sold to another producer who specializes in raising stockers. (However, in some areas, herds are managed to produce fall calves. Also, depending on feed sources and market conditions, calves may be sold at lighter weights, around 300 to 400 pounds.)

- *Stocker or backgrounding operation.* A producer in a stocker operation acquires calves weighing from 300 to 550 pounds and feeds them, primarily on pasture, until they weigh around 700 to 750 pounds, when they are sold to a finisher. Since the growth gains of young cattle are generally the most efficient phase of beef production, some stock operators prefer to buy lighter weight calves, although the lighter weights require more care and supervision to minimize death losses. Stocker operations are relatively high-risk programs that require specialized knowledge, but they can also be quite profitable.

  Backgrounding requires approximately 100 days, during which time the cattle may be fed a daily ration of silage (the entire corn or grain sorghum plant chopped into feed and stored in a silo) and grain and feed supplements, including soybean meal, minerals, salt, and vitamins. The supplements usually need to be purchased. Steers gain approximately two pounds per day, and heifers slightly less. Sometimes stocker cattle are placed on pasture, which can include dormant wheat in the winter or grass during the summer.

  Stocker cattle are typically financed with a 90- to 120-day single-advance, single-maturity note. Funds for feed purchases may be provided as part of the note proceeds, but, more commonly, the feed is raised by the producer. Loan repayment comes from the sale of the cattle when they weigh around 700 to 750 pounds. Collateral for stocker loans is typically the cattle financed and the feed. Banks usually require around a 30 percent margin in the cattle, but may require as little as 20 percent or less for financially strong borrowers.

  The profitability of a backgrounding operation is sensitive to the average daily weight gain, feed costs, weather, and purchase and sale prices of the cattle.

- *Finishing operation.* A finishing operation acquires cattle weighing approximately 700 to 750 pounds and feeds them a high-protein grain ration until they are ready for slaughter at around 1,100 to 1,200 pounds.

  Finishing usually takes around 130 to 145 days. Most finishing cattle are now custom-fed in commercial feedlots, but the producer (not the feedlot owner) usually retains ownership of the cattle. Feeder steers usually gain approximately 3.2 pounds per day, and heifers around 2.8 pounds per day. However, average daily gains vary depending on the breed, type of ration, time of year, or weather conditions.

  Finishing cattle can be risky because of fluctuations in cattle prices between purchase and sale dates. Some producers use futures contracts to lock in prices and reduce the risk, or they enter into forward contracts with a packer. Larger producers may use a ‘‘moving hedge’’ to offset the risk imposed by market cycles.[2]

  Banks normally require 20 to 30 percent initial margin in financing the purchase of feeder cattle, but may advance up to 100 percent of the feed costs. As the cattle gain weight, the bank’s collateral position tends to improve. Repayment comes from sale of the cattle, with loan maturity set near the anticipated sale date.

Dairy Operations

Cows are milked for ten months each year, then rested for two months and allowed to ‘‘dry up’’ (quit producing milk by not being milked). Three months after a female dairy cow gives birth, she is rebred and calves nine months later. Cows are commonly bred through artificial insemination, which allows the producer to improve the genetics of the herd. Each year approximately one-third of the cows are culled,

2. In this strategy, the producer periodically buys a given number of lightweight feeders and at the same time sells a similar number of fat cattle. When prices are down, lower revenues from sales of cattle are offset by the benefit of lower costs to purchase replacement lightweight feeders. By the same token, when prices are up, higher purchase costs are offset by higher revenues on the slaughter cattle sold. This strategy allows the producer to prevent or substantially minimize losses due to fluctuating market prices. Otherwise, the producer might too often be in the position of only buying at high prices and only selling at low prices.

with replacement heifers usually raised on the farm. An 80 percent calf crop is common, with the males either sold soon after birth or fed for slaughter.

Milk production is measured by pounds of milk produced per cow per year. Production in the range of 13,500 to 20,500 pounds is common. Milk production variables include the quality of the cows, number of days milked each year, and amount and quality of feed. Feeding cows a higher ratio of grain to dry hay will result in higher milk production, but the higher feed costs must be weighed against the returns of higher production.

Feed is a major expense for a dairy operation. Dairy cows consume a ration of corn or grain sorghum, soybean meal, high-quality hay, silage, vitamins, and minerals. Family-oriented dairy operations usually grow most of their own feed on the farm, while larger operations purchase most of their feed and confine the cows to a dry-lot facility.

A dairy operation is heavily capital intensive because of the investment in cows, buildings, and equipment. Dairying is also labor intensive, which further adds to the cost of production.

The efficiency of a dairy operation is measured on a ''per-cow'' basis. Gross income, expenses, and net income can be divided by the number of cows to analyze trends and compare them with other dairy operations. Several other key indicators of a dairy operation's productivity include the following:

- *Pounds of milk per cow per year.* Herds averaging less than 14,000 pounds may be struggling.
- *Calving interval.* Twelve to thirteen months is favorable; if the interval lengthens, milk production and the overall efficiency of the operation will decline.
- *Calf losses.* A 10 percent or less loss on live calves born is favorable and considered an indication of good management.
- *Culling rate.* Cows should start milking when they are about two years old and should average four to five lactation periods before they are culled; if cows have to be culled prematurely, efficiency declines.

Loans to dairy operators may include longer-term financing for land and improvements; intermediate financing for the cow herd, specialized equipment, and vehicles; and operating loans to help finance the production of feed crops. Established operations may not require herd financing unless the herd is being expanded. Financing replacement cows to maintain a herd, if necessary, should be included in a shorter-term operating loan. Generally, operating loans are not a major financing activity as the dairy farmer's regular income from the sale of milk can often accommodate operating needs.

Collateral for dairy loans, in addition to real estate, typically includes the livestock, crops and feed on hand, and equipment. The collateral is usually covered with a blanket security agreement. Often, milk sale proceeds are assigned to the bank, and the milk buyer sends a monthly check directly to the bank to meet scheduled loan repayments.

Clearly, the primary source of income for the dairy farmer is the sale of milk, which is produced daily. Additional income is produced from the annual sale of calves and culled cows.

Hogs

Hog production consists of a two-stage operation: (1) ''farrowing'' (breeding sows to produce feeder pigs) and (2) ''finishing'' (fattening feeder pigs to slaughter weight). Many producers combine both enterprises and are called farrow-to-finish operations.

Hog producers range from small operators to large corporate interests. The small producers can be considered those who market less than 2,500 head per year; they can be involved either in finishing hogs or in farrow-to-finish operations. Small producers also tend to be involved in grain farming (raising their own feed) and other kinds of livestock production. The profitability and financial strength of a small producer is generally tied to the ability to market hogs frequently throughout the year, which lessens the impact of adverse market fluctuations. If the producer cannot market frequently, he or she probably needs to be involved in hedging practices. A corporate hog farm is usually a farrow-to-finish operation, with the number of sows ranging from 500 to as many as 100,000 for the largest producers.

Farrowing Operations

Hog breeding normally requires one boar for approximately 20 sows. Sows typically have

two litters per year, and litter size is one of the most crucial factors in determining the success of a farrowing operation. Eight hogs per litter is a goal for most producers. Up to 25 percent of the sows will be culled each year. Some producers raise their own replacement sows, while others purchase quality breeding stock in an attempt to improve herd quality.

Pigs are farrowed (born) in confinement buildings, and after three weeks, they are moved to a nursery facility where the pigs are weaned from the sow. The capital invested in farrowing facilities varies greatly, but the trend has been toward higher investments in facilities that require less labor. However, a large investment in a single-use, costly hog facility can pose a significant risk if the farrowing operation is not profitable.

Feed costs are the largest operating expense of a farrowing operation. The feed required consists of a feed grain (corn or milo), a protein supplement, vitamins and minerals, and a pig starter (a commercial feed used in the transition from nursing to eating solid food). In a feeder pig production operation, the young pigs are typically kept until they weigh 40 to 60 pounds, which takes around two months. Feed costs are continually changing because of fluctuating grain prices, so it may be difficult to project cash flow accurately. Historical cash flow may be more useful in demonstrating the borrower's overall management capabilities.

Loans to farrowing operations may include an intermediate- to mid-term loan on the facilities (usually not for more than ten years), breeding stock loans that should be amortized over no more than four years, and operating loans. Operating loans are often in the form of revolving lines of credit to purchase feed, with repayment normally coming from the sale of hogs. The operating line should be cleaned up periodically, or the bank should establish systems to monitor advances and repayments to ensure that stale debt is not accumulating.

Collateral for a farrowing operation could include the facilities and the hogs and feed on hand. For collateral purposes, the hogs should be valued at local market prices even though the producer might have paid a premium for breeding stock. Feed should be heavily margined, as the proceeds from feed sale during a foreclosure are likely to be limited.

Loan repayment comes primarily from the sale of young feeder pigs and culled sows. The timing of scheduled repayments will vary, depending largely on the producer's breeding schedule and the anticipated sale dates for feeder pigs. Usually, sows are bred at different times so they are not all having pigs at the same time. In the case of a farrow-to-finish operation, the cycle will be longer, and repayments will be scheduled according to anticipated sale dates of the fat hogs and culled breeding stock.

Finishing Operations

Hog finishing is the process of acquiring young pigs that weigh 40 to 60 pounds, and feeding them until they reach a slaughter market weight of 220 to 240 pounds. The process takes approximately four months. The average death loss for a finishing operation is generally 4 to 5 percent of the total number of hogs started on feed.

Loans for hog finishing are usually in the form of single-payment notes that mature in approximately four months. Loan proceeds are used to purchase young pigs and may also be used to purchase feed. A bank commonly advances up to 100 percent of the purchase price of the pigs. Usually, there is a blanket security agreement in place that gives the bank a security interest in all hogs, as well as in feed and other chattels to provide additional overall support for the credit. Margin in the collateral increases as the animals gain weight. Repayment comes from the sale of fat hogs to a packing plant.

The main factors in determining a finisher's profitability are (1) the cost of the feeder pigs, (2) the cost of feeding the pigs, and (3) revenues from the sale of hogs. Costs and revenues continually change because of fluctuations in market prices for young pigs, slaughter hogs, grain, and feed. Because of the relatively short cycle of hog finishing, a number of loans may be made during one year. In analyzing hog loans, reviewing the overall profitability of the operation (taking into account depreciation on facilities and equipment, interest, and insurance) is more meaningful than reviewing the results from each individual loan advance.

Sheep

Sheep are raised for the production of meat and wool. The most common sheep enterprise is the raising of ewe (female) flocks, which produces

income from the sale of both wool and lambs. Larger flocks tend to be more efficient as they can take better advantage of investments in labor-saving equipment.

Ewes give birth once a year, usually during late fall or winter. They frequently have twins, resulting in an overall lamb production per ewe of approximately 140 percent. About 20 percent of the ewes are culled each year, with replacements usually being raised from lambs. There is typically one ram for each 30 ewes in a breeding flock. The sheep and lambs graze on pasture during the summer and are fed a ration of roughage and grain during the winter.

Loans to ewe flock operators are made to purchase breeding stock and to pay operating expenses. Breeding-stock loans should be amortized over no more than five years. Repayment comes primarily from the sale of lambs and wool.

Typically, lambs are finished in commercial feedlots until they reach slaughter weight, which involves purchasing 60-pound feeder lambs and feeding them a hay-grain ration for about 90 days until they weigh approximately 120 pounds. The loan term is usually 90 to 120 days, with the sale of fat lambs to a processor being the source of repayment. Collateral consists of the lambs, which should be valued at local market prices. Margin required in the lambs, if any, will depend on feedstocks owned or on the borrower's financial strength.

Poultry

Poultry production has become a very large and highly organized agribusiness. Large corporate producers dominate the industry. However, they depend to a large extent on individual growers, with whom they contract to raise the birds almost from the day they are hatched until they are ready for slaughter. The large company supplies an independent grower with the day-old chicks, feed, and medications and provides technical support. Under the contract, the company pays the grower at a rate designed to provide an acceptable return on the grower's investment in poultry houses, equipment, and labor.

Producing breeding stock, incubating eggs, hatching chicks, and producing pullets and eggs are other aspects of the poultry industry that are highly specialized and relatively concentrated within fairly large corporate producers. Most banks will not extend loans on these types of operations, and any that do should have substantial background information on the industry in their files. The examiner should review that information and discuss the industry and the borrower's operation with the officer originating or servicing the credit.

The typical grower owns 60 to 80 acres of land and has an average of three to four poultry houses. Most growers also have other jobs and earn supplemental income from their growing operations. Broiler (or fryer) chickens generally are grown to a live market weight of approximately 4.2 pounds at 42 days of age.

Most bank loans to contract poultry growers consist of construction loans to build poultry houses and permanent financing for the houses and equipment. The houses are large but of relatively simple construction. Permanent financing is typically amortized over 10 to 15 years.

Government guarantees (Farmers Home Administration, Small Business Administration, or various state agencies) are often available to mitigate the bank's risk by guaranteeing from 85 percent to as much as 100 percent of the permanent loan. Federal guarantees have not been available for construction financing of poultry houses, so the bank generally will have to assume the full risk of the loan during the construction period.

Construction loans are generally converted into long-term loans that are repaid with the contract income a grower receives from the large corporate producer. Since feed and other supplies are typically furnished by the large producer, individual growers do not normally require operating loans.

Egg production for consumption (rather than hatching) is another aspect of the poultry industry; it is also highly organized and controlled by large producers. Facilities, feed, and labor represent the primary costs for these operations, with repayment coming primarily from the sale of eggs. Some income is also derived from the sale of "spent" hens (older hens that are no longer efficient layers). These operations are capital intensive and highly specialized. Loans to egg producers need to be carefully analyzed to determine whether they are properly structured and adequately margined. Assessment of the borrower's overall management ability, and record of profitability, industry trends, and any special risk factors is particularly important in judging loan quality.

OPERATING (PRODUCTION) LOANS

Banks (and other lenders) commonly finance the operating expenses of agricultural producers with short-term operating loans. Expenses financed may include items such as cash rent; seed; fertilizer; chemicals; irrigation; fuel; taxes; hired labor; professional fees; and, for a livestock producer, feed, feed supplements, veterinary care and medicines, and other supplies. Operating loans may take the form of single-purpose financing or line-of-credit financing. The single-purpose loan is the simplest and most basic form of financing, as it does not attempt to address the borrower's total credit requirements, and the repayment source and timing are relatively certain.

Line-of-credit financing may accommodate most of a borrower's operating needs for the production cycle. Advances are made as needed to purchase inputs or pay various expenses, with all income usually remitted to the lender to reduce the line. Depending on the type of operation, the line may seldom be fully retired because funds are advanced for a new operating year before all inventories from prior years are marketed. An operating line of credit is generally established after cash-flow projections for the year are made to anticipate credit needs and repayment capacity. While this type of financing has the advantages of convenience and accurate cash-flow monitoring (which permits comparing actual cash flow with projections), it can also have some disadvantages. The lender may be inadvertently funding or subsidizing other creditors' payments with advances on the line and, because operating cycles overlap, it may be difficult for the lender to get out of an undesirable situation.

An operating line may be revolving or nonrevolving. A revolving line replenishes itself as repayments are made, so the outstanding balance can fluctuate up and down during the approved term. There is no limit on the total amount borrowed during the term of the line, as long as the amount outstanding never exceeds the established limit. A nonrevolving line is structured so that once the approved amount is used, even though payments are made to reduce the line, the borrower must reapply and receive approval for any further advances. Revolving lines afford flexibility but have no firm disbursement or repayment plan, so they are usually reserved for borrowers with strong financial positions, proven financial management, and a history of cooperation and performance. Bank management should continually monitor operating lines and clearly document the purpose for advances and source of repayments. A clean-up period may or may not be required after harvest or completion of the operating cycle, depending on the anticipated schedule for selling farm or ranch production.

The primary source of repayment for an agricultural operating loan is revenue from agricultural production. Many farmers also receive some form of government support payments, and they may have employment off the farm or do custom work (such as harvesting) for hire. In many cases, wages or salaries generated from the nonfarm employment of a farmer's spouse will cover a significant portion of the family's living expenses, relieving the financial pressure on the farming operation. To evaluate repayment capacity, the loan officer must determine how much revenue will be generated from either current production or inventories. Revenues will need to be sufficient to cover all expenses, however, not just those funded by the loan. These could include various operating expenses, family living expenses, payments on capital debt (for real estate and equipment), and any anticipated new capital expenditures. There should also be a margin to cover incorrect assumptions about yields and prices.

Most agricultural lenders recognize the need for yearly cash-flow projections to help determine credit needs and repayment capacity. Projections of both income and expense are usually made for each month (or each quarter) of the year to anticipate the amount and timing of peak financing needs, as well as the total net cash flow for the year. Obtaining and analyzing yearly federal income tax returns (particularly Schedule F) should be strongly encouraged as a means of reviewing actual operating results. Actual data can then be compared with projections to determine variances. Reasons for the variances should be understood as a part of the credit analysis process. This analysis will help the bank decide whether to grant or deny credit and service loans.

If a borrower loses money from operations in one year and cannot fully repay the operating loan, there will be "carryover debt." In general, carryover debt should be segregated, secured with additional collateral if possible, and amortized over a reasonable term that is consistent

with the borrower's repayment capacity. Consistent losses and excessive carryover debt can preclude further advances and lead to the sale of certain assets or even to full liquidation of the operation.

Collateral for a typical operating loan includes growing crops, feed and grain, livestock, and other inventories. Normally, a bank also obtains a security interest in equipment, vehicles, government payments, and other receivables to strengthen the collateral margin. For new borrowers, a lien search is recommended to determine the presence of any senior liens. Pledged assets should be valued, either by a knowledgeable bank officer or an outside appraiser, and the operation and collateral should be inspected periodically to judge conditions and values. Inspections for established borrowers are usually done at least annually. More frequent inspections are usually performed on marginal borrowers or if the borrower has a feeder livestock operation with more rapid turnover of assets.

GOVERNMENT AGRICULTURAL SUBSIDY PROGRAMS

Federal government programs have long been able to help farmers financially and, to an extent, control the overproduction of agricultural products. These programs are continually evolving, but remain important in determining many producers' income levels and profitability. In addition to establishing subsidies, the programs also set limits on the number of acres of certain crops that a producer can plant to help control crop surpluses and support price levels.

Conservation Reserve Program

The Conservation Reserve Program (CRP) is a long-term retirement program for erodible land. Landowners submit bids for a 10-year contract, stating the annual payment per acre they would accept to convert the highly erodible land to a grass cover. The maximum bid per acre has been established, and accepted bids must not exceed prevailing local rental rates for comparable land. If the bid is accepted by the local Agricultural Stabilization and Conservation Service (ASCS) office, the landowner must sow the land to grass, with the cost of planting grass shared by the landowner and the government.

During the term of the 10-year contract, the landowner cannot plant a crop on the land, allow grazing on it, or cut the grass for hay. The CRP contract is assignable, so it can be transferred to a new owner along with title to the land.

Farmers Home Administration

The Farmers Home Administration (FmHA) is a federal lending agency operating within the U.S. Department of Agriculture. The FmHA performs two main functions: (1) providing supervised credit to farmers who are unable to obtain adequate credit from commercial banks and (2) improving rural communities and enhancing rural development.

Three basic programs allow the FmHA to extend funds to farmers: (1) grants, (2) direct loans, and (3) loan guarantees. The grant program is the smallest and generally relates to rural housing and community programs, most of which are for water and waste disposal systems. The direct loan programs are for loans made by FmHA through its county and state offices to farmers. The loan guarantee program permits the FmHA to guarantee up to 90 percent of the amount of loss on a loan made and serviced by another lender.

Most FmHA loans are (1) farm-operating loans, (2) farm ownership loans, or (3) emergency farm loans. Operating loans and farm ownership loans are for operators of family farms. Eligible purposes for operating loans include capital loans for machinery and livestock, as well as annual production inputs. Farm ownership loans are available for buying land, refinancing debts, and constructing buildings. Emergency loans are designed for farmers in counties where severe production losses have resulted from a disaster or from economic emergencies.

To qualify for a loan, a borrower must (1) be unable to obtain sufficient credit elsewhere at reasonable rates and terms, (2) be a citizen of the United States, (3) be an owner or tenant operator of a farm not larger than a family farm, and (4) have sufficient training or experience to ensure a reasonable chance of success in the proposed operation.

Banks have been highly motivated to use the FmHA-guaranteed loan program as a means of mitigating risk and perhaps developing a sound customer for the future. An FmHA loan also

improves the bank's liquidity, since the guaranteed portion of the loan can be sold in the secondary market.

Small Business Administration

While it is not primarily a lender to agricultural producers, the Small Business Administration (SBA) has made low-interest-rate disaster loans available to individuals, including farmers. The SBA can make or guarantee various types of agricultural loans to producers whose annual revenues do not exceed $500,000. Banks occasionally make these loans, which are supported by collateral as well as a substantial percentage guarantee by the SBA. In many rural areas, however, it is probably more convenient for a bank to work with a nearby FmHA office than with an SBA office, which may be located some distance away in a metropolitan community.

Federal Crop Insurance Corporation

The Federal Crop Insurance Corporation, which is a part of the U.S. Department of Agriculture, writes multiperil crop insurance. The premiums for this insurance are subsidized by the federal government. For further information, see the following subsection on crop insurance.

CROP INSURANCE

The Federal Crop Insurance Reform Act of 1994 combined crop insurance and disaster aid into a single, unified program. To be eligible for any price support or production adjustment program and for new contracts in the conservation reserve program or any FmHA loan, farmers must carry crop insruance coverage. The expanded crop insurance program replaces the need for disaster bills as the federal response to emergencies involving widespread crop loss.

Aside from the basic required coverage under the federal program, known as the catastrophic coverage level, banks encourage some borrowers to carry crop insurance to reduce their risk of not being repaid on farm-operating loans. Borrowers that are more highly leveraged and have minimum margin in their operating loans are most likely to be required to carry crop insurance. Two common types of crop insurance are (1) crop hail insurance sold by private insurers, which insures only against hail damage, and (2) multiperil crop insurance written by the Federal Crop Insurance Corporation. As its name implies, multiperil crop insurance insures against drought, rain, hail, fire, wind, frost, winterkill, disease, and insect losses.

The federal government subsidizes the multiperil crop insurance premium by paying most of its administrative, actuarial, underwriting, and selling expenses. By subsidizing premiums and encouraging more producers to purchase the insurance, the government hopes to reduce the dependency on crop disaster payments when natural disasters occur. However, this program has not been particularly popular with farmers because they would have to suffer a high level of losses on all planted acres to receive any significant proceeds from the insurance. By diversifying their crops and planting in fields that are separated by significant distances, many farmers are willing to risk planting without crop insurance.

EVALUATING AGRICULTURAL MANAGEMENT

A crucial factor in loan analysis for banks, as well as for examiners, is an evaluation of the management capabilities of the agricultural producer. Cash earnings from an operation provide the primary source of repayment for most agricultural loans, so it is important to evaluate the borrower's ability to manage a profitable operation. The three kinds of management that agricultural lenders most often analyze are production, marketing, and financial management.

Production Management

A lender should first assess the borrower's technical ability as a producer of crops or livestock. This is primarily an objective measure because it consists of comparing an operation's output against industry and area norms. An operator whose production levels are consistently below average will probably have difficulty meeting debt-service requirements and may not be able to stay in business. There may be justifiable reasons for occasional years of below-average production, but lenders should

be cautious of operators who consistently perform poorly.

Another factor to consider is the producer's ability to successfully cope with the inherent variability of agricultural production. Adverse weather, disease, and pest infestations are all production risks that continually affect crops and livestock. Some producers diversify the commodities they produce to reduce their dependency on one crop or type of livestock.

Marketing Management

Good marketing management enables the producer to reduce price risk exposure. Volatile markets have convinced most producers and lenders that sound marketing is crucial for an ongoing agricultural operation, and almost every producer needs a marketing plan designed to control price risk. Aside from helping to ensure profitability, the plan can be incorporated in formulating a more reliable statement of projected cash flow, which helps both the lender and producer anticipate financing needs.

Some of the techniques that producers use to manage price risk exposure are forward contracting, hedging, purchasing options, and using government programs. See the subsection "Marketing Farm Products" for details.

Financial Management

A producer should have the ability and willingness to understand, maintain, and use financial records. The importance of sound financial records began to be more fully appreciated in the 1980s when agricultural loan losses rose, and many agricultural producers and banks failed. During that time, the primary emphasis for many agricultural lenders shifted from collateral-based lending to cash-flow lending. While collateral may afford ultimate protection for the lender under a liquidation scenario, cash flow allows for repayment of debt in the normal course of business.

In addition to recordkeeping, financial management also encompasses how a producer uses his or her assets and liabilities. Maintaining financial reserves in the form of current assets is one means by which a producer can be prepared to overcome short-run adversity. The reserves need not necessarily be cash; they might be in the form of stored grain or other nonperishable produce or they could be earning assets such as livestock, which is readily marketable. Controlled, reasonable equipment purchases are another indication of good financial management. Overspending on equipment may be indicated if the borrower's equipment list includes many items that are new, especially costly, duplicative, or unneeded for the types of operations being conducted. The presence of sizable nonbank equipment debt on the borrower's financial statement can, in some cases, also reflect overspending.

MARKETING FARM PRODUCTS

Marketing considerations have become more important for many producers as they attempt to maximize returns. Rather than merely selling crops or livestock at prevailing market prices when the production cycle is complete, some producers attempt to lock in a price through the use of forward contracts or futures or options trading. Some producers of nonperishables may simply study market action and cycles and keep harvested crops in storage, waiting for higher prices. Some livestock producers may buy and sell throughout the year to help even out the effects of market fluctuations. Both the bank lending officer and the borrower need to have a clear understanding of the marketing plan, including its potential costs, benefits, and risks.

The following comments briefly describe some of the basic tools producers use as alternatives to the cash market to manage price risk.

- *Forward contracting*. The producer contracts with a buyer to sell farm products at a fixed price in advance of the actual marketing date. These contracts are simple to use if willing buyers can be found, but carry some risk of the buyer's defaulting, particularly if market prices decline significantly before the contract matures. This risk may be mitigated to some extent by requiring the buyer to provide security in the form of a 10 to 15 percent margin to help ensure that the buyer honors the contract.
- *Minimum-price forward contract*. This is a relatively new type of forward pricing that may be available to some producers. It establishes a floor but not a ceiling for the price the producer will receive for his commodities, so

it protects against price declines but permits the producer to garner additional profits if the market rises.

- *Basis contracting*. This is a variation on forward contracting, whereby the price the producer receives is not fixed when the contract is drawn, but will be determined by the futures market price plus or minus some agreed-on difference (basis). For example, cattle for September delivery might be priced at the September futures price (as of a date to be selected by the seller) plus 50 cents per hundredweight. Accordingly, a basis contract does not reduce risk until the price is set by the seller, so if the seller waits to set the price, he or she is still subject to all market risk. However, a basis contract can be combined with a put option (see below) to set a minimum price.
- *Hedging*. Hedging involves the use of counterbalancing transactions to substantially eliminate market risk. The type of hedge typically used by an agricultural producer is sometimes referred to as a "short hedge" because it involves use of the futures market to, in effect, sell short. Later, when the producer's commodities are ready for delivery, he sells them in the cash market. If the price has declined, he makes a profit on the sale of the futures contract to offset the lower price he receives in the cash market. Conversely, if the price has increased, a loss on the futures contract will be incurred to offset the gain in the cash market. Hedging is similar to fixing a price with a forward contract except that the price is said to be an "expected" fixed price, since the difference between the cash and futures prices may not be correctly anticipated and the resulting net price received will vary some from the expected level. Hedging can have an advantage over forward contracting because it is readily available and based on competitively determined futures prices. Since positions in the futures market require the producer to keep a cash margin with the broker, and additional margin calls may have to be met if the market goes up (after the producer has sold short), it is especially important that the bank loan officer be aware of and understand the borrower's marketing plan.
- *Put option*. Buying a put option gives the producer the right, but not the obligation, to sell a commodity at a given (strike) price any time before the put's expiration date. It protects against falling prices because the put becomes more valuable as prices fall. At the same time, a put allows the producer to benefit from rising prices, if they rise more than enough to cover the cost of the put. Puts can also be attractive because they can limit losses by establishing a minimum price at times when current prices are not profitable and the producer is reluctant to fix a low price with forward contracting or short hedging. Puts have the disadvantage of being more expensive than hedging; premiums for put options can be especially high when market prices are high.

Other more complex strategies are sometimes used that combine cash and futures instruments to minimize risk or to modify initial positions to adjust for changing market conditions, including the following.

- *Establishing minimum prices with basis contracts*. Purchasing a put option along with selling commodities on a basis contract establishes a minimum price, while allowing the producer to gain from rising prices.
- *Converting a fixed price into a minimum price*. If a producer accepts a fixed price via forward contracting and later regrets that decision, he or she may decide to purchase a call option (which becomes more valuable as prices rise). The combination of a fixed-price contract and a call option is called a "synthetic put" because the net effect is the same as buying a put option. The producer who has accepted an estimated fixed price via a short hedge can either lift the hedge (cover the open short sale in the futures market) or, depending on circumstances and relative costs, leave the hedge in place and purchase a call option.
- *Converting a minimum price into a fixed price*. If a put option has been used to set a minimum price at very low levels, and prices subsequently increase, the producer can either roll up the put to a higher strike price or sell futures and establish a fixed price when the market reaches an acceptable level. Buying one or a series of additional puts allows the producer to profit from a further rising market but may become expensive.

