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## Federal Home Loan Banks

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# Federal Home Loan Banks

## Major Rating Factors

### Strengths:

- Government-related entities (GREs) with a critical public-policy role
- One of the primary liquidity providers to U.S. mortgage market participants, especially in times of stress
- Diverse global investor base that provides ample liquidity at low funding costs across maturities
- Excellent asset quality in the fully collateralized wholesale lending portfolio
- Sustained meaningful progress in lowering private-label mortgage-backed securities' (PLMBS) credit-related impairments

None

### Weaknesses:

- Challenges to broad-based growth in advances and core mission assets
- Small but growing exposure to nondepository financials, such as captive insurance companies
- Weaker capital than non-GREs
- Exposure to interest rate risk in mortgage and investment portfolios
- Uncertainty related to regulatory changes associated with broader housing finance reform

## Rationale

Standard & Poor's Ratings Services' ratings on the senior debt of the Federal Home Loan Banks (FHLB System) reflect the FHLB System's status as one of three rated housing government-sponsored enterprises (GSEs), its important role as a liquidity provider to U.S. mortgage and housing-market participants, its diverse global investor base that provides ample liquidity at low funding costs across maturities, and the pristine aggregate asset quality of its fully collateralized wholesale lending portfolio. Our rating on the FHLB System's debt reflects the application of our GRE criteria. Based on our criteria, the rating on the FHLB System's debt is the same as the U.S. sovereign rating because of the almost certain likelihood that the FHLB System would receive government support if needed, in our view.

Under our GRE criteria, the issuer credit ratings on the Federal Home Loan Banks (FHLBanks) are one to two notches higher than their stand-alone credit profiles because, in our view, the likelihood of the government providing extraordinary support, if needed, is very high. Therefore, a downgrade of the U.S. would, in most cases, directly affect our issuer credit ratings on the individual FHLBanks.

The FHLBanks' stand-alone credit profiles reflect their excellent loan quality and the funding and liquidity benefits that they receive as members of the FHLB System. The favorable conditions in the housing market combined with the growing evidence of stabilization in home prices have lowered the risk of loss or impairments on the FHLBanks' mortgage-backed securities (MBS) investments. Offsetting the individual FHLBanks' rating strengths are continued challenges to broad-based growth in advances and core mission assets--loans, letters of credit, and other forms of credit extension made to member institutions using mortgages and other acceptable collateral as security--for some

FHLBanks because of the abundant availability of cheap alternative funding (i.e., deposits), the ongoing mergers and consolidations in the banking industry, the FHLBanks' weak but adequate risk-adjusted profitability by virtue of the FHLB System's cooperative membership structure, the FHLBanks' weaker capital than non-GSE participants, and the potential for adverse statutory and regulatory changes related to broader housing GSE reform.

The FHLB System remains a reliable source of liquidity for its member institutions, supporting their participation in the U.S. housing market, particularly during times of stress. The FHLB System has provided its member institutions with readily available liquidity without adding unwarranted credit risk to its lending activities, based on its lending model of advances that are fully collateralized. This liquidity support was evident during third-quarter 2008 when advances peaked at \$1.01 trillion. Since then, with the ebb in financial stress, advances have declined (totaling \$484 billion as of March 31, 2014) as member institutions regained access to alternative funding sources for mortgages, particularly deposits. Much of the recent growth in advances has not been broadly based. Although the share of advances to total assets was near 60% at the end of 2013, an increase of several percentage points from the two prior years, advances remain low from a historical perspective. Despite the more stable conditions in the housing market in recent quarters, demand for advances remains constrained at many of the FHLBanks. Notwithstanding the aforementioned stabilization of the housing market, we expect the growth in advances at the FHLBanks to be limited overall. Although we view the improvement in household balance sheets and the progressive reduction of shadow inventory as favorable developments that are supportive of the housing recovery, we expect increasing interest rates and an unemployment rate that continues to hover above its historical average--at a projected 6.5% in 2014 and 6% in 2015--to continue to drag on the economy.

The FHLB System benefits from low funding costs on its debt (consolidated obligations) because of the implicit government support the system receives as a GSE and because consolidated obligations are a joint and several liability of the 12 independent FHLBanks (meaning that they have a shared responsibility to fully repay the debt). Nevertheless, the FHLB System's consolidated obligations are not explicitly guaranteed by, nor are they the obligations of, the U.S. government.

The FHLB System's internationally diverse investor base consists of many foreign central banks, fund managers, pension funds, state and local governments, and banks. We believe that the share of foreign investors is lower today than it was before the crisis, but that the share is still significant. Despite the steady deceleration of the Fed's asset purchases, as part of the unwinding of its extraordinary stimulus measures, and periodic market anxiety about a potential tightening of monetary policy, U.S. dollar-denominated and government-related assets remain relatively attractive to investors, which has kept the FHLBanks' funding costs low. Domestic financial institutions awash with deposits and facing weak loan demand have also invested their excess liquidity in FHLB System-consolidated obligations. In particular, the demand for advances from the FHLB System has been disproportionately driven by four of the nation's largest banks (JPMorgan, Bank of America, Citibank, and Wells Fargo), which accounted for more than a quarter of total advances as of the end of 2013. We expect the FHLB System's funding costs to be at least on par with that of Fannie Mae's and Freddie Mac's unsecured debt with spreads slightly above U.S. Treasuries, which are explicit marketable debt obligations of the U.S. government.

