
Introduction

The principal role of the Office of Finance (OF) is to issue and service consolidated obligations (COs) on behalf of the twelve Federal Home Loan Banks (FHLBanks). The two over-arching considerations are that (1) COs be issued at the lowest long-term all-in cost consistent with the FHLBanks' status as government-sponsored enterprises and (2) COs are efficiently serviced, that is all principal and interest payment occur in a timely fashion. Attendant to the role of issuing COs, the OF is also responsible for the preparation of the combined financial reports of the FHLBanks and providing other securities' disclosures.

The OF was created by the former Federal Home Loan Bank Board in 1972 when it relocated the former fiscal agent office from New York City. In 1989, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) abolished all the joint offices of the FHLBanks with the specific exception of the OF, thus giving the OF an implicit federal existence although it has no charter, and it is neither a federal nor state corporation. The OF operates out of leased space in the Reston Town Center development in Reston, Virginia, and a disaster-recovery site near the Dulles Airport. It has approximately 72 employees.

The Federal Housing Finance Board (Finance Board) has the explicit statutory duty to ensure that the FHLBanks (also referred to as "System") remain adequately capitalized and able to raise funds in the capital markets. In the interest of providing a liquid and competitively priced source of funding for the System, the Finance Board monitors the regulatory compliance and efficient operation of the OF.

By regulation, the OF is governed by a three-person board of directors, two of whom are FHLBank presidents and the third being a private citizen, who serves as chair. The Finance Board appoints the directors to staggered three-year terms ending March 31. There are no statutory or regulatory provisions dealing with the rotation of directors among the FHLBank presidents. The OF operates under the day-to-day supervision of a managing director.

While the OF is governed by a board of directors, the OF seeks to achieve consensus with a number of interested groups, including FHLBank presidents, FHLBank chief financial officers, and FHLBank funding officers. These three groups have formed a number of standing and/or *ad hoc* committees and/or sub-committees that deal with funding issues.

To facilitate efficient decision-making, the FHLBanks and the OF have implemented procedures that permit the Debt Management Subcommittee to implement procedures without a unanimous vote. In the issuance of COs, the OF must consider the preferences of investors and potential investors and the Nationally Recognized Statistical Rating Organizations that rate COs.

The capital requirements applicable to the FHLBanks place an implicit limit on the issuance of COs. For any FHLBank which has not yet converted to their new capital

plan, asset leverage is generally limited to twenty-one times capital. For any FHLBank who has converted to a new capital plan, assets, and implicitly COs, are limited by the leverage or risk-based capital requirements, whichever of the two is the binding constraint.

Regulatory Environment

The primary authorities governing, or relevant to, Office of Finance are set forth below. The discussion does not address the application of authorities other than the FHLBank Act and the regulations, interpretations and issuances of the Finance Board to the Office of Finance. The examiner should ensure that the application of such authorities to the Office of Finance has been considered by the Office of Finance and its legal counsel.

1) Federal Home Loan Bank Act

Section 11(b) of the FHLBank Act, as amended, authorizes the Finance and the FHLBanks to issue FHLBank System COs. In addition, Sections 10 and 11(h) address that the COs' proceeds are used by the FHLBanks to make advances to their members and housing associates, to purchase mortgage loans, and for other authorized purposes, including the funding of eligible investments.

2) Rules and Regulations of the Federal Housing Finance Board, which include the following parts and sections relevant to Office of Finance:

Part 966 of the Finance Board regulations addresses consolidated obligations. In particular, Section 966.2, Issuance of consolidated obligations, Section 966.2(c), Negative pledge requirements and Section 966.3, Leverage limit and credit rating requirements, are pertinent.

Part 932 of the Finance Board regulations addresses Federal Home Loan Bank Capital Requirements.

Part 985 of the Finance Board regulations addresses the Office of Finance. In particular, Section 985.2, Authority of the Office of Finance, Section 985.3, Functions of the Office of Finance, Section 985.4, Finance Board oversight, Section 985.5, Funding of the Office of Finance, Section 985.6, Debt management duties of the Office of Finance, Section 985.7, Structure of the Office of Finance board of directors, and Section 985.8, General duties of the Office of Finance board of directors are relevant.

Section 985.6(b)(2) of the Finance Board regulations requires that the scope, form, and content of the combined financial reports be consistent with the requirements of Regulations S-K and S-X of the Securities and Exchange Commission (SEC). The disclosures contained in the combined financial reports should also satisfy SEC reporting requirements now applicable to the FHLBanks and be consistent with the disclosures made in their periodic financial reports to the SEC on Forms 10-K and 10-

Q, except for certain items that obviously do not apply given the unique nature of the combined financial reports. However, the Finance Board retains the exclusive authority to determine the adequacy of the disclosures made in the combined financial report.

3) Advisory Bulletins of the Federal Housing Finance Board that provide supervisory guidance relating to Office of Finance activities are:

Advisory Bulletin 06-03, dated July 18, 2006, provides guidance on disclosure in SEC filings of unpublished information as defined in Part 911 of Finance Board regulations.

Advisory Bulletin 02-7, dated August 27, 2002, provides guidance to the FHLBanks on reporting their unsecured credit exposure to OF in order to meet the Finance Board's reporting requirement of Section 932.9(e)(1).