FINANCIAL AND INCOME INFORMATION FOR AGRICULTURAL PRODUCERS

The financial and income information most

commonly used by agricultural lenders includes balance sheets, income tax returns, and statements of projected cash flow. Many producers do not prepare income statements on an accrual basis. Often, their only available income statement is Schedule F of the annual federal income tax return.

Balance Sheet

Balance sheets for agricultural producers usually divide assets and liabilities into three groups—current, intermediate, and long-term—based on the liquidity of assets and repayment schedules of liabilities. Current assets are those that will either be depleted within 12 months or can easily be converted to cash without affecting the ongoing business operation. Current assets include cash, accounts receivable, livestock held for sale, inventories of crops, feed, supplies, growing crops to be harvested within 12 months, and prepaid expenses.

Intermediate assets support production and may be held for several years. Principal intermediate assets include breeding stock, equipment, and vehicles. While these assets may be relatively liquid, their sale would seriously affect the productivity of the operation.

Long-term, or fixed, assets are more permanent in nature and benefit the operation on an ongoing basis. The principal fixed asset of an agricultural operation is farm real estate, although the producer may have other long-term assets, such as investments, which may or may not be related to his or her farming or ranching operation.

Current liabilities include those which must be paid within 12 months, including amounts owed for feed, seed, supplies, interest, and taxes. The amounts of any payments due within 12 months on intermediate-term and long-term debt should also be included in current liabilities.

Intermediate liabilities are generally those due between one and ten years from the statement date, and commonly represent debt to finance equipment and vehicles. As mentioned above, the amounts of payments due on these debts within 12 months are shown as current liabilities.

Long-term liabilities usually are those that, at inception, had a maturity of more than ten years. Debt on real estate is the main type of long-term liability on the balance sheets of most agricultural producers.

The difference between total assets and total liabilities is the net worth of the producer or the equity in the producer's assets. Most producers are individual or family farmers whose balance sheets also include personal assets not directly used in the operation, as well as debts owed on those items.

It is important to remember that the amount shown on the statement for net worth is subject to question. Since it is merely the difference between the amounts shown for total assets and total liabilities, its accuracy depends on how the assets are valued and whether all liabilities are reflected. Most agricultural borrowers value assets on their balance sheets at what they assume to be "market value." However, some tend to use rather optimistic valuations, particularly on items such as equipment and real estate. Also, some borrowers tend to carry the same values forward each year for real estate or equipment, which may cast some doubt on accuracy. Examiners reviewing agricultural credits should try to determine prevailing market prices for various types of land in the bank's trade area and acquire general knowledge of equipment values. Recent published sales data on both real estate and equipment provide reliable indications of current values.

Sometimes not all liabilities are fully or properly disclosed. A form of potential liability that is often not disclosed is the amount of deferred income tax that will be due on the sale of real estate in which the borrower may have a substantial unrealized capital gain. It may not be possible to readily estimate such deferred-tax liability unless the borrower's statement shows both cost and market values. However, the examiner should keep these points in mind in analyzing the balance sheet, in an attempt to accurately assess the borrower's financial strength. Comparison with previous balance sheets, other information in the loan file, and general knowledge about values will aid the examiner in this analysis.

It is advisable to determine how the balance sheet was prepared and by whom. Many are prepared by the borrower and submitted to the bank. Others may be prepared by the borrower and lending officer working together. Presumably, the latter method would tend to ensure a more accurate presentation but, if not, it could raise questions about lending practices or the lending officer's competency. Similarly, balance sheets that do not balance (not an unusual

occurrence) might indicate a lack of appropriate analysis by the lending officer.

Balance-Sheet Ratio Analysis

The following are some basic, fairly simple ratios that can indicate the financial strength of a producer.

- *Current ratio (current assets/current liabilities).* This ratio can reflect a borrower's ability to meet current obligations without additional borrowing.
- *Quick ratio (liquid assets/current liabilities).* This ratio compares current assets that are easily converted into cash with current obligations and reflects a borrower's ability to immediately meet current obligations.
- *Leverage ratio (total liabilities/net worth).* This ratio shows the relationship between borrowed capital and owned capital. The higher the ratio, the greater is the reliance on borrowed capital, which means higher interest expense, potentially lower net income, and certainly less equity cushion to withstand risk and adversity. This is often called the *debt-to-worth ratio.*

Ratio Interpretation Guidelines[3]

Ratio	*Low Risk*	*Moderate Risk*	*High Risk*
Current Ratio	1.5:1	1:1–1.5:1	<1:1
Quick Ratio	1.1:1	.8:1–.5:1	<.5:1
Leverage Ratio	.75:1	1:1	1.25:1

Income Statement

Determining actual profitability for most agricultural borrowers is difficult, primarily because of the absence of complete income and expense information on an accrual basis. The most common income statement for agricultural producers is Schedule F of the federal income tax return ("Profit or Loss from Farming"), which accompanies Form 1040. It is prepared on a cash basis, showing cash income received and cash expenses paid, although the taxpayer is also permitted to deduct depreciation expense for items such as equipment, improvements to real estate, and breeding stock. Farmers may have other farm-related income reported on Form 4797, which reports sales of dairy and breeding livestock, or on Schedule D, which shows sales of real estate and equipment. Additional nonfarm income is reported on page 1 of Form 1040. All sources of income need to be considered by lenders and examiners, but for most farm borrowers, Schedule F is the primary report of income for the farming operation.

Tax returns probably provide the most accurate income and expense information for most farm operations. Some lenders attempt to convert the cash basis Schedule F to an accrual basis by adjusting for changes in inventory values, receivables, payables, and similar items, but the process requires timely, detailed financial information that often is not readily available. Instead, many lenders and examiners look at cash-basis income over a three-to-five year period to analyze trends and even out the cash-flow variances caused by differences in production and marketing cycles.

While cash income is not necessarily a good measure of farm business profits, it does help show the cash-flow situation and is useful in planning debt repayment programs and family budgets. In addition, cash income statements can be compared with projected cash flows to determine variances that need explanation or that may indicate the need for changes in the operation.

Operating Ratio Analysis

Key ratios can be calculated from income statements to aid in analysis. The most commonly used ratios measure profitability, repayment ability, and efficiency. Profitability is usually determined by return on equity and return on assets. Repayment ability can be determined by the earnings coverage ratio and debt payment ratio. The most common economic efficiency ratio used is the operating expense to revenue ratio. Although many smaller banks have not used income statements to any extent to analyze agricultural credits, this type of analysis can provide useful insights into an operator's efficiency and repayment ability.

3. These ratio interpretation guidelines are only rules of thumb and need to be viewed in conjunction with a thorough analysis of other pertinent factors, including balance-sheet composition, the nature of the operation, and an assessment of the borrower's management ability.

Return on assets is usually calculated by adding interest expense to net farm income and deducting a management fee (usually an amount for unpaid family labor), then dividing the resulting figure by average total farm assets for the year. Return on equity is usually calculated by deducting a management fee or unpaid family labor from net farm income and dividing the difference by total farm net worth.

Common ratios used to assess debt repayment ability and repayment risk are the earnings coverage ratio and the debt payment ratio. The earnings coverage ratio (also known as the cash-flow ratio) is a measure used to assess the operation's ability to repay. A strong earnings coverage ratio would be 30 percent or above. An acceptable but riskier level would be 10 to 30 percent. The debt payment ratio is used to determine risk over the term of the loan. It is calculated by dividing total annual debt payments by total revenue. As a general rule, total principal and interest payments should not exceed 25 percent of total revenue. A ratio of less than 15 percent would be relatively safe, while a 15 to 25 percent range would indicate some degree of risk.

The operating expense to revenue ratio measures the operating efficiency of the farm exclusive of debt obligations. A ratio of less than 70 percent usually reflects an efficient manager who can service larger amounts of debt. If the ratio exceeds 80 percent, repayment problems could occur if large amounts of debt are outstanding. The ratio tends to be higher for smaller operations.

The following example shows how the earnings coverage, debt payment, and operating expense to revenue ratios are determined from the income statement. This example reflects generally adequate ratios.

1. Total farm revenue	$210,000
2. PLUS: Nonfarm revenue	22,000
3. Total revenue (line 1 + line 2)	232,000
4. LESS: Farm operating expenses (excluding interest and depreciation)	153,000
5. LESS: Family living expenses and income taxes	35,000
6. Earnings available for interest and principal payments and new investments	44,000
7. LESS: Interest and principal payments	32,500
8. Remaining earnings available for risk, uncertainty, or new investments	11,500
Earnings coverage ratio = line 8 divided by line 7	35%
Debt payment ratio = line 7 divided by line 3	14%
Operating expense to revenue ratio = line 4 divided by line 1	73%

Statement of Projected Cash Flow

Projecting cash flow for an agricultural operation gives recognition to the importance of cash flow in servicing the debt of an ongoing operation. It also tends to impose some discipline on both borrower and lender by requiring a thoughtful planning process for the year in terms of anticipated income, expenses, financing needs, debt-servicing requirements, and capital expenditures. For individual or family farm operations, family living expenses should be included in the projections, as well as nonfarm income.

A cash-flow statement typically shows both the timing and amount of cash receipts and expenses. It can be either a forecasting device (statement of projected cash flow) or historical record (statement of actual cash flow). Banks and other lenders most commonly use the statement of projected cash flow because it aids in planning the borrower's credit needs, usually for the coming 12-month period.

A statement of projected cash flow shows not only how much credit is likely to be needed, but approximately when it will be needed. Perhaps most importantly, it shows whether cash income is expected to exceed expenses for the year. It also indicates the likely high point of the credit (amount and time) and the expected cash or debt position at the end of the year. The projected cash-flow statement represents a kind of budget that provides benchmarks against which actual performance can be compared. Significant variances call for explanations and may prompt certain actions to improve future operating results. Historical statements of actual cash flow have value for comparative purposes and can be an excellent aid in preparing projections for the following year, although banks do not typically request them from most agricultural borrowers. They tend to rely, instead, on income tax returns for information on actual operating results.

Cash flow projections are usually made near the beginning of a calendar year, although timing can vary depending on the nature of the operation. The statement is prepared as a spreadsheet normally listing, by month, anticipated cash receipts and disbursements. For each period, the projected operating-loan balance is shown after adjusting for the amount of projected net cash flow.

AGRICULTURAL LOAN POLICIES

Not all banks make agricultural loans, but for many banks, these loans comprise a significant portion of their portfolios. Any bank making agricultural loans should have developed an adequate, formalized set of written policies to guide the lending officers and staff. Agricultural loan policies should address the same general considerations as the policies used for other loan categories, such as desirable, undesirable, or prohibited loans; collateral requirements (including evaluation guidelines); maximum loan-to-value ratios; maximum maturities; documentation requirements; and concentration limitations. Given the specialized nature of agricultural assets and the varied types of operations, the policies should be comprehensive and specifically address the types of agricultural loans the bank intends to make.

Some banks may have general policies, supplemented by separate procedures or practices. Regardless of the individual bank's terminology or the way in which the material is organized, it is important that the bank's board of directors ensure that appropriate written guidance is provided for management in the agricultural lending area. The policies should help ensure that loans are made on a sound basis and provide a framework for identifying, addressing, and resolving problems that arise. Loan grading, either by the loan officers, a separate loan review function, or both is desirable, as well as a general plan for actions to be taken on loans with unsatisfactory grades. The policies should also address collection and charge-off considerations. Agricultural loan policies should be reviewed by the bank's board of directors and modified when deemed necessary. For more detailed guidance on bank loan policy, refer to section 2040.1, "Loan Portfolio Management."

AGRICULTURAL LOAN DOCUMENTATION

Loan documentation establishes the bank's legal position as creditor and secured party and evidences the borrower's ownership of and actual existence of collateral. Some documents, such as an insurance policy, give some evidence of collateral values and ensure that tangible collateral is protected. A number of documents play a supporting role, as they provide information that is vital in assessing a borrower s creditworthiness and in demonstrating the borrower's financial capacity to regulatory authorities, auditors, loan reviewers, senior management, and the board of directors. The documents also help management to service and grade the credit, determine the nature and extent of any problems, and formulate plans to resolve them by strengthening the bank's position or averting losses.

Absence of complete and current loan documentation is a weakness in the lending function and can pose a significant threat to the bank's safety and soundness. Some documentation exceptions are noted during virtually every examination, largely due to inadvertent oversights or unavoidable delays in obtaining original or updated documents. However, an unusually large volume of exceptions can be an important indication of weak and deteriorating loan quality. Excessive exceptions reflect unfavorably on management and indicate a need for management to either formulate stronger loan policies and procedures or to emphasize adherence to established guidance.

Many banks use a standard checklist to help ensure that all applicable documents are obtained when a loan is made. Most banks also have either an automated or manual "tickler" system to identify when updated documents are needed, such as current financial statements, tax returns, UCC-1 filings, collateral inspections, and evidence of insurance. Because of the large volume of required documents, many of which need to be updated at least annually, it is imperative that bank management be firmly committed to a sound loan documentation program. The program should establish responsibility for obtaining documents, monitoring compliance, and providing follow-up to help ensure that all required documents are obtained in a timely manner.

Not every document is applicable to each agricultural loan. Examiners need to assess which

documents are appropriate for a given loan depending on its individual circumstances. There should be little disagreement between examiners and bank management about the basic documents needed. Basic documentation requirements are usually listed in the bank's loan policies or procedures. The need for certain supporting documents may be a matter of judgment, particularly in regard to frequency of updating documents. In most cases, however, bankers and examiners tend to agree on items that are to be considered documentation exceptions. Refer to section 2080.1, "Commercial and Industrial Loans," for further guidance on loan documentation. Following is a list of the types of documents a bank should have in connection with agricultural loans:

- promissory note
- security agreement
- financing statement
- real estate mortgage or deed of trust
- other collateral assignments, as appropriate (such as assignments of third-party notes, mortgages or deeds of trust, life insurance policies, deposit accounts, securities, or other contracts)
- subordination agreements (for example, a prior lienholder may subordinate its lien position to a bank to induce the bank to make a loan)
- appraisals
- hazard insurance policy or certificate of coverage
- cash-flow projections, usually prepared annually
- income tax returns
- financial statements (balance sheets) for the borrower, cosigner, or guarantor
- collateral inspection reports by the bank
- bill of sale for livestock or equipment
- worksheet for each note (showing the purpose, timing, and source of repayment; collateral; total existing bank debt; analysis)
- overall credit analysis (particularly on large or troubled loans)
- loan officer memos and comments
- correspondence

LOAN ADMINISTRATION AND SERVICING

In addition to making agricultural loans, analyzing creditworthiness, setting loan terms, obtaining collateral, and assembling required documentation, management needs to administer the portfolio of outstanding loans. They need to monitor borrowers' performance relative to agreed-upon terms, collateral margins, financial and income data, cash flow, crop prospects, and market trends that may affect borrower performance. If problems arise, bankers need to formulate and implement plans to protect the bank's position.

Farm and Livestock Inspections

A physical inspection of the farming operation is usually performed by bank management before advancing any substantial funds to a new borrower. Subsequent inspections, particularly for larger or more marginal borrowers and for readily moveable collateral, should be performed periodically. Inspections may be performed by the loan officer or by another bank officer or employee with agricultural experience. The inspector usually prepares a fairly detailed report listing farm assets (livestock, equipment, grain and feed on hand, and growing crops) and at least brief comments on the condition of assets and crop prospects. Often, a listing of machinery, equipment, and vehicles is prepared from the bank's records ahead of time to aid in the inspection process; any additions, deletions, or exceptions noted should be shown on the report. Livestock are listed by type, showing numbers, sex, and approximate weight. Values for all items should be shown on the report, based on current market prices. The report may note the number of acres the potential borrower owns and rents, as well as the approximate value of real estate owned. A real estate evaluation might be performed as part of a farm inspection, but a full appraisal, if required, would almost always be performed separately, usually by another individual.

Farm inspections are usually performed annually, unless the borrower has a livestock feeding operation or some other type of operation that involves frequent turnover of assets. Generally, it is desirable to inspect feeder operations approximately every six months or more frequently if deemed necessary. The absence of a current inspection report, especially for larger or troubled borrowers, may be considered a loan-documentation exception.

UNSOUND AGRICULTURAL LENDING PRACTICES

Following is a list of common unsound lending practices, some of which are general and apply to all types of loans while others relate more specifically to agricultural loans. This list includes the most common shortcomings. Depending on the extent of the unsound practices, the examiner should incorporate specific recommendations for improvement into the examination report or formal supervisory action where appropriate.

- absence of or failure to follow sound lending policies and procedures
- failure to require adequate performance on debt
- failure to monitor the borrower's performance and position, commonly evidenced by the—
  - —lack of periodic collateral inspections
  - —absence of current income and financial information
  - —failure to consider the borrower's total debt-service requirements
  - —presence of additional operating debt at another bank; or
  - —absence of a lien search to verify the bank's position in collateral
- inappropriate loan structuring, such as—
  - —untimely or inappropriate repayment schedules
  - —failure to identify or segregate carryover operating debt
- unwillingness to say "no" to a financially stressed borrower, which could be an indication of—
  - —overlending (building loan volume without regard to quality or long-term effects on the borrower and the bank)
  - —failure to consider borrower's management capabilities
  - —failure to analyze or project costs of production
  - —failure to observe market trends.
- lending for speculative purposes
- lending outside of the bank's normal trade area
- lending on new or unproven types of operations or operations in which bank management has little or no experience

TROUBLED AGRICULTURAL LOANS

Aside from readily identifiable problem loans such as past-due loans, loans on nonaccrual status, loans on the bank's watch list or those that were previously classified, or loans to borrowers who have filed for bankruptcy, the following characteristics may indicate existing or potential problems. Examiners should keep in mind both current conditions and trends.

- undermargined collateral position
- unusually high leverage
- marginal liquidity
- heavy investment in equipment, vehicles, or real estate
- need for unplanned credit advances
- deficiencies or problems revealed in the collateral inspection
- unfavorable financial trends (especially increasing debt-to-worth ratio or declining collateral margins)
- lack of performance (renewals without appropriate performance)
- capitalizing interest on debt
- charge-offs
- inability to meet scheduled debt payments
- tax problems
- reluctance of borrower to provide current, complete, and accurate financial information
- notification of insurance cancellation for failure to pay premium
- evidence of legal action against the borrower
- overdependence on guarantors
- overdependence on anticipated inheritance

CHAPTER 12 BANKRUPTCY

Chapter 12 bankruptcy for family farmers became effective in November 1986. It was designed specifically for the family-farm debtor and permits family farmers to reorganize farm debt so that the amount of the debt approximates the value of the collateral. Only a "family farmer with regular annual income" (which can be a partnership or corporate structure) may file a chapter 12 bankruptcy. To be eligible, a debtor must meet *all* of the following tests:

- have a farming operation
- have no more than $1.5 million in total debts
- derive at least 80 percent of total debts (exclud-

ing debt on the principal residence) from the farming operation
- derive more than 50 percent of the family's income from the farming operation during the year immediately preceding the filing

The family farmer will have regular annual income if the court finds the annual income to be sufficiently stable and regular to enable the farmer to make payments under the chapter 12 plan.

Under chapter 12, there is no requirement for accelerated payment of arrearage as there is with chapter 13. Instead, the farmer/debtor can commence making plan-required payments from the start of the chapter 12 bankruptcy. Also, a farmer/debtor will have the ability to modify a promissory note and continue payments on it beyond the life of the chapter 12 plan if the court approves the modification; in such cases, the creditor cannot object.

A secured creditor will be ''adequately protected'' during the chapter 12 bankruptcy if it receives cash payments to offset any decrease in the value of collateral and, in the case of farmland, if the creditor is paid a reasonable rental fee based on the earning capacity of the property. Also, chapter 12 does not allow the creditor to recover ''lost opportunity costs,'' so the creditor will not be entitled to interest and other gains that would have been received by the creditor had bankruptcy not been filed. Elimination of the lost-opportunity-cost provision makes it more difficult for creditors to obtain a lift of stay on the grounds that there is not adequate protection.

Before confirming the chapter 12 plan, a court may permit a farmer to sell pledged assets without the consent of the secured creditor, although proceeds from the sale must go to the secured creditor. Creditors may bid at the sale, and collateral that is not sold will be subject to current evaluation in determining what amounts will be claimed by secured creditors under the plan. There is no time limit on the duration of a chapter 12 plan, except for a three-year limit (or five years with court approval) on unsecured debts.

If a chapter 12 debtor voluntarily dismisses the case, he is prohibited from refiling for 180 days. The law also provides for a dismissal from chapter 12, or a conversion to chapter 7, when the debtor commits fraud. Any other provisions of chapter 12 that are not discussed here are generally similar to those in chapter 11 and chapter 13 bankruptcy proceedings.

WORKING OUT PROBLEM AGRICULTURAL LOANS

When significant problems arise in agricultural credits, bank management resolves the problems in a timely manner to protect and strengthen the bank's condition. A sound and accurate loan-grading system, supported by a competent internal loan review program, will help to ensure timely identification of problems. Regulatory examinations provide an independent assessment, which may identify additional problems that management has not recognized. Once problems are identified, the following considerations are important in a workout program:

- identify the source of the problem
- establish a workout plan designed to strengthen the borrower and to minimize loss to the bank
- set at least a tentative timetable for the workout
- reach agreement with the borrower on the plan, if possible
- monitor progress frequently

Alternative actions in a workout plan might include—

- reducing the bank's exposure in outstanding debt by—
  - —obtaining additional collateral,
  - —obtaining financial assistance through sound cosigners, guarantors, or government guarantees,
  - —encouraging the borrower to modify his operations, or
  - —restructuring the credit to reduce the interest rate or payments
- advancing more funds to—
  - —refinance existing nonbank debt on more favorable terms or
  - —improve the bank's overall collateral position (for example, take out a small balance to a senior lender to put the bank in a first lien position)
- reducing or eliminating outstanding bank debt by—
  - —selling assets, which can range from a partial sale to reduce debt burden and improve chances for survival to a complete liquidation;

—refinancing a portion of bank debt (such as real estate) elsewhere if more favorable rates or terms are available; or
—recognizing a loss by partial or complete charge-off of the credit.

EXAMINER REVIEW OF AGRICULTURAL LOANS

A review of agricultural loans during an examination will follow the same basic guidelines employed in reviewing commercial or real estate loans. Certain practices, types of collateral, and documents may be unique to agricultural loans, and credit analysis will be somewhat specialized. However, the objectives of assessing credit quality based on the borrower's financial strength, cash flow, collateral, history of performance, and indications of management capabilities are much the same as for other loan types.

Sample size and sampling techniques will vary with the planned scope of the examination and size of the bank and its agricultural loan portfolio. As a minimum, the examination scope would usually include past-due and nonaccrual loans, watch-list loans, previously classified loans, insider loans, and some portion of other loans. See section 2080.1, ''Commercial Loans,'' for details regarding this topic.

Classification of agricultural loans should be made using the same criteria established for other types of loans. See section 2060.1, ''Classification of Credits,'' for regulatory definitions of substandard, doubtful, and loss classifications, as well as the special mention category and guidance on classifying loans.

1. To determine if lending policies, practices, procedures, and internal controls for agricultural loans are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the agricultural loan portfolio for credit quality, performance, collectibility, and collateral sufficiency.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, objectives, or internal controls are deficient or when violations of laws or regulations have been noted.

This section reinforces key factors in agricultural lending and provides a discussion of potential agricultural market issues and risk ramifications banking organizations and supervisory staff should consider when assessing the adequacy of the risk-management practices and capital needs for a bank's exposure to agriculture-related risks. This supervisory guidance also addresses factors that examiners should consider in evaluating individual agriculture-related credits and the adequacy of a banking organization's practices to monitor a borrower's capacity to repay given uncertain events. These concepts are based on the existing guidance within this manual's section 2140.1, "Agricultural Loans."

A bank's risk-management and capital planning practices should be sufficiently robust to assess the level of agriculture-related credit risk and the adequacy of a bank's capital to withstand potential future market and economic distress. The risk-management principles discussed in this section are broadly applicable, irrespective of agricultural market conditions.

MARKET ISSUES AND RISK RAMIFICATIONS

Prolonged and abrupt declines in farm income, brought about by negative movements in commodity prices and/or increased production costs, could have serious ramifications for the repayment ability of previously sound farm borrowers and could result in substantial declines in farmland collateral values. Highly leveraged farm borrowers or those that are in weakened financial condition would be most vulnerable to abrupt or prolonged financial distress.

Banks should monitor a number of market factors in order to manage and control the risk of their agriculture-related loan portfolio (including collateral values for farmland) and determine the repayment ability of individual farm borrowers. These factors include the following:

- *Agricultural commodity prices.* These prices have experienced unusually large swings over the past several years.
- *Production costs.* Volatility in costs for labor, feed, fertilizer, seed, land rent, and machinery and equipment may challenge farm operators' ability to effectively manage operating profit margins.
- *Farmland values.* Land values, particularly in the central United States, have surged to record highs over the past several years. Capitalization rates for farmland, particularly cropland, appear to be well below historical norms and may reflect overly optimistic long-term expectations. An abrupt increase in interest rates, coupled with a decline in farm income, could trigger an increase in capitalization rates, thereby lowering farmland values.
- *Global market issues.* Global supply and demand imbalances can adversely affect commodity prices and the cost of production. For example, weather events, economic conditions, and numerous other factors can impact global supply as well as demand and place downward pressure on farm income. Producers of ethanol and other biofuels may be adversely affected by the volatility in oil, corn, and other commodity prices.

SUPERVISORY EXPECTATIONS FOR CREDIT-RISK MANAGEMENT AND UNDERWRITING PRACTICES

The potential for volatile market conditions and risk factors raises the importance of ensuring that agricultural banks have in place appropriate risk-management programs and prudent lending standards. A key component of a sound risk-management program is the linkage between an analysis of market conditions and an agricultural bank's risk-management and capital planning practices. The range and extent of market analysis may vary depending on the composition of the bank's portfolio and overall risk exposure. The goal of this analysis should be to provide management and the board of directors with sufficient information on current market conditions, factors that could influence changes to market conditions, and possible events that could significantly change near- and long-term market conditions. At a minimum, banks with significant agricultural exposure should have established risk-management practices that address the following:

- *Assessment of the Borrower's Creditworthiness.* A bank should conduct a thorough

analysis of a borrower's creditworthiness, including assessments of the borrower's projected income and expenses compared to actual results, adequacy of working capital, capital expense analysis, reliability of supplementary sources of income, and cash flow stress test analysis. Current borrower financial information is essential to the bank's ability to evaluate the borrower's creditworthiness and leverage. A successful agriculture-related business should exhibit strong repayment ability and risk analysis, liquidity, solvency, collateral, credit management, profitability, and management performance.

- *Assessment of the Borrower's Cash Flow.* In volatile markets, a highly leveraged borrower may not have the necessary cash flow to properly service the debt according to the loan terms. By reviewing the borrower-prepared cash flow statements, the bank should be able to identify potential repayment ability problems, calculate key cash flow ratios, and assess the ability of the business to handle risk and uncertainty. Risk and uncertainty due to commodity prices, production, and weather are prevalent characteristics of most farm operations and should be explained in the cash flow projections. A sensitivity analysis that determines a farm operation's ability to withstand risk and uncertainty is useful in analyzing cash flow projections. While there is a broad spectrum of agricultural activities (e.g., grain, livestock, and fruit), there are some key elements of sound financial analysis that should be applied to all situations. These elements include
  - reviewing the reasonableness of budget assumptions and projections for yield, weight gain, production costs, and commodity prices;
  - comparing these projections with actual performance results;
  - assessing the impact of capital expenditures; and
  - evaluating significant changes in the borrower's balance sheet structure.
- *Underwriting Standards.* A bank should periodically review its underwriting standards to ensure that loan policies do not become outdated and ineffective. The frequency and depth of the review will depend on circumstances specific to each institution, such as growth expectations, competitive factors, economic conditions, and the bank's overall financial condition. Planned changes to a bank's lending function or business plan should prompt a modification to lending policies. The appropriateness of minimum debt-service-coverage ratios and maximum loan-to-value ratios should be assessed. Significant criticisms and recommendations made during recent audits and examinations should also be considered during the updating process.
- *Credit Administration and Controls.* A bank should have appropriate policies and controls to monitor and segregate agricultural carryover debt. Bank management should understand the fundamental causes of carryover debt. Carryover debt resulting from the borrower's inability to generate sufficient cash flow from sales to repay the current cycle's production loans generally reflects a well-defined credit weakness. The identification of a troubled borrower does not, however, prohibit a banker from working with the borrower. When carryover debt arises, the bank should confirm the reasons for the carryover debt (e.g., weaknesses in a borrower's financial condition or operations, inappropriate credit administration on the bank's part, a poor marketing plan, or adverse weather conditions), as well as the viability of the borrower's operation so that an informed decision can be made on whether debt restructuring is appropriate. The restructured debt should generally be on a term basis and require clearly identified collateral, a reasonable amortization period, and payment amounts based on realistic expectations.
- *Loan Structure.* The structure of a loan will depend on the nature of the borrower's business. To properly structure the borrowing relationship, the bank should be able to
  - project how the borrower will perform in the future, including likely primary and secondary repayment sources;
  - anticipate challenges and problems that the borrower may encounter;
  - match the type and terms of the loan to both the loan purpose and the likely repayment sources and ensure the loan is supported by sufficient cash flow from the expected repayment source;
  - develop a set of loan agreement covenants that protects the bank for the term of the loan; and
  - secure the credit facility with collateral and consider requiring loan support such as guarantees.
- *Reliable Collateral Evaluations and Reason-*

able Collateral Margins. A bank should have a process in place to monitor periodically the value of collateral pledged to the debt in order to manage the risk over the life of the loan. Evidence of collateral lien perfection and timely collateral inspections should be documented in the loan file review. Evidence of declining collateral margins may signify emerging concerns over the ability of the borrower to repay and could adversely affect the bank's collateral protection in the event of default.

