

## Federal Home Loan Banks

**Primary Credit Analysts:**

Daniel E Teclaw, New York (1) 212-438-8716; daniel\_teclaw@standardandpoors.com  
Sunsierre Newsome, New York (1) 212-438-2421; sunsierre\_newsome@standardandpoors.com

**Secondary Credit Analysts:**

Vandana Sharma, New York (1) 212-438-2250; vandana\_sharma@standardandpoors.com  
Vikas Jhaveri, New York (1) 212-438-3693; vikas\_jhaveri@standardandpoors.com

### Table Of Contents

---

Major Rating Factors

Rationale

Outlook

Critical Public Policy Role And Integral Link To The Government

Profile: Critical Role In The U.S. Housing Market

Support And Ownership: Individual Banks Are Member Owned

Strategy: Maximizing Advances To Members

Risk Profile And Management: Satisfactory Overall

Accounting

Profitability: Weak, But Acceptable

Capital: Adequate Overall

Related Criteria And Research

# Federal Home Loan Banks

## Major Rating Factors

### Strengths:

- Government-related entity (GRE) with critical public-policy role and integral link to the government
- Primary liquidity provider to U.S. mortgage and housing market participants
- Diverse global investor base enables ample liquidity at low funding costs across maturities
- Excellent asset quality in lending portfolio

None

### Weaknesses:

- Private-label residential mortgage-backed securities' (RMBS) unrealized losses exceed retained earnings at four FHLBs as of March 2010
- Weak profitability in absolute terms
- Exposure to interest rate risk on mortgage assets and credit risk in private-label RMBS portfolios
- Potential for adverse regulatory changes related to broader housing government-sponsored entity (GSE) reform

## Rationale

Standard & Poor's Ratings Services' 'AAA' rating on the debt of the Federal Home Loan Bank (FHLB) System reflects the System's status as one of three housing GSEs, its important role as a primary liquidity provider to U.S. mortgage and housing market participants, its diverse global investor base that enables ample liquidity at low funding costs across maturities, and its excellent aggregate asset quality in its lending portfolio (advance business).

Stand-alone credit profile ratings on individual FHLBs reflect their excellent loan quality and funding/liquidity benefits that accrue to them as members of the FHLB System. The individual bank rating strengths are offset by weak but adequate risk-adjusted profitability by virtue of the System's cooperative membership structure, the level of impairments and risk-taking in their respective MBS portfolios, high exposure to interest rate risk at certain FHLBs that buy mortgages from their members, and potential for adverse regulatory changes related to broader housing GSE reform.

Despite the decline in demand for advances, we believe the FHLB System continues to be a reliable source of liquidity for all lenders who are members of an FHLB and participate in the U.S. housing market. The System banks have afforded their members a readily available liquidity channel without adding unwarranted credit risk in their lending activities. This support was evident through the financial crisis and the subsequent economic recession, as advances rose to a peak of \$1.01 trillion in the third-quarter 2008 before falling gradually (about 40%) toward precrisis levels. Advances totaled \$572 billion at the end of March 2010.

The System enjoys low funding costs on its debt ("consolidated obligations") due to joint and several liability on the combined strength of the 12 independent FHLBs and the implicit government support the system receives as a GSE. Through the crisis, except for a very short time, the FHLB System spreads were nearly as strong as those of Fannie

Mae and Freddie Mac. There was a short period of higher spreads when the market thought the conservatorships of Fannie Mae and Freddie Mac reflected stronger government support for them than for the FHLBs. This was the case even though the U.S. Treasury clarified that all three would be treated equally through the period of conservatorship. Although liquidity across longer-dated maturities was strained, the FHLB System was readily able to refinance its debt at shorter maturities. As market confidence improved, the System was again able to fund regularly on medium and longer-dated maturities.

The international investor base consists of many sovereigns. However, current global economic weakness has brought investors back to the U.S. "safe haven," and domestic financial institutions awash with deposits and weak loan demand have also invested excess liquidity in FHLB System debt. Nevertheless, aggregated consolidated bond funding costs continued to deteriorate during April 2010--a trend that began in November 2009. We expect the FHLB System's funding costs to be on par with Fannie and Freddie, with spreads slightly above U.S. Treasuries, which explicitly include the full faith and credit of the U.S. government.

The FHLB System maintains excellent asset quality through its loan portfolio (representing 59% of assets). Across the system and throughout its history, no FHLB has taken a single loss related to its advance business. Members must secure the advances, and FHLBs only lend as much as discounted collateral policies would warrant. During the past two years, we believe the System banks have been appropriately modifying collateral-management guidelines, increasing haircuts for additional perceived risk in collateral types or troubled originators. Furthermore, troubled originators must deliver their pledged collateral to their respective FHLBs for collateral management and security. If a member runs into problems so that the Federal Deposit Insurance Corp. (FDIC) shuts it down, the FHLB either transfers advances to an acquiring entity or, more likely, the FDIC pays to release the abundant collateral and settle the closing bank's liabilities. Currently, the FHLB lien supersedes even depositors in winding down a bank.