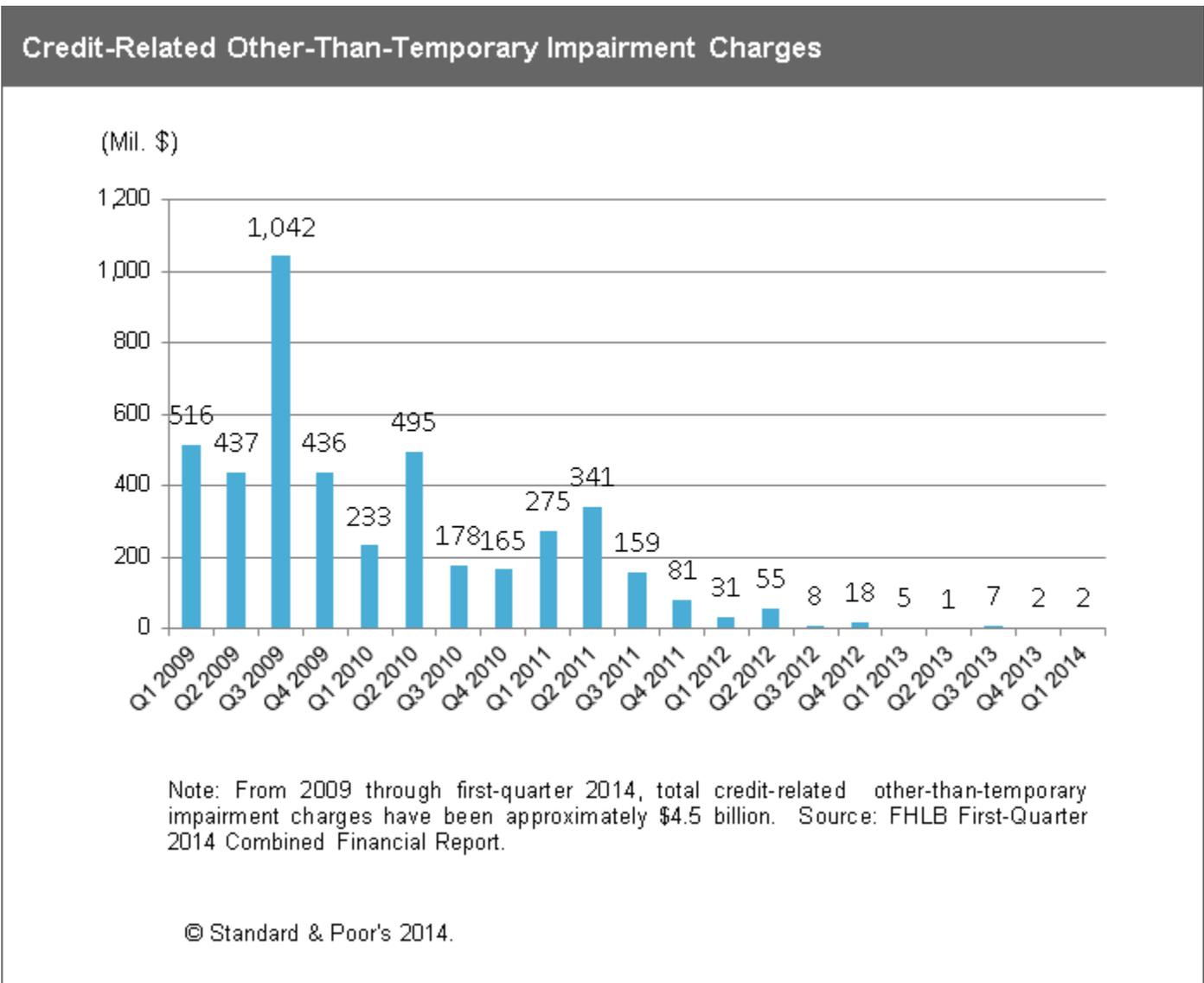
The FHLB System maintains excellent asset quality through its advance portfolio, which comprised 59% of combined

assets as of March 31, 2014. Across the FHLB System and throughout its entire history, no FHLBank has ever taken a single credit loss related to its advance business. Member institutions must fully secure all advances, and FHLBanks only lend as much as discounted collateral policies warrant. Moreover, a FHLBank can access the capital stock of its member organizations if the collateral proves insufficient. We believe the FHLBanks have been appropriately modifying their collateral-management guidelines as conditions change. This typically means increased haircuts (discounts), which may result in additional collateral being demanded as risks associated with collateral types and weakening institutions rise. Troubled borrowers must begin to deliver the pledged collateral to their respective FHLBanks for collateral management and security if their financial position deteriorates. If the Federal Deposit Insurance Corp. (FDIC) winds down a member institution, it either transfers advances to an acquiring entity or, more likely, pays off the advances to release the abundant pledged collateral and settle the closing member's liabilities. Under the Federal Home Loan Bank Act, the FHLB System lien supersedes depositors' when winding down a member bank. FHLBanks do not necessarily have priority in the liquidation of non-FDIC institutions and have modified lending limits and parameters to reflect their added risk. Given that insurance companies are an area of growth, the FHLBanks are working to achieve more certainty regarding FHLBank priority access to collateral with state insurance regulators.

In addition to advances, the FHLB System provides liquidity to the mortgage industry by purchasing mortgage-related securities for its investment portfolio. The carrying value of MBS totaled \$140 billion as of March 31, 2014 (approximately 17% of assets). Most FHLBanks had expanded their investment portfolios to include PLMBS prior to the housing crisis and absorbed significant losses on the value of those bonds as the market deteriorated. However, they have since scaled back their portfolios through run-off and sales. PLMBS now represent approximately 15% of the combined total MBS portfolio (about 2.5% of total assets versus more than 6% of total assets in early 2008). Total realized credit losses on these securities have been small, and we expect that losses from ongoing other-than-temporary impairments (OTTI) will remain low, in line with the anticipated gradual recovery and the return of liquidity to the housing market. Of the \$193.5 billion in the System's total investment securities as of March 31, 2014, 9% is rated 'BB+' or lower.