Expectations for the level of sophistication of risk-management systems will vary based on the specific risk characteristics, complexity, and size of the bank's exposure to agriculture. In general, there should be higher expectations around risk-management systems for banks with significant exposures to one or several agricultural sectors. An institution should assess the effect, if any, of its agricultural credit activities upon the institution's overall financial condition, including capital, the allowance for loan and lease losses, and liquidity.[1]

1. See, respectively, SR-09-4, "Applying Supervisory Guidance and Regulations on the Payment of Dividends, Stock Redemptions, and Stock Repurchases at Bank Holding Companies"; SR-06-17, "Interagency Policy Statement on the Allowance for Loan and Lease Losses (ALLL)," (section 2070.1); and SR-10-6, "Interagency Policy Statement on Funding and Liquidity Risk Management," (section 4020.1).

INTRODUCTION

This section is intended to provide guidance on prudent risk management of energy lending activity to examiners reviewing reserve-based lending, usually to exploration and production (E&P) firms.[1]

Reserve-based lending or reserve-based loans (RBL) is a type of financing where a loan is secured by the reserves of oil and gas of a borrower and repaid primarily using the proceeds from the future sale of encumbered oil or gas reserves. The amount of an RBL is determined based on the borrower's "proved reserves" borrowing base, adjusted for certain risk factors. Categories of proved reserves include proved-developed-producing, proved-developed-nonproducing, and proved-undeveloped reserves.

A bank engaging in reserve-based lending should maintain a robust risk management program to manage and control the level of risk in and concentration of its reserve-based lending portfolio. The program should include timely market condition analysis that supports sound credit risk management and underwriting practices. The range and extent of market analysis may vary depending on the composition of the institution's energy-related loan portfolio and overall risk exposure to the energy industry. The analysis should provide an institution's management and its board of directors with sufficient information on market conditions to make informed decisions regarding both loan and portfolio risk changes.

OIL AND GAS INDUSTRY OVERVIEW AND BUSINESS DESCRIPTION

The Oil & Gas (O&G) industry comprises three business segments—upstream, midstream, and downstream:

Upstream companies, also known as Exploration and Production (E&P) companies, find, develop, and produce oil, natural gas, and natural gas liquids. The upstream business model is analogous to mining for raw materials. Upstream companies manage their development and production costs and emphasize production volume to generate profit margins, which are sensitive to commodities market prices. Commodity price changes can cause volatility in company cash flow and the value of O&G reserves.

Upstream companies make up-front investments to obtain and develop reserves from which they expect to generate satisfactory investment returns based on their expectations for production costs, production volumes, and future market prices. Once production begins, the existing O&G reserves start to deplete. Therefore, upstream companies require high levels of ongoing capital expenditures to maintain or increase reserves to offset depletion. Sustained periods of capital investment can reduce the amount of cash flow available for debt service or distributions.

The primary assets of an E&P company are its oil and gas reserves, that is, hydrocarbons below the earth's surface that have not yet been produced and are economically viable to extract. E&P firms are unique in that their primary asset base is depleting and therefore must be continually replaced through either drilling activities or acquisition. Lending to E&P companies are based solely on the predicted cash-flow value of the oil or gas production. Reserve-based lending is secured by interests in oil and/or gas properties with proved reserves. Cash flow generated from the future sale of encumbered oil and/or gas reserves is the primary, and in some cases, the only credible source of repayment. Therefore, production payments are usually assigned to the bank, and the liquidation value of collateral is expected to be sufficient to pay off the loan at any time. In considering this or any type of secured loan, the banker must assess a borrower's creditworthiness. (See the subsection entitled "Credit Risk Management and Administration" for more information.)

Because cash flow generated from the future sale of oil or gas is the justification or basis for production lending, proved-producing reserves are the most desirable collateral for a bank as they provide sufficiently predictable cash flow for debt service. For this reason, loan values are predicated primarily on reserves that are proved-developed-producing properties.

Midstream companies gather, process, store, and transport crude oil, raw natural gas, natural gas

1. See SR letter 16-17, "Supervisory Expectations for Risk Management of Reserve-Based Energy Lending Risk," for more information.

liquids, and refined petroleum products and chemicals. The midstream business model is similar to a toll road that charges fees for the movement or intermediate processing of O&G. Midstream companies require large up-front investments in long-lived infrastructure and then generate medium to low profit margins by collecting fees for services. These companies frequently are structured as master limited partnerships, which are not subject to income tax.

Downstream companies refine petroleum products and engage in the manufacturing, marketing, and distribution of refined petroleum products such as gasoline, jet fuel, heating oil, asphalt, motor oil, and lubricants. The downstream business model is similar to value-added manufacturing that earns low to medium profit margins from refining raw materials, turning them into products with valuable uses, and marketing and delivering finished goods to wholesale customers and end users. Developing the capacity to do so requires high capital investment up front. Large downstream companies may incorporate elements of upstream and midstream businesses.

O&G service companies provide support to upstream, midstream, and downstream operations. E&P and integrated O&G companies, specifically, are supported by various types of service companies that provide geological surveys, engineering, technology, drilling, extraction, processing, transporting, wastewater disposal, and other services. These service companies are capital intensive and can be highly complex and technologically advanced. Some service companies are large and multinational, and others are quite small, such as local trucking companies, small engineering firms, and small maintenance firms.

Integrated O&G companies are involved in almost every aspect of the O&G business: upstream, midstream, and downstream. This structure may better enable such companies to successfully manage business cycle risks and price risks. Most of these companies also manufacture and sell petrochemicals. International integrated O&G companies conduct their operations worldwide and are among the largest and most recognized companies in the world. Comparatively, smaller and independent integrated O&G companies have less diversification and may exhibit greater vulnerability to commodity price volatility, cost overruns, production delay disruptions, and economic cycles.

DEFINITIONS OF RESERVES

Reserves[2] are quantities of petroleum that E&P companies anticipate they will be able to recover commercially from known accumulations from a given date forward under defined conditions. Reserves must be discovered, recoverable, commercial, and remaining as of the evaluation date. Reserves are classified into one of three categories: proved, probable, or possible, with proved reserves divided into three subcategories: proved developed producing, proved developed nonproducing, and proved undeveloped.

Proved Reserves (1P) are of the lowest risk classification. This means that under current conditions, it is reasonably certain that the reserves will be recoverable and commercial (i.e., profitable to produce).

- *Proved-developed.* Proved reserves are considered developed only after the necessary equipment has been installed or when the costs to do so are relatively minor. There are two subcategories of developed reserves: producing reserves and nonproducing reserves.
  - *Proved-developed-producing (PDP) reserves*. PDP reserves are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty (90 percent) to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.
  - *Proved-developed-nonproducing (PDNP) reserves.* These are generally proved-developed reserves behind the casing of existing wells or at minor depths below the present bottom of such wells that are expected to be produced through these wells in the predictable future; including proved developed shut-in (PDSI) and proved developed behind the pipe reserves.

2. For more information, please refer to "Petroleum Reserves Definitions," Society of Petroleum Engineers, last modified March 1997, www.spe.org/industry/petroleum-reserves-definitions.php.

The development cost of this type of reserves should be relatively small compared with the cost of a new well.

- *Proved-undeveloped (PUD) reserves.* These are reserves that are proved resources to be recovered from new wells on undrilled acreage or from existing wells requiring a relatively major expenditure for recompletion to a producing state. A company's proved-undeveloped reserves should be economically and technically viable for development.

Probable Reserves (2P) are those unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable. In this context, when probabilistic methods are used, there should be at least a 50 percent probability that the quantities actually recovered will equal or exceed the sum of estimated proved plus probable reserves.

Possible Reserves (3P) are those unproved reserves which analysis of geological and engineering data suggests are less likely to be recoverable than probable reserves. In this context, when probabilistic methods are used, there should be at least a 10 percent probability that the quantities actually recovered will equal or exceed the sum of estimated proved plus probable plus possible reserves.

TYPES OF OWNERSHIP INTEREST IN OIL & GAS RESERVES

Ownership interests related to reserves can be held in a variety of forms including royalty (or mineral) interests, overriding royalty interests, and working interests. Royalty interests are created when the mineral interest owner leases a property. Royalty interests represent payments to mineral owners to drill on their property take preference over all other payments from lease revenue. Overriding royalty interests are similar to royalty interests except these may have limited value as they are dependent on production. Working interest owners share in the profits after the royalty interest payment, lease operating expenses, severance and ad valorem taxes, and capital expenditures associated with a property (lease or well), as well as the risks associated with drilling.

FUNDING SOURCES AND CAPITALIZATION

A traditional role of bank credit in the O&G industry has been to finance E&P capital expenditures. The repayment of E&P loans depends primarily on revenues and cash flows generated by the successful acquisition, development, completion, and production of O&G reserves, and secondarily on the liquidation of O&G reserves securing the debt.

There are several loan structures used by E&P companies to finance their businesses. Most independent, non-integrated E&P companies obtain financing through an RBL. An RBL typically is a revolving facility secured by proved reserves with the amount of the borrowing base determined by the valuation of those reserves.

RBLs typically have terms of three to five years. The RBL's purpose is primarily to fund acquisition and development costs of new reserves, which, if successful, increase the reserve valuations and provide increasing cash flow for debt service and profits for the company's shareholders and investors. Other forms of debt, such as senior notes or bonds, are normally subordinate to the RBL in collateral position, but in certain cases, second-lien loans are pari passu with the RBL in right of contractual payment streams.

Although less common in the United States, another credit structure that E&P companies use is a reducing revolver, which is a combination of a revolving loan and a term loan. The revolver can increase to a maximum commitment level and then step down at regular principal payment dates.

Lenders may also make term loans for project financing, acquisition of O&G properties, or acquisition of other fixed assets secured by a first lien on the company's reserves. For term loans, banks determine the lendable amount based on engineering reports and make a one-time advance for the acquisition. This type of financing amortizes over the loan term or the principal balance is paid at maturity. The term of loans typically varies from five to 10 years, but the term of these loans should always be tied to the economic life of the underlying asset.

Banks have historically been the primary financial provider of RBLs but other market participants are active in providing additional sources of capital to the industry. Examples of other

forms of capital extended to the sector include the following:

- Second-lien debt: In energy lending, second-lien senior term loans may rank pari passu in right of payment with first-lien debt, including RBLs because of the additional risk to repayment but remain in a secured position ahead of unsecured debtors, such as bondholders. Second-lien loans often are structured with five-year maturities with interest-only payment requirements.
- Mezzanine debt: Mezzanine loans are subordinated to senior loans and are used to leverage acquisition or development activities, particularly when companies do not have sufficient producing reserves to support borrowing under an existing RBL. These loans may have tight covenants and extensive controls on funding and are generally unsecured and not subject to a borrowing base; rather, these loans are based on collateral coverage or cash flow ratios.
- Bonds: High-yield bond offerings and securitizations have played an important role in E&P financing by providing affordable access to capital markets. Longer-term bond offerings with 10-year maturities and interest-only payments have been common sources of funding for E&P companies.
- Private equity: Equity investors in the E&P industry play a significant role in E&P ownership and related financing structures. The increasingly complex corporate structure of E&P companies also requires that E&P lenders have more specialized expertise and monitoring systems.

Examiners should determine whether other financing sources are utilized, in addition to the loan under review, to meet the capital needs of the borrower. For example, banks that lack the in-house capacity to fund first- and second-lien facilities can either pair up with a mezzanine capital provider or try to stretch its borrowing base underwriting algorithms in an effort to meet a borrower's cash needs. This generates additional risk to the bank and may affect the liquidity and repayment capacity of the borrower.

EVALUATION OF RESERVES

When a lender decides to proceed with financing secured by oil or gas reserves, a bank obtains an engineering report. The initial step to determining the loan value of the collateral or assessing the borrower's creditworthiness is an analysis of the engineering report.

Banks that make RBLs will usually have a petroleum engineer on staff or contract with an engineering consultant firm to provide an engineer's report on the properties to be pledged. An engineering report provides reserves and production forecasts and then applies the pricing and cost assumptions to arrive at the net lease operating income available for debt service. This report is comparable to a real estate appraisal in its importance and function to the bank's credit decision.

Typically, most reports will cover five or more years. Production is usually broken down into categories of oil and gas, and sometimes the number of wells is detailed. Expenses may be divided into major components such as operating costs; production and ad valorem taxes; depreciation, depletion, and write-off of intangibles; general and administration expenses; and taxes on income. Also, if the owner expects to make capital improvements from income, this information will be included in the report. Some reports include the pro forma amount and terms of the loan to support the analysis.

Engineering reports must be generated by a fully qualified petroleum engineer. The lender should select an engineer based on the individual's competency, experience, and independence, as well as the individual's analytic skills. The integrity of engineering data that depict future cash stream is critical to the initial lending decision and equally important to an examiner in the assessment of credit quality. In summary, an acceptable engineering report must be an independent, detailed analysis of the reserves prepared by a competent engineer.

The examiner should carefully review the four elements below in establishing the amount of the borrowing base.

Pricing

When reviewing the engineering report, an examiner should carefully review the underlying pricing and production assumptions used. West Texas Intermediate (WTI) and Brent are the most common sources for benchmark prices used in engineering reports, but the actual price that is realized can vary significantly by well-

head. The difference between benchmark price and wellhead price is referred to as price differential. Factors affecting the price differential can include oil quality, transportation, and storage, to name a few. Banks should be able to support the pricing used in their forecasts, ensuring that benchmark prices are reasonable as compared to the wellhead prices.

E&P companies are exposed to the price volatility in commodity markets. In response, E&P companies may vary their production level and capital expenditures based on current and future price expectations, or hedge their reserves by utilizing the futures markets. A price sensitivity analyses should be run to test the valuation range, and long-term flat price cases should be run to test valuation at the floor or bottom price levels. Sound banking practices include a stress or downside analysis based on significantly lower prices.

The future price of oil is a judgment factor and should be based on conservative pricing and can include some reasonable escalation each year. This information can be obtained from a number of reliable sources, such as the NYMEX strip pricing. An examiner should determine the source of the data to judge the reliability of report information. The prices used for gas are usually contract prices plus escalation-clause rates. Special care is necessary in evaluating gas contracts, including their reasonableness in light of current conditions and the ability and willingness of the purchasers to honor the contracts. In some instances, certain purchasers have broken contracts or exercised "market-out" clauses to cease complying with long-term purchase commitments. The Securities and Exchange Commission (SEC) requires reserves with renegotiable contracts or under market-out clauses to value the reserves at spot prices at the date of renegotiation or immediately, in the case of market-out clauses.[3]

Cost

Cost assumptions should also be realistic and fully supported. Operating cost assumptions are based on the costs of similar operations in similar areas or, in the case of producing reserves, on historical performance, which may be escalated at some reasonable percentage each year. The report should consider increases and decreases in price as well as cost inflation over the "life of the properties."

Costs affect the economic life of reserves primarily in two ways: development costs and production costs. Production costs are a key focus in underwriting because the borrowing base is based primarily on PDP reserves. Production costs include lifting costs or lease operating expenses, which include operating and maintenance expenditures for materials, supplies, fuel, insurance, maintenance, and repairs. Additional production costs include property and severance taxes. If there are plans for further development, engineering reports may include development costs, or capital expenditures, for PDNP and PUD properties as well. Capital expenditures may include roads, utilities, drilling pads, site facilities, development wells, wellheads, well casing, and pipe and well equipment. To a lesser extent, capital expenditures may include workover costs for PDP wells.

Discount Rate

The discount rate depends on current market factors that consider the required market rate of return on future cash flows given the relative risks involved. Assumptions used to determine the discount rate should be fully supported. SEC reporting requirements require a 10 percent discount rate.

Timing

Preferably, the report should be no more than six months old under normal market conditions; if the commodity market becomes volatile, a report less than six months old will be adequate. A report that is up to 12 months old may be acceptable in some cases; however, it should not be more than 12 months old. Change is the most important factor in determining the adequacy and timeliness of reports. Significant price fluctuations or changes in interest rates may require the examiner to adjust the valuation of the reserves to reflect current conditions.

When engineering reports do not address one or more of these four critical concerns, the examiner should challenge management to pro-

3. For more information, see 17 CFR 210.4-10, "Financial accounting and reporting for oil and gas producing activities pursuant to the Federal securities laws and the Energy Policy and Conservation Act of 1975."

vide support for the evaluation assumptions, and may need to evaluate other bank methodologies, for example, recent cash flow histories, to determine the current collateral value. In addition, appropriate comments should be included in the report of examination and recommendations or matters requiring attention made to bank management for improving its engineering reporting and requirements.

ESTABLISHING THE BORROWING BASE

The borrowing base for an RBL, determined by analyzing previous production reports and independent engineering evaluations, represents the lending commitment established from the engineering valuation of the borrower's proved O&G reserves, subject to limitations and adjustments. It governs the maximum amount of availability under the RBL at any one time. The commodity prices, risk adjustment factors, and cash flow discount rate used to determine reserve values and the borrowing base should be fully supported in the lender's underwriting documentation.

The RBL is normally secured by a first lien on the borrower's O&G reserves, the cash flow from which is the loan's primary source of repayment. Banks typically perfect liens on reserve interests that produce 75 percent to 90 percent of the economic value of the borrowing base. Banks need to pay particular attention to state laws in order to understand what is required to perfect their security interest in their collateral. Additionally, banks need to ensure that liens remain enforceable as activities occur prior a borrower's sale of minerals. For example, a bank needs to protect its collateral interest when O&G assets are temporarily transferred from the well to storage containers across jurisdictions.

The engineer is responsible for ensuring that the evaluation includes only proved-developed reserves, unless otherwise directed by the lender. The lender might give value to reserves, properties or wells that are proved-developed-nonproducing under certain conditions. The lender would, however, deduct a safety factor by lowering the value of unseasoned or non-producing reserves. The lender will not generally loan against probable or possible reserves because of the production uncertainty and speculative nature of those categories. Their inclusion as collateral is usually as an abundance of caution with little or no value assigned to them.

The engineer must make a judgment on the accuracy of future revenues predictions. The engineer evaluates geologic conditions such as sand continuity, faulting, spacing, the number of wells, the diversity of properties, well productivity, the pressure production history, and overall data quality, as well as the degree of confidence the engineers have in their own numbers. Estimates based on well-established production performance are given the most credibility. Lesser weight is given to estimates derived from more speculative methods such as volumetric, analogy with similar reservoirs, or a computer simulation of new producing zones. The examiner should carefully review the narrative portion of the engineer's report to help determine its usefulness. It will detail what data were available, how they were used, the methods of analysis, and whether a field inspection was made, including individual well tests. This section of the report should inform the examiner of the true condition of the reserves and wells. It is possible for the projected cash flow to portray one picture while the narrative portrays an entirely different one.

For example, a bank will typically loan up to 65 percent of the net present value of risk-adjusted proved-developed-producing reserves; however, a lower percentage may be needed depending on a number of factors. If the reserves are in an area that is highly faulted, or if seismic work and drilling indicated that a zone is contiguous from one well to the next and the porosity and permeability of the pay-zone rock are very similar, then a lower percentage will be used. To avoid the possibility that any individual, unforeseen event will have a significant effect on the total projection, a wide spread of properties is preferable.

A bank needs to address the risk arising from a concentration of value in any one well, as well as a concentration in one reservoir, field, or producing area. Generally, a risk adjustment factor of not less than 10 percent will be used on unseasoned (less than six months in production) proved-producing reserves, but on long-life and high-quality reserves, a risk adjustment factor less than 10 percent is sometimes used. However, reserves that are highly faulted may require a higher risk adjustment factor than 10 percent even if they are long-life and high-quality. For non-producing reserves such as PDNP and PUD reserves, risk adjustment factors typically range

from 25 percent to 75 percent. Terms of an RBL will usually require that the loan be fully repaid before the risk adjustment factor is reduced. Examiners should carefully review the risk adjustment factors used by the lender for determining borrowing base commitments. In addition, there should be a limit established for the contribution of nonproducing reserves to the borrowing base. This is commonly set at no more than one third of the valuation. All bank adjustments should be fully detailed and supported.

For RBLs, a bank will periodically evaluate the borrower's O&G reserves to re-determine the borrowing base commitment. Redeterminations typically occur semiannually, but lenders and borrowers normally have the right to additional redeterminations once or twice during a year, as defined by the credit agreement.

Typical financial covenants in the RBL credit agreement include cash flow leverage, interest coverage, and current ratio covenants:

- The cash flow leverage ratio is typically defined as senior funded debt or total debt over trailing 12 months (TTM) EBITDAX.[4] This covenant is the most critical of the three main RBL covenants because it may provide the least amount of headroom while also controlling the amount of additional borrower debt. The total debt to EBITDAX covenant is frequently set at 3.5x and normally does not exceed 4.0x, unless the covenant is increased to account for an acquisition with step-downs to more reasonable leverage.
- A standard definition for interest coverage is TTM EBITDAX divided by TTM interest expense. Interest coverage covenants for RBLs may require 2.5x to 3.0x EBITDAX coverage of TTM interest expense.
- A standard definition of the current ratio is current assets divided by current liabilities less current maturities, requiring at least 1.0x to 1.25x coverage. Some transactions, however, may define the current ratio covenant as current assets plus unfunded RBL availability divided by current liabilities less current RBL maturities.

Declining commodity prices and a corresponding drop in revenues can stress these measures and limit production growth, which can lead to reduced RBL borrowing bases during redeterminations. Lenders often work with borrowers to formulate plans and implement short-term solutions.

Borrowing Base Stretch

A "stretch" occurs when the bank agrees to provide the borrower with an RBL commitment that materially exceeds the lendable amount as determined by the bank's underwriting criteria and loan policy. In a syndication, each participant calculates the RBL lendable amount separately. The calculated lendable amount may vary by bank, and some banks may agree to "stretch" to meet the higher borrowing base amount agreed upon by the syndication group. Bank approval of the stretch should be supported by documented risk mitigation methods. The approval of a stretched borrowing base should not be used to avoid borrower repayment requirements caused by an over-advance. If the stretch is not well supported, the advance should be considered in the risk rating assessment.

Repayment Analysis

The lenders normally prepare base case and sensitivity case repayment analyses as part of the underwriting process. The primary repayment source for most RBLs is cash flow generated from the sale of oil and gas production. Therefore, a borrower's future cash flow generated from the sale of oil and gas reserves should demonstrate the ability to cover projected operating expenses and repay total debt within a reasonable time.

A base case analysis should use prevailing market prices, such as NYMEX futures prices, versus the bank's commodity price deck used for borrowing base determination. The repayment analysis should be based on repayment capacity from un-risked and undiscounted revenues from the borrower's total proved reserves. Proved reserve life is the estimated productive

4. EBITDAX is earnings before interest, taxes, depreciation, and amortization (EBITDA) with depletion, exploration, and abandonment expense added back. These expenses are add banks because they are often considered discretionary, while also providing consistent application of the covenant regardless of whether the company uses the full cost accrual or successful efforts accounting method. EBITDAX, rather than EBITDA, appears almost universally in O&G financing documents.

TABLE 1
GENERAL FRAMEWORK FOR CALCULATION COMPARABLE EARNINGS BEFORE INCOME TAX, DEPRECIATION, DEPLETION, AMORTIZATION, AND EXPLORATION COSTS (EBITDAX)

Full Cost Method	*Successful Efforts Method*
Operation Income	Operating Income
Plus: Depreciation, Depletion and Amortization	Plus: Depreciation, Depletion and Amortization
Plus: Accretion of Asset Retirement Obligation	Plus: Exploration Expenses
Plus: Deferred Taxes	Plus: Dry Hole, Abandonment, and/or Impairment Expense
	Plus: Accretion of Asset Retirement Obligation
	Plus: Deferred Taxes
= EBITDAX	= EBITDAX

life of a proved reservoir based on the economic limit of producing the reserves assuming certain price and cost parameters. The economic half-life of the proved reserves represents the point in time when the borrower will have generated half of the estimated future net revenue (FNR). The reserve life and economic half-life of the reserves can be stated in months or years or as a percentage of the total FNR.

In addition, a sensitivity case analysis subjecting the oil and gas reserves to adverse external factors, such as stressed market prices or higher operating expenses, should be prepared to determine the vulnerability of the borrower's repayment capacity to adverse economic conditions.

Analyzing E&P Borrowers Financial Statements

At times it may be desirable for examiners to review E&P borrowers' financial statements analysis prepared by the bank. Such analysis should include historical production volumes as well as the average hydrocarbon prices received for the periods under review. As hydrocarbons are a commodity, physical volumes produced and commodity concentrations indicate the borrower's sensitivity towards market price fluctuation. Production volumes are typically expressed as barrels of oil equivalent (BOE) or thousands of cubic feet equivalent (MCFE) for gas.

Other analytical ratios, such as lifting costs (lease operating expenses per BOE or MCFE produced during a period) and finding costs (costs associated with increasing reserves during a particular period) should also be calculated and reviewed. The quantitative measures of E&P performance are based primarily on the ability to replace and grow resources at a favorable cost, in contrast to profit margins and growth for traditional industrial companies.

Another primary pricing metric for E&P companies is EBITDAX. EBITDAX represents EBITDA (earnings before depreciation, interest, taxes, and depreciation and amortization) before *exploration costs* for "successful efforts" companies; for "full cost" firms, exploration costs are embedded in depreciation and depletion. (See table 1.) In addition, other noncash expenses such as impairments, accretion of asset retirement obligation, and deferred taxes should be added back in calculating EBITDAX. Free cash flow should also be considered where cash income taxes and capital expenditures are deducted from EBITDAX.

SAMPLE CASE

Table 2 below provides a sample repayment analysis for determining the borrower's ability to repay total secured debt within a reasonable time.

Cash flow available for debt repayment is equal to projected future net revenue (FNR) less general and administrative (G&A) expenses and interest expense on total debt (column J). The beginning borrowing base commitment (column K) is reduced by the incremental cash flow

available for debt repayment from each period until payout and then applied to junior lien secured debt (column N). At payout, the FNR remaining (column Q) divided by the aggregate FNR represents the reserve tail (column R).

Examiners should evaluate the borrower's ability to repay total secured debt, including a fully funded RBL and interest expense on all debt. When it is unlikely that the borrower will use the full RBL commitment to fund projected capital expenditures or deficit cash flow, however, examiners may also run scenarios of the borrower's repayment capacity reflecting actual or anticipated usage on the RBL. The ability of the borrower to repay or refinance unsecured debt should consider the maturity structure and any contractual repayment obligations of the unsecured debt relative to the repayment capacity of the total secured debt.

TABLE 2
BORROWER CASH FLOW REPAYMENT ANALYSIS

	A	B	C=A+B	D	E	F	G=C–D –E–F	H	I	J=G–H–I
Year Ending	Oil, gas and NGL Revenues	Hedging Revenues (Losses)	Total Revenue	Total Lease Operating Expense (LOE)	Production/Ad Valorem Taxes	Capex	FNR	G&A	Total Interest Expense	Cashflow Available for Repayment
Year 1	48,892	8,699	57,591	6,623	733	6,917	43,318	2,512	8,500	32,306
Year 2	53,401	7,783	61,184	7,036	801	34,601	18,746	2,667	7,369	8,709
Year 3	45,003	3,919	48,922	5,626	675	3,412	39,209	2,131	7,064	30,013
Year 4	42,486		42,486	4,886	637		36,963	1,848	6,014	29,101
Year 5	37,965		37,965	4,366	569		33,030	1,651	4,987	26,391
Year 6	36,455		36,455	4,192	547		31,716	1,586	2,348	27,782
Year 7	28,068		28,068	3,228	421		24,419	1,221		23,198
Year 8	26,094		26,094	3,001	391		22,702	1,135		21,567
Year 9	21,075		21,075	2,424	316		18,335	917		17,418
Year 10	16,860		16,860	1,939	253		14,668	733		13,935
Remainder	67,750		67,750	7,791	1,016		58,943	3,092		55,851
Total	424,049	20,401	444,450	51,112	6,359	44,930	342,049	19,493	36,282	286,274

	K	L=J	M=K–L	N	O=J–L	P=N–O	Q=Total FRN–G	R=Q+Total FRN
Year ending	Beginning RBL (Total Commitment)	Cash Repayment	Ending RBL Bal.	Beginning Junior Secured Debt	Cash Repayment	Ending Junior Sec. Debt	Year-end FNR remaining	FNR remaining percent
Year 1	100,000	32,306	67,694	50,000		50,000	298,730	87%
Year 2	67,694	8,709	58,985	50,000		50,000	279,984	82%
Year 3	58,985	30,013	28,971	50,000		50,000	240,775	70%
Year 4	28,971	28,971	0	50,000	129	49,871	203,812	60%
Year 5				49,871	26,391	23,480	170,783	50%
Year 6				23,480	23,480		139,067	41%

CLASSIFICATION GUIDELINES FOR RESERVE-BASED LENDING

The classification of an RBL is like all loan classifications in that it must be predicated on an independent assessment of all credit factors that are germane to the specific credit being reviewed. A comprehensive analysis of the credit should take place if any of the following factors are present:

- The loan balance exceeds 65 percent of the discounted present worth of future net income (PWFNI) of proved-developed-producing reserves, or the cash-flow repayment analysis indicates that the loan will not amortize within 60 percent of the economic life of the proved reserves (alternatively, 120 percent of the economic half-life), and within 75 percent of the economic life for total secured debt.
- The credit is not performing in accordance with terms or payment of interest and/or principal.
- The credit is identified by the bank as a problem credit.
- Other factors indicate a potential problem credit.