As long as the FHLB system structure/organization continues operating in its current form, we do not envision a change to this policy. If such a change were to occur, FHLBs could become somewhat reticent to lend without a significant change to collateral haircuts or policies. Ultimately, this could disadvantage smaller lenders (that generally have fewer liquidity alternatives than do larger banks), even as the U.S. government would want them to continue lending into the mortgage and housing market.

In addition to advances, the FHLB System provides liquidity to the market by purchasing residential mortgage-backed securities (RMBS). MBS totaled \$156 billion at March 31, 2010 (approximately 16% of assets). Although they were all rated 'AAA' at purchase, most FHLBs expanded their investment selection to include nonagency RMBS supported by Alt-A and subprime mortgages, which represents approximately 32% of the combined total investment portfolio (about 5% of total assets). The mortgage and housing market crisis drove values of these bonds down significantly. Few securities have actually realized losses due to credit, but ongoing other-than-temporary impairment (OTTI) testing indicates the FHLBs expect some losses in the later lives of the bonds. Illustrating the credit deterioration, of the \$220 billion in System investment securities, 9.3% is now below investment grade, compared to 9.2% at the end of 2009. The level of securities rated below investment grade was only 1.2% at year-end 2008.

The FHLBs have iteratively revalued these bonds as prescribed by U.S. generally accepted accounting principles (GAAP). They recorded \$2.4 billion in OTTI charges during 2009 and an additional \$233 million of such charges during first-quarter 2010 related to prospective credit losses within the bonds. The lack of liquidity that occurred in the crisis reflects the remaining noncredit-related impairment that is classified in accumulated other comprehensive

income (AOCI) as unrealized losses. These numbers have been declining as liquidity returns to the market and shores up the market values.

However, we are concerned that at five of the FHLBs (Boston, Pittsburgh, San Francisco, Seattle, and Indianapolis), the level of unrealized losses approaches and/or exceeds the retained earnings of the FHLB. This would eliminate its cushion to cover any other unexpected credit loss. During the past two years, the fair-value write-downs derived from market prices have significantly exceeded the expected levels of credit loss for the individual securities, and have created capital gaps. Although we believe the liquidity returning to the market will reduce the level of unrealized losses, it is possible that certain losses will be credit-related and will hurt the FHLBs' retained earnings and capital base.

As part of a cooperative structure, the FHLBs earn relatively narrow net spreads between their assets and liabilities. Although the FHLBs' profitability measures are weak in absolute terms, they are satisfactory in our view of the low-risk nature of their core advance business. In normal economic conditions, normalized, plain-vanilla total revenue streams are adequate to cover overhead and pay a dividend to the FHLBs' members. However, unstable capital markets have driven economic volatility in two areas of FHLBs' earnings: credit-related impairments on RMBS and derivative marks to market on derivative and hedging activities. FHLB System net income decreased \$20 million year-over-year due primarily to net losses on derivative and hedging activities. Lower OTTI charges and lower net losses on advances and net gains on trading securities partially offset these losses.

Housing GSE reform, which is not in the current financial reform legislation, is still likely to affect the Federal Housing Finance Agency (FHFA) and its three housing-related GREs--the FHLBs, Fannie Mae, and Freddie Mac. At this point, we have not seen any specific proposals with respect to the FHLBs. Therefore, we believe it's premature to change our view on the expectation of ongoing support from the U.S. government. We expect to see some preliminary proposals to consider by the middle of 2011.

## Outlook

The outlook on each FHLB except FHLB-Seattle is stable (see Federal Home Loan Bank of Seattle, published July 2, 2010, on RatingsDirect). We expect the FHLB System, as a GRE, to continue to benefit from the implied support of the U.S. government for its consolidated debt obligations, and to continue to make advances. However, if losses on its private-label mortgage-backed securities exceed our expectations and affect profitability and consequently capital on certain FHLBs, or if possible legislation or regulatory developments have an adverse affect on the System, resulting in less implicit government support, we could lower our ratings.

## Critical Public Policy Role And Integral Link To The Government

Through implementation of our GRE ratings criteria (see Enhanced Methodology And Assumptions For Rating Government-Related Entities, published June 29, 2009, on RatingsDirect), we reflect our views on the importance of a GRE's role to the government. We define the strength of the link between the FHLB System and the U.S. government as integral. Through our criteria, we classify an individual FHLB's role, in general, as very important. We assign stand-alone credit profiles for each FHLB based on our normal review process and incorporate our expectation for ongoing support that the government extends through its regulatory supervision by the FHFA. We believe a single FHLB's weakness could have a systemic impact in terms of investors' perception of System strength

or weakness in a confidence-driven environment. In part, that is why we define the link between any one FHLB and the government as very strong, because a financial distress/default of the GRE would significantly affect the government's reputation, or create a perception of weakness. The likelihood of extraordinary support is very high, resulting in a prescriptive rating from our criteria tables that is one to three levels above the individual FHLB's stand-alone credit profile for government support.

We believe the role of the FHLB System for the government is critical. Its main purpose is to support its members' housing and community-investment activities. The System is a reliable source of liquidity through secured financing and MBS purchases that a private entity could not readily undertake, especially without an active securitization or covered bond market. We believe the government likely would conduct this function itself if the GSE did not exist. The FHLB System is one of the primary channels the government has established to ensure consistent availability of liquidity to the residential housing markets, as evidenced by the government's provision of GSE credit facilities (expired Dec. 31, 2009, unused) to all three housing GSEs.