The FHLBanks recorded just \$2 million in net OTTI related to credit losses in first-quarter 2014, down from a peak of \$1.0 billion in third-quarter 2009 (see chart 1). From 2009 through first-quarter 2014, credit-related OTTI totaled \$4.5 billion, but a significant portion of those losses occurred in 2009. The FHLB System's net OTTI losses declined significantly to \$14 million in full-year 2013 from \$112 million in 2012, \$856 million in 2011, and \$1.1 billion in 2010. Changes in the fair value of available-for-sale securities are reflected in accumulated other comprehensive income (AOCI)/loss.

Chart 1



Unrealized losses on investment securities have declined substantially at all of the FHLBanks since peaking in 2009, in line with the stabilization of the housing market and the improving liquidity in the mortgage markets. Moreover, the corrective actions the FHLBanks have taken to preserve capital have resulted in a noteworthy decline in the ratio of unrealized losses on investment securities to retained earnings for all FHLBanks. We believe that the FHLBanks are much better positioned to manage credit risk-related impairments in the near future because of their higher retained earnings buffers. Moreover, with the underlying recovery in the housing markets, many of these previously impaired portfolios are actually experiencing fair-value (unrealized) gains.

As part of its cooperative structure, the FHLB System earns relatively narrow net interest spreads between its assets and liabilities. Although the FHLBanks' profitability measures are weak in absolute terms, we believe they are satisfactory in light of their low-risk core advance business. Under normal economic conditions, typical revenue

streams are adequate to cover overhead expenses, build or return capital as necessary, and pay a dividend to member institutions. The FHLB System's net income declined to \$555 million in first-quarter 2014 compared with \$580 million four quarters ago. The decline was attributable to lower noninterest income and higher compensation costs, though it was somewhat offset by higher net interest income.

Housing finance reform will likely affect the Federal Housing Finance Agency (FHFA) and its three housing-related GSEs: the FHLB System, Fannie Mae, and Freddie Mac. Most of the proposals introduced in Congress so far, such as the Bipartisan Housing Finance Reform Draft bill sponsored by Senators Johnson and Crapo, Rep. Jeb Hensarling's Protecting American Taxpayers and Homeowners (PATH) Act, and the Housing Opportunities Move the Economy Forward bill sponsored by Congresswoman Maxine Waters, are at a preliminary stage and appear to largely target the future roles of Fannie Mae and Freddie Mac. Nevertheless, if any new legislation erodes the special standing of the FHLB System's claims in liquidation—for example, because of a competing class of covered bonds—this could increase the FHLBanks' credit risk, in our view. At this stage, we don't believe that a reduction in support is likely. The ultimate shape of housing finance reform isn't certain, and we believe it is premature to change our view on the FHLB System or our expectation of ongoing support from the U.S. government. We expect public debate to continue on these proposals, and believe that any reforms will likely need a number of years to take effect.

As of July 31, the FHLBanks of Des Moines and Seattle announced that they have entered into an exclusivity arrangement regarding a potential merger. A merger would require the approval of the FHFA as well as the member-owners of the two banks. Should the merger proceed, we expect the combined institution, which will be headquartered in Des Moines, to benefit from its improved financial strength and geographic reach, as well as economies of scale and risk diversification (see "Federal Home Loan Banks of Des Moines And Seattle Ratings Unaffected By Announced Exclusivity Arrangement," published Aug 6, 2014).

## Outlook

Our ratings on the FHLB System's debt and our issuer credit ratings on the FHLBanks have stable outlooks. The outlook reflects the stable outlook on the sovereign U.S. rating, as well as the application of our GRE criteria. Our stable outlook on the U.S. indicates that the likelihood that we will lower the rating in the near term has fallen to less than one in three. We expect the FHLB System, as a GSE, to continue to benefit from the implied U.S. government support for its consolidated debt obligations.

### **Critical public-policy role and link to the government**

We believe the FHLB System's role is "critical" and define the strength of the link between it and the U.S. government as "integral", as our GRE ratings criteria define the terms. The FHLB System is one of the primary channels the government has established to ensure that consistent liquidity is available to support U.S. housing and community-investment activities. The FHLB System offers a reliable source of liquidity, particularly for smaller member institutions, that a private entity could not readily create on its own.

In our rating process, we differentiate between the total FHLB System and the individual FHLB System Banks. Applying our criteria, we classify an individual FHLBank's role as very important and its link to the government as very strong. We view the FHLBanks' role as a source of low-cost funding for residential mortgage lending, housing, and

community development as very important to meeting a key national policy objective: homeownership. We assign stand-alone credit profiles to each FHLBank and incorporate our expectation for extraordinary support into our ratings on them. Because we believe the likelihood that the government will provide extraordinary support to an FHLBank is very high, we incorporate one to two notches of support into our final rating. Because the 12 FHLBanks have joint and several liability for the senior unsecured debt obligations that the FHLBanks Office of Finance issues, we believe that weakness in a single FHLBank could have an impact on investors' perception of the strength of the FHLB System as a whole. That is why, in part, we define the link between each of the 12 FHLBanks and the government as very strong--because a financially distressed or defaulted GRE could hurt the government's reputation or create a perception of weakness.

We note that FHLBank consolidated obligations continue to price at a narrow spread over U.S. Treasuries, affording the FHLBanks and their member institutions low funding costs. The FHLB System recorded \$755 billion of consolidated outstanding obligations as of March 31, 2014, a 13% increase from \$669 billion in March 2013 but 1.6% lower than the \$767 billion recorded in December 2013, reflecting the growth in total assets. We expect the growth in consolidated obligations to remain generally in line with the pattern of growth in advances, which are particularly driven by large member banks.