After performing the analysis, the examiner must determine if classification is warranted. When classification is warranted, the following guidelines are to be applied when repayment of the debt is solely dependent on oil and/or gas properties pledged as collateral. A lesser percentage or less severe criticism may be appropriate when other reliable means of repayment exist for a portion of the debt.

Proved-Developed-Producing Reserves

Sixty-five percent of discounted PWFNI should be classified substandard when the discounted PWFNI is determined using historical production data (decline-curve-analysis engineering). When less than 75 percent of the reserve estimate is determined using historical production data, or when the discounted PWFNI is predicated on engineering estimates of the volume of oil or gas flow (volumetric and/or analogy-based engineering data), the collateral value assigned to substandard should be reduced accordingly. The balance, but not more than 100 percent of discounted PWFNI of proved-developed-producing (PDP) reserves, should be extended doubtful. Any remaining deficiency balance should be classified loss.

Other Reserves

In addition to PDP, many reserve-based credits will include proved-developed-nonproducing reserves, shut-in reserves, behind-the-pipe reserves, and proved-undeveloped properties (PUPs) as collateral. Due to the nature of these other reserves, there are no strict percentage guidelines for the proportion of the credit supported by this type of collateral that should remain as a bankable asset. However, only in very unusual situations would the proportion of collateral values assigned to a classification category approach the values for PDP. The examiner must ascertain the current status of each reserve and develop an appropriate amount.

Examples could be reserves that are shut in due to economic conditions versus reserves that are shut in due to the absence of pipeline or transportation. PUPs require careful evaluation before allowing any bankable collateral value. An example of a bankable value for a PUP could be one that has a binding purchase contract. In every classification where a bankable value is given for any of these other reserves, the loan write-up should fully support the examiner's determination.

The above guidelines apply to production loans that are considered collateral-dependent and are devoid of repayment capacity from any other tangible source. Rarely should bankable consideration be given to loans that are completely collateral dependent in excess of the liquidation value of the pledged reserves. Once again, there is no substitute for a specific, case-by-case analysis of applicable credit and collateral factors pertaining to each individual credit. Frequently, when a lender encounters problems with a production credit, numerous other types of assets (for example inventories, or real estate) are encumbered in an effort to protect the bank's interests. Other types of collateral and sources of repayment should be carefully evaluated on a case-by-case basis.

DOCUMENTATION

The documentation for a term RBL is relatively simple. There is a note, a loan agreement, a deed of trust or mortgage, an assignment of production (usually in the mortgage), a title opinion, and a security agreement or financing statement. The assignment of oil and gas interests is unique because oil and gas are treated as real property while in the ground but convert to personal property interests as production is generated at the wellhead. Most lenders also require an affidavit as to payment of bills. Also, the owner or the operator is usually required to guarantee payment of the loan.

The bank will obtain an acceptable title opinion that indicates the borrower has, on the date of the loan, clear title to each of the leases under mortgage and that properties are free and clear of all liens. The bank should also perform a lien search to determine the existence of any previous liens before funding and should document the lien search in the loan file. After the loan is closed, the bank will send a letter of instruction to notify the company sending out production checks that the bank has taken a lien on the production and to request that production checks be sent directly to the bank. The mortgage covers surface rights and mineral interests. A copy of the mortgage containing an assignment of production will be sent to the company purchasing the production, along with a request that division orders or transfer orders be prepared recording its interest in production payments. This authorizes the purchaser to send production payments directly to the bank for the account of the borrower. The security agreement and financing statement covers removable equipment, oil and gas inventory above the ground, and accounts receivable. The financing statements are filed in the real estate records of the county in which the properties are located (usually with the county clerk) and in the secretary of state's office. This filing is done to perfect security interests in equipment, which may be moved from place to place. However, some states have different requirements, and the examiner should be familiar with each state's filing requirements. The affidavit as to payment of bills is executed by the borrower to ensure that all the bills have been paid on the properties or will be paid out of loan proceeds. If bills are to be paid out of proceeds, the bank should ensure that payments are verified. The examiner should review the loan agreement and, in particular, review both positive and negative loan covenants.

The bank will usually take a collateral interest in equipment, accounts receivables, and inventory. The deed of trust or real estate mortgage will cover real estate, surface rights, and mineral interests, and a security agreement will cover removable equipment, oil as inventory (in tanks), and accounts receivable. An appropriate filing is needed for each type of collateral to perfect the bank's security interest. Filing requirements may vary from state to state and should be researched. Generally, collateral documents should be filed with the state and county. It is reasonable to expect the bank to have collateral files completed within two to three months.

MARKET ISSUES AND RISK RAMIFICATIONS

Prolonged declines in crude oil prices often result in substantial declines in crude oil and natural gas reserve collateral values and associated cash flows, challenging the loan repayment ability of oil and gas exploration and production borrowers. Highly leveraged borrowers and those that are in weakened financial condition are most vulnerable to these market conditions. Banks should monitor market factors to better manage and control the risk of their reserve-based lending portfolios and to determine the repayment ability of their borrowers. These factors include

- *Oil and gas commodity prices.* Commodities are particularly susceptible to price volatility. Global supply and demand imbalances can affect commodity prices and the cost of production. For example, weather events, economic conditions, and numerous other factors can alter global supply as well as demand and place downward pressure on exploration and production company performance. Banks should take market developments and price volatility into consideration when critically reviewing collateral valuation assumptions and managing their reserve-based lending exposure.
- *Production costs and capital expenditure.* Production costs are also known as "lifting costs." These costs are incurred in the operation and maintenance of wells, related equipment, and

facilities, and can affect sustained production. Banks should critically review production costs and capital expenditures when determining borrower repayment capacity, financial viability, and liquidity. Additionally, production costs can vary significantly between wells and fields. Banks should use location-specific production cost and capital expenditure estimates instead of general assumptions, particularly for those reserve-based lending portfolios containing wells in different oil fields.

- *New technological drilling and completion improvements.* For example, horizontal wells with multistage hydraulic fracturing completions, have significantly increased the up-front capital needs for exploration and production borrowers. Banks engaging in exploration and production lending should understand the capital needs of these borrowers, including the use of new technologies, when determining borrower repayment ability. As reserves are depleted, additional capital spending is required to bring additional reserves into production and maintain productivity levels.
- *Lease provision and maintenance.* Oil and gas leases generally include a "continuous drilling" or "continuous operations" clause to prevent the lease from expiring at the end of the primary term while drilling operations are in progress. It gives the lessee the right to continue drilling any well that was begun before the lease expired and to begin drilling more wells. Maintaining production in order to exercise these lease maintenance clauses can potentially cause financial challenges to a borrower, particularly during weak market conditions. Banks should understand the scope of lease maintenance clauses in place and assess the borrower's ability to remain in compliance during stressed time periods.

CREDIT RISK MANAGEMENT AND ADMINISTRATION

Banks should have in place appropriate risk management programs and prudent underwriting standards for reserve-based lending. A risk management program should cover concentration limits and market condition analysis, as well as expectations to identify, measure, monitor and control concentration risks associated with reserve-based lending. Moreover, an institution's risk management program for reserve-based lending should be effectively integrated into its capital planning practices. A bank should regularly review its policies and practices for reserve-based lending, including any relevant contingency plans in the event of market changes, and should maintain capital levels commensurate with the level and nature of its reserve-based lending exposure. The information that follows should be considered whether the bank is lending directly or as a participant in a group, such as in the case of a syndicated loan.

At a minimum, an institution with significant reserve-based lending exposure should have established risk management practices that address the following items below.

Individual Reserve-Based Lending Credit Monitoring

- *Assessment of a borrower's creditworthiness.* An institution should conduct a thorough analysis of a borrower's past and prospective creditworthiness, including

  — Projected income and expenses compared to actual results, as well as the results of peer oil and gas producers in the region,
  — Working capital adequacy,
  — Capital expense analysis,
  — Cash flow analysis, and
  — Price sensitivity analysis.

Current borrower financial information is essential to the institution's ability to evaluate the borrower's creditworthiness, leverage, and liquidity. A creditworthy exploration and production business should exhibit strong repayment ability, risk analysis, liquidity, solvency, reserve valuation, credit management, profitability, and management performance.

- *Assessment of a borrower's cash flow.* In volatile markets, a highly leveraged borrower may not have the necessary cash flow to properly service its debt according to the loan terms. By reviewing borrower-prepared cash flow statements, an institution should be able to identify potential repayment ability problems, calculate key cash flow ratios, and assess the ability of the business to handle risk and uncertainty.

Risk and uncertainty due to market factors,

commodity prices, and production levels are prevalent characteristics of most exploration and production operations and should be reflected in the cash flow projections. A sensitivity analysis that determines an exploration and production operator's ability to withstand fluctuations in commodity prices and uncertainty in production levels is critical in analyzing cash flow projections. Some key elements of sound financial analysis that an institution should conduct include

— Reviewing the reasonableness of underlying assumptions and projections for production, pricing, and price differentials;
— Comparing these projections with historical production and performance results;
— Analyzing hedges in place as of collateral valuation date;
— Assessing the impact of changes in capital expenditures on production levels; and
— Evaluating a borrower's ability to timely service total debt and significant changes in its balance sheet structure.

- *Reliable collateral evaluations.* Valuation of oil and gas reserves demands expertise and industry experience. The interconnected nature of the energy industry is complex and demands breadth and depth of understanding across all business sectors which include upstream, midstream, and downstream segments. Specialized contracts with energy services providers, such as transportation to market or delivery point, should be carefully reviewed as part of risk management practices for reliable collateral valuation.

  A typical reserve-based lending credit facility requires a borrower to deliver an updated reserve engineering report twice a year to the lender. A bank should identify additional costs and value adjustments not included in the engineering report, such as information on land mortgage restrictions and lease assignments, and use this information to understand the scope and limitation of the collateral securing the reserve-based lending. A bank should assess the assumptions contained in the reserve report, as this information forms the basis for its analysis of the reserve valuation.

  A bank should have a well-defined and consistently applied process, including minimum frequency, for obtaining independent reserve engineering reports. These reports require significant industry expertise and should include a complete analysis of the wells and production requirements from current production and over the life of a well.

  A bank should periodically conduct independent assessments of reserve valuation. Depending on the level and complexity of reserve-based lending in its portfolio, an institution should utilize its own independent staff engineers (if available) or retain independent petroleum engineers to conduct a comprehensive assessment of reserve valuation. This assessment should consider such factors as the relevant production volumes, expected ultimate recovery of reserves, and capital expenditures needed to convert reserves into production. An institution should also have processes in place to monitor periodically (at minimum, twice a year) the value of collateral pledged in order to manage repayment risk over the life of the loan. An institution's processes, risk adjustment factors, and discount rates for reserve analyses should be well defined in policy and consistently applied. Additionally, evidence of collateral lien perfection and collateral inspections should be documented in loan files.

- *Loan structure.* The structure of an RBL should depend on the nature of a borrower's business. To properly structure a borrowing relationship, a bank should be able to

  — Project how the borrower will perform in the future, including likely primary and secondary repayment sources from producing and developing assets. There should be limits to the portion of repayment capacity derived from developing assets.
  — Anticipate challenges and problems that the borrower may encounter, such as commodity price volatility, operational risks, and lease maintenance requirements.
  — Match the type and terms of the loan to both the loan purpose and the likely repayment sources. This includes ensuring the loan is supported by sufficient cash flow from the expected repayment source, particularly when an RBL's collateral includes undeveloped fields (that is, proved-developed-nonproducing reserves and proved-undeveloped reserves) or fields that do not have a continuous production his-

tory as collateral. The primary source of repayment is typically proved producing reserves.

— Develop loan agreement covenants that protect the bank, including provisions for monitoring the borrower's expenditures for the term of the loan. For example, a forward-looking liquidity test should provide a bank with visibility to the future consolidated liquidity position of the borrower and all guarantors to the loan. In addition, covenants should require the borrower to obtain the bank's approval prior to lifting any hedges upon which the institution is relying to mitigate collateral market value fluctuation.

— Secure the credit facility with collateral and consider requiring the borrower to provide loan support such as guarantees and hedges for commodity price volatility. Any guarantor should be included in the loan agreement. A bank should have processes and procedures in place to limit a borrower's commodity price hedging to its total production and thereby avoid overhedging.

- *Risk rating credit facilities.* A bank should have in place a robust process to risk rate RBLs. Risk rating for RBLs should be based on realistic repayment assumptions for a borrower's ability to de-lever and repay the RBL and its total debt relative to the economic life of the borrower's oil and gas reserves. Financial support or credit enhancement from a sponsor (such as the borrower's parent company) should be demonstrated and documented for rating conclusions.

- *Timing of collateral impairment testing and impairment indicators.* Generally, RBL terms require a borrower to prepare a reserve impairment assessment at least annually, and more frequently depending on events or changes in circumstances. A bank should review the reserve impairment assessment report and associated recoverability test of pledged assets' value whenever events or changes in circumstances indicate that a pledged asset's carrying amount may not be recoverable.

Reserve-Based Lending Portfolio Monitoring

- *Underwriting standards.* An institution should periodically review its underwriting standards to ensure its reserve-based lending policies do not become outdated, ineffective, or unaligned with its stated risk appetite. The frequency and depth of the review will depend on circumstances specific to the institution, such as growth expectations, competitive factors, economic conditions, and overall financial condition. An institution's management should review and modify, as appropriate, reserve-based lending policies based on any planned changes to its reserve-based lending function or business plan. An institution should also address significant criticisms and recommendations about its underwriting standards that have been identified in recent audits and examinations.

- *Concentration limits.* In general, a bank should monitor and manage its aggregate energy lending portfolio to avoid concentration risk. The institution should set risk limits for reserve-based energy lending as well as energy services lending that are consistent with the risk appetite approved by the board of directors. In addition, an institution should monitor and manage its production and regional concentration risk for exploration and production borrowers to avoid any single well or field accounting for a high percentage of its energy-related loan portfolio.[5] For a bank with a lending footprint that is primarily in oil-dependent geographies, the bank should also be mindful of high correlations between energy and non-energy business in the local economy. The risk amplification that occurs during an extended commodity sector downturn should be heavily factored into concentration and risk analysis.

- *Credit administration and controls.* An institution should have appropriate policies and controls to monitor and separately manage troubled RBLs for which a borrower is unable to generate sufficient cash flow from oil and/or gas production to repay the loan (sometimes

5. For more information, see 17 CFR 210.4-10, "Financial accounting and reporting for oil and gas producing activities pursuant to the Federal securities laws and the Energy Policy and Conservation Act of 1975."

called "stretched" RBLs). A stretched RBL reflects a borrower with credit or liquidity weaknesses, and an institution should understand the fundamental causes of those weaknesses. An institution may still work with a troubled borrower to continue to service existing loans. An institution should confirm the reasons for the borrower's cash flow problems (for example, weaknesses in a borrower's financial condition or operations, or poor market conditions). An institution's credit administration process should appropriately monitor exposure to the borrower and adjust the credit facility rating to reflect the borrower's credit condition, as well as the viability of the borrower's operation, so that the institution can make an informed decision as to whether advancing additional funds is appropriate. Any additional funds advanced should be for the purpose of improving the borrower's financial condition.

Expectations for the level of sophistication of risk management systems will vary based on the specific risk characteristics, complexity, and size of an institution's reserve-based lending exposure. In general, there are higher expectations around risk management for banks with significant reserve-based lending exposures in concentrated geographic locations and market segments. An institution should assess the effect, if any, of its reserve-based lending activities on the institution's overall financial condition, including capital, the allowance for loan and lease losses, and liquidity.

TERMINOLOGY

The following are abbreviated explanations or discussions of some of the terms found in engineering reports and energy-lending transactions.

Analogy-based engineering data. Comparative analyses relating past performances of comparable properties to determine possible future reserves.

Assignment of production. Usually in the mortgage agreement, it allows direct payment from purchaser to the bank for oil production. Gas purchases generally are paid to the operator, and the operator then pays the bank.

Carried interest. When a party or parties have their expenses paid (carried) by other parties up to a specified limit.

Decline curves. Used to determine reserves by extrapolation of historical production data.

Deed of trust or mortgage. Covers real estate, surface rights, and mineral interests. Mortgage is unique because oil and gas are treated as real property while in the ground but converted to personal property interests as production is generated at the wellhead and as oil and gas enter storage tanks or a pipeline. The security agreement portion of the oil and gas mortgage will usually cover fixtures and equipment affixed to the well site.

Development wells. Drilled in the proven territory of a field, they have a high likelihood of producing oil or gas.

Division orders. Set out the borrower's interest in the property and direct production payments. Division order title opinions can be used to verify ownership and will contain the legal description of properties.

Escalating. Involves the difficult task of predicting future prices of oil and gas for valuing production. Escalating the value of production usually increases the risk to the lender. Examiners should carefully review the basis for escalating values when it has a significant impact on the value of the collateral and/or cash flow. Also, the examiner should carefully review how future expenses related to each well are estimated.

Exploratory well. Also known as a "wildcat," a well drilled in an unproven area. The term originated in early drilling days in Pennsylvania when wells were drilled within the sight and sound of wildcats.

Fault. A break or fracture in the earth's crust that causes rock layers to shift.

Field. An area in which a number of wells produce from a reservoir or from several reservoirs at various depths. There may be two or more reservoirs in a field that are separated vertically by intervening impermeable rock, laterally by local geologic barriers, or both.

Formation. A bed or deposit of substantially the same kinds of rocks.

Fracturing, frac'ing, frac job. Refers to pumping fluids under extremely high pressure into a formation to create or enlarge fractures through which oil or gas can move. Propping agents such as sand are sent down with fluids to hold the fractures open. Many completed wells require additional treatment (stimulation) before oil or gas can be produced.

Known accumulation. The term accumulation is used to identify an individual body of moveable petroleum in a reservoir. However, the key requirement is that in order to be considered as known, and hence contain reserves or contingent resources, each accumulation or reservoir must have been penetrated by a well. In general, the well must have clearly demonstrated the existence of moveable petroleum in that reservoir by flow to surface or at least some recovery of a sample of petroleum from the well. However, where log and/or core data exist, this may suffice, provided there is a good analogy to a nearby and geologically comparable known accumulation.

Lease. A contract between the landowner (lessor) and the lessee that gives the lessee the right to exploit the premises for minerals or other products and to use the surface as needed. However, surface damages would normally have to be reimbursed. Surface ownership is different from mineral ownership in many cases. Also, if drilling does not begin during a specified time period, the lease will expire.

Lithology. The scientific study of rocks.

Log(s). Used to record three basic measurements: electrical, radioactive, and sonic. The logging device is lowered into the well bore and transmits signals to the surface. These are recorded on film and used to make a log showing the recorded measurements that are used to analyze the formation's porosity, fluid saturation, and lithology. The log's header gives the log's type and date, the operator, the well name, and other information.

Market-out. A clause that basically allows the purchaser to stop paying the original contract price and institute a lower price with the intent of maintaining the marketability of the gas. Some contracts allow the producer to be released from the contract if he refuses the lower price or may offer other remedies.

Mineral rights. The ownership of minerals under a tract, which includes the right to explore, drill, and produce such minerals, or assign such rights in the form of a lease to another party. Mineral-rights ownership may or may not be severed from land-surface ownership, depending on state law. Title in fee simple means all rights are held by one owner; the fee in surface owner does not hold mineral rights. The term "minerals" is loosely used to refer to mineral ownership and even, incorrectly, to royalty ownership. A mineral acre is the full mineral interest under one acre of land.

Net revenue interest. A share of production after all burdens, such as royalty and overriding royalty, have been deducted from the working interest. It is the percentage of production that each party actually receives.

Operator. The manager of drilling and production for the owner.

Overriding royalty interest (ORRI). A royalty in excess of the royalty provided in the Oil & Gas Lease. Usually, an override is added during an intervening assignment. ORRIs are created out of the working interest in a property and do not affect mineral owners. An ORRI is a fractional, undivided interest with the right to participate or receive proceeds from the sale of oil and/or gas. It is not an interest in the minerals, but an interest in the proceeds or revenue from the oil & gas minerals sold. The interest is limited to a specific tract of land and is bound to the terms limits of the existing lease. If a lease is allowed to expire, an ORRI is dissolved or expires with the lease. Overrides expire and don't not continue into perpetuity in the same form as mineral or royalty interests.

Perforations. The holes in casing and cement through which oil and/or gas flow from formation into wellbore and up to surface.

Permeability. A measure of how easily fluids may flow through pore spaces. A tight rock or sand formation will have low permeability and, thus, low capacity to produce oil or gas. Wells in these zones usually require fracturing or other stimulation.

Porosity. Refers to the pore space in rock that enables it to hold fluids.

Proved developed shut-in (PDSI). Proved developed nonproducing reserves are subcategorized as nonproducing include proved developed shut-in (PDSI) and proved developed behind the pipe (PDBP) reserves. E&P companies expect to recover PDSI reserves from (1) completion intervals that are open at the time of the estimate but have not started producing, (2) wells that were shut-in for market conditions or pipeline connections, or (3) wells not capable of production for mechanical reasons.

Reservoir or pool. A subsurface rock formation containing an individual and separate natural accumulation of moveable petroleum that is confined by impermeable rock or by water barriers and is characterized by a single-pressure system.

Resource base or total petroleum initially-in-place. All estimated quantities of petroleum contained in the sub-surface, as well as those quantities already produced.

Reserves. The estimated amount of oil and gas in a given reservoir that is capable of being profitably recovered, assuming current costs, prices, and technology. Not to be confused with oil and gas in place (resource base), which is the total amount of petroleum in the earth regardless of whether or not it can be recovered. Recovery is a function not only of technology, but of the marketplace.

Reserve interest. The term used to describe the percent of revenue received.

Royalty interest. The share of gross production proceeds from a property received by its mineral owner(s), free of exploration, drilling, and production costs. Typically one-eighth to one-sixth of production, but fractions may be higher. Royalty payments take precedence over all other payments from lease revenues.

Primary, secondary, and tertiary recovery. Relates to the method of obtaining production from a well. Primary recovery is production from a reservoir through flowing or pumping wells because of the existence of natural energy within the reservoir. This usually recovers about 10 to 35 percent of the oil and gas in place. Secondary recovery is any method by which essentially depleted reservoir energy is restored. This may be accomplished by injection of liquids or gases or both. Tertiary recovery is any enhanced method employed after secondary recovery and is generally very costly.

Runs. A term used to refer to oil or gas production income from a lease.

Seismic survey or shooting. A method of gathering information by recording and analyzing shock waves artificially produced and reflected from subsurface rocks.

Shut-in well. A well that is capable of producing but is not presently operating. Reasons why a well may be shut in include lack of equipment or market.

Stripper wells. Wells that make less than 10 barrels of oil per day based on the last 12 months or wells that make less than 60,000 cubic feet of gas per day based on the last 90 days.

Volumetric calculations. Determine oil or gas reserves by use of rock volume and characteristics.

Working interest. Also referred to as an operating interest, the term used to describe the lease owner's interest in the well. Lease owners are the ones who pay for drilling and completing the well. Lease owners pay 100 percent of cost and receive all revenues after taxes and royalties are paid.

Workover. Relates to the process of cleaning out or other work on a well to restore or increase its production.

1. To determine if policies, practices, procedures, and internal controls for energy loans are adequate to identify and manage the risks the bank is exposed to.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the portfolio for performance, credit quality, collateral sufficiency, and collectibility.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

INTRODUCTION

Asset-based lending is a specialized area of commercial bank lending in which borrowers assign their interests in certain accounts receivable and inventory, and in selected cases fixed assets, to the lender as collateral. In asset-based lending, the primary repayment source is the conversion of the pledged assets into cash. Asset-based lending differs from a commercial loan in which the bank takes a security interest in all accounts receivable and inventory owned or acquired by the borrower. This section will discuss asset-based lending in relation to the characteristics of the borrower, its advantages to the borrower and the bank, credit and collateral analysis, documentation, and safeguards to ensure the authenticity and collectibility of the assigned receivables.

The examiner must judge the quality of the asset-based credit by evaluating the financial condition and debt-servicing ability of the borrower and the quality of the collateral. In addition, the examiner must evaluate the bank's credit policy, internal controls, audit procedures, and operational practices.

Many borrowers whose financial condition is not strong enough to allow them to qualify for regular, secured commercial bank loans may use asset-based loans to meet their financial needs. Some examples of asset-based borrowers are—

- businesses that are growing rapidly and need year-round financing in amounts too large to justify commercial lines of credit secured by blanket liens on accounts receivable and inventory,
- businesses that are nonseasonal and need year-round financing because working capital and profits are insufficient to permit periodic cleanups,
- businesses whose working capital is inadequate for their volume of sales and type of operation, and
- businesses that cannot obtain regular commercial loan terms because of deteriorating credit factors.

Some advantages of asset-based lending for the borrower are—

- efficiency in financing an expanding operation because the business's borrowing capacity expands along with increases in levels of accounts receivables, inventory, and sales;
- the ability to take advantage of purchase discounts because the company receives immediate cash on its sales and is able to pay trade creditors in a timely manner (consistent usage of purchase discounts reduces the cost of goods sold and enhances the gross profit margin); and
- the interest paid on asset-based loans may be lower than for alternate sources of funds.

Some advantages of asset-based lending for banks are—

- a relatively high-yield loan is generated commensurate with the perceived credit risk of the borrower;
- a depository relationship is formed that provides income and enhances the bank's ability to monitor changes in the borrower's cash flow and overall financial condition;
- banking relationships with longstanding customers whose financial conditions no longer warrant traditional commercial bank loans can continue;
- new business is generated by prudently lending to financially weaker customers who could not qualify for normal commercial loans; and
- potential loss is minimized when the loan is collateralized by a percentage of the accounts receivable and inventory.

CREDIT ANALYSIS

Although asset-based loans are collateralized and closely monitored, it is important to analyze the borrower's financial statements. Even if the collateral is of good quality and supports the loan, the borrower should demonstrate financial progress. Full repayment through collateral liquidation is normally a solution of last resort. An examiner should analyze the borrower's financial statements with particular emphasis on trends in working capital, review trade reports, analyze accounts receivable and inventory turnover, and review the agings of receivables and payables. Furthermore, the prompt payment of taxes, especially payroll taxes, should be verified. One reason for a company to obtain asset-based financing is to maximize discounts offered by

suppliers; therefore, it should pay creditors promptly upon receiving the financing.

Bank management's ability to recognize a customer's financial problems as they develop, and to initiate orderly liquidation, if necessary, is important in the supervision of asset-based financing. Theoretically, a borrower's line could be fully liquidated by discontinuing further advances, collecting the assigned receivables, and liquidating pledged inventory. However, such drastic action would most likely cause the borrower's business to close, resulting in a probable deterioration of the receivables from new disputes and in returns and offsets. Consequently, the bank usually notifies its borrower of a contemplated liquidation, which gives the borrower time to seek other means of continuing business so that the bank's loan may be liquidated in an orderly manner without losses or other adverse effects. Unless the bank has initiated an orderly liquidation, examiners should specially mention or classify receivable and inventory lines in which the borrower's financial position has declined so that continued financing is not prudent. When a liquidation is occurring, classification of the credit may not be necessary if the borrower's business is continuing, the existing collateral is of good quality, liquidation value sufficiently covers outstanding debt, and no collateral deterioration is anticipated.

A related issue concerning asset-based loans is the amount of excess availability associated with the revolving line of credit. The quantity of a borrowing company's excess availability is an excellent indicator of whether it has the capacity to service its loan. If a status report shows little availability, the borrower has used all of the cash that the pledged receivables and inventory are capable of generating under the asset-based line of credit. Since these loans may not yet be on the bank's watch list or problem-loan report, it is important for the examiner to track, over a fiscal-year period, a borrower's changing levels of availability when performing an analysis of creditworthiness. This analysis is especially critical for borrowers whose business is seasonal. Initial credit analyses of potential asset-based loan customers should include detailed projections showing that availability under revolving lines of credit at anticipated advance rates would be sufficient to meet the borrower's working-capital needs. Occasionally, overadvance lines are part of the initial credit facility.

Bank management must continually evaluate the realizable value of receivables and inventory pledged. To do so, management should review the quality of the receivables and inventory pledged, including documentation; the safeguards imposed to ensure the authenticity and collectibility of the assigned receivables; and the loan agreement and compliance therewith. The information obtained is sometimes difficult to interpret unless it is related to other periods, comparable businesses, or industry statistics. Comparative analysis helps indicate the continuing value of the collateral.

Lender-liability exposure is a risk in all types of commercial lending, but especially in asset-based lending. Borrowers using asset-based financing are generally very dependent on its continuation, so an abrupt cessation of a line of credit would be more likely to result in legal action against a lender. To protect themselves as much as possible from lender-liability lawsuits, banks frequently use time notes (with renewal options). Time notes are supported by loan agreements that usually include more numerous and detailed loan covenants. Legal counsels for both the lender and borrower should approve the loan agreement and covenants. At times, the borrower may not comply with one or more covenants in a loan agreement. The lender may agree to waive specific covenant violations to give a borrower time to take corrective action. If a covenant such as a financial covenant requiring a minimum capital level is waived, the waiver should be formally communicated to the borrower in writing. The lender should avoid both not taking action for a period of time and not issuing a written waiver for a covenant violation. In either case, if a covenant violation is subsequently used as a reason to cancel an asset-based loan, the lender is more vulnerable to lender liability. The lender should be careful to be consistent in all actions regarding the borrower.