Another reason for likely government support is that one FHLB could jeopardize the integrity of the joint and several liability related to the System's consolidated obligations, and the repayment of the same. The consolidated obligations are joint and several obligations of the 12 FHLBs, but do not carry explicit support (i.e., guarantee) of the U.S. government. So each System bank is responsible to the registered holders of the consolidated obligations for the payment of principal and interest on all consolidated obligations issued by the FHLBs. Per our criteria, the rating on the FHLB System's consolidated obligations is equalized to the 'AAA' sovereign rating of the U.S. government given the almost certain likelihood of extraordinary government support. The consolidated obligations continue to price at a narrow spread over U.S. treasuries (as they generally have throughout the crisis), affording the FHLBs and their members low funding costs.

With consolidated obligations outstanding of \$876 billion at March 31, 2010, the System is among the largest providers of mortgage credit in the U.S. This outstanding balance is down 23% year-over-year from \$1.1 trillion, reflecting lower advance demand and improved liquidity alternatives in the debt capital markets for member banks.

## **Profile: Critical Role In The U.S. Housing Market**

We view the FHLB System as serving an important role in the U.S. housing market by providing liquidity to its members. The 12 individual FHLBs are located in 12 distinct regions of the U.S. The public purpose of the 12 FHLBs is to provide members with advances as a supplement to deposit flows and other funding sources in meeting residential mortgage-credit needs.

Congress created the System under the Federal Home Loan Bank Act of 1932. The FHFA, an independent agency of the U.S. government, closely regulates the FHLBs on expectations, requirements, and limitations of business activity.

We believe we can differentiate the individual FHLBs, albeit in a narrow band, because they all have the same fundamental mission, with relatively minor variations in business models driven by managerial risk appetite and tolerance. Because each FHLB conducts its own affairs independently and is liable for its own lending, profitability, risk management, governance, and counterparty management, we assign different counterparty ratings for each FHLB. The FHLB Act is sufficiently prescriptive to keep each FHLB's scope of activities highly consistent. Management teams try to differentiate themselves by emphasizing various business activities for the benefit of their respective members. For example, FHLBs all capitalize essentially the same way to support three primary asset types:

advances to members, investment securities portfolio, and mortgage purchases from members. Management teams emphasize the origination levels of each of these types of assets differently, which offers us a view of their risk tolerance. One revenue-diversifying and separate business activity is the purchase of whole first mortgage loans from members under the Mortgage Partnership Finance (MPF) program, initiated in 1997, and the Mortgage Purchase Program (MPP), initiated in 2001. Under these programs, some of the FHLBs aggregated and ultimately carried these mortgage loans on their balance sheets because a suitable secondary market outlet never developed. FHLB acquisition of the loans, however, affords members an alternative to holding fixed-rate residential mortgage loans in their portfolios or selling them into the secondary market. The FHLBs share the risks associated with these loans with members: The originating lender-member bears a portion of the related credit risk, while the FHLB bears the interest rate risk.

Combined mortgage assets totaled \$69 billion at March 31, 2010 (7.1% of assets), down from \$85 billion one year ago. We expect the trend of winding down the MPF and MPP loans to continue as certain banks have discontinued the program.

The System's combined assets were \$966 billion and its advances were \$572 billion at March 31, 2010. These are down from their September 2008 peak of \$1.428 trillion and \$1.012 trillion, respectively, when member demand for reliable liquidity was high. Member advances have since declined because loan demand has waned, members are flush with deposits, and viability of other market sources of liquidity has returned.

## **Support And Ownership: Individual Banks Are Member Owned**

The FHLBs are owned by their members. Member institutions are primarily commercial banks and savings banks, but have grown to include credit unions and insurance companies. Membership consisted of the following mix as of March 31, 2010: commercial banks (5,667), thrifts (1,129), credit unions (1,015), and insurance companies (210). With passage of the Gramm-Leach-Bliley Act in 1999, membership in an FHLB became voluntary.

A member must contribute capital to belong to an FHLB. The member's stock requirement is generally based on its use of FHLB products, subject to a minimum requirement based on the member's mortgage-related assets. In return, the member may borrow on a secured basis at generally attractive rates from its FHLB. In addition, members may receive dividends on their shares in their FHLB, which helps to lower their all-in funding costs.

In 2006, the Federal Housing Finance Board (predecessor to the FHFA) adopted a rule prohibiting any FHLB from issuing additional stock to its member financial institutions if the amount of existing "excess stock" is more than 1% of the FHLB's assets. Excess stock is capital stock that a member holds above its initial purchase requirement as a condition of membership and/or to support its activities with the FHLB. Excess stock poses concerns for regulators because of members' abilities to put such stock back to the FHLB under certain circumstances, and because this capital can be used to support business activities that increase risk for the FHLBs. The rule prevents FHLBs that exceed the 1% threshold from paying stock dividends to members. As of March 31, 2010, the FHLBs of Atlanta, Boston, Chicago, Cincinnati, Indianapolis, Pittsburgh, San Francisco, and Seattle had excess stock outstanding greater than 1% of total assets. Each of these institutions was in compliance with excess stock rules. However, the FHFA currently classifies FHLB-Seattle as undercapitalized, and therefore prohibits it from repurchasing excess stock. Also, the FHFA must approve FHLB-Chicago stock repurchases according to its 2008 Consent Cease and Desist Order amendment.