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

In our opinion, the FHLB System serves an important role in the U.S. housing market by providing liquidity to its member institutions. The 12 individual FHLBanks are located in distinct regions of the U.S. The FHLBanks' public purpose is to provide member institutions with advances, as a supplement to deposit flows and other funding sources, to meet residential mortgage credit needs. The FHLB System's reliability was most noteworthy during 2008 when the demand for liquidity from member institutions was high and market confidence in asset values disappeared. During this time, the FHLB System's advance balances peaked at \$1.01 trillion and the combined balance sheet swelled to \$1.43 trillion. Advance balances have fallen from their peaks because members are flush with liquidity, but many FHLBanks are expanding their product types, targeting insurance companies for new business, and providing many other services to their member institutions. While the System's share of advances to total assets has increased gradually since the trough in 2010, we believe that the growth has not been broad based and that it has been constrained by the tepid pace of the housing recovery.

In our view, the FHLBanks all have the same fundamental mission, though their business models have minor variations according to their respective risk appetites and tolerances. For example, the FHLBanks are all capitalized in essentially the same way to support three primary asset types: advances to members, the investment-securities portfolio, and mortgage loan purchases from members. Management teams try to differentiate themselves by emphasizing various business activities that benefit their member institutions.

One distinct business activity that helps diversify revenue is the purchase of whole first mortgage loans from members of the Mortgage Partnership Finance (MPF) Program and the Mortgage Purchase Program (MPP). Under those programs, some of the FHLBanks purchase and ultimately carry these mortgage loans on their balance sheets as mortgage loans held for portfolio. This provides member institutions with an alternative to holding fixed-rate

residential mortgage loans in their portfolios or selling them into the secondary market. The risks associated with the loans are generally shared, as the member institutions retain a portion of the related credit risk while the FHLBanks bear the interest rate risk and their own portion of the credit risk. As of March 31, 2014, combined mortgage loans totaled \$43.7 billion, a fraction of the approximately \$114 billion peak set in 2004, and accounted for 5.3% of total assets, down from 6.5% a year earlier. We expect the amount of mortgage loans held on the balance sheet to continue to decline because some FHLBanks have discontinued or scaled back their direct mortgage exposure programs.

The FHLB System's combined assets were \$820.6 billion, and advances totaled \$484.4 billion as of March 31, 2014. These figures are up 11% and 16%, respectively, from March 2013, but are down relative to the previous quarter. FHLB System advances to member institutions continue to be restrained because of low overall loan demand resulting from high deposit balances at member institutions combined with relatively weak mortgage demand.

## **Support And Ownership: A Cooperative Owned By Its Member Institutions**

The FHLB System's member institutions own the FHLBanks. The member institutions are primarily commercial and savings banks, though they have expanded to include credit unions, insurance companies, and community-development financial institutions (CDFIs). The membership mix as of March 31, 2014, was 67% commercial banks, 17% credit unions, 12% thrifts, 4% insurance companies, and less than 1% CDFIs. With the passage of the Gramm-Leach-Bliley Act in 1999, membership in an FHLBank became voluntary for federal savings associations, among other provisions.

A member institution must purchase capital to belong to an FHLBank. The member institution's stock requirement is generally based on its use of FHLBank products, subject to a minimum requirement. In return, the member institution may borrow on a secured basis at generally attractive rates from its FHLBank. In addition, member institutions may receive dividends on their shares in the FHLBank, which helps to lower their total transaction funding costs (after commissions, interest, and other expenses).

Each FHLBank's member institutions elect the members of its board of directors, which are made up of directors or officers of member institutions along with independent directors that are not affiliated with them. The FHFA, an independent agency of the U.S. government, closely regulates the expectations, requirements, and limitations of the FHLBanks' business activities. The Office of Finance's board of directors consists of all 12 FHLBank presidents and five independent directors. The five independent directors serve as the Office of Finance's audit committee.

## **Strategy: Refocusing On Advances**

The FHLB System, in our view, continues to fulfill its public-policy mission of supporting its member institutions' housing and community-development initiatives. Each of the 12 FHLBanks in the System is independently managed, but all have similar strategies with minor variations. Overall, the FHLBanks strive to remain a reliable funding source for their members, to generate sufficient income to pay reasonable dividends, and to boost retained earnings after making the required FHLB System contributions to the Affordable Housing Program (AHP) and the FHLBanks' Joint Capital Enhancement (JCE) Agreement, the latter of which is allocated to a restricted retained earnings account at

each FHLBank.

To date, the tepid economic recovery combined with the lackluster housing demand and ready availability of deposits among member institutions has suppressed demand for advances from the FHLB System in general, with a couple of exceptions. However, some FHLBanks still have active mortgage loan portfolios that they aggregate from their members (MPF and MPP), but those are slowly running off.

As of March 31, 2014, each of the FHLBanks of Topeka, Chicago, and Indianapolis had more than 10% of its assets in mortgage loans held for portfolio--at 19%, 10%, and 17%, respectively. All of the other FHLBanks were below that threshold. An alternative to the legacy MPF program is the MPF Xtra program. Through MPF Xtra, the FHLBank of Chicago modified its MPF program to continue serving as an outlet for conforming mortgage loans. Loans sold to the FHLBank of Chicago under the MPF Xtra program are subsequently sold to Fannie Mae and are not held on its balance sheet. The MPF Xtra product is useful for smaller member institutions that do not generate sufficient volume to be direct providers of mortgage loans to Fannie Mae or Freddie Mac.

The FHLBanks annually set aside a percentage of earnings for their required contribution to the AHP and the JCE agreement. AHP helps members provide funding and grants to create affordable rental and home ownership opportunities. Separately, the JCE agreement requires each FHLBank to set aside 20% of its net income to a separate restricted retained earnings account at the FHLB until that account equals at least 1% of that FHLBank's average balance of outstanding consolidated obligations as of the previous quarter's end. The goal of the JCE agreement is to enhance the FHLBanks' capital positions.

