Introduction

The Federal Housing Finance Agency's (FHFA) Division of Federal Home Loan Bank Regulation (DBR) conducts the annual examination of the Federal Home Loan Banks' (FHLBank) Office of Finance (OF). In the interest of providing a liquid and competitively priced source of funding for Federal Home Loan Bank (FHLBank) members, FHFA examines the operations and regulatory compliance of the OF in its role as fiscal agent for the FHLBanks.

FHFA's examination activities focus on the activities of the board of directors, including the audit committee, and senior management and the assessment of operational risks that may affect the OF and, in turn, the safety and soundness of the FHLBanks. Examination activities also focus on debt issuance and debt servicing as these are the key day-to-day activities of the OF.

The OF is located in Reston, Virginia, and was created by the former Federal Home Loan Bank Board (FHLBB) in 1972 when the FHLBB relocated the former fiscal agent office from New York City. 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 implicit statutory recognition although it has no charter, and it is neither a federal nor state corporation.

The principal role of the OF is to issue and service consolidated obligations (COs) on behalf of the FHLBanks. The OF serves as an agent of the FHLBanks; it has no portfolio of its own and issues COs only upon the specific request of an FHLBank. The two over-arching considerations are that the OF: (1) issues COs at the lowest long-term all-in cost consistent with the FHLBanks' status as government-sponsored enterprises (GSEs); and (2) efficiently services COs so that all principal and interest payments occur in a timely manner. The capital requirements applicable to the FHLBanks place an implicit limit on the issuance of COs. COs are limited by leverage or risk-based capital requirements, as detailed in 12 CFR Part 932. In addition, the OF coordinates the provision of information from the FHLBanks to Nationally Recognized Statistical Rating Organizations (NRSROs) concerning the rating of COs, the preparation of the combined financial reports of the FHLBanks, and the provision of other securities disclosures. OF's preparation of the combined financial reports for the FHLBanks is assessed annually by FHFA's Office of the Chief Accountant.

By regulation, the OF is governed by a 17-person board of directors, consisting of the 12 FHLBank presidents and five independent directors. If the presidency of any FHLBank becomes vacant, the person designated by the FHLBank's board of directors to temporarily fulfill the duties of president of that FHLBank will serve on the OF board of directors until the presidency is filled permanently. Independent directors are elected by majority vote of the OF board of directors, subject to FHFA's review and non-objection to the nominees.

The independent directors each serve five-year terms (staggered so that no more than one independent director seat becomes vacant in any one year). The chairman of the board is selected from the independent directors and the vice-chair is selected from all directors. The OF operates under the day-to-day supervision of a chief executive officer.

The OF board has formed five committees: (1) Governance; (2) Risk; (3) Human Resources; (4) Planning and Budget; and (5) Audit. Except for the Audit Committee, membership in the committees consists of three of the FHLBank presidents and one independent director. In accordance with FHFA regulations, membership in the Audit Committee consists of the five independent directors.

Regulatory Environment

The primary authorities governing, or relevant to, the OF are set forth below. The examiner should ensure that the application of such authorities has been considered by the OF and its legal counsel.

1) Federal Home Loan Bank Act

Section 11(b) of the FHLBank Act, as amended, authorizes the OF and the FHLBanks to issue COs. In addition, Sections 10 and 11(h) state that the COs' proceeds are to be 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 FHFA, which include the following parts and sections relevant to the OF:

12 CFR Part 1270 of the FHFA regulations addresses COs. In particular, 12 CFR 1270.4, Issuance of consolidated obligations; 1270.4(b), Negative pledge requirements; and 1270.5, Leverage limit and credit rating requirements, are pertinent.

12 CFR Part 1273 of the FHFA regulations addresses the OF. In particular, 12 CFR 1273.2, Authority of the Office of Finance; 1273.3, Functions of the Office of Finance; 1273.4, FHFA oversight; 1273.5, Funding of the Office of Finance; 1273.6, Debt management duties of the Office of Finance; 1273.7, Structure of the Office of Finance board of directors; and 1273.8, General duties of the Office of Finance board of directors are relevant.

12 CFR 1273.6(b)(1) of the FHFA 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 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 disclosures that do not apply given the unique nature of the combined financial reports. However, the FHFA retains the exclusive authority to determine the adequacy of the disclosures made in the combined financial report.

3) Advisory Bulletins of the predecessor Federal Housing Finance Board (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 12 CFR 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 the OF to meet the FHFA's reporting requirement of 12 CFR 932.9(e)(1).

Advisory Bulletin 02-3, dated February 13, 2002: Disaster Recover Planning offers guidance on specific attributes to be considered by FHLBanks in the formulation of their business continuity plans and the establishment of bilateral agreements with other FHLBanks.

Advisory Bulletin 03-2, dated February 10, 2003: Business Continuation Contingency Planning offers guidance on specific attributes to be considered by FHLBanks in the formulation of their business continuity plans and the establishment of bilateral agreements with other FHLBanks.

Advisory Bulletin 05-05, dated May 18, 2005: Risk Management Oversight provides guidance on the risk management function and the risk management responsibilities of the board of directors and senior management.

