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# Credit Opinion: Federal Home Loan Bank of San Francisco

**Global Credit Research - 23 Jul 2013**

*San Francisco, California, United States*

## Ratings

| **Category** | **Moody's Rating** |
|---|---|
| Outlook | Stable |
| Bank Deposits | Aaa/P-1 |
| **Parent: Federal Home Loan Banks** | |
| Outlook | Stable |
| Senior Unsecured | Aaa |
| ST Issuer Rating | P-1 |

## Contacts


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## Key Indicators

**Federal Home Loan Bank of San Francisco (Consolidated Financials)[1]**

| | [2]**3-13** | [2]**12-12** | [2]**12-11** | [2]**12-10** | [2]**12-09** | **Avg.** |
|---|---|---|---|---|---|---|
| Total assets (USD million) | **87,593.0** | **86,421.0** | **113,552.0** | **152,423.0** | **192,862.0** | [3]**-17.9** |
| Tangible common equity (USD million) | **10,149.0** | **10,762.0** | **12,189.0** | **13,648.0** | **14,664.0** | [3]**-8.8** |
| Total shareholders' equity (USD million) | **9,708.0** | **9,956.0** | **10,283.0** | **10,697.0** | **11,073.0** | [3]**-3.2** |
| Return on average assets (FHLB) (%) | **0.4** | **0.5** | **0.2** | **0.2** | **0.2** | [4]**0.3** |
| Return on average equity (FHLB) (%) | **5.6** | **9.4** | **3.4** | **6.1** | **5.8** | [4]**6.1** |
| Advances / Total Assets (%) | **52.8** | **50.0** | **59.4** | **62.3** | **68.6** | [4]**58.6** |
| Mortgage Loans / Total Assets (%) | **1.3** | **1.5** | **1.6** | **1.6** | **1.6** | [4]**1.5** |
| Retained earnings and related reserves / Total Assets (%) | **2.6** | **2.6** | **1.6** | **1.1** | **0.6** | [4]**1.7** |
| Private Label RMBS / Total Assets (%) | **11.9** | **12.2** | **10.0** | **8.6** | **8.4** | [4]**10.2** |
| Total regulatory capital ratio (FHLB) (%) | **11.6** | **12.4** | **10.7** | **9.0** | **7.6** | [4]**10.3** |
| Liquid Assets (FHLB) / Short Term Debt (%) | **51.0** | **59.9** | **42.1** | **33.8** | **32.2** | [4]**43.8** |

Source: Moody's

[1] All figures and ratios are adjusted using Moody's standard adjustments [2] US GAAP [3] Compound Annual Growth Rate based on US GAAP reporting periods [4] US GAAP reporting periods have been used for average calculation

## Opinion

### SUMMARY RATING RATIONALE

On July 18, 2013, as a result of affirming the U.S. Government's Aaa debt rating with the outlook updated to stable from negative (See Moody's press release titled: "Moody's affirms Aaa ratings directly linked to US Government bond rating; outlook changed to stable"), Moody's affirmed the Aaa long-term deposit ratings of all of the

FHLBanks as well as the Aaa long-term bond rating of the FHLBank System and updated the outlook to stable from negative. At the same time, Moody's affirmed the Prime-1 short-term deposit ratings of all of the FHLBanks and the Prime-1 short-term bond rating of the FHLBank System.

Federal Home Loan Bank of San Francisco (FHLBank) Aaa/Prime-1 long- and short-term deposit ratings reflect the combination of the following factors: 1) the FHLBank of San Francisco's Baseline Credit Assessment (BCA) of a2, 2) very high cooperative support from the FHLBank System (BCA a1), 3) very high support from the U.S. government (Aaa debt rating).

The a2 BCA reflects Moody's opinion about the FHLBank's intrinsic or stand-alone financial strength and excludes extraordinary support, either from the FHLBank System or the U.S. Government. The rating incorporates the FHLBank's stable risk-adjusted profitability and excellent asset quality of its advance business. The FHLBank had an exposure of $10.4 billion (12% of total assets) to private-label residential mortgage back securities as of March 31, 2013. Moody's believes the FHLBank has the financial flexibility to absorb additional credit loss in the portfolio, though a more severe economic downturn could weaken the FHLBank's overall financial fundamental given the size of the private label RMBS.

The FHLBank of San Francisco's a2 BCA receives one notch of support from the FHLBank System given the FHLBank System's BCA of A1. Moody's very high U.S. government support assumption lifts the FHLBank San Francisco's deposit ratings to Aaa.

The outlook on the FHLBank of San Francisco Aaa long-term deposit, as well as the FHLBank System's Aaa debt ratings is stable reflecting the stable outlook on the US government. Any rating actions on the U.S. Government would likely result in all individual FHLBank's long-term deposit ratings and the FHLBank System long-term bond rating moving in lock step with any U.S. sovereign rating action.

GSE Reform

GSE reform has not progressed very far and Moody's expects very limited progress before the end of 2013. To date, the reform is primarily focused on the roles of Fannie Mae and Freddie Mac. However, the FHLBanks are likely to be included in the reform, though the impact remains uncertain. Moody's will monitor GSE reform as it progresses, as well as its impact on the FHLBanks.

**Rating Drivers**

- Joint and several liability reduces default risk of Systemwide liabilities

- Central liquidity provider to US banks

- Excellent asset quality reflects conservative underwriting standards and strong quality-monitoring policies

- Narrow charter for FHLBanks and member bank consolidation limit growth

- Substantial single borrower concentrations

- Material private-label securities portfolio

**Rating Outlook**

The rating outlook is stable. The outlook was changed to stable in July 2013 to reflect the stable outlook on the US Government's Aaa debt rating.