ASSET-BASED LOAN AGREEMENTS

An asset-based loan agreement is a contract between a borrower and the bank that sets forth conditions governing the handling of the account and the remedies available in the event of default. The following areas should be addressed in the loan agreement:

- *Eligible accounts receivable.* This involves identifying classes of receivables that will not

be regarded as acceptable collateral. Certain types of receivables carry a higher degree of risk relative to the willingness and ability of account debtors to pay and, by their very nature, should be excluded from the lending formula. The following are typical classes of ineligible receivables:

—*Delinquent accounts.* Eligible receivables generally exclude accounts that are more than a given number of days delinquent, most often 60 days or more past due. Delinquency is frequently expressed in loan agreements as a given number of days from the invoice date, such as 90 days from the invoice date when payment is required in 30 days, which is the most common payment term. Expressing delinquency in days from the invoice date prevents a borrower from reducing the volume of ineligible delinquent accounts by giving dated terms (extending payment days). For example, accounts with 30-day trade terms that are becoming 60 days delinquent could otherwise be maintained in the eligible-receivable base by increasing payment terms to 90 days. Also, under what is commonly referred to as the "50 percent rule," accounts with multiple invoices that have more than 50 percent of the total balance past due are excluded from the eligible-receivable base. For example, if a borrower's customer owes payment for ten invoices, of which six are delinquent, all ten would be considered ineligible, not just the six that are delinquent. While 50 percent is standard industry practice, lenders may be more conservative and require ineligibility for an entire account if less than 50 percent of it is past due.

—*Contra accounts.* These usually arise when the borrower both sells to and purchases from the account debtor. The risk is the possibility of direct offset against these accounts.

—*Affiliate accounts.* These accounts, unlike contra-accounts, occur when a borrower sells to an account debtor, both of whom are associated through common ownership. Associated risks include forgiveness of debt on behalf of the affiliate and a temptation for the borrower to create fraudulent invoices.

—*Concentration accounts.* A lender may be vulnerable to loss if a large percentage of the dollar amount of receivables assigned is concentrated in a few accounts. Too many sales, even to a good creditworthy customer, could ultimately cause problems should disputes arise over products or contracts. A common benchmark is that no more than 20 percent of the receivables assigned should be from one customer. Some lenders will use a percentage that is also subject to a dollar limit.

—*Bill-and-hold sales.* These occur when a product ordered by a buyer has actually been billed and is ready for shipment, but is held by the seller pending receipt of shipping instructions from the buyer. Bill-and-hold sales are not eligible as receivables to be loaned against because they are not fully executed transactions. A second party's claim could be of little value when merchandise has not been shipped and there is no evidence of acceptance on behalf of the buyer.

—*Progress billings.* These are invoices issued on partial completion of contracts, usually on a percentage basis. This practice is standard in construction and other industries where long-term contracts are generally used. Failure to complete a contract could jeopardize the collectibility of progress receivables and, therefore, should generally not be considered eligible collateral. Moreover, failure to complete contracts can expose companies to lawsuits from their customers, who may be forced to pay higher prices to other parties to complete the contracts over much shorter time periods. The only exception for progress billings is when, on partial completion, there has been delivery of the product, and the contract clearly states that buyers have accepted the product and are responsible for payment of the product delivered.

—*Receivables subject to a purchase-money interest.* These include floor-plan arrangements, under which a manufacturer will frequently file financing statements when merchandise is delivered to the borrower. That filing usually gives the manufacturer a superior lien on the receivable. An alternative would be to enter into an agreement with the manufacturer, which specifies that rights to the receivables are subordinated to the bank.

• *Percentage advanced against eligible or acceptable accounts receivable.* The accounts-

receivable advance rate, typically in the range of 75 to 85 percent, must serve the two primary functions of providing adequate cash flow for the borrower and providing a margin that gives adequate protection for the lender. Protection for the lender requires a sufficient margin for the continual costs of collection and absorption of dilution in the receivables. Selecting the proper advance rate for a borrower involves understanding the amounts and causes of portfolio dilution. Causes of dilution that are positive include the offering of discounts and various allowances. Causes that are negative include merchandise returns, bad debts, product liability, or warranty claims. An abundance of negative causes, such as bad debts, might indicate poor receivable-management practices. A lender must know how dilution is occurring in each receivable portfolio to measure it continually. This knowledge should lead to proper advance-rate selection, resulting in a loan balance protected by a receivables base with sufficient liquidation value to repay the loan.

- *Percentage advanced against eligible inventory.* The inventory advance rate typically ranges from 35 to 65 percent for finished products. Marketability and accessibility of the inventory are key factors in determining the advance rate. Proper evaluation of the liquidation value of inventory requires a firm understanding of marketability in all the various inventory stages (raw materials, works-in-process, finished merchandise). Works-in-process often have very low marketability because of their unfinished nature, and they will typically carry a very low advance rate—if they are even allowed as eligible inventory. Conversely, the raw materials or commodities (such as aluminum ingots, bars, and rolls) have a broader marketability as separately financed collateral components. When setting advance rates, it is also important to consider whether inventory is valued at LIFO (last in, first out) or FIFO (first in, first out). In an inflationary environment, FIFO reporting will result in higher overall inventory values on the customer's books.

The above factors are considerations in the conduct of inventory audits performed in connection with the granting and monitoring of asset-based loans. These audits will generally discuss the inventory from a liquidation basis. This information is critical in determining appropriate advance rates.

Pledged Receivables

The following factors should be considered in evaluating the quality of receivables pledged:

- Standard procedures require that the bank obtain a monthly aging report of the accounts receivable pledged. The eligible receivables base is then calculated by deducting the various classes of ineligible receivables. Usually the eligible receivables base will be adjusted daily during the month following receipt of the aging report. If accounts are ledgered, the base will be increased by additional sales, as represented by duplicate copies of invoices together with shipping documents and/or delivery receipts received by the bank. The receivables base will be decreased daily by accounts-receivable payments received by the borrower, who then remits the payments to the bank. Another method of payment in which the bank has tighter control is a lockbox arrangement. Under this arrangement, receivables are pledged on a notification basis and the borrower's customers remit their payments on accounts receivable directly to the bank through deposit in a specially designated account. If accounts are not ledgered but a blanket assignment procedure is used, the borrower periodically informs the bank of the amount of receivables outstanding on its books. Based on this information, the bank advances the agreed percentage of the outstanding receivables. Receivables are also pledged on a non-notification basis, with payments on the receivables made directly to the borrower who then remits them to the bank. Proper management of any asset-based credit line requires that all payments on accounts receivable be remitted to the bank, with the accounts-receivable borrowing base reduced by a like amount. The borrower's working-capital needs should then be met by drawing against the asset-based credit line.
- Slower turnover of the pledged receivables can be a strong indication of deterioration in credit quality of accounts receivable.
- Debtor accounts that are significant to the bank borrower's business should be well rated and financially strong. Borrowers should also

obtain financial statements on their major customers to make credit decisions. These financial statements should be reviewed when the bank performs its periodic audits. In addition, the borrower should maintain an appropriate level of reserves for doubtful accounts. Credit insurance is often used, which indemnifies a company against noncollection of accounts receivable for credit reasons. When credit insurance is used, the asset-based lender should be named as beneficiary.

- Dilution or shrinking of the accounts-receivable borrowing base can result from disputes, returns, and offsets. A large or increasing volume of these transactions could adversely affect the bank's collateral position.

The following safeguards, which bank management should consider and the examiner should evaluate, ensure the authenticity and collectibility of the pledged accounts receivable:

- *Audits.* To verify the information supplied by the borrower to the bank, the bank should audit the borrower's books. Audits should occur several times a year at the borrower's place of business. For satisfactory borrowers, the audit is usually performed quarterly. However, audits can occur more frequently if deemed necessary. Individuals who perform bank audits should be independent of the credit function. The scope of an audit should include—
  - —verification that the information on the borrowing-base certificate reconciles to the borrower's books;
  - —review of concentrations of accounts;
  - —review of trends in accounts receivable, accounts payable, inventory, sales, and costs of goods sold;
  - —review of the control of cash proceeds;
  - —determination that the general ledger is regularly posted;
  - —verification of submitted aging reports;
  - —review of bank reconciliations and canceled checks;
  - —determination if any accounts receivable are being settled with notes receivable;
  - —verification that the accounts-receivable ledger is noted to show that an assignment has been made to the bank;
  - —determination on non-notification accounts that all payments are remitted to the bank and that positive written confirmations are issued timely (for example, semiannually);
  - —verification that all taxes, especially sales and payroll, are paid timely; and
  - —review of compliance with the loan agreement.
- *Confirmation.* To verify the authenticity of the pledged collateral, the bank should institute a program of direct confirmation. This procedure is particularly important if the accounts receivable are pledged on a non-notification basis, since the bank does not have the same control over debtor accounts as it does when the receivables are pledged on a notification basis. Direct confirmation should be made before the initial lending arrangement and periodically thereafter. Confirmation should be on a positive basis. The bank should obtain written approval from the borrower before confirming accounts receivable on a non-notification basis.

Pledged Inventory

The following factors should be considered in evaluating the inventory pledged:

- A borrowing-base certificate, obtained from the borrower at least monthly, is normally used to calculate the dollar amount of inventory eligible for collateral. The borrowing-base certificate will show the different classes of inventory, such as raw materials, works-in-process, and finished goods. After this will be listed the different types of ineligible inventory, which will be subtracted to give the amount of eligible inventory. Finally, the advance rates are applied to the different classes of eligible inventory to determine the borrowing base.
- Factors affecting marketability, advance rates, and the decision whether to allow a class of inventory as eligible at even a low advance rate:
  - —*Obsolescence.* This could involve not only merchandise that is no longer in demand for various reasons, such as technological advances, but also style products, such as clothing, which obviously have a greater potential for obsolescence.
  - —*Seasonal goods.* It is necessary to know the seasonal highs and lows associated with a particular class of inventory, as well as the costs associated with these seasonal variations.

—*Oversupply.* If there is an oversupply in the general market of a particular class of inventory, then its value would be negatively affected.

—*Limited-use raw materials and finished goods.* These would be difficult to liquidate at a reasonable value.

Two other areas a lender must analyze in setting the inventory advance rate are the ease or difficulty, in terms of cost, of liquidating inventory in multiple locations, and the cost of maintaining certain inventory, such as food products that require refrigeration, in a salable state.

In addition to marketability, accessibility of the collateral is extremely important, as liquidation plans become meaningless if a lender cannot gain access to collateral. Constant vigilance is necessary to guard against actions that would preempt a lender's security interest in inventory. Following are some common actions that impede a lender's access to collateral:

- *Possessory liens.* A landlord lien is a common example. To protect their interest, lenders need to obtain landlord waivers to the lien.
- *Nonpossessory liens.* A purchase-money security interest is a common example. These are usually filed by trade suppliers against their customers.
- *Secret lien.* A tax lien is the most common example. To ensure that a loss of collateral does not occur, it is necessary to conduct periodic lien searches if a borrower develops financial problems.

Commercial lenders often use outside appraisal firms to help them determine prudent inventory-advance rates. Also, normal industry practice for advance rates on different classes of inventory is available through the Commercial Finance Association Information Exchange.

Turnover rates should be analyzed to identify potential slow-moving or obsolete inventory, which should be subject to a lower or no advance rate. The borrower should establish inventory reserves if the volume of slow-moving or obsolete inventory is significant, and charge-off procedures should be in effect. Inventory should be adequately insured in relation to its location and amount. Furthermore, bill-and-hold merchandise and goods held on consignment should be physically segregated from other warehoused inventory and should not be included as inventory on the borrower's books or on the borrowing-base certificate submitted to the bank.

UCC Requirements for Secured Transactions

Article 9 of the UCC applies to any transaction that is intended to create a security interest in personal property. For a detailed discussion of the UCC requirements regarding secured transactions, refer to section 2080.1, "Commercial and Industrial Loans."

1. To determine if the policies, practices, procedures, and internal controls for accounts receivable and inventory financing are adequate.
2. To determine if bank officers are conforming to established guidelines.
3. To evaluate the portfolio for collateral sufficiency, credit quality, and collectibility.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the asset-based lending section of the internal control questionnaire.
2. On the basis of the evaluation of internal controls and the work performed by internal or external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest review done by internal or external auditors, and determine if corrections have been accomplished.
4. Obtain a trial balance of the customer liability records.
   a. Agree or reconcile balances to department controls and the general ledger.
   b. Review reconciling items for reasonableness.
5. Using an appropriate technique, select borrowers for examination. Prepare credit line cards.
6. Obtain the following information from the bank or other examination areas, if applicable:
   a. past-due loans
   b. loans in a nonaccrual status
   c. loans on which interest is not being collected in accordance with the terms of the loan (Particular attention should be paid to loans that have been renewed without payment of interest.)
   d. loans whose terms have been modified by a reduction of interest rate or principal payment, by a deferral of interest or principal, or by other restructuring of repayment terms
   e. loans transferred, either in whole or in part, to another lending institution as a result of a sale, participation, or asset swap since the previous examination
   f. loans acquired from another lending institution as a result of a purchase, participation, or asset swap since the previous examination
   g. loan commitments and other contingent liabilities
   h. Extensions of credit to employees, officers, directors, and principal shareholders and their interests, specifying which officers are considered executive officers
   i. extensions of credit to executive officers, directors, and principal shareholders and their interests of correspondent banks
   j. a list of correspondent banks
   k. miscellaneous loan-debit and credit-suspense accounts
   l. loans considered "problem loans" by management
   m. Shared National Credits
   n. specific guidelines in the lending policy
   o. each officer's current lending authority
   p. current interest-rate structure
   q. any useful information obtained from the review of the minutes of the loan and discount committee or any similar committee
   r. reports furnished to the loan and discount committee or any similar committee
   s. reports furnished to the board of directors
   t. loans classified during the preceding examination
7. Review the information received and perform the following procedures.
   a. *Loans transferred, either in whole or in part, to or from another lending institution as a result of a participation, sale or purchase, or asset swap.*
      - Participations only:
        — Test participation certificates and records, and determine that the parties share in the risks and contractual payments on a pro rata basis.
        — Determine that the bank exercises similar controls and procedures over loans serviced for others as for loans in its own portfolio.
        — Determine that the bank, as lead or agent in a credit, exercises similar controls and procedures over syndications and participations sold as for loans in its own portfolio.
      - Procedures pertaining to *all* transfers:
        — Investigate any situations in which loans were transferred immediately before the date of examination to determine if any were transferred

to avoid possible criticism during the examination.

— Determine whether any of the loans transferred were either nonperforming at the time of transfer or classified at the previous examination.

— Determine that the consideration received for low-quality loans transferred from the bank to an affiliate is properly reflected on the bank's books and is equal to the fair market value of the transferred loans. (While fair market value may be difficult to determine, it should at a minimum reflect both the rate of return being earned on these loans as well as an appropriate risk premium.) Section 23A of the Federal Reserve Act prohibits a state member bank from purchasing a low-quality asset.

— Determine that low-quality loans transferred to an affiliate are properly reflected at fair market value on the books of both the bank and its affiliate.

— If low-quality loans were transferred to or from another lending institution for which the Federal Reserve is not the primary regulator, prepare a memorandum to be submitted to the Reserve Bank supervisory personnel. The Reserve Bank will then inform the local office of the primary federal regulator of the other institution involved in the transfer. The memorandum should include the following information, as applicable:

(1) name of originating institution
(2) name of receiving institution
(3) type of transfer (i.e., participation, purchase or sale, swap)
(4) date of transfer
(5) total number of loans transferred
(6) total dollar amount of loans transferred
(7) status of the loans when transferred (e.g., nonperforming, classified, etc.)
(8) any other information that would be helpful to the other regulator

b. *Miscellaneous loan-debit and credit-suspense accounts.*

- Discuss with management any large or old items.
- Perform additional procedures as deemed appropriate.

c. *Loan commitments and other contingent liabilities.* Analyze the commitment or contingent liability if the borrower has been advised of the commitment, and analyze the combined amounts of the current loan balance (if any) and the commitment or other contingent liability exceeding the cutoff.

d. *Loans classified during the previous examination.*

- Determine the disposition of loans so classified by transcribing—
  — current balance and payment status, or
  — date loan was repaid and source of payment.
- Investigate any situations in which all or part of the funds for the repayment came from the proceeds of another loan at the bank, or as a result of a participation, sale, or swap with another lending institution. If repayment was a result of a participation, sale, or swap, refer to step 7a of this section for the appropriate examination procedures.

e. *Uniform review of Shared National Credits.*

- Compare the schedule of credits included in the uniform review of Shared National Credits Program with line cards to ascertain which loans in the sample are portions of Shared National Credits.
- For each loan so identified, transcribe appropriate information from schedule to line cards. (No further examination procedures are necessary in this area.)

8. Consult with the examiner responsible for the asset/liability management analysis to determine the appropriate maturity breakdown of loans needed for the analysis. If requested, compile the information using bank records or other appropriate sources. See "Instructions for the Report of Examination," section 6000.1, for the considerations to be taken into account when compiling maturity information for the gap analysis.

9. Prepare line cards for any loan not in the sample that, on the basis of the information

derived from the above schedules, requires in-depth review.

10. Obtain liability and other information on common borrowers from examiners assigned to cash items, overdrafts, lease financing, and other loan areas, and together decide who will review the borrowing relationship.
11. Obtain credit files for each loan for which line cards have been prepared. In analyzing the loans, perform the following procedures:
    a. Analyze balance-sheet and profit-and-loss items as reflected in current and preceding financial statements, and determine the existence of any favorable or adverse trends.
    b. Review components of the balance sheet as reflected in the current financial statements, and determine the reasonableness of each item as it relates to the total financial structure.
    c. Review supporting information and consolidation techniques for major balance-sheet items.
    d. Ascertain compliance with provisions of loan agreements.
    e. Review digests of officers' memoranda, mercantile reports, credit checks, and correspondence.
    f. Review the following:
        - relationship between amount collected in a month on the receivables pledged as collateral and the borrower's credit limit
        - aging of accounts receivable
        - ineligible receivables
        - concentration of debtor accounts
        - financial strength of debtor accounts
        - disputes, returns, and offsets
        - management's safeguards to ensure the authenticity and collectibility of the assigned receivables
    g. Analyze secondary support offered by guarantors and endorsers.
    h. Ascertain compliance with established bank policy.
12. Transcribe significant liability and other information on officers, principals, and affiliations of appropriate borrowers contained in the sample. Cross-reference line cards to borrowers, where appropriate.
13. Determine compliance with laws and regulations pertaining to accounts receivable lending by performing the following steps.
    a. *Lending limits.*
        - Determine the bank's lending limit as prescribed by state law.
        - Determine advances or combinations of advances with aggregate balances above the limit, if any.
    b. *Section 23A, Relations with Affiliates (12 USC 371c), and section 23B, Restrictions on Transactions with Affiliates (12 USC 371c-1), of the Federal Reserve Act, and Regulation W.*
        - Obtain a listing of loans to affiliates.
        - Compare the listing with the bank's customer liability records to determine its accuracy and completeness.
        - Obtain a listing of other covered transactions with affiliates (i.e., acceptance of affiliate's securities as collateral for a loan to any person).
        - Ensure that covered transactions with affiliates do not exceed the limits of section 23A and Regulation W.
        - Ensure that covered transactions with affiliates meet the collateral requirements of section 23A and Regulation W.
        - Determine that low-quality loans have not been purchased from an affiliate.
        - Determine that all covered transactions with affiliates are on terms and conditions that are consistent with safe and sound banking practices.
        - Determine that all transactions with affiliates comply with the market-terms requirement of section 23B and Regulation W.
    c. *18 USC 215, Receipt of Commission or Gift for Procuring Loans.*
        - While examining the accounts receivable loan area, determine the existence of any possible cases in which a bank officer, director, employee, agent, or attorney may have received anything of value for procuring or endeavoring to procure any extension of credit.
        - Investigate any such suspected situation.
    d. *Federal Election Campaign Act (2 USC 441b), Political Contributions and Loans.*
        - While examining the accounts receivable loan area, determine the existence of any loans in connection with any political campaign.
        - Review each such credit to determine

whether it is made in accordance with applicable banking laws and regulations and in the ordinary course of business.

e. *12 USC 1972, Tie-In Provisions.* While examining the accounts receivable loan area, determine whether any extension of credit is conditioned upon—
   - obtaining or providing an additional credit, property, or service to or from the bank or its holding company (or a subsidiary of its holding company), other than a loan, discount, deposit, or trust service, or
   - the customer not obtaining a credit, property, or service from a competitor of the bank or its holding company (or a subsidiary of its holding company), other than a reasonable condition to ensure the soundness of the credit.

f. *Insider lending activities.* The examination procedures for checking compliance with the relevant law and regulation covering insider lending activities and reporting requirements are as follows. (The examiner should refer to the appropriate sections of the statutes for specific definitions, lending limitations, reporting requirements, and conditions indicating preferential treatment.)
   - *Regulation O (12 CFR 215), Loans to Executive Officers, Directors, and Principal Shareholders and Their Related Interests.* While reviewing information relating to insiders that is received from the bank or appropriate examiner (including loan participations, loans purchased and sold, and loan swaps)—
     - — test the accuracy and completeness of information about accounts receivable loans by comparing it with the trial balance or loans sampled;
     - — review credit files on insider loans to determine that required information is available;
     - — determine that loans to insiders do not contain terms more favorable than those afforded other borrowers;
     - — determine that loans to insiders do not involve more than normal risk of repayment or present other unfavorable features;
     - — determine that loans to insiders do not exceed the lending limits imposed by Regulation O;
     - — if prior approval by the bank's board was required for a loan to an insider, determine that this approval was obtained;
     - — determine compliance with the various reporting requirements for insider loans;
     - — determine that the bank has made provisions to comply with the disclosure requirements for insider loans; and
     - — determine that the bank maintains records of public disclosure requests and the disposition of the requests for a period of two years after the dates of the requests.
   - *Title VIII of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRA) (12 USC 1972(2)), Loans to Executive Officers, Directors, and Principal Shareholders of Correspondent Banks.*
     - — Obtain from or request that the examiners reviewing due from banks and deposit accounts verify a list of correspondent banks provided by bank management, and ascertain the profitability of those relationships.
     - — Determine that loans to insiders of correspondent banks are not made on preferential terms and that no conflict of interest appears to exist.

g. *Financial Recordkeeping and Reporting of Currency and Foreign Transactions (31 CFR 103.33), Retention of Credit Files.* Review the operating procedures and credit file documentation and determine if the bank retains records of each extension of credit over $10,000, specifying the name and address of the borrower, the amount of the credit, the nature and purpose of the loan, and the date thereof. (Loans secured by an interest in real property are exempt.)

14. Determine whether the consumer compliance examination uncovered any violations of law or regulation in this department. If violations were noted, determine whether corrective action was taken. Extend testing to determine subsequent compliance with

any noted law or regulation.

15. Perform the appropriate steps in "Concentrations of Credits," section 2050.3.
16. Discuss with appropriate officers, and prepare summaries in appropriate report form of—
    a. delinquent loans
    b. loans not supported by current and complete financial information
    c. loans on which documentation is deficient
    d. inadequately collateralized loans
    e. classified loans
    f. Small Business Administration delinquent or criticized loans
    g. transfers of low-quality loans to or from another lending institution
    h. concentrations of credit
    i. extensions of credit to major shareholders, employees, officers, directors, and/or their interests
    j. violations of laws and regulations
    k. other matters concerning the condition of the department
17. Evaluate the function for—
    a. the adequacy of written policies, relating to accounts receivable financing;
    b. the manner in which bank officers are conforming with established policy;
    c. adverse trends within the accounts receivable financing department;
    d. the accuracy and completeness of the schedules obtained from the bank;
    e. internal control deficiencies or exceptions;
    f. recommended corrective action when policies, practices, or procedures are deficient;
    g. the competency of departmental management; and
    h. other matters of significance.
18. Update the workpapers with any information that will facilitate future examinations.

Asset-Based Lending
Internal Control Questionnaire
Effective date March 1984

Section 2160.4

Review the bank's internal controls, policies, practices, and procedures for making and servicing accounts receivable financing loans. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flow charts, copies of forms, and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICIES

*1. Has the board of directors, consistent with its duties and responsibilities, adopted written accounts receivable financing policies that—
   a. establish procedures for reviewing accounts receivable financing applications,
   b. establish standards for determining credit lines,
   c. establish standards for determining percentage advance to be made against acceptable receivables,
   d. define acceptable receivables,
   e. establish minimum requirements for verification of borrower's accounts receivable, and
   f. establish minimum standards for documentation?

2. Are accounts receivable financing policies reviewed at least annually to determine if they are compatible with changing market conditions?

RECORDS

*3. Is the preparation and posting of subsidiary accounts receivable financing records performed or reviewed by persons who do not also—
   a. issue official checks and drafts or
   b. handle cash?

*4. Are the subsidiary accounts receivable financing records reconciled, at least monthly, to the appropriate general ledger accounts, and are reconciling items investigated by persons who do not also handle cash?

5. Are loan statements, delinquent account collection requests, and past-due notices checked to the trial balances that are used in reconciling subsidiary records of accounts receivable financing loans with general ledger accounts, and are they handled only by persons who do not also handle cash?

6. Are inquiries about accounts receivable financing loan balances received and investigated by persons who do not also handle cash or pass adjustments?

*7. Are documents supporting recorded credit adjustments to loan accounts or accrued interest receivable accounts checked or tested subsequently by persons who do not also handle cash or initiate transactions (if so, explain briefly)?

8. Are terms, dates, weights, descriptions of merchandise, etc., shown on invoices, shipping documents, delivery receipts, and bills of lading scrutinized for differences?

9. Are procedures in effect to determine if the signatures shown on the above documents are authentic?

10. Are payments from customers scrutinized for differences in invoice dates, numbers, terms, etc.?

LOAN INTEREST

*11. Is the preparation and posting of loan interest records performed or reviewed by persons who do not also—
   a. issue official checks and drafts or
   b. handle cash?

12. Are independent interest computations made and compared or tested to initial loan interest records by persons who do not also—
   a. issue official checks and drafts or
   b. handle cash?

COLLATERAL

*13. Does the bank record, on a timely basis, a first lien on the assigned receivables for each borrower?

14. Do all loans granted on the security of the receivables also have an assignment of the inventory?

15. Does the bank verify the borrower's accounts receivable or require independent verification periodically?
16. Does the bank require the borrower to provide aged accounts receivable schedules periodically?
17. If applicable, are cash receipts and invoices block proven in the mailroom and subsequently traced to posting on daily transaction records?

CONCLUSION

18. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly and indicate any additional examination procedures deemed necessary.
19. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

Some member banks provide lending services to stock brokerage firms using marketable securities as collateral. While various financial services are offered, typically most banks make loans to brokerage firms to provide them with the funding needed to carry their securities portfolio. The securities can either be held by the bank or a tri-party custodian or pledged to the bank at a depository. Collateral securities can be in physical form or can be held at a depository in book-entry form.

To promote efficiency, a brokerage firm may use a depository to hold the securities it has pledged as collateral for a bank loan. Brokerage firms deposit shares of eligible securities with the depository, and the stock certificates representing those shares are registered in the name of a common nominee. Beneficial ownership of the securities is transferred through computerized book entries, thus eliminating the physical movement of the securities. The depository has physical control of the securities while they are on deposit. Loan arrangements are made between the broker and the lending bank, with the broker providing electronic instructions to the depository to debit the firm's account and credit that of the lending bank. The depository acknowledges the transaction to the lending bank and will not reverse the entry or allow partial withdrawals without authorization from that institution. Participating banks receive daily reports showing their position in the program by broker name and type of security.

The New York Stock Exchange formed a subsidiary, the National Securities Clearing Corporation (NSCC), to provide equity clearance and continuous net settlement for the brokerage community. The Depository Trust Company in New York, under contract with the NSCC, handles the technical aspects of that operation, including final settlement. Collateral-pledging services may be offered by other depositories as well.

Book-entry transfer of ownership is limited to only those securities that are eligible for deposit in a depository. However, even if a security was depository-eligible, it would not be eligible for book-entry movement unless the lending bank was a direct or indirect participant in the depository. If the lending institution does not have a relationship, either directly or indirectly, with a depository, the securities would have to be delivered physically to the ultimate custodian (presumably the lending bank).

Securities lending is not always constrained by eligibility. Depending on the bank's underwriting standards, some banks may be willing to lend on the basis of securities that are not depository-eligible. This would preclude book-entry movement and require physical delivery.