- 4) Regulatory Interpretation 2005-01, dated March 30, 2005, provides guidance to CFR 966.8(c), which prohibits COs from being directly placed with an FHLBank. 12 CFR 966.8(c) has been superseded by 12 CFR 1270.9(c) of the FHFA regulations.
- 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 COs 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 only make principal or interest payments up to the amount of remittances received and therefore will not make the principal or interest payments due on some of the COs scheduled for payment that day.

The management of intra-day liquidity at the OF is important. 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 OF and then on to the Federal Reserve Bank of New York in a timely fashion.

7) *Investor Suitability.* COs should be sold only 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 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 the FHLBanks could face legal and reputation risk if an underwriter sells a CO to an unsuitable investor.

Issues Specific to the Office of Finance

Debt Issuance¹

COs are unsecured debt obligations sold in the public capital markets and are the joint andseveral obligation of all the FHLBanks. No FHLBank issues bonds or discount notes in its own name; all bond and discount notes are issued in the name of the FHLBank System. The statutory authority for the FHLBanks to issue COs is at Section 11(a) of the FHLBank Act (12 USC 1431(a)).

¹ For the Enterprises, this topic is covered in a supplemental guidance module titled Enterprise Debt Issuance and Servicing.

On most bonds, a single FHLBank receives all the proceeds and is thus the "primary obligor." Bond terms are negotiated with the primary obligor, but the other FHLBanks have an interest in the pricing of each bond. If one FHLBank "pays up" for a particular bond, then it might affect the prices that other FHLBanks subsequently may have to pay for similar bonds. In contrast, more than one FHLBank receives the proceeds of discount notes, global bond issues, and other large bond transactions.

Investors in FHLBank COs do not know the identity of the FHLBank(s) receiving the proceeds, though each FHLBank files Forms 8-K with the Securities and Exchange Commission dealing with long-term debt issues. This anonymity enhances liquidity and lowers costs.

Joint-and-several liability means that the other 11 FHLBanks are liable for the payment of principal and interest on a CO for which another FHLBank is the primary obligor if that FHLBank is unable to fulfill its obligations. The Federal Housing Finance Board, a predecessor agency to FHFA, adopted regulatory provisions dealing with joint-and-several liability. FHFA's rule dealing with joint-and-several liability appears at 12 CFR 1270.10.

How FHLBank Consolidated Obligations are Issued

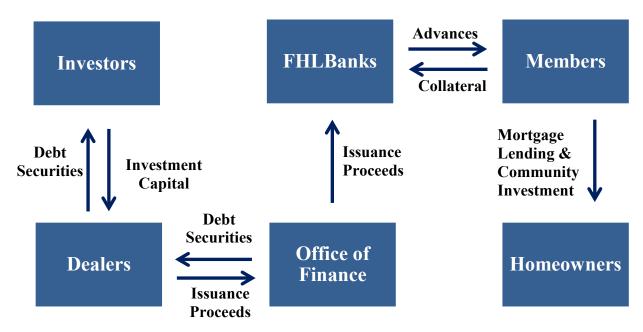
On a daily basis, the OF provides the FHLBanks color on the agency debt markets to enable each FHLBank to target its debt issuance more efficiently. Expressions of interest between the FHLBanks and underwriters flow in both directions. On auctioned transactions, the FHLBanks go through the OF to the underwriter community seeking to place debt. On negotiated transactions, an underwriter(s) goes to the OF or to one or more FHLBanks seeking to have an FHLBank(s) issue debt with investor-determined characteristics. The OF assists in the negotiation process and makes sure all debt issues fall within predetermined parameters.

The OF has the authority to limit, prohibit or redirect any debt issuance if it thinks that issuance will adversely affect debt issuance or debt pricing for the System. The OF rarely uses this authority.

All COs are issued through underwriters except for a very small amount of direct placements. The OF has qualified approximately 75 firms to underwrite and sell bonds and there is a discount note selling group with approximately 20 members². Several risk-control measures help to reduce risk for the OF and the FHLBanks. First, the OF has an "auto-charge" agreement, similar to a stand-by letter of credit, in place with most underwriters to assure their performance in paying for the COs upon delivery. Second, the underwriters act as principals, either individually or in a syndicate, for resale to investors, rather than agents of the OF or the FHLBanks. Underwriters take delivery of the COs and

² The exact number of underwriters in each selling group varies over time.

own the COs. If the COs cannot get placed with individual investors, they will remain in the inventory of the underwriter, exposing the underwriter to interest-rate risk.



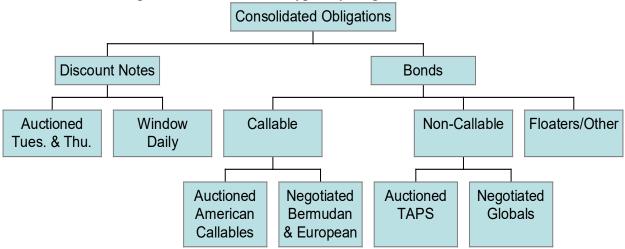
The FHLBank System should not buy back discount notes or bonds from underwriters because of adverse market price movements. This practice could shift the relationship with dealers from a principal to an agent basis, which could subject the FHLBank System to litigation exposure from non-involved dealers or investors. This unacceptable practice is different than the acceptable practice of an FHLBank repurchasing previously issued debt to manage its own funding or market risk position by reducing debt overhang.

The OF has outreach to underwriters that are owned by minorities, women, and disabled (MWD) persons. These firms are usually small and often do not have sufficient capital that would enable them to underwrite large amounts of FHLBank COs. The OF has flexible underwriter approval and less stringent annual underwriting requirements for such underwriters.