- 4) Regulatory Interpretation 2005-01, dated March 30, 2005, provides guidance to Part 966.8(c), which prohibits COs from being directly placed with an FHLBank Act.
- 5) Local Registration Requirements. While COs are permissible investments for most fiduciaries in most states, there may be instances where COs are subject to local registration requirements. The OF should have policies and procedures in place to prevent the marketing and sale of COs in jurisdictions that subject them to local registration requirements.
- 6) Daylight Overdrafts. In April 2006, the Federal Reserve Bank of New York implemented new rules concerning "daylight overdrafts." Under practices before this change, the Federal Reserve Bank of New York would release early all the principal and interest payments on consolidated obligations due that day. During the course of the day, the FHLBanks would remit funds to the Federal Reserve Bank of New York to cover the daylight overdraft by 4:00 p.m., New York time.

Under the new procedures, the Federal Reserve Bank of New York will not release any payment unless it has already received those funds. If funds are not available at the Federal Reserve Bank of New York by 4:00 p.m., New York time, it will not make the principal or interest payment due on some of the COs scheduled for payment that day. If this were to occur, investors in COs would not receive the timely payment of principal or interest.

The OF and the FHLBanks must maintain satisfactory contingency plans to prevent the non-payment of any scheduled CO payment in the event funds are not remitted to the Federal Reserve Bank of New York in a timely fashion.

7) *Investor Suitability*. COs only should be sold to investors who have the knowledge and experience to evaluate the risks and benefits of the investment. Standards of this type are commonly referred to as "suitability standards." When COs are sold by

dealers, as in the case with most of all COs issued through the OF, it is the dealer's responsibility to sell them to suitable customers, that is, customers sufficiently sophisticated to fully understand the risks associated with the security purchased.

The OF's Selling Group agreement contractually obligates dealers to sell COs only to suitable investors and provides the OF access to dealer records to review sales for suitability. The OF maintains a compliance program to monitor this requirement as the OF and FHLBanks could face legal and reputation risk if an underwriter sells a CO to an unsuitable investor.

Office of Finance Environment

The five areas of principal supervisory interest at the OF are governance, issuing COs, servicing COs, preparing combined financial reports of the FHLBanks, and information technology.

1) Governance. As with the FHLBanks, good corporate governance is critical to the success of the OF. By regulation, the OF board of directors consists of two FHLBank presidents and a private citizen who serves as chair. Other FHLBank presidents usually participate in these board meetings, but they do not vote.

Finance Board rules enumerate a number of explicit duties for the OF's directorate that complement the implicit duties typical of corporate boards. Also, by regulation, the audit committee of the OF consists only of the three board members.

The Finance Board's regulations that pertain to corporate governance are found at Part 917. While many portions of this part do not explicitly apply to the OF, many of these provisions represent "best practices" of corporate governance that the OF is encouraged to follow.

OF management is responsive to FHLBank presidents, chief financial officers, and funding officers. These groups have a number of standing and *ad hoc* committees dealing with funding, accounting, and disclosure issues.

2) Issuing COs. The OF has a number of debt programs.

Discount notes have a maturity of less than one year. They are issued in one of two ways. One is a regular Tuesday and Thursday auction of 4-, 9-, 13-, and 26-week discount notes. The second is the "window" program in which the OF each day posts rates at which it will offer discount notes of a given maturity.

The OF has a number of bond (maturity of one year or longer) programs.

a) TAPS bonds are fixed-rate, fixed-maturity bonds that may be auctioned daily. During a three-month period, all TAPS bonds of a given maturity date are cumulated into a single CUSIP number.

- b) Global bonds are usually fixed-rate, fixed-term bonds sold in syndicated issues of at least \$3 billion.
- c) Each day the OF stands ready to auction fixed-rate bonds with American (continuous after an initial lock out) call options.
- d) The largest bond program in terms of unit count is the negotiated callable bond program. Most of these transactions are "reverse inquiries" in which an underwriter is seeking an FHLBank to issue a bond with investor-determined features. Each day the OF negotiates bond issues for bonds with European (one-time) or Bermudan (periodic) call options. In most, but not all cases, these transactions have an associated mirror-image interest-rate swap. The OF may issue bonds with complex structures, such as range bonds and step-up notes. All complex structures get swapped by the Federal Home Loan Bank that receives the proceeds to create simple floating-rate financing.
- 3) Servicing COs. At any one time, the OF may have more than 10,000 separate bond issues outstanding. These create many thousand servicing events each year, including the payment of regular interest, the payment of principal, bond calls, and other servicing events such as the adjustment of the rate on floating-rate bonds and the adjustment of the coupon payments on the more complex bond structures.
 - All bonds need to be entered into the Federal Reserve System's book entry system. The FHLBanks need to remit through the OF payments each day for the principal and interest due that day.
- 4) Preparing the combined financial statements of the FHLBanks. A review of the process for preparing and distributing the combined financial statements, and an evaluation of the accuracy and adequacy of the statements and included disclosures, is performed by the Finance Board's accounting department.
- 5) Information Technology. The OF is highly dependent on information technology for issuing and servicing COs. There are two principal systems. Financial Management Systems (FMS) deals with issuing COs, and includes a number of Internet-based auction platforms. Debt Special Services (DSS) is the debt servicing system that governs the payment of interest and principal on COs. These two systems are customized applications written for the OF. FMS and, to an even greater degree DSS, largely automate the CO issuance and servicing process.

Principal Risks at the OF

1) Management Succession. As a small, IT-dependent organization carrying on highly-specialized activities, management succession planning at the OF is important. The management succession issues OF faces are comparable to other organizations of its size and type.