Each FHLB's members elect all members of its board of directors, which is comprised of directors or officers of member institutions and independent directors not affiliated with member institutions. In 2010, the FHFA reconstituted the board of directors of the FHLBs' fiscal agent, the Office of Finance, with a board of directors consisting of all 12 FHLB presidents and five independent directors. The five independent directors will serve as the Office of Finance's audit committee. This committee will ensure that the FHLBs adopt consistent accounting policies and procedures to continue to create accurate and meaningful combined financial reports. This should result in a forum to improve processes, similar to that adopted to reflect consistent OTTI recognition in 2009.

## **Strategy: Maximizing Advances To Members**

Although each of the 12 FHLBs in the System is independently managed, most FHLBs have been emphasizing a strategy to maximize advances (loans to member banks). Some still have active mortgage portfolios that they have aggregated from their members (MPF and MPP), but these are slowly running off at some of the FHLBs. In the past three years, the FHLBs of Atlanta, Chicago, Seattle, San Francisco, and Dallas all announced that they would stop acquiring new mortgages under the purchased mortgage programs by ceasing to enter into new master agreements.

As of March 2010, the FHLBs of Chicago, Cincinnati, Des Moines, and Indianapolis maintained the largest percentage of the balance of mortgage loans held for portfolio with 33%, 13%, 11%, and 10%, respectively, of the combined total. No other FHLB held 10% or more of the combined mortgage loans. In 2008, FHLB-Chicago announced that it would continue to be an outlet for FHLBs' conforming mortgage loans that it concurrently sells to Fannie Mae and does not hold on its balance sheet. This program, MPF Xtra, has subsequently been offered to members of other FHLBs as an alternative to the legacy MPF program. This product is useful for smaller members who do not generate the volume to be a direct provider of mortgage loans to Fannie Mae or Freddie Mac.

The FHLBs all hold MBS near the 300% limit of capital because it is the most profitable business activity in their profiles. Most of the FHLBs' management teams strive to hold approximately 270% to 280% of capital to improve profitability in normal conditions. However, in March 2008, the regulator temporarily implemented higher investment levels so that each FHLB could increase its MBS holding capacity for qualifying (GRE agency--Fannie Mae/Freddie Mac) MBS originated after Jan. 1, 2008. The FHFA increased the limit to 600% of capital (from 300%) to improve liquidity in the stressed mortgage market. This increased limit for purchase expired in March 2010. In first-quarter 2010 the FHLBs of Des Moines and Topeka took advantage of the increased authority to purchase newly originated MBS with shorter maturities to help manage interest-rate risk.

Management at many of the FHLBs is focusing on attracting new members, particularly insurance companies and credit unions, to broaden the revenue side of these FHLBs' income statements through increased advances. They also have focused on cost containment in recent years to preserve their business models and sustain earnings platforms. Nevertheless, expenses have broadly increased because of SEC registration and other regulatory requirements, including those relating to risk management. The FHLBs ultimately strive to generate a sufficient level of income to pay for the required System contributions to Resolution Funding Corp. (REFCORP) and the Affordable Housing Program (AHP), as well as to continue to pay reasonable dividends to members and boost retained earnings.

## Risk Profile And Management: Satisfactory Overall

Interest-rate risk is the primary risk for the FHLBs, and they have managed this satisfactorily except in the cases of FHLB-Chicago and FHLB-Seattle. Chicago and Seattle's mortgage-portfolio dynamics created hedging challenges that the companies were ill-equipped to manage. We expect both to continue to experience earnings volatility due to the swings in derivatives gains and losses. The FHLBs face manageable credit risk and little funding risk given the high quality of investments they hold and the secured nature of their other financial assets.

### Credit risk: Adequate system-wide

Each FHLB sets its own credit policies, but within strict limits that apply to the System as a whole. At each of the 12 regional banks, there is a concentration of advances to a relatively small number of members, usually the largest members. In most districts, the top five borrowers hold about 50% of the advances. (The lowest top-five concentration is Des Moines with 40.5% and the highest is San Francisco with 71.1%.) Still, the secured nature of the FHLBs' lending and their ability to require appropriate capital when advances are made and keep it until advances are repaid substantially mitigate concentration risk.

Advances to members are adequately collateralized with predominantly high-quality mortgage collateral. In addition, each FHLB monitors its members' financial condition and can customize its collateral policies, advance rates, and security agreements by borrower, depending on perceived credit risk in the collateral and/or the counterparty. In accordance with the Federal Home Loan Bank Act of 1932, any security interest that any depository member grants to an FHLB generally has priority over the claims and rights of any other party, including depositors. (The exceptions are claims that would be entitled to priority under otherwise applicable law and claims secured by actual perfected security interests.) We observed this successfully play out recently with institutions that failed during the economic crisis. Repayment or assumption of advances has not yet occurred or been tested on any insurance company failure or sale. Given these factors, no FHLB has ever taken a credit loss on any member loan, and no losses on advances are likely.