1. To determine if policies, practices, procedures, objectives, and internal controls for securities broker and dealer loans are adequate.
2. To determine the types of loans (underwriting loan, day loan, inventory loan, margin loan, or guidance line) made, loan pricing and fees, loan-to-value ratios, and margin calls.
3. To evaluate credit quality, credit analysis, collateral and custody requirements, and procedures for lost and stolen securities.
4. To determine if bank officers are operating in conformance with the established guidelines.
5. To determine compliance with applicable laws and regulations, including Regulations T and U, the Securities Act of 1933, and the Securities Exchange Act of 1934.
6. To evaluate management information systems, particularly the lender's ability to ensure adequate collateral coverage by being able to automatically price collateral daily.
7. To determine the scope and adequacy of the audit function.
8. To initiate corrective action when policies, practices, procedures, objectives, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Securities Broker and Dealer Loans section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and of the work performed by internal/external auditors ascertain the scope of the examination.
3. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest review done by internal/external auditors, and determine if corrections have been accomplished.
4. Request the bank to supply:
   a. Schedule of approved lines for each dealer including outstanding balances.
   b. Delinquent interest billings, date billed amount of past-due interest.
5. Obtain a trial balance of all dealer accounts and:
   a. Agree balances to department controls and general ledger.
   b. Review reconciling items for reasonableness.
6. Using an appropriate technique, select borrowers to be reviewed.
7. Using the trial balance, transcribe the following information for each borrower selected onto the credit line cards.
   a. Total outstanding liability.
   b. Amount of approved line.
8. Obtain from the appropriate examiner the following schedules, if applicable to this area:
   a. Past-due loans.
   b. Loan commitments and other contingent liabilities.
   c. Miscellaneous loan debit and credit suspense accounts.
   d. Loans considered ‘‘problem loans’’ by management.
   e. Each officer’s current lending authority.
   f. Current interest rate structure.
   g. Any useful information obtained from the review of the minutes of the loan and discount committee or any similar committee.
   h. Reports furnished to the loan and discount committee or any similar committee.
   i. Reports furnished to the board of directors.
   j. Loans classified during the preceding examination.
   k. A listing of loans charged-off since the preceding examination.
9. Review the information received and perform the following:
   a. For miscellaneous loan debit and credit suspense accounts:
      - Discuss with management any large or old items.
      - Perform additional procedures as deemed appropriate.
   b. For loans classified during the previous examination, determine disposition of loans so classified by transcribing:
      - Current balances and payment status, *or*
      - Date loan was repaid and sources of payment.
   c. For loan commitments and other contingent liabilities, analyze if:
      - The borrower has been advised of the contingent liability.
      - The combined amounts of the current loan balance and the commitment or contingent liability exceed the cutoff.
   d. Select loans which require in-depth review based on information derived when performing the above steps.
10. For those loans selected in step 6 above and for any other loans selected while performing the above steps, transcribe the following information from the bank’s collateral record onto the credit-line cards:
    a. A list of collateral held, including date of entry, and amount advanced.
    b. A brief of the agreement between the bank and the dealer.
    c. Evidence that the proper documentation is in place.
    d. Details of any other collateral held.
11. The examiner should be aware that certain stock-secured purpose transactions with and for brokers and dealers are exempt from the

margin restrictions of Regulation U. Refer to the regulation for a complete description of such transactions, which include the following:

a. Temporary advances to finance cash transactions.
b. Securities in transit or transfer.
c. Day loans.
d. Temporary financing of distributions.
e. Arbitrage transactions.
f. Credit extended pursuant to hypothecation.
g. Emergency credit.
h. Loans to specialists.
i. Loans to odd-lot dealers.
j. Loans to OTC market makers.
k. Loans to third-market makers
l. Loans to block positioners.
m. Loans for capital contributions.

12. Discuss with appropriate officer(s) and prepare summaries in appropriate report form of:
    a. Delinquent loans, including a breakout of "A" paper.
    b. Loans on which collateral documentation is deficient.
    c. Recommended corrective action when policies, practices or procedures are deficient.
    d. Other matters regarding the condition of the department.
13. Prepare appropriate comments for examination report stating your findings with regard to:
    a. The adequacy of written policies relating to dealer loans.
    b. The manner in which bank officers are conforming with established policy.
    c. Schedules applicable to the department that were discovered to be incorrect or incomplete.
    d. The competence of departmental management.
    e. Internal control deficiencies or exceptions.
    f. Other matters of significance.
14. Update the workpapers with any information that will facilitate future examinations.

Securities Broker and Dealer Loans

Internal Control Questionnaire

Effective date March 1984

Section 2170.4

Review the bank's internal control, policies, practices and procedures for making and servicing loans. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information.

POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written loan policies that:
   a. Establish standards for determining broker and dealer credit lines?
   b. Establish minimum standards for documentation?
2. Are such loan policies reviewed at least annually to determine if they are compatible with changing market conditions?
3. Is a daily record maintained summarizing loan transaction details, i.e., loans made, payments received and interest collected to support applicable general ledger account entries?
4. Are frequent note and liability ledger trial balances prepared and reconciled with controlling accounts by employees who do not process or record loan transactions?
5. Is an exception report produced and reviewed by operating management that encompasses extensions, renewals or any factors that would result in a change in customer account status?
6. Do customer account records clearly indicate accounts which have been renewed or extended?

LOAN INTEREST

7. Is the preparation and posting of interest records performed and reviewed by appropriate personnel?
8. Are any independent interest computations made and compared or adequately tested to initial interest records by appropriate personnel?

COLLATERAL

9. Are multicopy, prenumbered records maintained that:
   a. Detail the complete description of collateral pledged?
   b. Are typed or completed in ink?
10. Are receipts issued to customers covering each item of negotiable collateral deposited?
11. If applicable, are the functions of receiving and releasing collateral to borrowers and of making entries in the collateral register performed by different employees?
12. Are appropriate steps with regard to Regulation U being considered in granting dealer and broker loans?

CONCLUSION

13. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficienicies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
14. Based on composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

INTRODUCTION

Factoring is the purchase, essentially without recourse, of the accounts receivable of a client by a bank (the factor). Generally, factor clients are small, undercapitalized companies or start-up firms with limited liquidity that generally do not qualify for more traditional bank financing. In contrast to accounts receivable financing, where the client retains the credit and collection risk associated with the receivables, factoring transfers these risks to the factor. For the client, the principal advantage of factoring is the assurance that it will receive the proceeds of its sales, regardless of whether the factor is paid. Furthermore, the client does not have to maintain a credit department to evaluate the creditworthiness of customers, collect past-due accounts, or maintain accounting records on the status of receivables. The factor assumes these responsibilities. An additional advantage for the client is that under the terms of an ''advance factoring'' arrangement, the client receives payment for its receivables before the time stated on the invoice.

Two basic types of factoring service offered by the industry are (1) maturity factoring and (2) advance factoring. In maturity factoring, an average maturity due date is computed for the receivables purchased within a given time period, and the client receives payment on that date. Advance factoring is computed in the same way; however, the client has the option of taking a percentage of the balance due on a receivable in advance of the computed average maturity due date. The remainder of the receivable, sometimes called the ''client's equity,'' is payable on demand at the due date.

ACCOUNTING FOR FACTORING

The factor's balance sheet reflects the purchased accounts receivable as an asset account, ''factored receivables,'' with ''due to clients'' as the corresponding liability. Usually, the balance of due-to-clients will be less than the factored receivables because of payments and advances to the clients. If, however, the factor makes advances to the client in amounts that exceed amounts due to the client, the advances will be shown as ''overadvances.'' Overadvances are common and usually secured by other collateral. The factoring agreement should set limits on the amount of overadvances available at any one time, generally based on specified collateral, such as the client's inventory. The relationship to inventory is based on the premise that the inventory will be sold, thus generating receivables that the factor has contracted to purchase. Proceeds from the factored receivables resulting from the sale of inventory are then used to repay the overadvance. If the overadvance is unsecured, it should be offset by a corresponding reduction in the ''client's equity.'' The factor's income statement will show factoring commissions, which represent the discount on the receivables purchased, as income. Interest income for advances on the due-to-client balances may or may not be a separate line item.

Since factoring is a highly competitive industry, price cutting has reduced factoring commissions to the point that they provide minimal support to a factor's earnings. As a result, interest margins on factoring advances represent an increasingly important part of a factor's net income. An analysis of proportional changes in the due-to-clients account should provide valuable insight into the analysis of the earnings of a bank's factoring activities. As more clients take advances (reducing due-to-clients), profit margins should widen. Conversely, as the due-to-clients proportion of total liabilities rises, profit margins may be expected to narrow.

FACTORING AGREEMENT, APPROVAL PROCEDURES, AND EXAMINER'S EVALUATION

The typical factoring agreement stipulates that all of a client's accounts receivable are assigned to the factor. However, the agreement between the factor and the client will usually state that receivables subject to shipping disputes and errors, returns, and adjustments are chargeable back to the client because they do not represent bona fide sales. The agreement will, in most instances, require that a reserve be established against the purchased receivables to ensure the factor's access to funds for any future chargeback adjustments.

The usual approval process requires the client to contact the factor's credit department before filling a sales order on credit terms. The credit

department conducts a credit review, determines the creditworthiness of the customer, and approves or rejects the sale. If the credit department rejects the sale, the client may complete the sale, but at its own risk. The most commonly rejected sales are those to affiliates, known bad risks, customers whose credit cannot be verified, and customers whose outstanding payables exceed the factor's credit line to that customer. Sales made by the client without the factor's approval are considered client-risk receivables, and the factor has full recourse to the client.

Once a sale has been made and the receivable assigned to the factor, whether or not the factor has approved it, the client's account will be credited for the net invoice amount of the sale. Trade or volume discounts, early payment terms, and other adjustments are deducted from the invoice amount. The receivable then becomes part of the client's "availability" to be paid immediately or at the computed date, depending on the basis of the factoring arrangement.

Each month the client receives an "accounts-current" statement from the factor, which details daily transactions. This statement reflects the daily assignments of receivables, remittances made (including overadvances and amounts advanced at the client's risk), deductions for term loans, interest charges, and factoring commissions. Credit memos, client-risk charge-backs, and other adjustments will also be shown. Client-risk charge-backs are the amounts deducted from the remittances to the client resulting from the failure of the client's customers to pay receivables that were advanced at the client's risk.

The accounts-current statement and the availability sheets are necessary for analyzing asset quality. The factor's ability to generate these reports daily is a basic control feature. Accounting systems for a high-volume operation probably will be automated, providing the factor with the data necessary to properly monitor the client. If a monitoring system is in place, the examiner should use the data provided in the asset analysis process.

The evaluation of a factoring operation includes a review of its systems and controls as well as an analysis of the quality of its assets. A major portion of a factor's assets will be factored receivables, for which the credit department has the responsibility for credit quality and collection. The other major portion of assets will consist of client loans and credit accommodations, such as overadvances and amounts advanced at the client's risk, for which the account officers are responsible.

CREDIT DEPARTMENT EVALUATION

Because of its integral function in the credit and collection process, the credit department is the heart of a factoring operation. The department should maintain a credit file for each of its client's customers, and these files should be continually updated as purchases are made and paid for by the customers. These files should include financial statements, credit bureau reports, and details of purchasing volume and paying habits. Each customer should have an assigned credit line based on the credit department's review of the customer's credit capacity.

The objective of a credit department evaluation is to critique the credit and collection process and to assess departmental effectiveness. The examiner should have a copy of departmental policies and procedures as well as a verbal understanding of them before beginning the review. The factor's policies should include, at a minimum, well-defined field audit procedures, a fraud detection and monitoring plan, and a computer back-up plan. Customer files selected for review may be drawn from large and closely monitored customers, or they may be selected by a random sample.

ASSET EVALUATION

The asset evaluation is a twofold process. The first part is to evaluate credit accommodations to each client. The second part is to evaluate customer receivables purchased by the factor at its own risk. For the first part of the process, the examiner should obtain a list that shows the aggregate of each client's credit exposure to the factor, both direct and indirect, including overadvances and receivables purchased at the client's risk. For the second part of the process, the examiner should obtain an aging schedule of factored receivables aggregated by customer but net of client-risk receivables. The selection of clients and customers for review should be based on the same selection methods as those used for the commercial loan review. Clients with a high "dilution" of receivables

(that is, customer nonpayment due to returns, shipping disputes, or errors) and those with client-risk receivables equal to 20 percent or more of factored volume might also be selected for review. Past-due factored volume is not a meaningful measure of client quality because a factor usually collects principal and interest payments directly from the client's availability.

A maturity client's availability is the sum of all factored receivables less trade and other discounts, factoring commissions, client-risk charge-backs, and other miscellaneous charges to the client's account. There may also be deductions for letters of credit and other credit accommodations. An advance client's availability would be further reduced by advances on the factored receivables, interest charges, and the reciprocal of the contractually agreed-upon "advance" percentage. This reciprocal, 20 percent in the case of a client who receives an 80 percent advance, is sometimes referred to as the client's equity in the factored receivables. Availability may be increased by liens on additional collateral, such as inventory, machinery and equipment, real estate, and other marketable assets.

A client's balance sheet will show a "due-from-factor" account instead of accounts receivable. The account balance may be somewhat lower than a normal receivables balance, thus distorting turnover ratios and other short-term ratios. A client can convert sales to cash faster with a factor than if it collected the receivables. The statement analysis should consider the client's ability to repay any advances received from the factor in the form of overadvances, term loans, or other credit accommodations. The analysis should also assess the client's ability to absorb normal dilution and the potential losses associated with client-risk receivables, particularly when these elements are unusually high.

CLASSIFICATION GUIDELINES

When classifying the credit exposure to a client, the client-risk receivables portion of factored volume is the only amount subject to classification. Because of the recourse aspect, the balance is considered an indirect obligation rather than a direct obligation. Any other credit accommodations to a client that are not included in factored receivables, such as overadvances or term loans, are also subject to classification. Customer receivables purchased by the factor at its own risk are subject to classification. Care should be taken not to classify any receivables that have already been classified under client-risk exposure. Seasonal aspects of clients' businesses should be carefully analyzed in assessing asset quality based on classification data.

CONCLUSION

Due to the large volume of daily transactions that typically flows through a factor, any internal control procedure that can be easily circumvented is a potential problem. The review of the department's internal systems and controls should be continuous throughout the examination. This review should include credit controls for both clients and customers. Since credit problems can develop rapidly in factoring, credit controls and systems must be responsive to the identification of these problems. Earnings and capital adequacy are evaluated based on the department's own performance. The factoring department's earnings trends may be evaluated by comparing the yield on assets for various periods. Factors are subject to the same price competition in the commercial finance market as accounts receivable financiers. Declining portfolio yields may reflect competitive pressures and may portend declining future profitability.

1. To determine if policies, practices, procedures, and internal controls for factoring are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the portfolio for performance, credit quality, collectibility, and collateral sufficiency.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Factoring section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures. Also obtain a listing of any deficiencies noted in the latest reviews done by internal/external auditors, and determine if appropriate corrections have been made.
4. Obtain a trial balance(s) of applicable asset and liability accounts and:
   a. Agree or reconcile balances to department controls and general ledger.
   b. Review reconciling items for reasonableness.
5. Obtain the following information:
   a. A list of all clients with their outstanding balances including total factored receivables with those purchased at the client's risk segregated, overadvances, term loans and other credit accommodations.
   b. If not included in 5a above, a list of amounts due to each client by the factor (availability reports).
   c. Aging schedules of factored receivables by client and by customer with client risk receivables segregated.
   d. Past due status reports for 5c, above.
   e. Listings of all clients and customers considered to be problems.
   f. Credits classified at the previous examination.
   g. Concentration reports by client and by customer.
   h. Exception reports highlighting dilution of factored receivables because of shipping disputes and errors, returns, or any other adjustments.
   i. Credit commitments/lines for each client including amounts for overadvances and receivables purchased at the client's risk.
   j. Credit lines for each customer.
   k. Specific lending policy guidelines including each officer's current lending authority.
   l. Current fee schedule.
   m. Any useful information obtained from the review of the minutes of the loan and discount committee or any similar committees.
   n. Reports furnished to the board of directors.
   o. Any other management reports maintained by the factoring department.
6. After consulting with the examiner-in-charge, determine the appropriate cut-off lines for:
   a. Client's aggregate direct liability (i.e., overadvances, term loans and other credit accommodations).
   b. Client's indirect liability (i.e., client-risk exposure).
   c. Customer's factored receivables not including those in 6b above.
7. Transcribe information to line cards for all client and customer credits over the cut-off limits, for all credits recognized as problems, and for credits classified at the previous examination.
8. Cross reference clients and customers with the examiners assigned to other loan areas for common borrowers, and together decide who will review the borrowing relationship.
9. Obtain credit files for all clients and customers for whom line cards were prepared and analyze the accounts by performing the following procedures:
   a. Analyze balance sheet and profit and loss items as reflected in current and preceding financial statements, determine the existence of any favorable or adverse trends.
   b. Review components of the balance sheet as reflected in the current financial statements and determine the reasonableness of each item as its relates to the total financial structure.
   c. Review supporting information for the major balance sheet items and the techniques used in consolidation, if applicable, and determine the primary sources of repayment and evaluate their adequacy.
   d. Compare the amount of the credit line(s) with the lending officer's authority.
   e. Determine compliance with the bank's established commercial loan policy.

In addition to the above procedures which are applicable to both client and customer accounts, the following additional procedures should be performed for client accounts only:

f. Determine compliance with provisions of factoring agreements.
g. Review digest of officers' memoranda, mercantile reports, credit checks and correspondence to determine the existence of any problems which might deter the contractual program as set forth in the factoring agreement.
h. Relate collateral values to outstanding debt.
i. Compare fees charged to the fee schedule and determine that the terms are within established guidelines.
j. Analyze secondary support afforded by guarantors and endorsers.

10. Perform appropriate procedural steps in Concentration of Credits section, if applicable.
11. Discuss with appropriate officer(s) and prepare summaries in appropriate report form of:
    a. Delinquent amounts, segregating those considered "A" paper.
    b. Violations of laws and regulations.
    c. Accounts not supported by current and complete financial information or on which other documentation is deficient.
    d. Concentrations of credit.
    e. Criticized accounts.
    f. Other matters regarding condition of asset quality.
12. Evaluate the factoring department with respect to:
    a. The adequacy of written policies relating to factoring.
    b. The manner in which bank officers are operating in conformance with established policy.
    c. Adverse trends within the factoring department.
    d. Internal control deficiences or exceptions.
    e. Recommended corrective action when policies, practices or procedures are deficient.
    f. The competency of departmental management.
    g. Other matters of significance.
13. Update the workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices and procedures for its factoring operation. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written factoring policies that:
   a. Establish procedures for reviewing factoring agreements?
   b. Establish standards for determining client credit lines for each of the various types of accommodations available (i.e., factored receivables, client-risk receivables, overadvances, term loans, etc.)?
   c. Establish standards for determining individual customer limits?
   d. Require a client to contact the factor for approval before filling a sales order on credit terms?
   e. Establish standards for approving the sales orders referred to above.
   f. Establish standards for determining the percentage of advance that will be made against acceptable receivables in advance factoring arrangements?
   g. Establish standards for determining the discount on factored receivables and the interest rate or fee charged for other credit accommodations?
   h. Establish minimum standards for documentation?
2. Are factoring policies reviewed at least annually to determine if they are compatible with changing market conditions?

INTERNAL CONTROL

*3. Is the preparation and posting of subsidiary factoring records performed or reviewed by persons who do not also:
   a. Issue official checks and drafts?
   b. Handle cash?

*4. Are the subsidiary factoring records reconciled, at least monthly, to the appropriate general ledger accounts, and reconciling items investigated by persons who do not also handle cash?

5. Are accounts current statements, delinquent account collection requests, and past-due notices checked to the trial balances that are used in reconciling subsidiary records of factoring accounts with general ledger accounts, *and* handled only by persons who do not also handle cash?

6. Are inquiries about factored balances received and investigated by persons who do not also handle cash?

*7. Are documents supporting recorded credit adjustments to factored receivable accounts and the due-to-clients accounts checked or tested subsequently by persons who do not also handle cash (if so, explain briefly)?

8. Are proper records maintained for approval of:
   a. Customer orders?
   b. Client credit accommodations?

9. Are items, dates, weights, description of merchandise, etc., shown on invoices, shipping documents, delivery receipts, and bills of lading scrutinized for differences?

10. Are procedures in effect to determine if the signatures shown on the above documents are authentic?

11. Are payments from customers scrutinized for differences in invoice dates, numbers, terms, etc.?

INTEREST AND FEES

*12. Is the preparation and posting of discount, interest, and fee records performed or reviewed by persons who do not also:
   a. Issue official checks and drafts singly?
   b. Handle cash?

13. Are independent discount, interest and fee computations made and compared or tested to initial records by persons who do not also:
   a. Issue official checks and drafts?
   b. Handle cash?

COLLATERAL

*14. Does the bank record, on a timely basis, a first lien on the assigned receivables for each borrower?
15. Does the bank verify the borrower's accounts receivable or require independent verification on a periodic basis?
16. Does the bank review aged accounts receivable schedules on a regular basis?
17. If applicable, are cash receipts and invoices block proved in the mailroom and subsequently traced to posting on daily transaction records?

CONCLUSION

18. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
19. Based on a composite evaluation as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

Bank Premises and Equipment

Effective date May 2019

Section 2190.1

INTRODUCTION

Bank premises and equipment includes land, buildings, furniture, fixtures, and other equipment, either owned or acquired by means of a capitalized lease, and any leasehold improvements. This section covers the fair valuation, general propriety, and legality of the bank's investment in premises and equipment. Other real estate owned and insurance coverage on fixed assets are discussed in other sections of this manual.

ACQUISITION AND VALUATION

Banks obtain premises and equipment in three primary ways:

- directly purchasing premises and equipment with cash outlays or by incurring debt, such as a mortgage;
- indirectly investing in a corporation that holds title to bank premises (the corporation may or may not be affiliated with the bank); or
- leasing bank premises and equipment from a third party

The bank's initial investment in premises and equipment should be booked at cost, which should be determined according to generally accepted accounting principles (GAAP). Nondepreciable assets such as land and art should remain on the books at cost, unless the asset incurs a material and permanent decline in value. Under such circumstances, the asset should be reduced to its fair value on the books, and a loss should be recorded.

The bank should depreciate assets that, over time, decline in economic value. These assets may be depreciated differently for book and tax purposes, which may give rise to deferred tax assets and deferred tax implications. GAAP allows depreciation using various methods. These include time-factor methods such as straight-line and accelerated methods. Accelerated methods include sum-of-the-years' digits depreciation, declining-balance depreciation, double-declining-balance depreciation, and other accelerated methods. The Internal Revenue Service allows accelerated depreciation methods for many assets to encourage businesses to make capital investments. While many banks follow these accelerated schedules for tax purposes, they may not depreciate these same assets as rapidly for book purposes.

Examiners should review internal controls for the bank's premises and equipment to ensure that these assets are properly safeguarded and appropriately recorded on the bank's books. Controls should be in place to inventory these assets and address the periodic review of their economic usefulness. Furniture, fixtures, and equipment whose economic usefulness have expired or that are otherwise damaged, impaired, or obsolete should be written down to value. Assets that cannot be located should be accounted for as a loss.

LEASES

Banks frequently lease their premises and equipment rather than own them. Leases should be accounted for appropriately. In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-02, "Leases (Topic 842)," which supersedes Accounting Standards Codification (ASC) 840.[1] Entities that have not adopted ASU 2016-02, should continue to account for leases in accordance with ASC Topic 840, Leases. Entities that have adopted ASU 2016-02, should account for leases in accordance with ASC Topic 842, Leases.

The instructions, including the supplemental instructions, for the preparation of the Call Report detail the capitalization of leases and specify treatment for leases. The accounting requirements for leasing transactions are somewhat complex, and examiners who have ques-

1. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, for banks that are public business entities (PBEs). For banks that are not PBEs, the guidance is effective for fiscal years beginning after December 15, 2019, and for interim periods within fiscal years beginning after December 31, 2020. For further information, see the Glossary entries in the Call Report Instructions for "public business entity" and "private company." Early adoption is permitted for all banks. An institution that early adopts these standards must apply them in their entirety. If an institution chooses to early adopt these standards for financial reporting purposes, the institution should implement them in its FFIEC Consolidated Reports of Condition and Income (Call Report) for the same quarter-end report date.

tions on the capitalization of leases should refer to the applicable ASC Topic for necessary detail.

Lease arrangements between a state member bank and its parent company or other affiliated entity should be reviewed in detail. Examiners should consider whether the lease arrangement is reasonable in relation to the cost of the asset, its current fair value, or similar lease arrangements in the current market. Transactions that appear to be self-serving or otherwise unreasonable to the bank should be criticized.

APPLICATION PROCEDURES FOR INVESTING IN BANK PREMISES

Section 24A of the Federal Reserve Act (12 USC 371d) requires state member banks to obtain Federal Reserve System approval to make additional investments that would cause the bank's total bank premises investments to exceed certain percentage-of-capital thresholds. Section 208.21 of Regulation H implements this requirement. Note that for purposes of this requirement, "bank premises investments" include a bank's direct investment in premises; its investment in the stock (or other ownership interests), bonds, debentures, or other such obligations of any company holding the premises of the bank; and loans made to (or on security of) any company holding the premises of the bank.

A bank that is well-capitalized (as defined in Regulation H) and has a CAMELS composite rating of 1 or 2 (as of its most recent examination) must obtain prior Federal Reserve System approval for a bank premises investment only if the investment would cause the bank's total bank premises investments (plus any debt incurred by any bank premises company affiliated with the bank) to exceed 150 percent of the bank's perpetual preferred stock (and related surplus) plus its common stock (and related surplus).

A bank not eligible for the 150 percent threshold must obtain prior Federal Reserve System approval for a bank premises investment only if the investment would cause the bank's total bank premises investments (plus any debt incurred by any bank premises company affiliated with the bank) to exceed the bank's perpetual preferred stock (and related surplus) plus its common stock (and related surplus).

To make a bank premises investment that exceeds the applicable threshold, a bank must notify the Federal Reserve of the proposed investment at least 15 days before making it, and must not have been advised by the Federal Reserve prior to the end of the 15-day period that the investment is subject to further review.

Approval is not required under Section 24A where a change in U.S. GAAP requires a state member bank to capitalize premises leased prior to the effective date of the new accounting standard. Thus, if prior to adoption of the new accounting standard a state member bank's investment in bank premises is less than capital stock, but that investment increases to an amount in excess of capital stock by virtue of adopting the new accounting standard, the bank need not seek the Board's approval under Section 24A. However, approval will be required under Section 24A for any bank premises investment in excess of capital stock made following adoption of ASU 2016-02.[2]

Section 208.6(b) of Regulation H provides factors that the Board will consider in approving domestic-branch applications. One of the factors the Board will analyze is whether the bank's investment in premises for the branch is consistent with section 208.21 of Regulation H. Reserve Banks, under their delegated authority, can also perform this analysis.

FUTURE USE AND CLASSIFICATION AS OREO

Member banks are encouraged to plan for their future premises needs. However, examiners should not arbitrarily classify real estate acquired for future use. The examiner needs to review the circumstances surrounding each individual case and determine if the period of time which the property has been held is reasonable relative to the intended use. Real estate acquired for future expansion is considered "other real estate owned" from the date when its use for banking is no longer contemplated. In addition, former banking premises are considered other real estate owned as of the date the bank relocated to new banking quarters.

2. See SR letter 19-7, "Statement on the Implications of the New Lease Accounting Standard on Regulation H," for more information.

TRANSACTIONS WITH INSIDERS

If a member bank contracts for or purchases any securities or other property from any of its directors, any firm its directors are members of, or any of its affiliates, the transaction is subject to the requirements of section 23B of the Federal Reserve Act and the Board's Regulation W. These sections require that transactions be made in the regular course of business on terms not less favorable to the bank than those offered to others. When the purchase is authorized by a majority of the board of directors who have no interest in the sale of such securities or property, the authority should be evidenced by affirmative vote or written assent. In addition, a member bank may sell securities or other property to any of its directors subject to the same stipulations.

EXAMINATION CONSIDERATIONS

As indicated earlier, the examiner responsible for the review of bank premises and equipment should assess the appropriateness of the bank's investment in this area and the overall impact of occupancy expense on the bank. Even if a bank's total investment in bank premises is within state or federal regulatory limits and all of its fixed assets are valued fairly, its total expenditures for or investment in premises and equipment may be inappropriate relative to the bank's earnings, capital, or the nature and volume of the its operations.

Bank Premises and Equipment

Examination Objectives

Effective date May 2019

Section 2190.2

1. To determine whether the policies, practices, procedures, and internal controls regarding bank premises and equipment are adequate.
2. To determine whether bank officers and employees are operating in conformance with the bank's established guidelines.
3. To determine the scope and adequacy of the audit function.
4. To determine the adequacy and propriety of the bank's present and planned investment in bank premises.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. Evaluate policies and procedures regarding premises and fixed assets. Satisfactory internal policies generally address items such as
   - requirements that the directorate approve all major purchases;
   - guidelines that discourage conflicts of interest or self-dealing with vendors, servicers, and insurers; and
   - guidelines for maintaining the level and nature of premises and fixed asset investments in compliance with applicable laws and regulations (e.g., state laws and Section 24A of the Federal Reserve Act).
2. Evaluate internal controls. Consider whether
   - individuals who post purchase and sale records are responsible for the custody or inventory of the property;
   - subsidiary ledgers of depreciation are balanced to the general ledger by persons who have sole custody of property;
   - periodic physical inventories confirm asset values;
   - adequate fire and extended insurance coverage is in force for bank premises, furniture, and equipment;
   - asset sales, including the recognition of gains and losses, are appropriately recognized; and
   - disclosures, including the existence of liens, are appropriate.
3. Determine whether investment in premises and equipment is reasonable and in compliance with state laws:
   - Review the current and prospective use of fixed assets in serving banking needs.
   - Review Uniform Bank Performance Report schedules to determine if investments in premises and fixed assets are reasonable in relation to total assets and consider the percentage of operating income absorbed by occupancy expense.
4. Determine whether audit procedures consider premises and equipment that are held by the bank, a subsidiary, or an affiliate realty corporation as part of sale and leaseback transactions or as lease-purchase contracts:
   - If significant, auditors should ensure capitalized lease designations are appropriate and in accordance with GAAP.
   - If part of sale-leaseback agreement, they should review for proper accounting treatment and accordance with GAAP.
5. Determine whether information and reporting regarding fixed assets to senior management and the board is adequate.
6. Determine whether real estate held for future expansion still qualifies as bank premises.
7. Reconcile premises and equipment subsidiary ledgers to the general ledger.