- 2) Reputation Risks Associated with Debt Programs. On behalf of the FHLBanks, the OF issues "agency" debt. Because of both the real and perceived special status of agency debt, it is critical that the OF follow the highest standards in issuing COs. The OF needs to have "world class" disclosures when marketing COs and adhere to strict suitability standards. Since the OF relies upon its dealers to perform the suitability analyses, it is imperative that the OF has high standards for the selection and retention of dealers and a rigorous compliance program to assure that dealers are selling COs only to suitable investors.
- 3) Disclosure. The OF and the FHLBanks are potentially subject to law suits from investors if they were to lose money on any COs they were to purchase. Moreover, because of the agency status of COs, the OF has an obligation to follow the highest disclosure standards. The reputation of the FHLBanks could suffer and spreads on COs could widen if the disclosures prepared by the OF were viewed as inferior.
- 4) Suitability. The OF has established a schedule of minimum denominations for COs where the minimum increases as the bond structure gets more complex. The minimum denomination for the most simple bond structures is \$10,000, compared with \$1,000 for U.S. Treasury bonds and notes. These minimum denominations are one portion of a suitability regimen as investors need significant financial resources to purchase the more complex bond structures. As noted above, the OF qualifies dealers and makes these dealers responsible for assessing suitability. Monitoring of dealer efforts to assure suitability is critical to control any resulting risks.
- 5) Timely Payments. While the CO servicing process is highly automated, a number of potential human and technological factors could result in an investor not receiving timely payment of principal and interest. Such factors could include a bond not being entered into the servicing system correctly, the bond not getting entered into the Federal Reserve's book entry system correctly, the bond being assigned the wrong CUSIP number, systems failures at the Federal Reserve Bank of New York, information technology hardware or software failures at the OF, an FHLBank not remitting funds on time, malfeasance or misfeasance by an employee, or human or technological factors at the dealer.
- 6) Technological Obsolescence. The OF makes extensive use of information technology. The OF may be exposed to vendor risk if a particular piece of hardware or software were no longer supported or if new hardware or software is incompatible with the existing systems.
- 7) Business Continuity and Recovery. The OF has a three-stage business continuity plan. First, it owns a generator on the roof of its offices that can provide electrical power to its offices. Second, the OF has a disaster recovery site near Dulles Airport. This site is on a different power grid than the Reston location. Third, the OF has a secondary disaster recovery site at the disaster recovery site of the FHLBank of Pittsburgh. The OF runs real-time computer back-ups of mission-critical systems at both locations.

Specific Risk Controls Relating to OF

1) Governance. The board of directors and senior management have the ultimate responsibility for the design, implementation, and monitoring of the OF's internal control environment. Specific attributes of a strong internal control environment include the identification of key risks, implementation of controls, organizational structure, departmental policies and procedures, managerial review and exception reporting, hiring practices and contingency planning, and retention of staff possessing the necessary technical expertise.

- 2) Internal Audit. The OF maintains an internal audit staff, under the direction of an audit director who reports directly to the board of directors' audit committee. The audit director is responsible for providing adequate independent assessment concerning risk management, risk identification, and internal controls. To be effective, the frequency and scope of internal audit should be incorporated into an annual audit plan and communicated to the board of directors and management of the OF.
- 3) Granularity. The OF engages in many transactions. The potential for losses resulting from errors depends upon the structural complexity of a transaction and its dollar amount. Large dollar transactions, global bonds, and overnight discount notes are simple structures and therefore may be less prone to errors. The more complex structures tend to be smaller dollar transactions; thus, if an operational failure were to occur on a complex structure, any financial losses would likely be relatively small.
- 4) Interested Parties. While the OF has a board of directors, a number of other groups act in advisory roles, including committees and subcommittees of the FHLBank presidents, chief financial officers, and funding officers. Most new policies and procedures are reviewed and agreed upon by one or more of these groups.

Financing Corporation

The Financing Corporation (FICO) was established for the purpose of recapitalizing the Federal Savings and Loan Insurance Corporation and its sole purpose is to function as a financing vehicle for the Federal Savings and Loan Insurance Corporation Resolution Fund. FICO was originally authorized to issue \$10.825 billion in obligations, the proceeds of which would be transferred to the FSLIC Resolution Fund. In December 1991, as provided by the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991, FICO's ability to issue new debt was terminated. Outstanding FICO bonds of \$8.170 billion mature in 2017 through 2019.

FICO is housed within the OF and oversight of all FICO's activities is responsibility of the OF. FICO is under the management of a directorate composed of the Managing Director of the OF and two FHLBank presidents. The directorate serves without compensation and FICO may not have any paid employees.

FICO is a mixed-ownership, tax-exempt government sponsored corporation, chartered by the former Federal Home Loan Bank Board pursuant to the Competitive Equality Banking Act of 1987 (CEBA). The capitalization of FICO was provided by a distribution of approximately \$700 million in retained earnings from the FHLBanks to FICO in exchange for FICO nonvoting capital stock. With the enactment of FIRREA, oversight responsibility for FICO was transferred to the Finance Board.

FICO used the proceeds received from the sale of stock to purchase zero-coupon Treasury bonds with maturities equivalent to those of the FICO bonds to be used as the primary source of repayment of the principal of the FICO obligations. The primary source of payment on the interest on the obligations is the receipt of assessments imposed on and collected from institutions insured by the Bank Insurance Fund (BIF) and the Savings Association Insurance Fund (SAIF), which were merged in March 2006 into a newly created Deposit Insurance Fund (DIF).