Types of Consolidated Obligations Issued

The OF uses a variety of debt programs for issuing COs. These include such issuances as discount notes (DN) with maturities of less than one year, callable bonds, bullet bonds, and floating-rate bonds. When market conditions turn unfavorable in one of these segments, debt pricing may be more beneficial in another segment. OF does maintain some presence in multiple fixed-income segments as a way of minimizing its long-term cost of funds even though the OF may issue a CO on a given day that would be cheaper to issue in another form.

DNs are offered into the market through regularly scheduled competitive auctions at 4-, 9-, 13-, and 26-week maturities. DNs are auctioned twice weekly, on Tuesdays and Thursdays, to the selling group members. After issuance, DNs can be traded in the secondary market through securities dealers and banks. In addition, the OF has a daily "window" program for DNs where it offers a wide array of DN maturities at posted prices. The OF offers overnight DNs whose volume typically ranges from \$5 to \$15 billion.



FHLBank bonds are issued in a wide variety of sizes, structures, and maturities. Bonds are available in maturities ranging from less than one year to 30 years, with the majority of issues having maturities between one and five years. Issue sizes can range from under \$10 million to \$7 billion, and individual bonds can be reopened to meet additional demand. The OF issues both callable and non-callable bonds. While most bonds have fixed interest rates, some bonds have floating rates and others have complex coupon-payment terms, such as step-up bonds and range bonds.

The largest bond program in terms of units is negotiated callable bonds with European (one-time), Bermudan (periodic), or other call option structures. Negotiated bonds arise from "reverse inquiries" where an underwriter approaches either the OF or an FHLBank about their interest in issuing a bond with investor-determined features. The FHLBank receiving the proceeds frequently enters into a simultaneous interest-rate swap that converts the bond into a simple floating-rate instrument. Joint-and-several liability does not extend to the interest-rate swap; as one or more FHLBanks in their individual capacities are the counterparty.

The TAP³ Issue Program was launched on July 6, 1999, as a refinement to the FHLBank bullet bond auction process. Rather than frequently bringing numerous small bullet issues

³ "TAP" is not an acronym. Its genesis is either similar to tapping a tree to get sap or tapping on a table to get money.

of similar maturities to market, the TAP Issue Program aggregates the most common maturities (2-, 3-, 5-, and 7-year) by reopening them over a three-month period. As a result, these "on-the-run" issues typically grow from \$1 billion to \$3.5 billion in each cycle. TAP Issues generally remain open for three months, after which they are closed and a new series of TAP Issues is opened to replace them. Sometimes instead of issuing a new two-year TAP bond, the OF will reopen a one-year-old bond with a three-year original maturity. Deciding whether to reopen an old bond or to issue a new bond often depends on the application of Original Issue Discount (OID) rules. Among other things, the TAP Issue Program has reduced the number of separate bullet bonds issued and provided enhanced funding diversification for the FHLBanks. TAP bonds have a cost savings because of a smaller liquidity premium compared with the former method of issuing many smaller bonds.

Each day the OF stands ready to auction fixed-rate bonds with American (continuous after an initial lock out) call options. The American callable bonds usually do not have an associated interest-rate swap, and they are a natural funding vehicle for mortgages and mortgage-backed securities.

Global Bonds are typically fixed rate, fixed-term bonds with an issue size of \$3 billion or more. Each Fall, the U.S. Treasury Department (U.S. Treasury) coordinates the creation of an agency issuance calendar for the following year. Under this procedure, the FHLBanks have one calendar day each month when they can issue a Global Bond and have the assurance that neither the U.S. Treasury nor the Enterprises will be issuing a bond of the similar tenor. On each of these 12 dates, the OF can issue a global bond, re-open an existing global bond, or elect to pass on that date.

The OF distributes a "Daily Commentary," a weekly report, and a "Monthly Funding Review" that contain information about debt issuance. In addition, the OF distributes daily funding guidelines, and DN auction results and DN auction memos on Tuesdays and Thursdays. Examiners should review these documents as part of the examination.

Funding Contingency

The ability to issue debt into the marketplace through the OF is essential to maintain the FHLBank System's liquidity. During the financial market crisis in 2008, the FHLBank System could not effectively issue debt with maturities of one-year or greater. Therefore, debt issuance became concentrated in DNs, which, at times, required substantial effort by the OF to issue new or rollover maturing positions. Frequently, the OF had to limit issuance size and the proceeds from many DN auctions were not sufficient to meet FHLBank demand. In these instances, the OF allocated proceeds among the FHLBanks based on a pre-determined methodology. As the financial market crisis persisted, several FHLBanks volunteered to restrict the purchase of long-term securities because of funding scarcity.

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Moreover, the persistence of the crisis exacted a toll on the OF personnel because of pressures from FHLBanks dissatisfied with limitations on debt issuance.

A funding contingency plan should outline an agreed upon System-wide approach to debt allocation under stressed conditions. Moreover, procedures for debt issuance and allocation should be prepared for plausible scenarios. Periodically, the OF and FHLBanks should test the funding contingency plan and procedures to identify any deficiencies that need addressing. Sound planning requires evaluating potential market scenarios which would impact the System's ability to issue debt in the amounts and types needed.