Initially, the FHLBs' securities portfolios were designed to serve as a fundamental source of balance-sheet liquidity and to support interest-rate risk-management efforts. However, in reaching for yield, some of the FHLBs increased the credit risk in their investment portfolios by adding private-label RMBS backed by Alt-A and subprime mortgages. During first-quarter 2010, the FHLBs of Atlanta, Pittsburgh, and Seattle transferred all or certain private-label RMBS that had credit-related OTTI to their available-for-sale portfolios from held-to-maturity classification. This increases financial flexibility and allows management the option to sell these securities, though we recognize management's intent to hold these securities indefinitely. More than 80% of System MBS is held to maturity, and management has both the ability and intent to collect cash flows through maturity.

Another aspect of credit risk is counterparty credit related to derivatives. Each FHLB conducts its own derivatives business and generally limits counterparties to high-credit-quality entities. The FHLBs closely monitor these activities through credit analysis, collateral requirements, and other credit enhancements. Each FHLB has appropriate legal documentation with each of its counterparties, and is required to follow the requirements set forth by applicable regulation. Most FHLBs have tightened unsecured limits within these documents.

### Market risk: Not significant for most FHLBs in the System

In general, the FHLBs pursue matched asset-liability management. Their ample access to the debt markets helps facilitate this because the System can raise funds at a wide variety of maturities. The MBS investment portfolios,



however, introduce a degree of interest-rate risk because of their indeterminate maturities, as do the FHLBs' purchased mortgage portfolios, due to prepayment uncertainties. The individual FHLBs use derivatives primarily to lower funding costs as part of their interest-rate risk management. As noted, the FHLBs are purchasing fewer mortgages and, therefore, reducing their need for a complex hedging book and operation.

Although each FHLB's portfolio is distinct, the combined FHLB System had investments of \$309 billion (32% of total system assets) as of March 31, 2010, including about \$44 billion of private-label RMBS (\$55 billion unpaid balances). More than 86% of these are held to maturity due to managements' abilities and intent to collect returns through maturity of the securities. At the end of first-quarter 2010, the FHLBs had recognized \$406 million of combined OTTI charges related to private-label RMBS and home-equity loan investments. Of the total, \$173 million was recognized in AOCI, resulting in net OTTI losses in earnings of \$233 million. The securities producing most of these charges carried the highest investment ratings at the time of purchase, and were supported by Alt-A and subprime collateral. However, Alt-A and subprime securities make up about one-half of the private-label RMBSs.

We expect some further increase in credit losses of the underlying securities. However, the levels we believe will be realized do not have material significance relative to the capital bases of most of the individual FHLBs, excluding Seattle and perhaps San Francisco. We expect the FHLB System's combined capitalization to remain satisfactory.

#### **Funding and liquidity risk: Well managed**

The System relies heavily on the capital markets for its funding. The FHLBs issue consolidated obligations through their fiscal agent, the Office of Finance. The 12 FHLBs are jointly and severally responsible for the debt. The FHFA, at its discretion, may require any FHLB to make the principal or interest payments due on any other FHLB's consolidated obligations, even in the absence of a default of the primary obligor. The consolidated obligations, as GSE debt, are favorably priced, typically at small spreads to U.S. Treasury debt. This access to favorably priced funding is a major strength of the System. In addition, each of the FHLBs takes deposits from its members, although these account for a relatively small proportion of funding.

The FHLBs maintain ample liquidity in their investment portfolios, even though the FHLBs with unrealized losses cannot readily liquidate their "held-to-maturity" portfolios. FHFA regulations stipulate minimum liquidity levels and tightly restrict eligible investments. The FHLBs' principal investments are MBS, Federal funds sold, commercial paper, and GSE securities. Investments rose to 32.0% as a percentage of assets at March 31, 2010, from 22.6% one year ago as advances continued to decline year-over-year.

## **Accounting**

All FHLBs became SEC registrants in 2006, which required the SEC, the FHLBs' regulator, and the FHLBs' external accountants to review the FHLBs' accounting practices closely. This in turn led to various restatements of past financial statements (primarily FAS 133-related). In addition, FHLB-Chicago had to restate its financials in first-quarter 2010 because of calculation errors in the cash flows from certain derivative and investment activities for three quarters of 2009. This was not material with respect to the System. The FHLBs will be required to comply fully with Sarbanes-Oxley Section 404 in 2010, although several FHLBs were already in compliance by year-end 2008.

The Office of Finance prepares combined (not consolidated) financial statements, aggregating the financial

statements of the 12 FHLBs, with eliminations for transactions among the FHLBs, but without adjusting for differences in accounting that arise given the options available under GAAP. The System is working to ensure that appropriate levels of consistency among the FHLBs' accounting reflect appropriate transparency to conditions and results within GAAP without directing uniform accounting options under GAAP for all FHLBs.

All 12 FHLBs implemented SFAS 150, "Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity" (FAS 150), retroactive to Jan. 1, 2004. This affects the unique capital structure of the FHLBs' member shares, in that regulatory capital now includes the portion of stock that has been reclassified as mandatorily redeemable to liabilities. Across the System, there was \$8.2 billion (about 0.85% of total assets, and approximately 16% of regulatory capital) of mandatorily redeemable capital stock on FHLB balance sheets as of March 31, 2010. The future level of member loans may affect whether the capital is actually redeemed by members.