FICO's activities are currently limited to servicing its outstanding obligations through assessments on all depository institutions insured by the Federal Deposit Insurance Corporation (FDIC). The administrative expenses of FICO are funded by the FHLBanks through periodic assessments based upon an approved budget.

A Memorandum of Understanding (MOU) between the FDIC and FICO establishes the procedures for establishing the semi-annual assessment rate and quarterly collection of assessments for all insured depository institutions.

Resolution Funding Corporation

The Resolution Funding Corporation (REFCORP) is subject to the general oversight and direction of the U.S. Secretary of the Treasury.

REFCORP is a mixed-ownership, tax-exempt government sponsored corporation established by FIRREA. Day-to-day operations of REFCORP are under the management of a three-member directorate comprised of the Managing Director of the OF and two FHLBank presidents. The directorate serves without compensation, and REFCORP may not have any paid employees.

Following the enactment of FIRREA, \$2.5 billion in FHLBank retained earnings were used to capitalize REFCORP. In exchange, the FHLBanks received REFCORP non-voting, non-dividend-bearing capital stock. Further, FIRREA required the FHLBanks to pay a fixed \$300 million annual assessment toward interest on the REFCORP bonds. The Gramm-Leach-Bliley Act of 1999 (GLB) changed the method of assessing the FHLBanks for mandated annual payments to REFCORP from a fixed payment to 20 percent of the net earnings of the FHLBanks after contributions to the Affordable Housing Program.

REFCORP was authorized to issue up to \$30 billion in debentures, bonds and other obligations. To date, REFCORP has issued nearly all of the authorized \$30 billion

obligations and no additional issuance is anticipated. Proceeds of the debt, net of issuance costs, were used solely to purchase RTC non-redeemable capital certificates or to refund any previously issued obligations. Non-marketable U.S. Treasury Zero coupon bonds of equal maturity value as the REFCORP obligations issued were purchased to repay the obligations at maturity.

REFCORP's activities have been limited to servicing the outstanding obligations through assessments on the FHLBanks, the FSLIC Resolution Fund, and the U.S. Treasury. The administrative and custodial expenses are funded by the FHLBanks through periodic assessments based upon an approved budget.

Examination guidance

A work program for the OF accompanies this narrative. Below are illustrative examples of various considerations used by examiners in completing the analyses required. In determining the extent of review and testing to be conducted in completing each analysis, the examiner should take into account the quality and effectiveness of corporate governance, risk management, internal controls, and audit coverage.

For each section, the examiner should review the previous examination report, internal and external audit reports, and the results of visitations for any comments about the area under examination. Examiners should identify issues or concerns that require follow-up or closer review. A review of all written policies, procedures, and guidelines should complement each section and all conclusions should address their adequacy.

1) Organizational structure

- a) Review the organizational chart and determine the adequacy of the functional organization and reporting structure.
- b) Review management succession plan(s), determine if the OF has appropriately planned for ongoing training of key senior managers and has an adequate management succession plan(s) that addresses each key department of the OF.
- c) Determine if the organizational structure supports the goals of the OF and affords proper separation of duties.
- d) Evaluate key personnel primary duties, responsibilities and technical expertise of personnel, note training efforts to maintain skills current.
- e) Evaluate any cross-training of personnel to help ensure sufficient trained staff is available.
- f) Evaluate senior management's coordination among key departments such as risk management, information technology, treasury and cash management, accounting, credit and human resources as appropriate.

- g) Evaluate the impact of any significant changes made in the foregoing since the last examination, including any anticipated changes by management in the near future.
- 2) Evaluate the establishment of risk tolerances and development of key policies and oversight by the board of directors. Adequacy of senior management oversight and the risk management function
 - a) Establishment of risk tolerances and development of key policies
 - (1) Evaluate the process used to establish risk tolerances.
 - (2) Obtain and evaluate the adequacy of risk tolerances established in the various respective activities of debt issuances, debt servicing, dealer selection, dealer activities monitoring, investment disclosures, cost of funds, data sources, data usage, development and use of key indicators, etc.
 - (3) Determine if the OF has adequate policies, procedures and guidelines governing debt issuance, debt servicing, dealer selection, dealer activities monitoring and compare those policies, procedures and guidelines to evaluate their appropriateness.
 - (4) Obtain and evaluate the adequacy of enterprise policies and procedures.
 - b) Oversight by the board of directors
 - (1) Review board of directors minutes and evaluate if the board is reviewing key activities and policies of the OF.
 - (2) Determine if key risks are appropriately reviewed by the board of directors in a timely manner.
 - (3) Determine if all key areas of the OF provide adequate reporting to the board of directors or a committee of the board.
 - (4) Determine the adequacy of the OF's budgetary process.
 - c) Adequacy of senior management oversight
 - (1) Determine if senior management has implemented overall adequate departmental policies, procedures, guidance to ensure sufficient controls are in place.
 - (2) Review internal reports used by senior management to provide adequate oversight to each key risk area of the enterprise.