**What Could Change the Rating - Up**

Factors that would lead to an upgrade of the FHLBank of San Francisco's baseline credit assessment include a reduction in private-label securities to less than 5% of total assets while maintaining consistent risk-adjusted returns while maintaining strong asset quality.

**What Could Change the Rating - Down**

Moody's does not expect changes to the senior debt ratings of the FHLBanks, as the FHLBanks' ratings already incorporate an expectation of a very high degree of U.S. Government support, which is a key factor in the FHLBanks' current Aaa senior debt and Prime-1 short-term debt ratings. The importance of the FHLBanks' role as a liquidity provider to U.S. banks throughout the current crisis solidifies this view.

Factors that could lead to a downgrade of the BCA include a material decline in profitability (quarterly net losses over four quarters), significant asset-liability mismatches, or material changes in asset quality.

## DETAILED RATING CONSIDERATIONS

The FHLBank of San Francisco lends to member institutions in Arizona, California, and Nevada in the form of advances, which are generally short-term and over-collateralized, minimizing the credit risk on these loans. Moody's baseline credit assessment represents our opinion of the likelihood that the institution will require extraordinary support from an external party. FHLBank of San Francisco's a2 BCA reflects FHLBank of San Francisco's strong credit culture, stable, though moderate, profitability, and the benefits associated with the joint and several liability of the FHLBank System. Below are the detailed rating factors that influence the FHLBank's ratings and outlook.

Profitability

FHLBank of San Francisco's modest but consistent profitability (as measured by ROAA) reflects primarily low risk profile of its asset base. ROAA was 0.4% and 0.5% as of March 31, 2013 and December 31, 2012, respectively.

Capital Adequacy

FHLBank of San Francisco is required by legislation to maintain minimum regulatory capital level of 4% of its total assets. At March 31, 2013, the capital ratio of the FHLBank was 11.6%, down from 12.4% at December 31, 2012. The FHLBank of San Francisco's capital levels are elevated due to the shrinking of its balance sheet, coupled with a reluctance to redeem excess member stock while its private-label security portfolio remains elevated. Over the longer term, the FHLBank's capital levels will return to more normal levels around 4.5%.

Asset Quality and Credit Risk Management

Moody's believes that the asset quality of the FHLBank of San Francisco is exceptional. Advances represent 53% of total assets as of March 31, 2013, while the FHLBank's investment portfolio represents 32%. Advances are over-collateralized and the FHLBank has never incurred a loss on an advance in its 80 year history. Similar to other FHLBanks, the FHLB of San Francisco has significant borrower concentrations; its top five advance borrowers represented 35% of total assets as of March 31, 2013. The largest borrower JP Morgan represented 19% of the FHLBank's advances. This concentration is a long-term risk to the FHLBank's earnings.

Interest Rate Risk Management

The FHLBank of San Francisco conservatively manages its interest rate risk exposures through the use of debt with similar characteristics to the FHLBanks assets, as well as derivatives. The FHLBank's primary asset is advances, which come in a variety of types, including fixed rate, variable rate, callable by the FHLBank as well as putable advances. With a putable advance, the FHLBank purchases a put option from the member that allows the FHLBank to terminate the fixed rate advance on specified dates and offer, subject to certain conditions, replacement funding at prevailing market rates. Prepayment fees, which mitigate interest rate risk, are also a common feature of advances.

The FHLBank uses net portfolio value of capital sensitivity as the primary metric for measuring the Bank's exposure to changes in interest rates. The FHLBank's net portfolio value of capital sensitivity policy limits the potential adverse impact of an instantaneous parallel shift of +/- 100-basis-point change in interest rates from the base case to no worse than -3.0% of the estimated net portfolio value of capital. In addition, the policy limits the potential adverse impact of an instantaneous +/-100-basis-point change in interest rates measured from interest rates that are 200 basis points above or below the base case to no worse than - 4.0% of the estimated net portfolio value of capital. The Bank's measured net portfolio value of capital sensitivity was within the policy limit as of March 31, 2013.

Liquidity and Funding

The FHLBank's GSE status has provided it with consistent and stable access to the debt market. The FHLBank's internal sources of liquidity are modest. As of March 31, 2013, the FHLBank of San Francisco had approximately $51.1 billion in short-term consolidated obligations, which includes discount notes and bonds maturing within a one year period. In total, short-term debt comprised about 63% of total debt. Liquid assets were approximately 51% of short-term debt as of March 31, 2013. Liquid assets include cash, cash equivalents, federal funds as well as agency securities. Liquid assets as a percentage of short-term debt increases to 95% if advances maturing within one year is included in liquid assets.

The Federal Housing Finance Agency, the regulator of the FHLBanks, requires each FHLBank to maintain sufficient liquidity, through short-term investments, in an amount at least equal to an FHLBank's anticipated cash outflows under two different scenarios. One scenario assumes that an FHLBank cannot access the capital markets for a period of between 10 to 20 days, with initial guidance set at fifteen days and members do not renew any maturing, prepaid and called advances. The second scenario assumes that an FHLBank cannot access the capital markets for a period of between three to seven days, with initial guidance set at five days during which members will automatically renew maturing and called advances for all members except very large, highly rated members. The FHLBank of San Francisco also met all other internal liquidity requirements at March 31, 2013.

Other

A significant underpinning of the Baseline Credit Assessments is the joint and several nature of the consolidated obligations of the System. The financial strength of individual FHLBanks is very sound, and the joint and several liability contributes to the overall strength of the FHLBank System by narrowing any ratings differences among the individual Banks that could exist were ratings to exclude the joint and several feature. As a result, the ratings of the weakest FHLBanks are increased, and the ratings of the strongest are lowered.

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