Debt Servicing

At any one time, the OF may have more than 10,000 bond issues outstanding. A consequence of such volume are thousands of servicing events each year, including the payment of interest, the payment of principal, bond calls, adjustment of the rate on floating-rate bonds, and the adjustment of the coupon payments on the more complex bond structures. The OF performs all debt servicing in-house.

Most COs are cleared and settled through the the Federal Reserve System's book-entry system. In addition, some COs are cleared and settled through the clearing systems operating by DTC, Euroclear, and Clearstream. The FHLBanks need to remit through the OF payments each day for the principal and interest due to debt holders. DNs and bonds are "joint and several" obligations of the FHLBanks. That is, each FHLBank, individually and collectively, has an obligation to make full and timely payment of all principal and interest on DNs and bonds when due.

The servicing process exposes the OF and the FHLBank System to the potential for both human and technological errors. For example, the process for calling debt has the potential for human error, as employees on the debt funding desk must monitor individual bonds outstanding and make the decision on whether a bond should be called. If the outstanding bond is a European callable, with only one possible call date, and the OF misses the opportunity to call the bond due to human error, the OF will have to continue to pay the existing (presumably higher) interest rate on the bond until the bond matures. The high degree of automation in the payment of interest and principal on debt increases the risk of technological errors.

Information Technology

The OF is highly dependent on information technology (IT) for issuing and servicing COs. There are two principal systems. The Financial Management System (FMS) deals with issuing COs, and includes a number of Internet-based auction platforms. The 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. Dealers access these systems by logging onto a public server that is in the demilitarized zone (DMZ).

The OF is also highly dependent on IT for preparing the combined financial report for the FHLBank System. The principal system is the Financial Reporting System (FRS) and WebFilings software.

Financing Corporation and REFCORP

Congress created two special-purpose funding vehicles as ways to deal with the savings and loan crisis in the late 1980s—the Financing Corporation (FICO) and the Resolution Funding Corporation (REFCORP).

<u>FICO</u>

FICO was established to recapitalize the Federal Savings and Loan Insurance Corporation (FSLIC) and its sole purpose is to function as a financing vehicle for the FSLIC Resolution Fund. FICO was originally authorized to issue \$10.825 billion in obligations, the proceeds of which was 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, leaving its sole function to service the outstanding debt. Outstanding FICO bonds mature in 2017 through 2019.

FICO is housed within the OF and the oversight of all FICO's activities is the responsibility of the OF. FICO is under the management of a directorate comprised of the CEO of the OF, who has no term limit, and two FHLBank presidents serving a one year term. The FHLBank presidents serve as Chairman and Vice Chairman of the FICO board. The directorate serves without compensation and FICO has no paid employees.

FICO is a mixed-ownership, tax-exempt government-sponsored corporation, chartered by the former FHLBB 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 Housing and Economic Recovery Act of 2008, oversight responsibility for FICO was transferred to the FHFA. In fulfilling its responsibility, the

FHFA conducts an annual examination of FICO in conjunction with the OF's annual examination that culminates with the issuance of a separate report of examination.

FICO used the proceeds received from the sale of stock to purchase zero-coupon U.S. 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 of 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 services 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.

<u>REFCORP</u>

Through the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), Congress created REFCORP. Up through 2011, the FHLBanks had an obligation to pay a portion of the interest on the approximately \$30 billion of bonds issued by REFCORP. The FHLBanks have fulfilled all their REFCORP obligations, and the U.S. Treasury is now responsible for all the interest due on REFCORP bonds. The board of directors of REFCORP is two FHLBank presidents appointed by the U.S. Treasury Department and the CEO of the OF. The only connection between REFCORP and the FHLBanks is that the REFCORP board is drawn from FHLBank and Office of Finance officers.

Examination Guidance

A workprogram for the OF and the FICO accompanies these guidelines. The examiner must perform worksteps sufficient in coverage to document the basis for conclusions on the quantity of risk and quality of risk management pertaining to this area. Transaction testing is mandatory and the examiner must document sufficient worksteps from Section 4, *Testing*, to support the findings and conclusions from this examination module.

In determining the extent of review and testing to be conducted in completing each examination, the examiner should take into account any applicable FHFA off-site monitoring or analysis reports, such as analyses of the quality and effectiveness of corporate governance practices, financial condition and performance, economic and housing industry conditions, internal controls, and audit coverage relating to the OF's activities.

NOTE: Text in (*italics*) referenced in a workstep represents illustrative guidance that serves as suggestions for specific inquiry.

1. Scope of Examination Work Performed

- 1) Review past reports of examination for outstanding issues or previous problems.
- 2) Review FHFA off-site monitoring or analysis reports, and workpapers produced as part of on-going monitoring, related to the OF.
- 3) Assess the status of outstanding Matters Requiring Attention and Violations.
- 4) Review internal audit reports for outstanding issues relating to the OF.
- 5) Review minutes of meetings of the board of directors and relevant board and management committees for any issues.
- 6) Document activities performed to evaluate potential risks related to the OF's activities.
- 7) Evaluate any significant operational changes that have been implemented since the preceding examination or are being considered that may affect the ability of the FHLBanks to raise funds in the capital markets.

Summarize the work performed in the examination of the OF. To the extent there were modifications to the originally planned scope based on concerns identified during the examination, document those changes and the reasons for such changes.