(3) Evaluate if senior management takes appropriate action(s) to identify control failures and if it takes appropriate action(s) to implement corrective action(s).

d) Risk Management Function

- (1) Evaluate the adequacy of the risk identification process used by senior management for each key area.
- (2) Determine if line management provides adequate reporting to senior management to assist in ongoing monitoring of day-to-day activities.
- (3) Determine if management takes appropriate action to risks identified as a result of risk identification processes.

e) Additional Considerations

- (1) Does Capital Markets Administration (CMA) monitor for receipt of Original Issue Discount certificates or inform OF bond counsel of bond issues with OID? (Tax Compliance.)
- (2) Interview the managing director and the senior director of accounting policy and financial reporting to determine whether the OF is appropriately managing the System's relationship with the Nationally Recognized Statistical Rating Organizations (NRSROs).
- (3) Interview the director of debt servicing to determine whether the OF has policies and procedures in place to assure timely and accurate preparation of the monthly unsecured credit report. Determine whether these reports are accurate and prepared in a timely fashion.
- (4) Determine if draft operating notices are reviewed by FHLBanks, CMA, and the applicable dealers prior to finalization and posting on website.
- (5) Determine if the OF has appropriately assessed the insurance needs of the enterprise and taken appropriate action.
- (6) Evaluate the adequacy of contingency plans to prevent the non-payment of any scheduled payment on a CO in the event funds are not remitted to the Federal Reserve Bank of New York in a timely fashion.
- (7) Determine if the board of directors and senior management are properly overseeing the issues described in Section 2)e) (1) through (6), above. Assess reporting, staffing resources, expertise, cross-training, etc.

3) Debt issuance

a) Evaluate the process used by management to identify risk and if management takes appropriate and timely action to control risk.

- b) Determine if the investment disclosures have clear policies, procedures and guidelines specifically to promote high disclosure standards.
- c) Evaluate the process that management takes to determine that CO disclosures meet the highest disclosure standards.
- d) Determine if adequate management information systems exist to promote adequate day-to-day monitoring as well as providing timely identification of trends.
- e) Determine if at the Operations level, appropriate guidance has been formalized to control risk.
 - Consider if the formal risk tolerances for key risk areas, appropriate departmental policies, procedures and guidelines have been established and sufficient reporting mechanisms are in place.
- f) Determine if policies and procedures are in place to prevent the marketing and sale of COs in jurisdictions that subject them to local registration requirements.
- g) If appropriate, prepare finding(s) memorandums and provide copies to the examiner-in-charge for distribution to OF's senior management.
- h) Consult with the examiner-in-charge to reach an overall rating(s) and an overall debt issuance conclusion(s) and prepare report write-ups if necessary.

4) Debt servicing

- a) Evaluate the process used by management to identify risk and if management takes appropriate and timely action to control risk.
- b) Determine if adequate management information systems exist to promote adequate day-to-day monitoring as well as providing timely identification of trends.
- c) Determine whether the OF has clear written policies and procedures for servicing COs.
- d) If appropriate, prepare finding(s) memorandums and provide copies to the examiner-in-charge for distribution to OF's senior management.

e) Consult with the examiner-in-charge to reach an overall rating(s) and an overall debt servicing conclusion(s) and prepare report write-ups if necessary.

5) Underwriters and suitability

- a) Determine whether the OF has clear written policies and procedures to specifically address underwriters' suitability.
- b) Evaluate the process used by management to identify risk and if management takes appropriate and timely action to control risk.
- c) Determine if adequate management information systems exist to promote adequate day-to-day monitoring as well as providing timely identification of trends.
- d) Consult with the examiner-in-charge to reach an overall rating(s) and an overall underwriters and suitability conclusion(s) and prepare report write-ups if necessary.

6) Cost of funds

- a) Evaluate the process used by management to identify risk and if management takes appropriate and timely action to control risk.
- b) Determine if adequate management information systems exist to promote adequate day-to-day monitoring as well as providing timely identification of trends.
- c) Determine whether the OF has clear written policies and procedures addressing underwriters and suitability.
- d) Consult with the examiner-in-charge to reach an overall rating(s) and overall cost of funds conclusion(s) and prepare report write-ups if necessary.

7) Data sources, data identification, and shared information

- a) Evaluate the process used by management to identify risk and if management takes appropriate and timely action to control risk.
- b) Determine if adequate management information systems exist to promote adequate day-to-day monitoring as well as providing timely identification of trends.
- c) Consult with the examiner-in-charge to reach an overall rating(s) and an overall conclusion(s) and prepare report write-ups if necessary.

8) Supplemental internal and external audit procedures

- a) Refer to the Federal Housing Finance Board's examination manual for guidance regarding the evaluation of audit activities.
- b) Select audit representing global or new products, such as APLS and determine the quality of audit activities.
- c) Determine if audit appropriately tracks all findings to a satisfactory resolution.
- d) Evaluate the auditor's skill sets commensurate with the needs of the OF.

9) Supplemental information technology procedures, business continuity and recovery, and end-user computing

- a) Information technology
 - (1) Refer to the Federal Housing Finance Board's examination manual for guidance regarding the evaluation of IT activities. Coordinate with other examiners to avoid duplicative work.
 - (2) Determine the adequacy of management's processes to identify and control IT risks.
 - (3) Determine if management has appropriate controls over vendors who provide critical processing services.
 - (4) Evaluate the processes used to identify and maintain adequate controls over all input and output.
 - (5) Determine if management has implemented sufficient controls to identify and ensure that all processing is well-documented to support all established IT standards.
 - (6) Determine the level of internal software development done within the OF or by vendors for the benefit of the OF and evaluate if risks are well-controlled.
- b) Business continuity and recovery
 - (1) Refer to the Federal Housing Finance Board's examination manual for guidance regarding the evaluation of business continuity and recovery.
 - (2) Obtain and review the last recovery center risk assessment and determine if distance, capacities and various types of disasters are considered.