Based on collateral held as security for advances and the fact that there has never been a credit loss on an advance, the FHLBs have not established loan-loss allowances for advances. The only loan-loss provisions are related specifically to mortgage-related (i.e., MPF/MPP) assets whose risk is insured and/or credit-enhanced with the member.

## **Profitability: Weak, But Acceptable**

The FHLBs' profitability measures appear weak when compared to non-GRE financial institutions. Nevertheless, we expect profitability to remain acceptable on a risk-adjusted basis given the FHLBs' low expenses, advantageous funding costs, and tax-exempt status that supports profitability measures. As cooperatives, the FHLBs strive to provide high-quality services at a reasonable or low cost that does not maximize profitability. Aggregate return on equity and return on assets (ROA) appear very weak compared with those of most other financial institutions, and are likely to remain so, as general competitive pressures and market forces have retarded spread on the FHLBs' advance book. On an ROA basis, the FHLBs generally earn 0.20%-0.30%, on average. For non-GREs/commercial banks, we view 1.0% as a reasonable earnings benchmark in a normal economic environment.

The System's cost of funds is very favorable and reflects its GRE status and its ability to raise funds at a small spread over U.S. Treasury rates. In addition to the direct return on a member's investment in the form of dividends, members benefit primarily from low funding costs on advances. Even when demand for advances has been strong, as cooperatives the FHLBs have not raised pricing materially (in line with their public-policy mission). Thus, profitability margins remain thin. The aggregate net interest margin increased to 0.49% as of March 31, 2010, from 0.39% in March 2009.

Normal operating costs tend to be very low, reflecting the wholesale nature of operations and the System's recent emphasis on cost control. Of late there has been some increase across the FHLBs due to higher information technology investment for financial and regulatory reporting. Although the FHLBs benefit from their exemption from income taxes, earnings are penalized by AHP- and REFCORP-related assessments. AHP supports members' affordable housing programs and REFCORP was created in 1989 to raise approximately \$30 billion to resolve thrift insolvencies. The REFCORP assessments, as mandated in 1989 legislation, were originally scheduled to end in 2030, but the expected date at which they will be satisfied now appears to be 2012 as a result of 1999 legislation that enabled the acceleration of payments toward this obligation.

Apart from their core lending activities, the FHLBs also earn a small spread on their non-MBS investment portfolios.

Investing in MBS normally generates wider margins, but Finance Agency rule limits the amount of each FHLB's MBS investment to 300% of its capital. Direct mortgage purchases on the balance sheet had contributed substantially to earnings when it was successfully executed, but it weakened earnings when hedging was ineffectively implemented. Now that management at some of the FHLBs is deemphasizing direct mortgage purchases, we expect lower volatility in these FHLBs' earnings streams, particularly for FHLB-Chicago and FHLB-Seattle as their portfolios and associated funding wind down.

The combined FHLB System profitability for first-quarter 2010 decreased slightly to \$325 million from \$345 million in first-quarter 2009. This was primarily due to net losses on derivative and hedging activities, which were partially offset by lower net OTTI losses. The FHLB System recorded \$233 million in net OTTI charges related to private-label RMBS investments and \$254 million of net losses on derivatives and hedging activities. FHLB-Topeka was the only bank to have a first-quarter loss, which was primarily related to derivatives and hedging activities.

We expect profitability to remain pressured as both funding costs and asset yields remain low and advance demand ebbs. We expect economic expansion to be slow, so advance demand will likely still decline even if the demand for advances precedes the new cycle by one to two quarters. As markets settle, we believe the volatility in the FHLBs' derivative positions should stabilize or improve.

## Capital: Adequate Overall

Capital adequacy is different for an FHLB than for other financial institutions. FHLB stock cannot be publicly traded. It can be issued, redeemed, or repurchased only at its stated par value of \$100 per share. If a member exits the System, the FHLB must redeem its stock subject to any applicable redemption period, which is five years for most FHLB stock. In addition, members have the right to put their "excess stock" to the FHLB (i.e., any stock holdings in excess of a member's minimum capital stock requirements, as established by the FHLB's capital plans), and the FHLB has the discretion to repurchase excess stock from members at any time. Because of the puttable/redeemable nature of the common shares, they lack some characteristics usually associated with permanent equity capital. Moreover, we believe there could be significant implications for the integrity of the System if any of the FHLBs were ever to suffer losses that caused members of that FHLB to record impairments on their FHLB stock investments. Nevertheless, some FHLBs have exercised discretion since mid-2008 by not paying dividends and returning capital to members more slowly, or by temporarily prohibiting repurchases of excess shares. FHLB-Seattle is restricted from redeeming or repurchasing capital stock or paying dividends without FHFA approval. Also, the FHFA must approve FHLB-Chicago's stock repurchases according to its 2008 Consent Cease and Desist Order amendment.

An FHLB is not permitted to redeem shares if doing so would cause its capital to fall below minimum required regulatory levels. There is some correlation between redemption requirements triggered by members exiting the System--or where a member's lower advance activity creates excess stock--and asset levels at the FHLB. Still, we perceive a significant difference in the quality of equity between any one FHLB's paid-in capital (which may be redeemed) and its respective retained earnings. Retained earnings typically have been thin.