Management at many of the FHLBanks is focusing on attracting new member institutions, particularly insurance companies and (to a lesser extent) credit unions, to broaden the revenue side of their income statements through increased advances. They have also focused on cost containment in recent years to preserve their business models and sustain earnings. Nevertheless, expenses increased in first-quarter 2014 compared with first-quarter 2013, driven largely by compensation and other operating expenses. We expect the FHLBanks will see some incremental cost increases because of U.S. regulatory reforms, which the Dodd-Frank Act necessitates in areas such as over-the-counter derivatives.

## **Risk Profile And Management: A Low-Risk Strategy**

The FHLBanks face manageable credit risk and little funding risk given the high quality of their investments and the fact that their other financial assets are generally secured. Interest rate risk is the primary risk for the FHLBanks, and they have managed it satisfactorily, except for a few individual FHLBanks during the last crisis. Each FHLBank sets its own policies and procedures to evaluate, manage, and control risk within the regulatory limits that apply to them.

### **Credit risk**

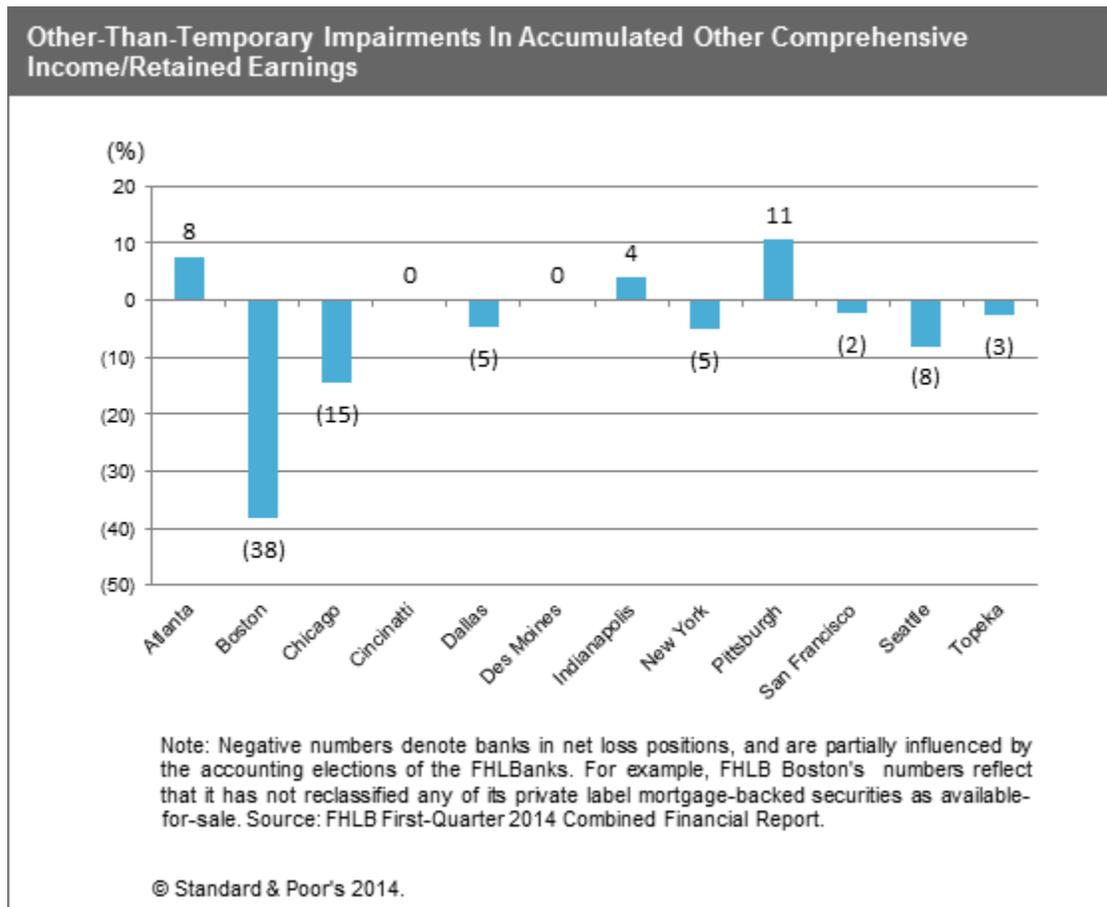
Most of the 12 FHLBanks have a concentration of advances in a relatively small number of their largest member institutions. As of March 31, 2014, advances to the top five borrowers were 26%-77% for the FHLBanks. Moreover, a large member borrower may borrow through separate subsidiaries from several FHLBanks. However, the secured nature of the FHLBanks' lending along with their ability to require appropriate capital from member institutions when

advances are made, which they then keep until the advances are repaid, substantially mitigate concentration risk.

Advances to member institutions are adequately collateralized, and the FHLBanks have rights to collateral with an estimated value greater than their related outstanding advances. Each FHLBank monitors its member institutions' financial conditions and manages their collateral guidelines, advance rates, and security agreements by borrower to further mitigate credit risk. Members' capital stock serves as a further buffer against potential losses. Furthermore, any security interest that a depository member institution grants to an FHLBank generally has priority over the claims and rights of other parties, including depositors. The FHLBanks rely on more strict borrowing limits and collateral guidelines to mitigate their credit risk for nondepositories, for which they are not guaranteed priority status in liquidation. We believe that these factors have contributed to the FHLBank track record of having never taken a credit loss on a member loan since inception, including advances to failed member institutions.

The FHLBanks' securities portfolios were designed to serve as a fundamental source of balance-sheet liquidity and to support interest rate risk-management efforts. Prior to the last economic crisis, some of the FHLBanks increased the credit risk in their investment portfolios by adding PLMBS backed by prime, Alt-A, and subprime mortgages, but these pressures have now largely abated. The FHLBanks have since ceased purchasing new PLMBS and have replenished their retained earnings buffers against future losses. As of March 31, 2014, all FHLBanks had made visible progress toward reaching a better balance of unrealized losses on their investment portfolios and retained earnings (see chart 2).