2. Description of Risks

The OF differs from the other entities regulated by FHFA. As a result of the unique nature of the OF's business, it is predominantly faced with two types of risk—operational risk and risks associated with governance. It has no portfolio of its own, and thus is not subject to market risk. It has limited credit risk by (1) having dealers act as principals, and not agents, of the FHLBanks, (2) qualifying dealers based on their capital, a dealer compliance assessment, and other factors, and (3) relying on "auto-charge" agreements (similar to standby letters of credit) to ensure that the dealer takes possession and pays for the securities underwritten.

The risks at the OF, with respect to individual transactions, are further reduced because of the granularity of the transactions. OF issues on behalf of the FHLBanks many thousands of separate bonds in a year, so an operational failure on one bond should not have any major effect. Furthermore, the OF issues a COs only upon the specific request of an FHLBank(s) and that FHLBank(s) participates in the closing telephone call with the underwriter.

In general, the risks faced by the OF are associated with:

- Debt issuance and the reliance on external parties such as underwriters and the Federal Reserve Bank of New York
- *Debt servicing, including the management of intra-day liquidity*
- Business continuity as the OF is in the markets daily issuing debt and servicing debt
- Information technology, since most key systems are custom applications
- Governance
- Internal audit, especially information technology
- *Reputation or image risk that can arise, in part, from investor suitability issues.*

The OF is also responsible for preparing the offering materials, including the combined financial reports, associated with the issuance, marketing, and sale of COs.

- 1) 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.
- 2) Assess the adequacy of the OF's and the FICO's board of directors' and senior management's oversight of the risks arising from their activities.
- 3) Review board of directors minutes and evaluate if the board is reviewing key activities and policies of the OF and the FICO.
- 4) Determine if key risks are appropriately reviewed by the board of directors in a timely manner. (*Does the board meet frequently throughout the year?*)
- 5) Review internal reports used by senior management to provide adequate oversight to each key risk area. (*Are the reports comprehensive and address all risks?*)
- 6) Evaluate if senior management takes appropriate action(s) to identify control failures and if it takes appropriate action(s) to implement corrective action(s).
- 7) Obtain and review any study, audit, or any type of assessment done by the OF, outside consultants, auditors, etc. concerning the operations of the FICO.
- 8) Review any processes used by the board of directors and/or FICO's Secretary/Treasurer to monitor the operations of the FICO.

3. Risk Management

Risk Identification Process

- 1) Evaluate the process used by management to identify risk and whether management takes appropriate and timely action to control risk. *(Has the identification of potential risk resulted in establishing appropriate controls?)*
- 2) Determine if management takes appropriate action to address risks identified as a result of risk identification processes. (*Does management coordinate risk mitigation throughout the organization?*)

Organizational Structure

- 1) 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.
- 2) Determine if the organizational structure supports the goals of the OF and affords proper separation of duties.
- 3) Evaluate key personnel's primary duties, responsibilities, and the technical expertise of personnel, note training efforts to maintain current skills.
- 4) Evaluate any cross training of personnel to help ensure sufficient trained staff is available.
- 5) Evaluate senior management's coordination among key departments such as risk management, information technology, debt issuance, debt servicing, investor relations, accounting, and human resources as appropriate.
- 6) Evaluate the effect of any significant changes made since the last examination, including any anticipated changes by management in the near future.

Policy and Procedure Development

- 1) Determine if the OF has adequate policies, procedures, and guidelines governing debt issuance, debt servicing, dealer selection, and dealer activities monitoring and evaluate their appropriateness.
- 2) Determine if senior management has implemented adequate departmental policies, procedures, and guidance to ensure sufficient controls are in place.
- 3) 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.
- 4) Determine whether the OF has clear written policies and procedures to specifically address underwriters' suitability.
- 5) Determine if the OF has clear policies, procedures, and guidelines specifically to promote high disclosure standards. (What is the process that management takes to determine that CO disclosures meet the highest disclosure standard? Is internal OF guidance appropriate for development of combined financial statements?)

- 6) Determine whether the OF has policies and procedures in place to prevent the direct issuance of a CO to another FHLBank as restricted by regulation⁴.
- 7) Determine whether the OF has policies and procedures in place to modify posted rates for DNs as FHLBank demand for DNs or market conditions change.
- 8) Assess the policies and procedures over selecting and updating index values and ensuring that they are correctly and accurately entered into the servicing system.
- 9) Determine whether the policies, procedures, and practices that the OF uses to qualify and disqualify dealers are clear and that they are adhered to by OF management and staff. (Does the OF's dealer compliance program have an appropriate process for ensuring dealers are qualified? Are programs in place to promote the participation of new dealers in approved selling groups? If so, are such programs appropriately managed and is established criteria clearly defined?)
- 10)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.
- 11)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.
- 12) 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.
- 13)Determine whether the OF has clear written policies and procedures for ensuring that COs are issued consistent with the requirements of 12 CFR 1273.8(c)(4) of FHFA regulations, which require that COs be issued efficiently and at the lowest all-in funding costs over time.
- 14)Obtain and review any FICO specific policies, procedures, and practices. Determine if policies and procedures provide clear guidance and adequate controls for servicing its outstanding obligations. Review investment policy of FICO.

⁴ An FHLBank is generally prohibited by regulation from purchasing, directly or indirectly, securities from the initial issuance of a consolidated obligation.