Bank Premises and Equipment
Internal Control Questionnaire
Effective date May 2019

Section 2190.4

An internal control questionnaire (ICQ) helps an examiner assess a bank's internal controls for an area. ICQs typically address standard controls that provide day-to-day protection of bank assets and financial records. The examiner decides the extent to which it is necessary to complete or update ICQs during examination planning or after reviewing the findings and conducting preliminary examination activities. Items marked with an asterisk require substantiation by observation or testing.

CUSTODY OF PROPERTY

*1. Do the bank's procedures preclude persons who have access to property from having "sole custody of property," in that
   a. Its physical character or use would make any unauthorized disposal readily apparent?
   b. Inventory control methods sufficiently limit accessibility?

ACQUISITIONS, SALES, AND DISPOSALS

2. Is the addition, sale or disposal of property approved by the signature of an officer who does not also control the related disbursement or receipt of funds?
3. Is board of directors' approval required for all major additions, sales or disposals of property (if so, determine the amount that constitutes a major acquisition, sale or disposal)?

*4. Is the preparation, addition, and posting of property acquisitions, sales, and disposals records, if any, performed and/or adequately reviewed by persons who do not also have sole custody of property?

*5. Do persons who do not also have sole custody of property balance any property acquisition, sale, or disposal records, at least quarterly, to the appropriate general ledger?

6. Are the bank's procedures such that all acquisitions are reviewed to determine whether they represent replacements and that any replaced items are cleared from the accounts?
7. Do the bank's procedures provide for signed receipts for removal of equipment?

*8. Do the bank's policies cover procedures for selecting a seller, servicer, insurer, or purchaser of major assets (for example, through competitive bidding) to prevent any possibility of conflict of interest or self-dealing?

9. Do the review procedures provide for appraisal of an asset to determine the propriety of the proposed purchase or sales price?

DEPRECIATION

*10. Is the preparation, addition, and posting of periodic depreciation records performed and adequately reveiwed by persons who do not also have sole custody of property?

11. Do the bank's procedures require that regular charges be made for depreciation expense?

*12. Do persons who do not also have sole custody of property balance subsidiary depreciation records, at least quarterly, to the appropriate general ledger controls?

PROPERTY RECORDS

*13. Are subsidiary property records posted by persons who do not also have sole custody of property?

*14. Do persons who do not also have sole custody of property balance the subsidiary property records, at least quarterly, to the appropriate general ledger accounts?

BANK AS LESSOR (BANK PREMISES AND BANK-RELATED EQUIPMENT ONLY)

*15. Do policies provide for division of the duties involved in billing and collection of rental payments?

16. Are the lease agreements subject to the same direct verification program applied

to other bank assets and liabilities?

17. Are credit checks performed on potential lessees?
18. Do policies provide for a periodic review of lessees for undue concentrations of affiliated or related concerns?

BANK AS LESSEE (BANK PREMISES AND BANK-RELATED EQUIPMENT ONLY)

19. Does the bank have a clearly defined method of determining whether fixed assets should be owned or leased, and is supporting documentation maintained by the bank?
20. Are procedures in effect to determine lease classification as defined by the generally accepted accounting principles?
21. Do the bank's operating procedures provide, on capitalized leases, that the amount capitalized is computed by more than one individual and/or reviewed by an independent party?

OTHER PROCEDURES

*22. Is the physical existence of bank equipment periodically checked or tested, such as by a physical inventory, and are any differences from property records investigated by persons who do not also have sole custody of property?
23. Do the bank's procedures provide for serial numbering of equipment?
24. Are the bank's policies and procedures on property in written form?
25. Is the benefit of expert tax advice obtained prior to final decision-making on significant transactions involving fixed assets?

*26. Does the bank maintain separate property files, which include invoices (for example, settlement sheets and bills of sale), titles on real estate and vehicles, Uniform Commercial Code (UCC) filings or liens for personal property, and other pertinent ownership data?

CONCLUSIONS

27. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant additional deficiencies that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
28. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

A state member bank's authority to hold real estate is governed by state law. A bank is permitted to include owned real estate in its premises account if the real estate serves as premises for operations or is intended to be used as premises. In addition, a bank may hold other real estate owned (OREO), which is defined below. State laws dictate the terms and conditions under which state-chartered banks may acquire and hold OREO.

The bank's policies and procedures should address the management and disposition of its OREO holdings, including

- protection of a bank's interests in a property,
- account for the OREO asset and expenses associated with the maintenance and disposition of the property in conformance with generally accepted accounting principles and Call Report Instructions, and
- compliance with federal and state laws pertaining to the holding of OREO.

DEFINITION

Other real estate comprises all real estate, other than bank premises, owned or controlled by the bank or its consolidated subsidiaries, including real estate acquired through foreclosure, even if the bank has not received title to the property. Bank holdings of OREO may arise from the following events:

- the bank purchases real estate at a sale under judgment, decree, or mortgage when the property secured debts previously contracted;
- a borrower conveys real estate to the bank to fully or partially satisfy a debt previously contracted (acceptance of deed in lieu of foreclosure);
- real estate is obtained in exchange for future advances to an existing borrower to fully or partially satisfy debts previously contracted;
- a bank takes possession (although not necessarily title) of collateral in a collateral-dependent real estate loan (i.e., an in-substance foreclosure);
- a bank has relocated its premises and has not yet sold the old premises;
- a bank abandons plans to use real estate as premises for future expansion; and
- a bank has foreclosed real estate that is under contract for sale.

There are three major phases of the OREO life cycle: acquisition, holding period, and disposition.

ACCOUNTING AND REPORTING STANDARDS

The accounting and reporting standards for the acquisition phase are set forth in Accounting Standards Codification (ASC) 310-40, Receivables-Troubled Debt Restructurings by Creditors (formerly known as FAS 15, "Accounting by Debtors and Creditors for Troubled Debt Restructurings"); ASC 360-10-30, Property, Plant and Equipment-Initial Measurement (formerly included in FAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets"); and ASC 360-10-35, Property, Plant and Equipment-Subsequent Measurement. Until the effective date of Accounting Standards Update (ASU) 2014-09[1] "Revenue from Contracts with Customers," which includes amendments to ASC Subtopic 610-20, Other Income–Gains and Losses from the Derecognition of Nonfinancial Assets, the primary accounting guidance for sales of foreclosed real estate is ASC Subtopic 360-20, Property, Plant, and Equipment – Real Estate Sales (formerly FASB Statement No. 66, "Accounting for Sales of Real Estate"). When it takes effect, ASC Subtopic 610-20 supersedes ASC Subtopic 360-20 for real estate sales not

1. Effective date of ASU 2014-09, including ASC Subtopic 610-20 (and ASC Topic 606) – For institutions that are public business entities, these standards are effective for fiscal years beginning after December 15, 2017, including interim reporting periods within those fiscal years. For institutions that are not public business entities (i.e., that are private companies), the standards are effective for fiscal years beginning after December 15, 2018, and interim reporting periods within fiscal years beginning after December 15, 2019. For further information, see the Glossary entries in the Call Report Instructions for "public business entity" and "private company." Early application of these standards is permitted for all institutions for fiscal years beginning after December 15, 2016, and interim reporting periods as prescribed in the standards. An institution that early adopts these standards must apply them (including all of ASC Topic 606 on revenue recognition) in their entirety. If an institution chooses to early adopt these standards for financial reporting purposes, the institution should implement them in its Call Report for the same quarter-end report date.

accompanied by a leaseback and becomes the primary accounting guidance for sales of foreclosed real estate. Reference should also be made to the FFIEC 031 Consolidated Report of Condition and Income for a Bank with Domestic and Foreign Offices (Call Report), Schedules RC and M, and the instructions for the reporting of OREO transactions.

TRANSFER OF ASSETS TO OREO

Real estate assets transferred to OREO should be accounted for individually (on an asset-by-asset basis) on the date of transfer. Each transferred real estate asset should be recorded at its "fair value" less estimated cost to sell the asset. This "fair value" becomes the cost of the asset. ''Fair value'' is the amount the creditor should reasonably expect to receive for the asset in a current sale between a willing buyer and a willing seller (that is, not a forced liquidation sale).

The recorded amount of a loan (or an investment in a loan) at the time of foreclosure involving real estate transferred to OREO is the unpaid balance adjusted for any unamortized premium or discount and unamortized loan fees or costs, less any amount previously charged off, plus recorded accrued interest. Any excess of the recorded amount of the loan over the transferred property's fair value is a loss that must be charged against the allowance for loan and lease losses (ALLL) immediately upon the property's transfer to OREO. If the fair value (less costs to sell) of the property exceeds a recorded loan amount, the excess should be reported as a recovery of a previous charge-off or in current earnings, as appropriate. Legal fees and other direct costs incurred by the bank should generally be included in expenses.

The value of OREO properties must be reported at the fair value minus estimated selling expenses or the recorded loan amount. For example, if the recorded investment in the property is $125, the fair value of the property is $100, and the estimated selling expenses are $6, the carrying value for this property would be $94. The difference between the recorded loan amount of $125 and the fair value of $100 minus the $6 estimated cost to sell the property, or $31, would be charged to the ALLL at the time the property was transferred to OREO. Subsequent to the acquisition date, the OREO property should be reported at the lower of the cost of the property ($94 in this case) or the fair value of $100 less cost to sell of $6, which is also $94. Any subsequent declines in value should be recorded by creating a valuation allowance.

Alternatively, if the recorded loan amount is $250, the property's fair value is $275, and the estimated selling expenses are $18, the property's carrying value would be $257 (the property's fair value of $275 less estimated cost to sell of $18). The $7 difference between the fair value (less costs to sell) and the recorded loan amount would be recorded as a recovery of a previous charge-off or in current earnings, as appropriate. Before recording the $7 in earnings, significant scrutiny should be applied to understand why the borrower would risk losing the equity in the property. Additionally, in some states, lenders are required to return recovered amounts, in excess of the amount owed, to the borrower.

EVALUATIONS OF REAL ESTATE TO DETERMINE THE CARRYING VALUE OF OREO

The transfer of real estate pledged as collateral for a loan to OREO is considered to be a "transaction involving an existing extension of credit" under 12 CFR 225.63(a)(7) and is exempt from Regulation Y's appraisal requirement. However, under 12 CFR 225.63(b), the bank must obtain an "appropriate evaluation" of the real estate that is "consistent with safe and sound banking practices" to establish the carrying value of the OREO. A bank may elect, but is not required, to obtain an appraisal to serve as the "appropriate evaluation." Until the evaluation is available, a bank should rely on its best estimate of the property's value to establish the carrying value. The federal banking agencies have issued appraisal and evaluation guidelines to provide guidance to examining personnel and federally regulated institutions regarding prudent appraisal and evaluation policies, procedures, practices, and standards.

The appraisal or evaluation should provide an estimate of the parcel's market value. (Refer to section 4140.1, "Real Estate Appraisals and Evaluations," and its appendices A to D found in section A4140.1.) Generally, appraisals or evaluations contain an estimate of the property's fair

value based on a forecast of expected cash flows, discounted at an interest rate that is commensurate with the risks involved. The cash flow estimate should include projected revenues and the costs of ownership, development, operation, marketing, and sale. In such situations, the appraiser or evaluator should fully describe the definition of value and the market conditions that have been considered in estimating the property's fair value.

PROPERTY ACQUIRED THROUGH FORECLOSURE—JUNIOR LIENHOLDER

When a bank acquires a property through foreclosure as a junior lienholder, whether or not the first lien has been assumed, the property should be recorded as an asset at its fair value less its estimated cost to sell. Any senior debt (principal and accrued interest) should be recorded as a corresponding liability. Senior debt should not be netted against the assets. Any excess of the recorded loan amount over the property's fair value less estimated cost to sell should be charged off to the ALLL. The recorded investment may not exceed the sum of any senior and junior debt. Payments made on senior debt should be accounted for by reducing both the asset and the liability. Interest that accrues on the senior debt after foreclosure should be recognized as interest expense.

COLLATERAL-DEPENDENT LOANS

Collateral-dependent loans are those for which repayment is expected to be provided solely from the underlying collateral when there are no other available and reliable sources of repayment. Guidance for the treatment of certain troubled debts and collateral dependent loans is found in ASC 310-40, Receivables-Troubled Debt Restructurings by Creditors.[2] According to the instructions in the Call Report, collateral-dependent real estate loans (other than consumer mortgage loans) should be transferred to OREO when the lender has taken physical possession of the collateral, regardless of whether formal foreclosure proceedings have taken place. Otherwise, the bank should keep the collateral-dependent real estate loan categorized as a loan. To facilitate administration and tracking, however, banks may choose to include a collateral-dependent real estate loan in the OREO portfolio as potential or probable OREO. Impairment of a collateral-dependent loan must be measured using the fair value of the collateral. In general, any portion of the recorded amount of a collateral-dependent loan in excess of the fair value of the collateral (less the estimated cost to sell) that can be identified as uncollectible should be promptly charged off against the ALLL. Examiners should review these loans using the same criteria applied to OREO.

For a residential real estate property collateralizing a consumer mortgage loan, a bank is considered to have received physical possession only upon the occurrence of either of the following:

(1) The bank obtains legal title to the residential real estate property upon completion of a foreclosure even if the borrower has redemption rights that provide the borrower with a legal right for a period of time after a foreclosure to reclaim the real estate property by paying certain amounts specified by law, or

(2) The borrower conveys all interest in the residential real estate property to the bank to satisfy the loan through completion of a deed in lieu of foreclosure or through a similar legal agreement. The deed in lieu of foreclosure or similar legal agreement is completed when agreed-upon terms and conditions have been satisfied by both the borrower and the creditor.

PROPERTY ACQUIRED FOR FUTURE USE

Property the bank originally acquired for future use as premises, but for which plans have been abandoned, and property that formerly served as bank premises, should be accounted for at the lower of (1) its fair value less cost to sell or (2) the cost of the asset on the date of transfer to OREO. Any excess of book value over fair

2. See also SR letter 13-17, "Interagency Supervisory Guidance Addressing Certain Issues Related to Troubled Debt Restructurings."

value should be charged to other operating expense during the current period.

CARRYING VALUE OF OREO

A bank should have a policy for periodically determining the fair value of its OREO property by obtaining an appraisal or an evaluation, as appropriate. While the Federal Reserve has no prescribed time frame for when a bank should reappraise or reevaluate its OREO property, the bank's policy should conform to state law, if applicable, and take into account the volatility of the local real estate market. A bank should determine whether there have been material changes to the underlying assumptions in the appraisal or valuation that have affected the original estimate of value. If material changes have occurred, the bank should obtain a new appraisal or evaluation based on assumptions that reflect the changed conditions.

ACCOUNTING FOR SUBSEQUENT CHANGES IN FAIR VALUE

Charges for subsequent declines in the fair value of OREO property should never be posted to the ALLL. If an appraisal or evaluation indicates a subsequent decline in the fair value of an OREO property, the loss in value should be recognized through the income statement by a charge to earnings. Banks should attempt to determine whether a property's decline in value is not recoverable, taking into consideration each property's characteristics and existing market dynamics. The preferred treatment for nonrecoverable losses in value is the direct write-down method, in which the charge to expenses is offset by a reduction in the OREO property's carrying value. If the reduction in value is deemed temporary, the charge to earnings may be offset by establishing a valuation allowance specifically for that property. In the event of subsequent appreciation in the value of an OREO property, the increase can only be reflected by reducing this valuation allowance or recognizing a gain upon disposition, but never by a direct write-up of the property's value. A change to the valuation allowance should be offset with a debit or credit to expense in the period in which it occurs.

In addition to the preceding treatment of the write-down in the OREO value, the previous subsection "Transfer of Assets to Other Real Estate Owned" discusses setting up a valuation allowance for estimated selling expenses associated with the sale of the other real estate. The balance of this valuation allowance can fluctuate based on changes in the fair value of the property held, but it can never be less than zero. The following examples are presented to illustrate the treatment that subsequent depreciation and appreciation would have on OREO properties.

Depreciation in an OREO Property's Value

Assume a bank has written down its initial recorded investment in an OREO property from $125 to its fair value of $100 minus costs to sell (assume costs to sell of $6), or $94. Assume that a new appraisal indicates a value of $90, with reduced estimated selling expenses of $5, or $85. If the bank determines this decline in value is nonrecoverable, the bank must expense the depreciation of $9 ($94 minus $85).

Appreciation in an OREO Property's Value

Assume a bank has written down its recorded investment in an OREO property to its fair value of $110 less costs to sell of $10, or $100, and it subsequently created a valuation allowance for the $10 temporary decline in value. A new appraisal indicates an increase in the value of the property to $112 less costs to sell of $9, or $103. Notwithstanding the property's increased value, the recorded investment value cannot be increased above $100. The valuation allowance for selling expenses can never be less than zero, thus prohibiting an increase in the value of the property above the recorded investment. In this case, the bank would reduce the valuation allowance to zero, which would increase the recorded value to $100.

Accounting for OREO Income and Expense

Gross revenue from OREO should be recognized in the period in which it is earned. Direct costs incurred in connection with holding an

OREO property, including legal fees, real estate taxes, depreciation, and direct write-downs, should be charged to expense when incurred.

A bank can expend funds to develop and improve OREO when it appears reasonable to expect that any shortfall between the property's fair value and the bank's recorded book value will be reduced by an amount equal to or greater than the expenditure. Such expenditures should not be used for speculation in real estate. The economic assumptions relating to the bank's decision to improve a particular OREO property should be well documented. Any payments for developing or improving OREO property are treated as capital expenditures and should be reflected by increasing the property's carrying value to the extent that those expenditures increase the value of the property.

DISPOSITION OF OREO

OREO property must be disposed of within any holding period established by state law and, in any case, as soon as it is prudent and reasonable. Banks should maintain documentation reflecting their efforts to dispose of OREO property, which should include

- a record of inquiries and offers made by potential buyers,
- methods used in advertising the property for sale whether by the bank or its agent, and
- other information reflecting sales efforts.

The sale or disposition of OREO property is considered a real estate-related financial transaction under the Board's appraisal regulation. A sale or disposition of an OREO property that qualifies as a federally related transaction under the regulation requires an appraisal conforming to the regulation. A sale or disposition that does not qualify as a federally related transaction nonetheless must comply with the regulation by having an appropriate evaluation of the real estate that is consistent with safe and sound banking practices.

The bank should promptly dispose of OREO if it can recover the amount of its original loan plus additional advances and other costs related to the loan or the OREO property before the end of the legal holding period. The holding period generally begins on the date that legal title to the property is transferred to the bank, except for real estate that has become OREO because the bank no longer contemplates using it as its premises. The holding period for this type of OREO property begins on the day that plans for future use are formally terminated. Some states require OREO property to be written off or depreciated on a scheduled basis, or to be written off at the end of a specified time period. The bank should determine whether such requirements exist and comply with them.

Financing Sales of OREO

Gains and losses resulting from a sale of OREO properties for cash must be recognized immediately. Until the effective date of ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)," a gain resulting from a sale in which the bank provides financing should be accounted for under the standards described in ASC 360-20-40, Property, Plant and Equipment-Real Estate Sales-Derecognition. After the effective date of ASU 2014-09, a gain resulting from a sale in which the bank provides financing should be accounted for under the standards described in ASC Subtopic 610-20, Other Income–Gains and Losses from the Derecognition of Nonfinancial Assets. For further details, refer to the glossary section of the Call Report instructions under "foreclosed assets."

Nonrecourse Financing

Banks may promote the sale of foreclosed real estate by offering nonrecourse financing to buyers. These loans should be made under the same credit terms and underwriting standards the bank employs for its regular lending activity. Financing arrangements associated with this type of transaction are subject to the accounting treatment discussed above.

RENTAL OF RESIDENTIAL OREO PROPERTIES

OREO Rental Policy Statement Overview

The Federal Reserve issued a policy statement[3] on April 5, 2012, indicating that, consistent with the general policy of the Federal Reserve and in

3. See SR letter 12-5/CA letter 12-3, "Policy Statement on Rental of Residential Other Real Estate Owned (OREO) Properties," and its attachment.

light of the extraordinary market conditions that existed, banking organizations may rent one- to four-family residential OREO properties without having to demonstrate continuous active marketing of the properties, provided suitable policies and procedures are followed.[4] Under these conditions and circumstances, banking organizations would not contravene supervisory expectations that they show "good-faith efforts" to dispose of OREO by renting the property within the applicable holding period. Key risk-management considerations for banking organizations that engage in the rental of residential OREO, including compliance with holding-period requirements for OREO, compliance with landlord-tenant and associated requirements, and accounting according to generally accepted accounting principles (GAAP). Rental of OREO properties with leases in place and demonstrated cash flow from rental operations sufficient to generate a reasonable rate of return should generally not be classified.

The statement establishes specific supervisory expectations for banking organizations that undertake large-scale residential OREO rentals (generally, 50 properties or more available for rent). Such organizations should have formal policies and procedures governing the operation and administration of OREO rental activities, including property-specific rental plans, policies and procedures for compliance with applicable laws and regulations, a risk-management framework, and oversight of third-party property managers.

Policy Statement on Rental of Residential OREO Properties

In light of the large volume of distressed residential properties and the indications of higher demand for rental housing in many markets, some banking organizations may choose to make greater use of rental activities in their disposition strategies than in the past. In response to the volume of these activities, the Federal Reserve adopted an April 2012 policy statement, whereby banking organizations may rent one- to four-family residential OREO properties without having to demonstrate continuous active marketing of such properties, provided suitable policies and procedures are followed. This policy statement reminds banking organizations and examiners that the Federal Reserve's regulations and policies permit the rental of residential OREO properties to third-party tenants as part of an orderly disposition strategy within statutory and regulatory limits.[5] This policy statement applies to state member banks, BHCs, nonbank subsidiaries of BHCs, savings and loan holding companies, non-thrift subsidiaries of savings and loan holding companies, and U.S. branches and agencies of foreign banking organizations (collectively, banking organizations).

The general policy of the Federal Reserve is that banking organizations should make good-faith efforts to dispose of OREO properties at the earliest practicable date. Consistent with this policy, in light of the extraordinary market conditions that currently prevail, banking organizations may rent residential OREO properties (within statutory and regulatory holding-period limits) without having to demonstrate continuous active marketing of the property, provided that suitable policies and procedures are followed. Under these conditions and circumstances, banking organizations would not contravene supervisory expectations that they show "good-faith efforts" to dispose of OREO by renting the property within the applicable holding period. Moreover, to the extent that OREO rental properties meet the definition of community development under the Community Reinvestment Act (CRA) regulations, they would receive favorable CRA consideration.[6] In all respects, banking organizations that rent OREO properties are expected to comply with all applicable federal, state, and local statutes and regulations.

Home prices have been under considerable downward pressure since the financial crisis began, in part due to the large volume of houses for sale by creditors, whether acquired through foreclosure or voluntary surrender of the property by a seriously delinquent borrower (distressed sales). Creditors, in turn, often seek to liquidate their inventories of such properties

4. The policy statement supplements other relevant Federal Reserve guidance, including the Board's policy statement on the disposition of property acquired in satisfaction of debts previously contracted. See 12 CFR 225.140.

5. The term "residential properties" in this policy statement encompasses all one- to four-family properties and does not include multifamily residential or commercial properties.

6. The Federal Reserve's CRA regulations define community development to include activities that provide affordable housing for low- and moderate-income individuals as well as those activities that revitalize or stabilize low- and moderate-income areas (see 12 CFR 228.12(g)(1) and (4)).

quickly. Since 2008, it is estimated that millions of residential properties have passed through lender inventories. These distressed sales represent a significant proportion of all home sales transactions, despite some ebb and flow, and thus are a contributing element to the downward pressure on home prices. With mortgage delinquency rates remaining stubbornly high, the continued inflow of new real estate owned properties to the market—expected to be millions more over the coming years—will continue to weigh on house prices for some time.[7]

Banking organizations include their holdings of such properties in OREO on regulatory reports and other financial statements.[8] Existing federal and state laws and regulations limit the amount of time banking organizations may hold OREO property.[9] In addition, there are established supervisory expectations for management of OREO properties and the nature of the efforts banking organizations should make to dispose of these properties during that period.

Risk-Management Considerations for Residential OREO Property Rentals

In all circumstances, the Federal Reserve expects a banking organization considering such rentals to evaluate the overall costs, benefits, and risks of renting. The banking organization's decision to rent OREO might depend significantly on the condition of individual properties, local market conditions for rental and owner-occupied housing, and its capacity to engage in rental activity in a safe and sound manner and consistent with applicable laws and regulations.

Banking organizations should have an operational framework for their residential OREO rental activities that is appropriate to the extent to which they rent OREO properties. In general, banking organizations with relatively small holdings of residential OREO properties—fewer than 50 individual properties rented or available for rent—should use a framework that appropriately records the organizations' rental decisions and transactions as they take place, preserves key documents, and is otherwise sufficient to safeguard and manage the individual OREO assets.[10] In contrast, banking organizations with large inventories of residential OREO properties[11]—50 or more individual properties available for rent or rented—should utilize a framework that systematically documents how they meet the supervisory expectations described in the next section. All banking organizations that rent OREO properties, irrespective of the size of their holdings, should adhere to the guidance set forth in this section.

Compliance with Maximum OREO Holding-Period Requirements

Banking organizations should pursue a clear and credible approach for ultimate sale of the rental OREO property within the applicable holding-period limitations. Exit strategies in some cases may include special transaction features to facilitate the sale of OREO, potentially including prudent use of seller-assisted financing or rent-to-own arrangements with tenants.

Compliance with Landlord-Tenant and Other Associated Requirements

Banking organizations' residential property rental activities are expected to comply with all applicable federal, state, and local laws and regulations, including landlord-tenant laws; landlord licensing or registration requirements; property maintenance standards; eviction protections; protections under the Servicemembers

7. For further discussion of housing market conditions and the obstacles to conversions of OREO properties to rental, see "The U.S. Housing Market: Current Conditions and Policy Considerations," Federal Reserve staff white paper, January 4, 2012 (housing white paper).

8. "Other real estate owned" is comprised of all real estate other than (1) bank premises owned or controlled by the bank and its consolidated subsidiaries and (2) direct and indirect investments in real estate ventures.

9. Generally, the Federal Reserve allows BHCs to hold OREO property for up to five years, with an additional five-year extension subject to certain circumstances (see 12 CFR 225.140). National banks are subject to similar restrictions. State member banks and licensed branches of foreign banks are subject to the holding periods and other limitations on OREO activity established by their respective licensing authorities, which vary. Savings and loan holding companies generally may acquire real estate for rental (see 12 USC 1467a(c)(2) and 12 CFR 238.53(b)).

10. A preliminary analysis of December 2011 Call Report data suggests that roughly 98 percent of community banks held 50 or fewer residential OREO properties.

11. For purposes of this guidance, the supervisory expectations for OREO rentals and the number of properties available for rent should include those properties for which tenants were already in place at the time of foreclosure or transfer of ownership. See the *Federal Reserve Consumer Compliance Handbook*, Section IV for further information.

Civil Relief Act;[12] and anti-discrimination laws, including the applicable provisions of the Fair Housing Act and the Americans with Disabilities Act. Prior to undertaking the rental of OREO properties, banking organizations should determine whether such activities are legally permissible under applicable laws, including state laws. When applicable, banking organizations should review homeowner and condominium association bylaws and local zoning laws for prohibitions on renting a property. Banking organizations may use third-party vendors to manage properties but should provide necessary oversight to ensure that property managers fully understand and comply with these federal, state, and local requirements.

Other Considerations

Banking organizations should account for OREO assets in accordance with GAAP and applicable regulatory reporting instructions.[13]

Specific Expectations for Large-Scale Residential OREO Rentals

Banking organizations with large inventories of residential OREO properties that decide to engage in rental activities should have in place a documented rental strategy, including formal policies and procedures for OREO rental activities and a documented operational framework. Policies and procedures should clearly describe how the banking organization will comply with all applicable laws and regulations. Policies and procedures should include processes for determining whether the properties meet local building code requirements and are otherwise habitable, and whether improvements to the properties are needed in order to market them for rent. In addition, policies and procedures should establish operational standards for the banking organization's rental activities, including that adequate insurance policies are in place, that property and other tax obligations are met on a timely basis, and that expenditures on improvements are appropriate to the value of the property and to prevailing norms in the local market.

Policies and procedures should also require plans for rental of residential OREO properties, down to the individual property level, that cover the full holding period from the time the bank received title to ultimate sale by the bank. Plans should identify which properties would be eligible for rental. Plans also should establish criteria by which properties are chosen for marketing as rental properties, and the process by which rental decisions should be made and implemented. Plans should describe the general conditions under which the organization believes a rental approach is likely to be successful, including appropriate consideration of rental market and economic conditions in respective local markets.