**Chart 2**



Another aspect of credit risk is counterparty credit related to derivatives. Each FHLBank manages its own derivatives portfolio and generally limits counterparties to high-credit-quality entities. The FHLBanks closely monitor counterparty credit risk activities through credit analysis, collateral requirements, and other credit enhancements, and are required to follow the requirements set forth in applicable regulations. As a result of the Dodd-Frank Act, all FHLBanks were required to clear certain types of derivative transactions through a clearinghouse as of June 10, 2013. As of March 31, 2014, the FHLBanks had cleared \$60.4 billion (in notional amounts) of derivative transactions in asset positions with a credit exposure and \$88.4 billion of liability positions with a credit exposure through a clearinghouse, compared with only \$10 million and \$118 million a year earlier. Other proposals related to derivatives provisions of the Dodd-Frank Act may alter business practices in the derivatives markets and could have an effect on the FHLBanks.

### **Market risk**

In general, the FHLBanks pursue matched asset-liability management. The FHLB System's access to the debt markets helps facilitate this because it can raise money at a wide range of maturities and with a wide variety of features. The FHLBank's MBS and mortgage investment portfolios introduce a degree of interest rate risk because of their indeterminate maturities as a result of the varying prepayment rates. The individual FHLBanks may also use derivatives to manage their interest rate risk within appropriate limits. Although each FHLBank's portfolio is distinct, the combined FHLB System had investments of \$273 billion (33% of total FHLB System assets) as of March 31, 2014, including about \$20 billion of PLMBS (approximately \$21 billion at amortized cost). During first-quarter 2014, the FHLBanks recognized \$2 million of total credit-related OTTI charges related to private-label residential mortgage-backed securities (RMBS).

Because we expect the housing markets to continue to improve, impairments from credit losses in the private-label RMBS portfolio are expected to abate going forward. As a result, the credit losses that could be realized are not significant relative to the FHLBanks' capital bases. We expect the FHLB System's combined capitalization to remain satisfactory.

In 2009, the FHLB System developed a uniform framework for completing their OTTI analyses in accordance with Financial Accounting Standards Board guidance on the recognition and presentation of OTTI in financial statements. That implementation provides greater consistency among the 12 FHLBanks regarding OTTI analysis, including the calculation of any expected credit losses for impaired securities.

### **Funding and liquidity risk**

The FHLB System relies heavily on the capital markets for funding, typically through the issuance of consolidated obligations. The 12 FHLBanks are jointly and severally liable for the consolidated obligations issued by the Office of Finance. The FHFA, at its discretion, may require any FHLBank to make the principal or interest payments due on any other FHLBank's consolidated obligations, even in the absence of the primary obligor's default. 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 one of the FHLB System's major strengths. FHFA regulations stipulate minimum liquidity levels and tightly restrict eligible investments. Generally, each FHLBank maintains liquidity to meet the credit and liquidity needs of its members, as well as current and future financial commitments. They also maintain liquidity to redeem or repurchase excess capital stock. The FHLB System has retained access to the public debt markets to meet liquidity needs even in times of stress, but it also relies on highly liquid investment portfolios. The FHFA requires each

FHLBank to maintain enough contingent liquidity to cover five days without accessing the public debt markets, among other standards. The FHLBanks' principal investments are GSE and private-label MBS securities, federal funds sold, interest-bearing deposits, reverse repurchase agreements, and municipal and Treasury securities. Investments were 33% of combined assets as of March 31, 2014, down from 35% a year earlier.

## Profitability: Appropriate For Its Mission

The FHLBanks' net income declined 4% year-over-year to \$555 million as of first-quarter 2014, which is attributable to lower noninterest income and higher compensation costs, though this was somewhat offset by higher net interest income after provisions for credit losses. In first-quarter 2014, net interest income post-provisions was up 1.5% over the prior year as a result of lower funding costs. Noninterest income fell by 79%, mainly due to higher losses on derivatives, hedging activities, and financial instruments held under fair value option. Noninterest expenses also increased slightly, climbing 7% year-over-year. Their return on average assets (ROA) varied between 0.12% and 0.48%, with an overall System ROA of 0.27% in first-quarter 2014. That compares with a 1.01% ROA for all FDIC institutions in the same period. Nevertheless, we expect profitability to remain acceptable on a risk-adjusted basis given the FHLBanks' low expense-growth, advantageous funding costs, and tax-exempt status. As cooperatives, the FHLBanks strive to provide their services at reasonable costs (that do not maximize profitability).

The FHLB 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. Member institutions benefit in the form of dividends on their investments in capital stock of the FHLBanks, as well as through low funding costs on advances. Thus, profitability margins remain thin even when demand for advances is strong because FHLBanks seek to pass their funding advantage onto their members.

The FHLB System's aggregate net interest margin was 0.42% in first-quarter 2014--down from 0.46% in the same period last year. This decline was largely due to lower yields on interest-bearing assets and the reduced average balances of mortgage loans.

Apart from their core lending activities, the FHLBanks also earn a small spread on their non-MBS investment portfolios. Investing in MBS normally generates wider margins, but FHFA rules limit the amount of each FHLBank's MBS investment portfolio to 300% of its regulatory capital, a limit every FHLBank (except Atlanta, Cincinnati, Chicago, Topeka, and San Francisco) was in compliance with as of March 31, 2014. These FHLBanks are not required to sell any previously purchased MBS, however, they are precluded from purchasing additional MBS investments until their MBS ratios decline below 300%.