Risk Metrics

- 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) Consider if formal risk tolerances for key risk areas, appropriate departmental policies, procedures, and guidelines have been established and sufficient reporting mechanisms are in place.

Reporting

- 1) Determine if all key areas of the OF provide adequate reporting to the board of directors or a committee of the board. *(Are the reports comprehensive and presented in a clear and meaningful fashion?)*
- 2) Determine if line management provides adequate reporting to senior management to assist in ongoing monitoring of day-to-day activities. (Do the reports evaluate compliance with established risk metrics? Does the OF have reporting processes in place to identify exceptions to budget? Is reporting related to potential operational risks adequate?)

Internal/External Audit

- 1) Refer to the examination module on Internal and External Audit for guidance regarding the evaluation of internal audit activities.
- 2) Select representative audits and determine the quality of internal audit activities.
- 3) Determine if internal audit appropriately tracks all findings to a satisfactory resolution.
- 4) Evaluate whether the internal auditor department's skill sets are commensurate with the needs of the OF. (Do deficiencies in audit department expertise require outsourcing parts of the audit function? Is the outsourcing of such work appropriate? Have outsourced audits resulted in quality assessments of potential risks to the institution?)

Determine the level of audit activities for FICO, including reviewing the current year's audit plan and evaluating its adequacy. Assess any audit concerns for FICO. *Information Technology*

- 1) Determine if adequate management information systems exist to promote adequate day-to-day monitoring to provide timely identification of trends. (*Does the information system provide standardized reports that track compliance with risk limits?*)
- 2) Refer to the Information Technology Risk Management Program examination module for guidance regarding the evaluation of IT activities.
- 3) Determine the adequacy of management's processes to identify and control IT risks. (Are risk assessments performed on the various business activities? Have appropriate controls been established for new IT initiatives? Is management held accountable for implementing such initiatives on-time and within budget? Is management held to ensuring desired outcomes of new initiatives are achieved?)
- 4) Determine if management has appropriate controls over vendors who provide critical processing services. (Are third-party vendor policies enacted through service contracts?)
- 5) Evaluate the processes used to identify and maintain adequate controls over all input and output.
- 6) Determine if management has implemented sufficient controls to identify and ensure that all processing is well-documented to support all established IT standards.
- 7) 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.
- 8) Refer to the examination module for Business Continuity Planning for guidance regarding the evaluation of business continuity planning and recovery.
- 9) Obtain and review the last recovery center risk assessment and determine if distance, capacities, and various types of disasters are considered.
- 10) Obtain and review lines of business resumption plan(s) (BRP) and evaluate for adequacy. Consider the last test of the BRP and management's ability to address any identified areas that needed improvement. (Have all departments within the OF participated in BCP/ BRP tests? Have these tests shown that the OF will be able to function in the event of a disaster? Have these tests considered the possibility of one department's reliance on another department at the time of a potential disaster?) Coordinate examination activities in this area with examiners working in the Operational Risk area.

- 11) 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 bookentry system.
- 12) As appropriate, review and complete other areas of the examination guidance and workprograms that address automated and/or manual processing (end-user computing, or EUC). (Does the regulated entity have a formal policy covering EUC applications?)
- 13) Obtain from senior Risk Management personnel how workflow is diagramed and updated for each EUC.
- 14) Evaluate the processes used to identify all EUC applications and maintain adequate controls over input and output as well as any calculations done within each EUC application.
- 15) Determine if management has implemented sufficient controls to identify and ensure that all EUC are well-documented to support established standards for EUC.
- 16) Determine whether the internal controls on updating and maintaining the automated servicing system are adequate and appropriate.
- 17) Determine if automated calculation of interest payments accommodates all types of issuances or whether it requires "work-arounds."
- 18) Determine whether the automated servicing system accurately incorporates all relevant features of each issuance. (For example, does the servicing system need "work-arounds"?)
- 19) Review the management reports and adequacy of systems used to monitor the cost of debt products relative to comparable instruments issued by other government-sponsored enterprises. (Can time series spreads be readily generated? How is pricing compared to U.S. Treasury or agency bonds?)
- 20) Identify the sources of data used by the OF and determine if controls are effective to help promote accurate and timely gathering of data.
- 21) Determine how management verifies data accuracy for each source.
- 22) Determine the adequacy of documentation to denote end-to-end collection of data, use of data, and output of data.
- 23) Evaluate the processes used to validate model adequacy and maintain a satisfactory level of documentation.

- 24) Identity all models used (Principia, A. Kalotay, etc.) and evaluate the workflow of each model used and determine if adequate controls are in place throughout the process.
- 25) Determine the extent that various data are shared with the FHLBanks or other interested parties.
- 26) Assess all unique connections in and out of the OF processing environment, considering all third parties used by key departments as well as by IT.
- 27) Review results of the last quarterly access reviews and determine if all required access reviews were performed and requested changes made. (See access approval forms for FHLBanks and dealers and documentation that access for all appropriate users is checked quarterly.)
- 28) Test in FMS that Tier 1 (related to capital strength) underwriters do not have the ability to write complex COs.
- 29) Confer with the examiner conducting the IT review to determine whether the Unix/Sybase audit has disclosed any significant control weaknesses.
- 30) Ensure that trade data are "locked" to prevent any changes once finalized and "released" by the funding officer.
- 31) Determine whether data entry internal controls are adequate.
- 32) Determine that physical access by employees to FedLine Advantage access rights, and access controls are appropriate.