(3) Obtain and review lines of business resumption plan(s) and evaluate for adequacy. Consider the last test of the BRP and management's ability to address any identified areas which needed improvement.

c) End-user computing

- (1) As appropriate, review and complete other areas of the examination guidance and work programs that address automated and/or manual processing (enduser computing, or EUC).
- (2) Evaluate the processes used to identify all end-user computing applications and maintain adequate controls over input and output as well as any calculations done within each EUC application.
- (3) Determine if management has implemented sufficient controls to identify and ensure that all end-user computing is well documented to support established standards for end-user computing.
- (4) Prepare a summary addressing the level of OF's EUC usage, quality of controls, policies, practices and guidelines over EUC. Consult with the examiner-in-charge any weaknesses or recommendations in this area and prepare memorandums as appropriate.

10) Financing Corporation (FICO) activities

- a) Review the most recent report of examination and workpapers, visitation reports, and any correspondence since the last examination and identify any issues of concern and follow-up.
- b) Assess the adequacy of the FICO's board of directors and senior management's oversight of the risks arising from FICO activities.
- c) Prepare a conclusion memorandum to the examiner-in-charge that summarizes the results of the review in this section.

11) Testing

Examiners should identity areas in each step above to verify and document. Document how the selection was made, considering the risk impact of items selected. Consider audit activities and work done by consultants, management, and/or others and evaluate if it meets our needs or if other items should be verified. Determine if management maintains a quality assurance (or compliance) process and evaluate the effectiveness of those activities.

a) Establishment of risk tolerances and development of key policies

Determine if tolerances are made based on quantifiable metrics; evaluate the quality of those metrics.

b) Debt issuance

- (1) Interview capital markets personnel and assess their ability to keep abreast of market conditions.
- (2) Evaluate the adequacy of policies and procedures to ensure FHLBanks maintain assets free of any lien or pledge at least equal to the amount of COs outstanding.
- (3) Evaluate the adequacy of policies and procedures to ensure that COs maintain the highest rating from <u>any</u> Nationally Recognized Statistical Rating Organization (NRSRO).
- (4) Select an appropriate number of tapes of transactions to review and evaluate if term funding officers are complying with the established policies and procedures. Consider sampling each type of COs, including global bonds due to their size.
- (5) Observe the daily auction processes for the discount note (DN) auction, eCallable auctions, and TAP (fixed rate and maturity bonds that may be auctioned daily) auctions and evaluate if the Financial Management System is calculating auction winners correctly and allocating funds correctly to winning dealers and appropriate Banks.
- (6) Review daily confirms to ensure short-term trades are confirmed twice daily with applicable dealers and ensure any differences are quickly resolved.
- (7) Observe the web-based auction award confirmation process (DN, eCallable, and TAP auctions).
- (8) Evaluate the process of posting current rates and trading activity on the OF website; consider the timing of these posting and the controls to prevent and/or detect errors.
- (9) Evaluate the process of how swap rates, trade data, and DN indications are posted to certain third-party information providers (Telerate and Bloomberg) and evaluate the quality of management's oversight (supervision).
- (10) Review procedures regarding lockouts or adherence to a lockout list policy if applicable.
- (11) Review auto-charge agreements to determine which dealers have limits and Capital Markets management's monitoring of same.

- (12) Sample trades for accuracy of final term sheets, deal confirms, and trade tickets.
- (13) Review last dealer access review to determine if access is appropriate.
- (14) Determine that bond data entry is checked by manager.
- (15) Randomly select a daily work folder and review contents for cross-checks and approvals noted on Daily Bond Issues Report versus the Offer Log sorted by settlement date to ensure all trades were processed.
- (16) Randomly select a few bond issuance packages and review items (source docs, Fed NY term sheet, Bond Digest Report, dealer confirmation), and check for approval on Bond Digest Report and Fed sheet.
- (17) Determine whether OF issuance activities comply with applicable laws and regulations, especially Section 985.8(c) (4).
- (18) Determine whether OF has policies and procedures in place to prevent the direct issuance of a consolidated obligation to another Federal Home Loan Bank.
- (19) Determine whether the OF has policies and procedures in place to modify posted rates for DN as Federal Home Loan Bank demand for DN or market conditions change.
- (20) Determine whether the OF has a formal mechanism to review the pricing of global bonds relative to that of comparable Treasury or agency bonds.
- (21) Assess whether bond call/no call decisions and debt retirements are promptly and accurately executed. Evaluate the call notification process and determine adequacy.
- (22) Determine that physical access by employees (by Kastle key) to FedLine Advantage access rights, and access controls to CitiDirect are appropriate.
- (23) Interview the manager about finalizing Cash Sheet, determine if sufficient metrics exist to detect problems, issues, trends, quality of controls and determine if any outstanding un-reconciled items exist and if management is taking appropriate steps to address those.
- (24) Interview senior and line management to determine whether they believe that the OF's committee structure has an adverse effect upon the cost-effective issuance of COs.