Finally, policies and procedures should address all risk-management issues that arise in renting residential OREO properties. Some risk elements parallel those found in other banking activities, for example, the credit risk associated with tenants' potential failure to make timely rent payments, or potential conflict of interest issues such as the use of a firm by a banking organization to both provide information on a property's value and list that property for sale on behalf of the banking organization. Other risks unique to such rental include

- dealing with vacancy, marketing, and re-rental of previously occupied properties;[14]
- liability risk arising from rental activities, along with the use and management of liability insurance or other approaches to mitigate that liability and risk; and
- legal requirements arising from the potential need to take action against tenants for rent delinquency, potentially including eviction. Such requirements may include notice periods.

Banking organizations may need to develop new policies and risk-management processes to address properly these categories of risk.

In many cases, banking organizations will use third-party vendors (for example, real estate agents or professional property managers) to manage their OREO properties. Policies and procedures should provide that such individuals or organizations have appropriate expertise in property management, be in sound financial

12. See CA letter 05-3, "Servicemembers Civil Relief Act of 2003," May 6, 2005.

13. See the instructions for the Consolidated Reports of Condition and Income (Call Report) as to the reporting of OREO transactions and to the Consolidated Financial Statements for Holding Companies (FR Y-9C).

14. Various jurisdictions may apply specific requirements to landlords in their marketing and re-rental activities (for example, an obligation to offer potential tenants an initial lease term of two years).

condition, and have a good track record in managing similar properties. Policies and procedures should also call for contracts with such vendors to carry appropriate terms and provide, among other key elements, for adequate management information systems and reporting to the banking organization, including rent rolls (along with actual lease agreements), maintenance logs, and security deposits and charges to these deposits. Banking organizations should provide for adequate oversight of vendors.

Additional Materials for Reference

- ASC 310-40, Receivables-Troubled Debt Restructurings by Creditors (formerly known as FAS 15, "Accounting by Debtors and Creditors for Troubled Debt Restructurings").
- ASC 360-10-30, Property, Plant and Equipment-Initial Measurement (formerly included in FAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets").
- ASC 360-10-35, Property, Plant and Equipment-Subsequent Measurement.
- Until ASU 2014-09 is effective, ASC Subtopic 360-20, Property, Plant, and Equipment – Real Estate Sales is the primary accounting guidance for sales of foreclosed real estate.
- Once ASU 2014-09 is effective, ASC Subtopic 610-20 is the primary accounting guidance for sales of foreclosed real estate.
- SR letter 13-19/CA letter 13-21, "Guidance on Managing Outsourcing Risk," December 5, 2013.
- SR letter 10-16, "Interagency Appraisal and Evaluation Guidelines," December 2, 2010, and this manual's section 4140.1. For the sale of OREO property with a value of $250,000 or less, a BHC or state member bank may obtain an evaluation in lieu of an appraisal.
- SR letter 95-16, "Real Estate Appraisal Requirements for Other Real Estate Owned (OREO)," March 28, 1995.
- SR letter 12-10/CA letter 12-9, "Questions and Answers for Federal Reserve-Regulated Institutions Related to the Management of Other Real Estate Owned (OREO)," June 28, 2012.

CLASSIFICATION OF OREO

The examiner should generally evaluate the adequacy of the bank's information to support the carrying value of an OREO property, and the appropriateness of its classification. OREO usually should be considered a problem asset, even when it is carried at or below its fair value. Despite the apparent adequacy of the property's fair value, the bank's acquisition of OREO through foreclosure usually indicates a lack of demand for the property or weaknesses in the property's condition.

When evaluating the OREO property for classification purposes, the examiner must consider the property's fair value, whether it is being held in conformance with state law, and whether it is being disposed of according to the bank's plan. The amount of an OREO property subject to classification is the carrying value of the property, net of any specific valuation allowance. The existence of a specific valuation allowance does not preclude adverse classification of OREO. Banking organizations should also provide the appropriate classification treatment for their residential OREO holdings. Residential OREO is typically treated as a substandard asset, as defined by the interagency classification guidelines (see section 2060.1, "Classification of Credits"). However, residential properties with leases in place and demonstrated cash flow from rental operations sufficient to generate a reasonable rate of return[15] should generally not be classified. The examiner should review all types of OREO for classification purposes. When the bank provides financing, the examiner should determine whether the loan is prudently underwritten.

15. Whether a rate of return is reasonable depends on a number of considerations, including local market conditions, the time horizon of the rental, and the nature of the property. Commonly used measures include a capitalization rate (known as a "cap rate," which generally is the expected annual cash flows from renting the property relative to the price at which the property holder could expect to sell it in the owner-occupied market), as discussed in the housing white paper, or other measures of internal rate of return. Depending on the circumstances and risks associated with the property, valid indications that a level of return is reasonable could include (but would not be not limited to) comparisons with normal returns for single-family rentals in the relevant local market; rates of return on other similar local real estate investments; or cap rates or other measures of internal rate of return on investments with similar risk profiles. For example, in many markets a cap rate above 8 percent would likely represent a reasonable rate of return. Large one-time expenditures that are idiosyncratic to a given year but are normal to residential properties over their lifetime, such as replacement costs for worn-out appliances, should generally not be the reason that a property would be classified. Costs of improvement should be treated as capital expenditures with a corresponding effect on the properties' carrying values, but only to the extent the improvements increase the properties' values.

The examiner should review all relevant factors to determine the quality and risk of the OREO property and the degree of probability that its carrying value will be realized. Some factors the examiner should consider include

- the property's carrying value relative to its fair value (including the date of any appraisal or evaluation relative to changes in market conditions), the bank's asking price, and offers received;
- the source and quality of the appraisal or evaluation, including the reasonableness of assumptions, such as projected cash flow for commercial properties;
- the length of time a property has been on the market and local market conditions for the type of property involved, such as history and trend of recent sales for comparable properties;
- bank management's ability and track record in liquidating other real estate and assets acquired in satisfaction of debts previously contracted;
- income and expenses generated by the property and other economic factors affecting the probability of loss exposure;
- the manner in which the bank intends to dispose of the property;
- other pertinent factors, including property-title problems, statutory redemption privileges, pending changes in the property's zoning, environmental hazards, other liens, tax status, and insurance.

ENVIRONMENTAL LIABILITY

Under federal and state environmental liability statutes, a bank may be liable for cleaning up hazardous substance contamination of OREO. In some cases, the liability may arise before the bank takes title to a borrower's real estate collateral. A property's transition from collateral to bank ownership may take an extended period of time. As the financial problems facing a borrower worsen, a bank may become more involved in managing a company or property. Such involvement may become extensive enough that the bank is deemed to have met substantially all ownership criteria, the absence of a clear title in the bank's name notwithstanding. Generally, the more bank management is involved in such activity, the greater the bank's exposure to any future clean-up costs assessed in connection with the property. A more thorough discussion of environmental liability can be found in section 2040.1, "Loan Portfolio Management," of this manual, under the subsection "Other Lending Concerns."

1. To determine if the policies, practices, procedures, and internal controls regarding other real estate owned are adequate.
2. To determine that bank officers and employees are operating in conformance with the established guidelines.
3. To evaluate the validity and quality of all other real estate owned.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of law or regulations have been noted.

1. If selected for implementation, complete the Other Real Estate Owned section of the Internal Control Questionnaire.
2. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures and obtain a listing of any audit deficiencies noted in the latest review done by internal/external auditors and determine if appropriate corrections have been made.
3. Obtain a list of other real estate owned and agree total to general ledger.
4. Review the other real estate owned account to determine if any property has been disposed of since the prior examination and:
   a. If so, determine that:
      - The bank accepted written bids for the property.
      - The bids are maintained on file.
      - There is justification for accepting a lower bid if the bank did not accept the highest one.
   b. Investigate any insider transactions.
5. Test compliance with applicable laws and regulations:
   a. Determine that other real estate owned is held in accordance with the provisions of applicable state law.
   b. Determine if other real estate is being amortized or written off in compliance with applicable state law.
   c. Consult with the examiners assigned to "Loan Portfolio Management," "Other Assets and Other Liabilities," "Reserve for Possible Loan Losses" and "Bank Premises and Equipment" to determine if the situation holds real estate acquired as salvage on uncollectible loans, abandoned bank premises or property originally purchased for future expansion, which is no longer intended for such usage.
   d. Review the details of all other real estate owned transactions to determine that:
      - The property has been booked at its fair value.
      - The documentation reflects the bank's persistent and diligent effort to dispose of the property.
      - If the bank has made expenditures to improve and develop other real estate owned, proper documentation is in the file.
      - Real estate that is former banking premises has been accounted for as other real estate owned since the date of abandonment.
      - Such property is disposed of in accordance with state law.
6. Review parcels of other real estate owned with appropriate management personnel and, if justified, assign appropriate classification. Classification comments should include:
   a. Description of property.
   b. How real estate was acquired.
   c. Amount and date of appraisal.
   d. Amount of any offers and bank's asking price.
   e. Other circumstances pertinent to the classification.
7. Review the following with appropriate management personnel or prepare a memo to other examiners for their use in reviewing with management:
   a. Internal control exceptions and deficiencies in, or non-compliance with, written policies, practices and procedures.
   b. Uncorrected audit deficiencies.
   c. Violations of law.
8. Prepare comments in appropriate report form for all:
   a. Criticized other real estate owned.
   b. Deficiencies noted.
   c. Violations of law.
9. Update the workpapers with any information that will facilitate future examinations.

Other Real Estate Owned
Internal Control Questionnaire
Effective date March 1984

Section 2200.4

Review the bank's internal controls, policies, practices and procedures for other real estate owned. The bank's systems should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information.

RECORDS

1. Is the preparation, addition, and posting of subsidiary other real estate owned records performed and/or tested by persons who do not have direct, physical or accounting, control of those assets?
2. Are the subsidiary other real estate owned records balanced at least annually to the appropriate general ledger accounts by persons who do not have direct, physical or accounting, control of those assets?
3. Is the posting to the general ledger other real estate owned accounts approved, prior to posting, by persons who do not have direct, physical or accounting, control of those assets?
4. Are supporting documents maintained for all entries to other real estate owned accounts?
5. Are acquisitions and disposals of other real estate owned reported to the board of directors or its designated committee?
6. Does the bank maintain insurance coverage on other real estate owned including liability coverage where necessary?
7. Are all parcels of other real estate owned reviewed at least annually for:
   a. Current appraisal or certification?
   b. Documentation inquiries and offers?
   c. Documented sales efforts?
   d. Evidence of the prudence of additional advances?

OTHER PROCEDURES

8. Are the bank's policies and procedures relating to the real estate owned in writing?

CONCLUSION

9. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
10. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

OTHER ASSETS

The term *other assets,* as used in this section, includes all balance-sheet asset accounts not covered specifically in other areas of the examination. Often, such accounts may be quite insignificant in the overall financial condition of the bank. However, significant subquality assets may be uncovered in banks lacking proper internal controls and procedures.

In many banks, other asset accounts are maintained on the daily statement but must be reflected in a specific asset category for reporting. Schedule RC-F of the Consolidated Report of Condition lists the specific accounts classified as ''other assets'' and includes a catchall heading of ''other.'' Certain accounts in that other asset account, such as securities borrowed, are examined using the procedures described in the appropriate section of this manual.

Types of Other Asset Accounts

Types of other assets frequently found in banks are the various temporary holding accounts, such as suspense, interoffice, teller, transit, and bookkeeping differences having debit balances. Those accounts should be used only for temporary recording until the offsetting entry is received or fully identified and posted to the proper account. A bank should have written internal control procedures to ensure that difference accounts are reconciled and closed out on a timely basis. Nothing should be allowed to remain in those accounts for any significant length of time—usually no more than a few business days. All difference accounts should be closed out at least quarterly.

General categories of other assets common to banks are accrued interest receivables (on loans, debt securities, and other interest-bearing assets) and other types of income earned but not yet collected (income derived from an asset that is recognized but not yet collected or received on the reporting date), net deferred tax assets (deferred tax assets less deferred tax liabilities that result in a debit balance for a particular tax jurisdiction), interest-only strips receivables for mortgage loans and other financial assets, prepaid expenses (cash outlays for goods and services, the benefits of which will be realized in future periods), equity securities (cost of) that do not have readily determinable fair values (including Federal Reserve stock and bankers' bank stock), the cash surrender value of bank-owned life insurance (BOLI), and other nonsecurity or other interest-only strips receivables.

An interest-only strip receivable is the contractual right to receive some or all of the interest due on a bond, mortgage loan, collateralized mortgage obligation, or other interest-bearing financial asset. This includes, for example, the contractual rights to future interest cash flows that exceed contractually specified servicing fees on financial assets that have been sold.

The other assets category also consists of unique and unusual transactions that are not appropriate to include in other line items of a bank's balance sheet. An unlimited number of possible account titles could be included in this category, such as redeemed food stamps, art objects, antiques, and coin and bullion. Regardless, the examiner must design specific procedures for review and testing to fit the particular account and situation and must document the scope of the review in the workpapers.

Examination Review of Other Assets

Examiners assigned to ''other assets'' must obtain the detailed breakdown of these accounts when they are reported on the bank's statement of condition and when they are so designated for the purposes of reporting on the bank's Call Report. When the account can best be examined by examiners assigned to other areas of the bank, the detailed breakdown of the accounts should be furnished to those examiners. The remaining accounts should be reviewed and evaluated by examiners assigned to this section. The major factor in deciding which accounts are to be reviewed are materiality and the volume of transactions flowing through the account.

With regard to materiality, the examiner should evaluate whether to analyze the nature and quality of each individual item, on the basis of its impact on the overall soundness of the bank or the quality of the bank's earnings. Therefore, the examiner needs to verify—

- the existence of the asset;
- the proper valuation of the asset;

- that the asset is properly classified, described, and disclosed in the financial statements (including the existence of any liens);
- that the asset is being properly amortized on a consistent basis over the estimated period of benefit;
- that any sales of assets, including the recognition of gains and losses, have been properly recognized; and
- the adequacy of the accounting and disposition controls for, as well as the quality of, the asset.

With regard to transaction volume, the examiner should evaluate whether any accounts with small balances have an unusually high level of transaction volume. Therefore, it is important that the examiner verify that—

- the account has a valid business purpose,
- the account is reconciled on a regular basis, and
- the accounting controls are adequate.

An examiner should authenticate the existence of the selected assets by ensuring that their supporting documentation is adequate. Also, the examiner should verify that ownership of the asset rests with the bank. (In the case of organizational costs borne by the bank for the formation of a holding company, those costs, and the related ownership rights in the capitalized asset, should more properly be borne by the ownership interests and should not be recorded as assets of the bank.)

Proper valuation and reporting of other asset accounts is another potential area of concern for the examiner. Assets are generally acquired through purchase, trade, repossession, prepayment of expenses, or accrual of income. Generally, assets purchased, traded, or repossessed are transferred at their fair market value. Prepaid expenses and income accrued are booked at cost. An examiner should be particularly alert in identifying those assets that lose value over time to ensure that they are appropriately depreciated or amortized. All intangible assets should be regularly amortized, and management should have a system in place to confirm the valuation of the remaining book balance of the intangible assets.

The examiner needs to ensure that the controls concerning other assets protect the bank's ownership rights, the accounts are properly valued and accurately reported, and control activities are monitored regularly by management. A bank with good control and review procedures will periodically charge off all uncollectible or unreconcilable items. However, the examiner must frequently go beyond the general ledger control accounts and scan the underlying subsidiary ledgers to ensure that posting errors and the common practice of netting certain accounts against each other do not cause significant balances to go unnoticed because of lack of proper detail.

Deferred Tax Assets

For verifying compliance with the limits found in the risk-based capital guidelines, examiners need to review the net deferred tax assets (deferred tax assets less deferred tax liabilities) that a bank reports in its regulatory reports and the amount of limited deferred tax assets that are not deducted from a bank's tier 1 capital. The net deferred taxes result from the application of an asset and liability approach for financial-accounting and reporting for income taxes. Net deferred taxes (net deferred tax assets) generally arise from the tax effects of reporting income or expense charges in one period for financial-statement purposes and in another period for tax purposes. This effect, known as a temporary difference, is at times sizable. Tax laws often differ from the recognition and measurement requirements of financial accounting standards. Differences can arise between (1) the amount of taxable income and pretax financial income for a year and (2) the tax bases of assets or liabilities and their reported amounts in financial statements. Charges that result in a significant deferred tax asset are often caused by loan-loss provisions exceeding bad debt deductions for tax purposes in a given period. While banks are permitted to carry deferred income tax assets on their reports of condition, they are limited by generally accepted accounting principles (GAAP) to the extent these items can be carried.

The Financial Accounting Standards Board's (FASB) Statement No. 109 (FAS 109), "Accounting for Income Taxes," establishes procedures to (1) measure deferred tax assets and liabilities using a tax-rate convention and (2) assess whether a valuation allowance should be established for deferred tax assets. Enacted tax laws and rates are considered in determining the applicable tax rate and in assessing the need for

a valuation allowance. FAS 109 was to be adopted by banks as of January 1, 1993, or the beginning of their first fiscal year thereafter, if later.

FAS 109 requires a deferred tax asset to be recognized for all temporary differences that will result in deductible amounts in future years and for tax credit carryforwards. For example, a temporary difference may be created between the reported amount and the tax basis of a liability for estimated expenses if, for tax purposes, those estimated expenses are not deductible until a future year. Settlement of that liability will result in tax deductions in future years, and a deferred tax asset is recognized in the current year for the reduction in taxes payable in future years. A valuation allowance is recognized (deducted from the amount of the deferred tax asset) if, based on the weight of available evidence, it is *likely* that some or all of the deferred tax asset will not be realized.

Deferred Tax Liabilities

A deferred tax liability is recognized for temporary differences that will result in taxable amounts in future years. Deferred tax liabilities that may be related to a particular tax jurisdiction (for example, federal, state, or local) may be offset against each other for reporting purposes. A resulting debit balance is included in "other assets" on the bank Call Report and reported in Schedule RC-F; a resulting credit balance is included in "other liabilities" on the bank Call Report and reported in Schedule RC-G. A bank may report a net deferred tax debit (or asset) for one tax jurisdiction (for example, federal taxes) and also report a net deferred tax credit (or liability) for another tax jurisdiction (for example, state taxes).

Limitation on Deferred Tax Assets for Tier 1 Risk-Based Capital and Leverage Capital

The risk-based capital and leverage capital guidelines include a limit on the amount of certain deferred tax assets that may be included in (that is, not deducted from) tier 1 capital for determining the amount of the bank's required risk-based and leverage capital levels. Certain deferred tax assets can only be realized if a bank earns taxable income in the future. Deferred tax assets are limited, for regulatory capital purposes, to (1) the amount that the bank expects to realize within one year of the quarter-end report date (based on its projections of future taxable income for that year) or (2) 10 percent of tier 1 capital, whichever is less. The reported amount of deferred tax assets, net of any valuation allowance for deferred tax assets, in excess of the lesser of these two amounts is to be deducted from a bank's core capital elements in determining tier 1 capital. See section 3020.1 for more detailed information on how to determine the capital composition and limitation on deferred tax assets.

Bank-Owned Life Insurance to Be Included in Other Assets

FASB's Technical Bulletin No. 85-4 (FTB 85-4), "Accounting for the Purchases of Life Insurance," addresses the accounting for BOLI. "Other assets" are to include the amount of the assets that represent the cash surrender value of the insurance policy that is reported to the institution by the insurance carrier (less any applicable surrender charges not reflected by the insurance carrier in the reported cash surrender value that could be realized under the insurance contract) as of the balance-sheet date. Because there is no right of offset, an investment in BOLI is reported as an asset separately from any deferred compensation liability. BOLI is reported on the balance sheet of the bank Call Report as "other assets" and on its schedule RC-F as "all other assets—cash surrender value of life insurance." (See SR-04-4 and SR-04-19.) (The net earnings (losses) on, or the net increases (decreases) in, the net cash surrender value of BOLI should be reported according to the bank Call Report instructions for the glossary and the income statement, Schedules RI and RI-E.)

OTHER LIABILITIES

The term *other liabilities* represents the bank's authorized obligations. Other liabilities, as used in this section, include all balance-sheet liability accounts not covered specifically in other areas of the examination. The accounts often may be quite insignificant when compared with the overall size of the bank. In some banks, individual accounts are established for control pur-

poses and appear on the balance sheet as "other liabilities." For reporting, however, these accounts must be assigned to specific liability categories or netted from related asset categories, as appropriate.

Schedule RC-G of the Consolidated Report of Condition lists the specific accounts classified as "other liabilities." The schedule includes interest accrued and unpaid on deposits and other expenses that are accrued and unpaid (including accrued income taxes payable), net deferred tax liabilities, the allowance for credit losses on off-balance-sheet credit exposures, and all other liabilities. "All other liabilities" includes liability accounts such as accounts payable, deferred compensation liabilities, dividends that are declared but not yet payable, and derivatives with a negative fair value held for purposes other than trading.

As stated above, the "all other liabilities" term includes deferred compensation liabilities. This account is used to record the bank's obligation under its deferred compensation agreements. Section 3015.1 discusses deferred compensation agreements in detail, both as to the nature and operation of the different types of agreements and the accounting standards and guidance that are applicable to those agreements—in particular, a revenue-neutral plan or an indexed retirement plan. (See also SR-04-4, SR-04-19, and the glossary entry for "deferred compensation agreements" in the bank Call Report instructions.)

Types of Other Liability Accounts

A general category of other liabilities common to banks is expenses accrued and unpaid. These accounts represent periodic charges to income based on anticipated or contractual payments of funds to be made at a later date. They include such items as interest on deposits, dividends, taxes, and expenses incurred in the normal course of business. There should be a correlation between the amount being accrued daily or monthly and the amount due on the stated or anticipated payment date.

Other liability accounts should be reviewed to determine that accounts, such as deferred taxes, are being properly recognized when there are temporary differences in the recognition of income and expenses between the books and the income tax returns. This review should also determine that matters such as pending tax litigation, equipment contracts, and accounts payable have been properly recorded and are being discharged in accordance with their terms and requirements.

Various miscellaneous liabilities may be found in accounts, such as undisbursed loan funds, deferred credits, interoffice, suspense, and other titles denoting pending status. An unlimited number of possible items could be included. The review of these accounts should determine that they are used properly and that all such items are clearing in the normal course of business. Because of the variety of such accounts, the examiner must develop specific examination procedures to fit the particular account and situation.

Examination Review of Other Liabilities

Examiners assigned to "other liabilities" are responsible for obtaining the bank's breakdown of these accounts and, when the accounts are to be examined under other sections, must ensure that examiners in charge of those sections receive the necessary information. The remaining accounts should be reviewed and evaluated by examiners assigned to this section.

The primary emphasis of examining other liabilities is to obtain reasonable assurance that (1) the liabilities represent the bank's authorized obligations and (2) all contingencies and estimated current-period expenses that will be paid in future periods that should be accrued during the period have been accrued, classified, and described in accordance with GAAP, and the related disclosures are adequate. Another emphasis in examining this area should be the adequacy of the controls and procedures the bank employs to promptly record the amount of liability. Without proper management attention, these accounts may be advertently or inadvertently misstated. Unless properly supervised, these accounts may be used to conceal shortages that should be detected immediately. For instance, other liabilities may include fraudulent entries for suspense or interbranch accounts that could be rolled over every other day to avoid stale dates, causing shortages of any amount to be effectively concealed for indefinite periods of time.

Similar to "other assets," other liability

accounts with small balances may be significant. Scanning account balances may disclose a recorded liability, but it does not aid in determining the accuracy of liability figures. Therefore, it is important to review the documented information obtained from examiners working with and reviewing the minutes of the board and its committees. Responses from legal counsel handling litigation could also be important because this information might reveal a major understatement of liabilities. Determining accurate balances in other liability accounts requires an in-depth review of source documents or the other accounts in which the liability arose.

1. To determine if policies, practices, procedures, and internal controls regarding ‘‘other assets’’ and ‘‘other liabilities’’ are adequate.
2. To determine that bank officers and employees are operating in conformance with established guidelines.
3. To evaluate the validity and quality of all ‘‘other assets.’’
4. To determine that ‘‘other liabilities’’ are properly recorded.
5. To determine the scope and adequacy of the audit function.
6. To determine compliance with laws and regulations.
7. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. Complete or update the Internal Control Questionnaire, if selected for implementation.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Obtain a listing of any deficiencies noted in the latest review done by internal/external auditors from the examiner assigned "Internal Control," and determine if appropriate corrections have been made.
4. Obtain from the examiner assigned "Examination Strategy" the list of "other assets" and "other liabilities" accounts.
5. Obtain a trial balance of "other assets" and "other liabilities" accounts, including a detailed listing of the interbank accounts and:
   a. Agree or reconcile balances to department controls and general ledger.
   b. Review reconciling items for reasonableness.
6. Scan the trial balances for:
   a. Obvious misclassifications of accounts and, if any are noted, discuss reclassification with appropriate bank personnel and furnish a list to appropriate examining personnel.
   b. Large, old, or unusual items and, if any are noted, perform additional procedures as deemed appropriate, being certain to appraise the quality of "other assets."
   c. "Other assets" items that represent advances to related organizations, directors, officers, employees, or their interests, and if any are noted, inform the examiner assigned "Loan Portfolio Management."
7. Determine that amortizing "other assets" accounts are being amortized over a reasonable period correlating to their economic life.
8. If the bank has outstanding customer liability under letters of credit, obtain and forward a list of the names and amounts to the examiner assigned "Loan Portfolio Management."
9. Review the balance of any "other liabilities" owed to officers, directors, or their interests and investigate, by examining applicable supporting documentation, whether they have been used to—
   a. record unjustified amounts; or
   b. record amounts for items unrelated to bank operations.
10. Develop, and note in the workpapers, any special programs considered necessary to properly analyze any remaining "other assets" or "other liabilities" account.
11. Test for compliance with applicable state laws and regulations.
12. For "other assets" items that are determined to be stale, abandoned, uncollectible, or carried in excess of estimated values, and for "other liabilities" items that are determined to be improperly stated, after consulting with the examiner-in-charge, request management to make the appropriate entries on the bank's books.
13. Prepare, in appropriate report form, and discuss with appropriate officer(s):
    a. Violations of laws and regulations.
    b. Criticized "other assets."
    c. The adequacy of written policies relating to "other assets" and "other liabilities."
    d. Recommended corrective action when policies, practices, or procedures are deficient.
14. Update the workpapers with any information that will facilitate future examinations.

Other Assets and Other Liabilities

Internal Control Questionnaire

Effective date May 1993

Section 2210.4

Review the bank's internal controls, policies, practices, and procedures concerning "other assets" and "other liabilities." The bank's systems should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used, and other pertinent information.

OTHER ASSETS

Policies and Procedures

1. Has the bank formulated written policies and procedures governing "other assets" accounts?

Records

2. Is the preparation of entries and posting of subsidiary "other assets" records performed or tested by persons who do not also have direct control, either physical or accounting, of the related assets?
3. Are the subsidiary "other assets" records, if any, balanced at least quarterly to the appropriate general ledger accounts by persons who do not also have direct control, either physical or accounting, of the related assets?
4. Is the posting of "other assets" accounts to the general ledger approved prior to posting by persons who do not also have direct control, either physical or accounting, of the related assets?
5. Are worksheets or other supporting records maintained to support prepaid expense amounts?
6. Are supporting documents maintained for all entries to "other assets"?
7. Are the items included in suspense accounts aged and reviewed for propriety regularly by responsible personnel?

Receivables

8. Are receivables billed at regular intervals? (If so, state frequency _____.)
9. Are receivables reviewed at least quarterly for collectibility by someone other than the originator of the entry?
10. Is approval required to pay credit balances in receivable accounts?
11. Do credit entries to a receivables account, other than payments, require the approval of an officer independent of the entry preparation?

Other Procedures

12. Does charge-off of a nonamortizing "other asset" initiate review of the item by a person not connected with entry authorization or posting?
13. Do review procedures, where applicable, provide for an appraisal of the asset to determine the propriety of the purchase or sale price?

Conclusion

14. Does the foregoing information provide an adequate basis for evaluating internal controls in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
15. Are internal controls adequate based on a composite evaluation, as evidenced by answers to the foregoing questions?

OTHER LIABILITIES

Policies and Procedures

1. Has the bank formulated written policies and procedures governing the "other liabilities" accounts?

Records

2. Does the bank maintain subsidiary records of items comprising "other liabilities"?

3. Is the preparation of entries and posting of subsidiary "other liabilities" records performed or tested by persons who do not also originate or control supporting data?
4. Are subsidiary records of "other liabilities" balanced at least monthly to appropriate general ledger accounts by persons who do not also originate or control supporting data?
5. Are the items included in suspense accounts aged and reviewed for propriety regularly by responsible personnel?

Other Procedures

6. Does the bank book obligations immediately on receipt of invoices or bills for services received?
7. If the bank uses a Federal Reserve deferred credit account, is the liability for incoming "Fed" cash letters booked immediately upon receipt?
8. Does the bank book dividends that have been declared but are not yet payable?
9. Are invoices and bills proved for accuracy prior to payment?
10. Are invoices and bills verified and approved by designated employees prior to payment?
11. Are procedures established to call attention, within the discount period, to invoices not yet paid?
12. Does the bank have a system of advising the board of directors of the acquisition and status of major "other liabilities" items?
13. Are all payroll tax liabilities agreed to appropriate tax returns and reviewed by an officer to ensure accuracy?

Conclusion

14. Does the foregoing information provide an adequate basis for evaluating internal controls in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
15. Are internal controls adequate based on a composite evaluation, as evidenced by answers to the foregoing questions?