Regulatory Compliance

- 1) Determine whether the OF debt issuance activities are in conformance with guidelines established by its board of directors. Determine whether these guidelines meet the criteria established in 12 CFR 1273.8(c)(1).
- 2) Determine whether OF issuance activities comply with applicable laws and regulations, especially 12 CFR 1273.8(c) (4).

4. Testing

Debt Issuance Effectiveness

- 1) Review periodic analyses and reports on debt issuance provided to the OF board of directors to assess current debt issuance levels, trends and practices.
- Review various publications on debt issuance (Daily Commentary, Weekly Report, Monthly Review, etc.) issued by the OF to assess current debt issuance levels, trends and practices.
- 3) Review minutes of the Financial Officers group and the Funding Officers group to assess current debt issuance levels, trends and practices.
- 4) Interview the director of long-term funding and the director of short-term funding to ascertain issuance trends, staffing and IT adequacy, changes to issuance practices, and how they ensure COs are consistent with the requirements of 12 CFR 1273.8(c)(4) of FHFA regulations.
- 5) Review any changes to Issuance Practice Bulletins since the last examination and assess compliance with these guidelines.
- 6) Review any changes to Dealer Issuance Bulletins since the last examination and assess OF's compliance monitoring system.
- 7) Review and assess compliance with short-term and long-term desk policies and procedures.
- 8) Observe the daily process of setting pricing guidelines for DNs and bonds.
- 9) Assess the indication rate process for DNs, TAPs, and callables and review past indication rate reports and identify the source of any large difference between indication and actual rates.
- 10) Review the process for developing, distributing, and archiving the CO indicative rate curve.
- 11) Assess effectiveness by reviewing issuance costs relative to Treasury, other GSEs, and pricing indications.

- 12) Observe the auction processes and evaluate if debt issuance IT systems are functioning properly including calculating auction winners correctly and allocating funds correctly to winning dealers and appropriate FHLBanks.
- 13) Review the OF operational incident report for any events associated with debt issuance. Determine if the root cause is properly identified and the accuracy of any loss calculation.
- 14) Review the electronic confirmation process and determine if any trades have not been confirmed by a dealer.
- 15) Evaluate the timeliness and accuracy of postings to the issuance platform, including the posting of current rates and trading activity.
- 16) Evaluate the process of how DN Window Rates, DN Auction offerings and results, and DN swap rates are posted to certain third-party information providers (Reuters and Bloomberg) and assess the adequacy of management controls.
- 17) Review each instance where the OF used its authority to limit, prohibit or redirect any bond trade.
- 18) Review any issuance prohibition periods for callables or TAPs and, if any, determine the compliance with any lockout periods.
- 19) Review the global debt issuance program. Determine the adequacy of any changes made to the program since the last examination. Determine if global issuance frequency is consistent with requirements established by the Financial Officers group. Determine if global debt issuance is consistent with supporting market access for COs. Sample the supporting documentation for global debt issuance and "passes." If issued, assess if dealers are not releasing pricing details before the OF notifies the marketplace.
- 20) Assess the adequacy of the ranking methodology used to select dealer eligibility for global debt issues as part of the lead, co-manager, or distribution group.
- 21) Assess the adequacy of the dealer outreach program and efforts to expand the pool of eligible dealers.
- 22) Determine whether the OF has a methodology to assess whether the compensation for underwriters is appropriate and reasonable.
- 23) Determine if the OF or an FHLBank has repurchased any recently issued debt to relieve any financial pressure on a dealer because of adverse market movements.

Funding Contingency Plan

- 1) Assess the adequacy of the Funding Contingency Plan.
- 2) Assess if periodic tests of the plan are sufficiently robust and that test results are reported to the OF board of directors.

Debt Servicing

- 1) Determine whether interest payments on COs are accurately calculated.
- 2) Determine if there have been recent instances where interest payments have not been calculated correctly.
- 3) For scheduled debt settlements and principal and interest payment activity, interview staff and observe staff inputs as needed and obtain screen prints or necessary servicing reports.
- 4) Determine whether the OF is timely and accurately implementing bond calls when requested by the FHLBank that is the principal obligor for the bond in question. Evaluate the call notification process and determine adequacy.
- 5) Determine whether the OF accurately calculates the interest rate on floating-rate instruments at reset dates and whether it uses the appropriate index.
- 6) Interview the manager about finalizing Cash Sheet, determine if sufficient metrics exist to detect problems, issues, trends, and quality of controls and determine if any outstanding un-reconciled items exist and if management is taking appropriate steps to address those.
- 7) Assess the input and output process of COs by the OF into the Federal Reserve Bank of New York's book entry system.
- 8) Select a sample of bond issuance packages and review for completeness and accuracy.