In the current environment, however, all of the FHLBs have been growing retained earnings to provide capital support to their mortgage-lending and investing programs. The Gramm-Leach-Bliley Act codified a minimum capital-to-assets ratio of 4.0% (i.e., the sum of capital stock, retained earnings, and mandatorily redeemable stock divided by total assets at the end of the period) and safeguards to maintain this measure. For example, members

cannot make capital withdrawals if such withdrawals would cause an FHLB to fail this 4.0% test. Under certain circumstances, members can be required to contribute additional capital so the FHLB meets this test.

The Gramm-Leach-Bliley Act required each FHLB to develop an individualized capital plan to be approved by the Federal Housing Finance Board. Only FHLB-Chicago, which is the only FHLB not to have implemented its new capital plan as of March 31, 2010, has a higher capital-to-asset ratio requirement of 4.5%, at least until it implements its new capital plan. The aggregate capital-to-assets ratio was 6.17% as of March 31, 2010, compared with 4.92% in March 2009. Each FHLB adequately passed the capital-to-assets test as of March 31, 2010.

## Related Criteria And Research

- Federal Home Loan Bank of Seattle, July 2, 2010
- Enhanced Methodology And Assumptions For Rating Government-Related Entities, June 29, 2009

<b>FHLB System Financial Statistics</b>						
	<b>Atlanta</b>	<b>Boston</b>	<b>Chicago*</b>	<b>Cincinnati</b>	<b>Dallas</b>	<b>Des Moines</b>
Rating	AAA/Stable/A-1+	AAA/Stable/A-1+	AA+/Stable/A-1+	AAA/Stable/A-1+	AAA/Stable/A-1+	AAA/Stable/A-1+
<b>(Mil. \$)</b>						
<b>Assets</b>						
Advances	105,474	35,175	21,291	32,969	42,627	33,027
Mortgage loans, net	2,418	3,393	22,678	9,032	248	7,557
Investments, including MBS	37,337	22,300	40,319	23,875	14,855	23,236
Other	1,052	701	1,781	1,920	967	803
Total assets	146,281	61,569	86,069	67,796	58,697	64,623
<b>Asset composition (%)</b>						
Advances	72.10	57.13	24.74	48.63	72.62	51.11
Mortgage loans	1.65	5.51	26.35	13.32	0.42	11.69
Investments, including MBS	25.52	36.22	46.84	35.22	25.31	35.96
Other	0.72	1.14	2.07	2.83	1.65	1.24
Total assets	100.00	100.00	100.00	100.00	100.00	100.00
Advance concentrations: Top 5 concentration¶ (%)	60.70	45.30	41.70	54.10	60.20	40.50
Retained earnings	916	165	709	416	370	500
<b>Net Income</b>						
2010 1Q	48	23	1	43	16	30
2009	283	(187)	(65)	268	148	146
2008	254	(116)	(119)	236	79	127
2007	445	198	111	269	130	101
<b>Return on average assets (%)</b>						
2010 1Q	0.13	0.15	0.00	0.24	0.10	0.19
2009	0.16	(0.27)	(0.07)	0.32	0.21	0.21
2008	0.13	(0.14)	(0.13)	0.25	0.11	0.18

<b>FHLB System Financial Statistics (cont.)</b>						
2007	0.28	0.30	0.11	0.32	0.24	0.21
<b>Duration gap (months)</b>						
2010 1Q	0.8	1.9	1.3	0.1	2.0	0.6
2009	1.8	2.6	1.0	0.0	1.8	1.2
2008	5.7	(0.7)	(0.3)	(0.2)	2.3	(7.3)
2007	0.4	0.5	0.0	0.4	0.9	(1.4)
<b>Regulatory capital ratio (%)</b>						
2010 1Q	6.32	6.34	5.24	5.76	4.58	4.40
2009	6.07	6.20	5.11	5.81	4.45	4.60
2008	4.29	4.55	4.70	4.48	4.47	4.70
2007	4.26	4.37	4.87	4.43	4.22	5.10
Residential PLMBS - AFS - amortized cost	3,323	0	129	0	0	0
OTTI in AOCI	(664)	0	(63)	0	0	0
Gross unrealized gains	0	0	17	0	0	0
Gross unrealized losses	0	0	(1)	0	0	0
Estimated fair value	2,659	0	82	0	0	0
Residential PLMBS - HTM - amortized cost	8,206	2,775	2,869	164	483	35
OTTI in AOCI	0	(849)	(865)	0	(69)	0
Carrying value	8,206	1,926	2,004	164	415	35
Gross unrealized gains	16	122	259	0	0	0
Gross unrealized losses	(576)	(170)	(47)	0	(48)	(7)
Estimated fair value	7,646	1,878	2,216	165	366	28
Fair-value PLMBS (AFS & HTM)/amortized cost PLMBS (%)	89.38	67.67	76.65	100.20	75.76	80.71
Total Regulatory Capital	9,249	3,903	4,511	3,907	2,688	2,838
Required risk-based capital	2,716	1,362	4,097	417	517	852
Excess over risk-based capital	6,533	2,541	414	3,490	2,171	1,986
Excess stock	2,552	1,629	1,194	1,184	260	39
MRCS	481	91	470	412	8	7
<b>Members</b>						
YTD 2010	1,175	460	790	736	929	1,223
2009	1,195	462	792	735	923	1,226
2008	1,238	461	816	728	923	1,245
<b>Member failures</b>						
YTD 2010	13	0	2	0	2	5
2009	44	0	19	2	5	10