Prior to 2007, mortgage loans held for portfolio also contributed substantially to earnings at certain FHLBanks if the associated hedging strategy was effectively implemented. However, when interest rates declined and refinancing prepayments greatly exceeded historical levels during the last crisis, this strategy became ineffective and weakened some FHLBanks' earnings. Because of managements' de-emphasis on direct mortgage loan purchases in recent years, we expect the contributions to those FHLBanks' earnings streams to be smaller. As of March 31, 2014, the FHLBanks of Atlanta, Chicago, Dallas, San Francisco, and Seattle were not accepting additional master commitments to acquire loans for their own portfolio nor were they purchasing additional mortgage loans under either the MPP or MPF

Program, except for certain FHLBanks' purchases of MPF loans to support affordable housing. However, during 2014, the FHLBank of San Francisco plans to begin purchasing mortgage loans from members for its own portfolio under the MPF program.

Normal operating costs tend to be very low, but we expect some increase across the FHLBanks because of greater technology investments needed for financial and regulatory reporting. Although the FHLBanks benefit from their income-tax exemption, AHP assessments reduce their earnings.

Although we expect the U.S. housing recovery to gather some steam, it won't be at full-throttle for some time. As a result, we expect profitability to remain muted as funding costs and asset yields remain low and advance demand remains choppy and constrained among the membership at large. We expect economic expansion to be gradual and tepid in contrast with prior recovery cycles.

## **Capital: Flexible And Adequate**

Capital adequacy is different for FHLBanks than for other financial institutions, as it expands and contracts with members' borrowing needs. Current and former member institutions own FHLBank stock, which cannot be publicly traded. We view the flexibility the FHLBanks have in preserving their capital favorably. An FHLBank can exercise its judgment, within FHFA guidelines, to suspend or eliminate dividend payments and to repurchase excess stock from its members at any time.

In 2014, the FHLBanks were required to undergo stress tests using assumptions provided by the FHFA for the first time, as required by the Dodd Frank Act. The impact of the stress is projected over a nine-quarter period beginning with fourth-quarter 2013. Results indicated that each bank had a large enough capital cushion to withstand the shock from a hypothetical "Severely Adverse Scenario" as presented by the FHFA.

FHLBank stock can be issued, redeemed, or repurchased only at its stated par value of \$100 per share. If any of the FHLBanks ever suffered losses that caused its members to record impairments on their FHLBank stock investments, we believe that could have significant implications for the integrity of the FHLB System. An FHLBank is not permitted to redeem shares if doing so would cause its capital to fall below minimum required regulatory levels. If a member institution exits the FHLB System, the FHLBank must redeem its stock subject to any applicable redemption period, which is five years for most FHLBank stock. There is some correlation between redemption requirements triggered by member institutions exiting the FHLB System and lower asset levels at a FHLBank--in other words, a member institution's lower advance activity creates excess stock.

Excess stock is capital stock a member institution holds in excess of its requirement. According to an FHFA rule, an FHLBank is prohibited from creating excess capital stock by paying stock dividends or issuing new excess capital stock to its members if the amount of existing excess stock is more than 1% of the FHLBank's total assets. As of March 31, 2014, the FHLBanks of Boston, Cincinnati, Indianapolis, San Francisco, and Seattle each had excess capital stock outstanding greater than 1% of their total assets.

Excess stock lacks some characteristics usually associated with permanent equity capital because the common shares

are redeemable. Nevertheless, some FHLBanks have exercised their discretion since mid-2008 by not paying dividends, returning capital to their members more slowly, or temporarily prohibiting repurchases of excess shares. The FHLBank of Boston repurchased \$500 million of excess stock on May 1, 2014, but continues its moratorium on repurchases other than in limited cases involving former member-related insolvency. The FHLBank of San Francisco repurchased excess stock in first-quarter 2014 and plans to continue doing so.

Retained earnings have been growing over time. All of the FHLBanks have been increasing retained earnings to provide capital support for their mortgage loan purchase programs and investment portfolios. As of March 31, 2014, the FHLB System reported \$12.5 billion of retained earnings, 14% higher than a year ago. We believe retained earnings provide a more stable and permanent form of loss-absorbing capital compared with paid-in capital, which can fluctuate with member activity levels. In our view, the FHLBanks of Boston and Seattle now have unrealized losses that are more manageable relative to their retained earnings. Through the FHLBank's JCE Agreement, each of the FHLBanks will further build its capital base by allocating 20% of its net income to a separate restricted retained earnings account until reaching an amount equal to at least 1% of its average balance of outstanding consolidated obligations for which it was the primary obligor as of the previous quarter's end.

The Gramm-Leach-Bliley Act required each FHLBank to develop an individualized capital plan to be approved by the former Federal Housing Finance Board and subjected each FHLBank to a minimum regulatory total capital-to-assets ratio of 4%. (The ratio is defined as the sum of capital stock, retained earnings, and mandatorily redeemable capital stock divided by total assets at the end of the period. Regulatory capital also includes any permitted general allowance for losses and any other amount from sources available to absorb losses that the FHFA has determined by regulation to be appropriate to include.) The FHLBanks were in compliance with regulatory capital minimums as of March 31, 2014, and the combined regulatory capital-to-assets ratio for the FHLB System was 5.94% at that time, compared with 6.71% a year earlier.

### Peer Comparison For Federal Home Loan Banks

	Atlanta	Boston	Chicago	Cincinnati	Dallas	Des Moines	Indianapolis
	AA+/Stable/A-1+	AA+/Stable/A-1+	AA+/Stable/A-1+	AA+/Stable/A-1+	AA+/Stable/A-1+	AA+/Stable/A-1+	AA+/Stable/A-
<b>Assets (Mil. \$)</b>							
Advances	84,166	29,700	22,372	65,545	15,341	44,924	17,1
Mortgage loans, net	879	3,348	7,294	6,691	86	6,485	6,1
Investments, including MBS	32,206	16,878	41,414	28,418	13,387	20,885	12,1
Other	2,216	135	959	248	1,821	595	1,1
Total assets	119,467	50,061	72,039	100,902	30,635	72,889	36,5
<b>Asset composition (% of total assets)</b>							
Advances	70.5	59.3	31.1	65.0	50.1	61.6	4
Mortgage loans	0.7	6.7	10.1	6.6	0.3	8.9	1
Investments, including MBS	27.0	33.7	57.5	28.2	43.7	28.7	3
Other	1.9	0.3	1.3	0.2	5.9	0.8	3