- (25) Assess adequacy of internal audit, internal control, business continuity and insurance as they relate to this area or consult with examiners assigned those areas for coordination.
- (26) Assess the input and output process of COs by the OF into the Federal Reserve Bank of New York's book entry system.
- (27) Determine if the OF has developed contingency plans should issues or problems occur at the Federal Reserve Bank of New York that prevent the input of bonds into its book-entry system.

c) Debt servicing

- (1) Determine whether the internal controls on updating and maintaining the automated servicing system are adequate and appropriate.
- (2) Determine whether interest payments on COs are accurately calculated.
- (3) Determine if automated calculation of interest payments accommodates all types of bonds and DN or whether it requires "work-around(s)."
- (4) Assess the level of human input necessary to calculate interest payments.
- (5) Assess the frequency and adequacy of internal and external audit review of these procedures.
- (6) Determine if there have been recent instances where interest payments have not been calculated correctly.
- (7) For scheduled debt settlements and P & I payment activity, interview and observe staff inputs as needed and obtain screen prints or necessary servicing reports.
- (8) Obtain and determine the source of indicative rates; ensure the rates were reviewed and updated by OF.
- (9) Determine whether OF debt issuance activities are in conformance with guidelines established by its board of directors. Determine whether these guidelines meet the criteria established in Section 985.8(c)(1).
- (10) Determine whether the OF is timely and accurately implementing bond calls when requested by the Federal Home Loan Bank that is the principal obligor for the bond in question.
- (11) Determine whether the OF accurately calculates the interest rate on floating-rate instruments at reset dates and whether it uses the appropriate index.

- (12) Determine whether the OF can ensure that the coupons on complex bonds are accurately calculated on reset dates.
- (13) Determine if automated calculations of interest payments accommodate all types of bonds and DN or whether they require "work around(s)".
- (14) Evaluate the adequacy of the frequency of internal and external audit review of these procedures.
- (15) Assess the policies and procedures over selecting index values and ensuring that they are correctly and accurately entered into the servicing system.
- (16) Ascertain if OF can service all bonds it issues, including ones with new IT characteristics such as "work-arounds" and other manual interventions.
- (17) Determine whether the automated servicing system accurately incorporates all relevant features of each bond or DN. For example, does the servicing system need any "work-around(s)"?
- d) Underwriters and suitability
 - (1) Determine the effectiveness of the OF's Underwriters and Dealers Compliance Program.
 - (2) Determine that the compliance program can provide reasonable assurance that each dealer has proper policies, procedures, and practices in place to prevent COs from being sold to accounts for which they are not appropriate investments.
 - (3) Determine that the compliance program can provide reasonable assurance that each dealer adheres to established policies, procedures, and practices.
 - (4) Obtain and evaluate the OF's Selling Group Agreement which contractually obligates dealers to sell COs only to suitable investors. Assess whether the compliance program is likely to prevent the placement of COs by underwriters to unsuitable investors.
 - (5) Determine that the compliance program can provide reasonable assurance that can ensure each dealer has appropriate procedures in place to report any exceptions.
 - (6) Determine whether the OF board of directors has established a clear charter for the compliance program.
 - (7) Determine whether OF has adequately staffed and funded this function.

- (8) Interview the director of compliance to determine how compliance reviews are conducted.
- (9) Review the work program for the compliance reviews to determine whether they scope of the reviews is adequate and complete.
- (10) Review the workpapers of the compliance function for accuracy and completeness.
- (11) Determine whether the compliance function of the OF can reasonably establish that underwriters are in compliance with selling group agreements, the master underwriting agreement, the global debt agreement, and all other applicable laws and regulations.
- (12) Assess the adequacy of the internal audit's work program concerning the compliance function.
- (13) Review all Issuance Practice Bulletins and Dealer Issuance Practice Bulletins that were issued since the previous OF audit and determine if they were sent to the proper recipients.
- (14) Obtain a list of OF's user guides to determine if guidance is given for all applicable applications.
- (15) Determine if the user guides have been given to the banks (IPB), dealers (DIPB), and other appropriate users of information.
- (16) Determine whether the policies, procedures, and practices that the OF uses to qualify and disqualify dealers are clear and that they are adhered to OF management and staff.
- (17) Determine whether the criteria the OF uses to disqualify dealers have been approved by the board of directors or senior management.
- (18) Determine whether there have been any instances where the application of special criteria resulted in either the retention or disqualification of a dealer.
- (19) Determine whether the policies governing the rotation of dealers in and out of the various selling groups are clear, in written form, approved by either the board of directors or senior management, and that they are adhered to by OF management and staff.
- (20) Determine whether the policies used to determine the leads and co-leads on global bonds are clear, in written form, approved by either the board of directors or senior management, and equitably administered.

- (21) Where COs are placed directly by the OF with the investor rather than through an underwriter, determine whether the OF implements policies and procedures to determine the appropriateness of the investment for the purchaser. Such policies and procedures may include but are not limited to considering:
 - (a) The investor's knowledge of the product;
 - (b) The appropriate minimum denominations for securities based on different levels of complexity and risk;
 - (c) The customer's net worth;
 - (d) The customer's financial goals;
 - (e) The customer's ability to evaluate the risks and merits of the security; and,
 - (f) Determine whether the customer is able to bear the risks of the security.

e) Cost of funds

- (1) Interview the director of long-term funding, the director of short-term funding, and the senior director of research and planning and ascertain how they ensure COs are consistent with the requirements of Section 985.8(c)(4) of the Finance Board regulations.
- (2) Determine whether the OF has clear written policies and procedures for ensuring that COs are issued consistent with the requirements of Section 985.8(c)(4) of the Finance Board regulations.
- (3) Determine whether the OF has a methodology to assess whether the compensation for underwriters, including that in the form of swap fees, is appropriate and reasonable.
- (4) Determine whether the OF has the management information systems in place to monitor the cost of various debt products relative to comparable instruments issued by other government-sponsored enterprises. For example, can time series of spreads be readily generated?
- (5) Determine the extent to which comparative information about the cost of funds is shared with the Federal Home Loan Banks.
- (6) Determine the extent to which the OF makes use of comparative information on the cost of funds.