<b>FHLB System Financial Statistics (cont.)</b>						
2008	7	0	0	0	3	0
<b>OTTI - credit</b>						
YTD 2010	(46)	(23)	(44)	0	(1)	0
2009	(316)	(444)	(437)	0	(4)	0
2008	0	0	0	0	0	0
<b>Total impairment</b>						
YTD 2010	(64)	(21)	(29)	0	(7)	0
2009	(1,306)	(1,329)	(1,404)	0	(80)	0
2008	(186)	(382)	(292)	0	0	0
<b>Credit OTTI/total impairment (%)</b>						
YTD 2010	71.88	109.52	151.72	N.A.	14.29	N.A.
2009	24.20	33.41	31.13	N.A.	5.00	N.A.
2008	0.00	0.00	0.00	N.A.	N.A.	N.A.
<b>Retained earnings</b>						
YTD 2010	916	165	709	416	370	500
2009	873	142	708	412	356	484
2008	435	(20)	540	326	216	382
<b>OTTI in AOCI</b>						
YTD 2010	(664)	(849)	(911)	(0)	(69)	0
2009	(739)	(929)	(978)	(0)	(67)	0
2008	0	0	0	0	0	0
<b>OTTI in AOCI/retained earnings (%)</b>						
YTD 2010	72.49	514.43	128.49	0.02	18.59	0.00
2009	84.67	654.23	138.14	0.10	18.69	0.00
2008	0.00	0.00	0.00	0.00	0.00	0.00

Data as of March 2010, unless otherwise indicated. Atlanta is for top 10 exposures. Indianapolis is for top four exposures. San Francisco is for top four exposures. Cincinnati is for top four. AOCI-Accumulated other comprehensive income. OTTI-Other-than-temporary impairment. HTM-Held to maturity. AFS-Available for sale. \*Capital excludes \$1 billion deferrable subordinated debt issued June 2006. †Capital includes mandatorily redeemable capital stock, excludes AOCI. N.A.-Not available.

### Ratings Detail (As Of July 21, 2010)\*

#### Federal Home Loan Banks

Senior Unsecured (1 Issue)	AAA
Senior Unsecured (1 Issue)	AAA/A-1+
Senior Unsecured (6258 Issues)	AAA/Stable
Short-Term Debt (1 Issue)	A-1+

#### Sovereign Rating

United States of America	AAA/Stable/A-1+
--------------------------	-----------------

#### Related Entities

##### Federal Home Loan Bank of Atlanta

Issuer Credit Rating	AAA/Stable/A-1+
LOC Evaluation (0 Issues)	AAA/A-1+

##### Federal Home Loan Bank of Boston

Issuer Credit Rating	AAA/Stable/A-1+
----------------------	-----------------

<b>Ratings Detail (As Of July 21, 2010)*(cont.)</b>	
LOC Evaluation (0 Issues)	AAA/A-1+
<b>Federal Home Loan Bank of Chicago</b>	
Issuer Credit Rating	AA+/Stable/A-1+
Subordinated (1 Issue)	AA-
LOC Evaluation (0 Issues)	AA/A-1+
<b>Federal Home Loan Bank of Cincinnati</b>	
Issuer Credit Rating	AAA/Stable/A-1+
<b>Federal Home Loan Bank of Dallas</b>	
Issuer Credit Rating	AAA/Stable/A-1+
<b>Federal Home Loan Bank of Des Moines</b>	
Issuer Credit Rating	AAA/Stable/A-1+
<b>Federal Home Loan Bank of Indianapolis</b>	
Issuer Credit Rating	AAA/Stable/A-1+
LOC Evaluation (0 Issues)	AAA/A-1+
<b>Federal Home Loan Bank of New York</b>	
Issuer Credit Rating	AAA/Stable/A-1+
LOC Evaluation (0 Issues)	AAA/A-1+
<b>Federal Home Loan Bank of Pittsburgh</b>	
Issuer Credit Rating	AAA/Stable/A-1+
<b>Federal Home Loan Bank of San Francisco</b>	
Issuer Credit Rating	AAA/Stable/A-1+
Senior Unsecured (1 Issue)	AAA/Stable
LOC Evaluation (0 Issues)	AAA/A-1+
<b>Federal Home Loan Bank of Seattle</b>	
Issuer Credit Rating	AA+/Negative/A-1+
LOC Evaluation (0 Issues)	AA+/A-1+
<b>Federal Home Loan Bank of Topeka</b>	
Issuer Credit Rating	AAA/Stable/A-1+

\*Unless otherwise noted, all ratings in this report are global scale ratings. Standard & Poor's credit ratings on the global scale are comparable across countries. Standard & Poor's credit ratings on a national scale are relative to obligors or obligations within that specific country.

Copyright ( c ) 2010 by Standard & Poor's Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).