## Peer Comparison For Federal Home Loan Banks (cont.)

<b>Advance concentrations: top five concentrations (%)</b>							
March 31, 2014	62	38	60	77	26	60	
<b>Net income (Mil. \$)</b>							
First-quarter 2014	77	36	81	57	13	37	
2013	338	212	343	261	88	110	2
2012	270	207	375	235	81	111	1
2011	184	160	224	138	48	78	1
<b>Return on average assets (%)</b>							
First-quarter 2014	0.25	0.31	0.46	0.23	0.17	0.21	0.
2013	0.28	0.54	0.53	0.28	0.27	0.20	0.
2012	0.22	0.45	0.54	0.35	0.23	0.23	0.
2011	0.15	0.30	0.28	0.21	0.14	0.15	0.
<b>Duration gap (in months)</b>							
First-quarter 2014	(0.6)	(0.6)	0.4	0.1	1.3	(0.4)	(3)
<b>Regulatory capital ratio (%)</b>							
First-quarter 2014	5.1	8.7	5.3	4.9	5.7	4.6	6
2013	5.4	9.6	5.4	5.3	5.9	4.6	6
2012	5.2	10.6	4.8	5.8	5.0	5.7	6
2011	5.8	8.5	6.4	6.4	5.2	5.5	6
<b>Private-label mortgage-backed securities (Mil. \$)</b>							
Residential PLMBS-available for sale-amortized cost	2,093	0	68	0	0	0	4
OTTI in AOCI	(23)	0	5	0	0	0	
Gross unrealized gains	153	0	0	0	0	0	
Gross unrealized losses	0	0	0	0	0	0	
Estimated fair value	2,223	0	73	0	0	0	4
Residential PLMBS-held to maturity-amortized cost	1,812	1,431	1,474	0	191	29	1
OTTI in AOCI	0	(311)	(306)	0	(31)	0	
Carrying value	1,812	1,119	1,168	0	160	29	1
Gross unrealized gains	14	322	428	0	25	0	
Gross unrealized losses	(13)	(16)	(2)	0	(6)	(1)	
Estimated fair value	1,813	1,426	1,594	0	179	29	1
<b>Capital (Mil. \$)</b>							
Total regulatory capital	6,125	4,356	3,817	4,945	1,755	3,375	2,3

**Peer Comparison For Federal Home Loan Banks (cont.)**

Required risk-based capital	2,070	690	1,291	528	393	613	6
Excess over risk-based capital	4,055	3,666	2,526	4,417	1,362	2,762	1,6
Excess stock	9	1,631	127	721	217	-	5
MRCs	23	978	5	115	4	8	

**Credit-related other than temporary impairment (Mil. \$)**

First-quarter 2014	(1.0)	(0.5)	0.0	0.0	0.0	0.0	(0
2013	0.0	(2.6)	0.0	0.0	(1.4)	0.0	(1
2012	(16.0)	(7.2)	(15.0)	0.0	0.0	0.0	(4
2011	(118.0)	(77.1)	(68.0)	0.0	(6.1)	0.0	(26

**Other than temporary impairments in accumulated other comprehensive income (Mil. \$)**

First-quarter 2014	130	(312)	(306)	-	(31)	-	2
2013	125	(325)	(320)	-	(33)	-	2
2012	(41)	(385)	(389)	-	(41)	-	(10
2011	(398)	(451)	(492)	-	(51)	-	(119

**Retained earnings (Mil. \$)**

First-quarter 2014	1,690	816	2,107	631	667	696	7
2013	1,657	789	2,028	621	655	678	7
2012	1,435	588	1,691	538	572	622	5
2011	1,254	398	1,321	444	495	569	4

**OTTI in AOCI/retained earnings (%)**

First-quarter 2014	7.7	38.3	14.5	0.0	4.7	0.0	3
2013	7.5	41.2	15.8	0.0	5.1	0.0	3
2012	2.9	65.5	23.0	0.0	7.2	0.0	1
2011	31.7	113.3	37.2	0.0	10.4	0.0	2

MBS--Mortgage-backed securities. PLMBS--Private-label MBS. OTTI--Other-than-temporary impairment charges. AOCI--Accumulated other comprehensive income

**Related Criteria And Research****Related Criteria**

- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Rating Finance Companies, March 18, 2004

**Related Research**

- Federal Home Loan Banks of Des Moines And Seattle Ratings Unaffected By Announced Exclusivity Arrangement, Aug 6, 2014

**Ratings Detail (As Of August 19, 2014)****Federal Home Loan Banks**

Senior Unsecured	AA+
Senior Unsecured	AA+/A-1+
Senior Unsecured	AA+/Stable

## Ratings Detail (As Of August 19, 2014) (cont.)

Short-Term Debt	A-1+
<b>Sovereign Rating</b>	
United States of America (Unsolicited Ratings)	AA+/Stable/A-1+
<b>Related Entities</b>	
<b>Federal Home Loan Bank of Atlanta</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Boston</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Chicago</b>	
Issuer Credit Rating	AA+/Stable/A-1+
Subordinated	AA-
<b>Federal Home Loan Bank of Cincinnati</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Dallas</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Des Moines</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Indianapolis</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of New York</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Pittsburgh</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of San Francisco</b>	
Issuer Credit Rating	AA+/Stable/A-1+
<b>Federal Home Loan Bank of Seattle</b>	
Issuer Credit Rating	AA/Stable/A-1+
<b>Federal Home Loan Bank of Topeka</b>	
Issuer Credit Rating	AA+/Stable/A-1+

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