- (7) Assess the oversight of the board of directors and senior management in assessing funding costs. Assess reporting, staffing resources, expertise, cross-training, etc.
- f) Data sources, data identification, shared information
 - (1) Identify the sources of data used by the OF and determine if controls are effective to help promote accurate and timely data is gathered.
 - (2) Determine how management verifies data accuracy for each source.
 - (3) Determine the adequacy of documentation to denote end-to-end collection of data, use of data and output of data.
 - (4) Identify the various models used in the preparation of market forecasts, price setting, and other key indicators.
 - (5) Evaluate the processes used to validate model adequacy and maintain satisfactory level of documentation.
 - (6) Consider management's processes to identify interest rates, volatilities, and bond structures.
 - (7) Identity all models used (Principia, A. Kalotay, etc.) and evaluate the work flow of each model used and determine if adequate controls are in place throughout the process.
 - (8) Determine the extent that various data is shared with the FHLBanks or other interested parties.
 - (9) Evaluate the process used to document the work flow in and out of the Risk Valuation Analysis (RVA) report. Determine if the distribution of the output is adequate. Determine if the source of data used into RVA is acceptable.
- g) Information technology, business continuity and recovery and end-user computing
 - (1) Information technology
 - (a) Capture all unique connections in and out of the OF processing environment, consider all third parties used by key departments as well as by IT.
 - (b) Review results of the last quarterly access reviews for Financial Management Systems (FMS) Web, Debt Special Services (DSS) Web, eSpeed, Issuance and Servicing, eNegotiated and determine if all required

access reviews were performed and requested changes made? (See access approval forms for banks and dealers and documentation that access for all appropriate users is checked quarterly.

- (c) Review individual access rights within FMS to ensure that OF employees have appropriate access rights.
- (d) Test the process over how Swap Counterparties are granted access to Financial Management Systems. Ensure that none have trade authority. (See forms Swap Counterparties must sign prior to entrance to FMS).
- (e) Test in FMS that Tier 1 (related to capital strength) underwriters do not have the ability to write complex COs.
- (f) Confer with the examiner conducting the Information Technology review to determine whether the Unix/Sybase audit has disclosed any significant control weaknesses.
- (g) Ensure that trade data are "locked" to prevent any changes once finalized and "released" by the funding officer.
- (h) Determine whether data entry internal controls are adequate.

(2) Business continuity and recovery

- (a) Determine the general process to maintain up to date business continuity plans (lines of business).
- (b) Determine the general process to maintain up to date disaster recovery plan(s) (equipment and connectivity).

(3) End-user computing

- (a) Determine if the number of EUC is identified and well controlled. Consider management information systems (metrics) that provide the name of the EUC, use of the EUC, version of the EUC, and identify controls of each EUC.
- (b) Obtain from IT senior management how work flow is diagramed and updated for each EUC.
- (c) Obtain from line management how data flow is controlled in and out of each individual EUC used in the critical path of the OF mission.

h) FICO activities

- (1) Review the minutes of the board of directors.
- (2) Obtain and review any FICO specific policies, procedures, and practices.
- (3) Obtain and determine if the board adequately reviewed and properly approved FICO's operating budget.
- (4) Obtain and review any study, audit, or any type of assessment done by OF, outside consultants, auditors, etc. concerning the operations of FICO.
- (5) Review any processes used by the board of directors and/or FICO's senior management to monitor the operations of FICO's activities.
- (6) Assess audit, internal control or business continuity concerns or consult with examiner(s) assigned same for coordination and cross-reference.
- (7) Evaluate the processes used by management to identify, implement, and maintain satisfactory internal controls.
- (8) Determine the level of audit activities, including reviewing the current year's audit plan and evaluating its adequacy.
- (9) Consult with the examiner(s) assigned business continuity for OF and coordinate any efforts to evaluate FICO's recovery abilities.
- (10) Determine if there are any operations that need to be captured in business resumption plans independently from OF.
- (11) Determine if any changes occurred since the last examination which may result in a different business continuity approach for FICO.
- (12) Evaluate the accounting process of FICO.
- (13) Verify that FICO bills OF \$250 per month and that OF pays the bill.
- (14) Review the process used to maintain appropriate accounting records.

12) Assessment of Office of Finance

Summarize the results of Office of Finance activities examined in a separate memorandum. The memorandum should clearly and specifically describe the basis and analysis for the assessment. The memorandum should discuss the quality and effectiveness of corporate governance (strong, satisfactory, supervisory concern, unacceptable) and the level (low, moderate, high), direction (stable, decreasing,

increasing) and quality of risk management that pertains to operational risk. A memorandum must be prepared irrespective of whether the examiner's assessment is positive or negative.

13) Items requiring follow-up at the next on-site examination

Identify key issues that have been communicated to management (written and oral) that require follow-up during the next on-site visitation.