Underwriters and Suitability

1) 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. *(What are the requirements for becoming a member in the selling group?)*

- 2) Interview the director of dealer compliance to determine how compliance reviews are conducted.
- 3) Review the workprogram the dealer compliance officer uses to complete compliance reviews to determine whether the scope of the reviews is adequate and complete. (Can compliance reviews provide reasonable assurance that each dealer adheres to established policies, procedures, and practices, including selling group agreements, the master underwriting agreement, the global debt agreement, and other laws and regulations?)
- 4) Review the workpapers of the compliance function for accuracy and completeness.
- 5) Review any audit of the compliance program.
- 6) Review all Issuance Practice Bulletins and Dealer Issuance Practice Bulletins that were issued since the previous OF examination and determine if they were sent to the proper recipients.
- 7) Determine whether there have been any instances where the application of special criteria resulted in either the retention or disqualification of a dealer.
- 8) Review auto-charge agreements to determine which dealers have limits and Capital Markets management's monitoring of the same.
- 9) Review OF's last assessment of dealer access to OF systems to determine if dealer access is appropriate.

FICO Activities

- 1) Obtain and determine if the board adequately reviewed and properly approved FICO's operating budget. Determine if the budget was submitted and successfully approved by FHFA.
- 2) Assess the process of sending payments to FICO bonds to ensure timely payment from FICO. Describe flow of funds from FICO to bond payments.
- 3) Ensure FICO receives assessments from FDIC in a timely manner.
- 4) Evaluate the accounting process of FICO. Assess staffing assigned from the OF to perform the necessary duties of FICO.
- 5) Review the process used to maintain appropriate accounting records for FICO.

- 6) Consult with the examiner(s) assigned business continuity for the OF and coordinate any efforts to evaluate FICO's recovery abilities.
- 7) Determine if there are any operations that need to be captured in BRPs independently from the OF.
- 8) Determine if any changes occurred since the last examination, which may result in a different business continuity approach for FICO.
- 9) Evaluate the processes used by management to identify, implement, and maintain satisfactory internal controls for FICO. Assess internal control or business continuity concerns for FICO.
- 10) Determine if there are any FICO operations that need to be captured in business resumption plans independently from the OF.

Additional Considerations

- 1) Obtain copies of the annual budget of the OF. In consultation with OCA staff, evaluate and conclude on the adequacy of efforts to budget and control expenses, including accounts payable, payroll, capital assets/inventory, and executive compensation. *(Consider whether appropriate OF staff is assigned responsibility for controlling expenses and is held accountable for managing budgeted expenses.)*
- 2) Review and assess the process by which the OF prepares the Combined Financial Report.
- 3) Review one or more unsecured credit reports for accuracy and timeliness.

5. Conclusions

- 1) Summarize conclusions for all examination work performed, including work performed by other FHFA staff as it relates to the OF and FICO. Develop a memorandum describing the risks to the institution resulting from weaknesses identified in the institution's practices. The memorandum should clearly describe the basis of conclusions reached and summarize the analysis completed. Within the memorandum, discuss the types of risk the OF and FICO are exposed to (e.g., operational); the level of risk exposure; the direction of risk (stable, decreasing, increasing); and the quality of risk management practices (strong, adequate, weak). A memorandum must be prepared irrespective of whether the examiner's assessment is positive or negative. The summary document should include recommended component ratings for Management and Operational Risk for the OF and FICO.
- 2) Conclude on the responsiveness to previous examination findings. Evaluate the adequacy of the OF's response to previous examination findings and concerns.
- 3) Develop findings and prepare findings memorandums, as appropriate. Based on examination work performed, develop findings communicating concerns identified during the examination. Findings should identify the most significant risks to the institution and the potential effect to the OF resulting from the concerns identified. Such documents should describe a remediation plan specifying the appropriate corrective action to address examination concerns and establish a reasonable deadline for the OF to remediate the finding. Communicate preliminary findings to the EIC. Discuss findings with OF personnel to ensure the findings and analysis are free of factual errors.
- 4) Develop a list of follow-up items to evaluate during the next annual examination. In addition to findings developed in the steps above, include concerns noted during the examination that do not rise to the level of a finding. Potential concerns include issues the OF is in the process of addressing, but require follow-up work to ensure actions are completed appropriately. In addition, potential concerns should include anticipated changes to the institution's practices or anticipated external changes that could affect the institution's future practices.

Workprogram

1. Scope of Examination Work Performed

Workpapers must document the examination activities undertaken to evaluate potential risks related to the OF.

2. Description of Risks

- Identify areas of concern pertaining to the OF's ability to carry-out its day-to-day activities
- Assess current risks and trends in the risk to the organization
- Evaluate changes within the organization or industry affecting risk
- Evaluate the OF's risk-identification practices and conclude on their adequacy

3. Risk Management

- Assess and conclude on the adequacy of the organization's risk identification process
- Assess and conclude on the overall adequacy of internal controls, including an evaluation of:
 - The OF's organizational structure
 - Policy and procedure development
 - Appropriateness of risk metrics
 - Reporting by management and the board
- Assess and conclude on the internal and external audit of risks
- Assess and conclude on the adequacy of the OF's information technology and controls
- Assess and conclude on the adequacy of the organization's efforts to ensure:
 - Compliance with laws, regulations and other supervisory guidance
 - Compliance with the organization's policies and procedures

4. Testing

• Complete testing, as appropriate, to assess adherence with examination standards

5. Conclusions

- Summarize conclusions for all examination work performed related to the OF and FICO
 - Conclude on the level of risk to the organization
 - Include an assessment of the adequacy of an organization's monitoring of risk and establishment of internal controls to mitigate risk
- Conclude on responsiveness to examination findings from previous examinations
- Develop examination findings, as appropriate
- Identify areas requiring follow-up examination activities or monitoring