

CREDIT OPINION

24 April 2024

Update



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Federal Home Loan Bank of Topeka

Update to credit analysis following the ratings affirmation

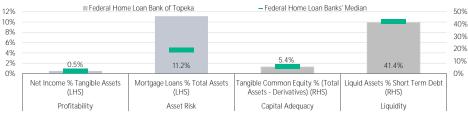
Summary

The Federal Home Loan Bank of Topeka's (FHLBank Topeka) Aaa long-term and Prime-1 short-term deposit ratings are in-line with the deposit ratings of the other ten regional FHLBanks. These ratings reflect the combination of FHLBank Topeka's a1 Baseline Credit Assessment (BCA) and our view that there is a very high likelihood of support from the US Government (Aaa negative), corresponding to a 70 – 95% probability under our Banks methodology framework. This comparatively elevated support probability assumption applies specifically to FHLBank Topeka's deposit obligations and primarily reflects the operational importance of deposit accounts in facilitating the funding of advances to FHLBank members.

FHLBank Topeka's a1 BCA is based on the excellent asset quality of its advance portfolio, investment portfolio, and mortgage portfolio, along with its consistent earnings generation. FHLBank Topeka benefits from its core business of advancing funds to members, with \$45.4 billion outstanding as of 31 December 2023. While the credit performance of the FHLBank Topeka's mortgage assets, which equal 11.2% of assets as of 31 December 2023, has been excellent, mortgage assets carry heightened operational complexity along with greater interest rate risk and credit risk relative to the FHLBank's core lending business.

In late 2023, the Federal Housing Finance Agency (FHFA), which supervises and regulates the FHLBanks, published a <u>lengthy report</u> following its year-long review of the System. As discussed later in this research, the report highlighted the FHFA's key priorities and potential areas of change in the months and years head, with the biggest immediate impact being the curtailed reliance of members, specifically banks in troubled financial condition, on emergency financing from the FHLBanks. Nonetheless, we expect the FHLBanks will remain a reliable source of liquidity to their members in the ordinary course of business.

Exhibit 1
Rating Scorecard - Key Financial Ratios [1]



[1] All ratios for Federal Home Loan Bank of Topeka are as of 31 December 2023. Federal Home Loan Banks' medians are as of 30 September 2023.

Source: Moody's Ratings

Credit strengths

- » Excellent credit quality of its advance, investment, and mortgage portfolios minimize asset risk
- » Although narrowly focused, the FHLBanks, including FHLB Topeka, are central liquidity providers to US banks, underscoring their systemic importance

Credit challenges

- » Narrow FHLB charter and bank consolidation limit growth
- » Substantial single borrower concentrations
- » Reliance on confidence-sensitive market funding, but market access is strong because of consolidated issuance and FHLB status as a government-sponsored enterprise (GSE)

Outlook

The negative rating outlook reflects our negative outlook on the ratings for the US government. Any rating actions on the US Government would likely result in all individual FHLBanks' long-term deposit ratings, and the FHLBank's Aaa long-term bond rating, moving in lock step with any US sovereign rating action.

Factors that could lead to an upgrade

At Aaa, an upgrade of any individual FHLBank's long-term deposit ratings is not possible. A higher BCA could occur if any of the individual FHLBank's advances were at least 70% of assets on a consistent basis, while also displaying: 1) strong profitability, 2) a stable member risk profile focused primarily on depository members, 3) continued strong asset risk management, including modest asset-liability and operational risk, and 4) robust capital and liquidity.

Factors that could lead to a downgrade

Any negative rating action on the US Government would likely result in all individual FHLBanks' long-term deposit ratings moving in lock step with the US Government's rating.

Factors that could lead to a downgrade of any of the individual FHLBank's BCA of a1 include elevated loss expectations on their investment portfolio, deteriorating capital or significant asset-liability mismatches. In addition, a reduced role in US banking system funding and/or an expanded risk profile, could result in a lower standalone BCA. If profitability or liquid resources weakens, that would be another factor leading to a potential downgrade. A lower BCA could result in a lower long-term deposit rating.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Key Indicators

Exhibit 2
Federal Home Loan Bank of Topeka (Consolidated Financials) [1]

	12-23 ²	12-22 ²	12-21 ²	12-20 ²	12-19 ²	CAGR/Avg. ³
Total Assets (USD Billion)	74.9	72.0	48.0	52.6	63.3	4.34
Net Income / Tangible Assets (%)	0.5	0.3	0.3	0.2	0.3	0.3 ⁵
Liquid Assets (GSE) / Short Term Debt (%)	41.4	40.6	55.1	49.2	42.4	45.7 ⁵
Tangible Common Equity / (Total Assets - Derivatives) (%)	5.4	5.2	5.5	5.0	4.4	5.1 ⁵
Mortgage Loans / Total Assets (%)	11.2	11.0	17.0	17.5	16.8	14.7 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel I; US GAAP. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. Sources: Moody's Ratings and company filings

Profile

Chartered by Congress in 1932 through the Federal Home Loan Bank Act, the 11 FHLBanks are federally chartered, privately capitalized GSEs whose primary mission is to provide their roughly 6,500 member financial institutions with a reliable source of liquidity to support housing finance, community lending and asset-liability management. Each FHLBank is a separately chartered cooperative owned by its respective members, with its own board of directors, management and employees. Members primarily include banks, savings institutions, insurance companies and credit unions.

The 11 FHLBanks together with the Office of Finance, which is the fiscal agent responsible for issuing and servicing the FHLBanks' debt, make up the FHLBank system. The FHLBanks and the Office of Finance operate under the supervisory and regulatory framework of the Federal Housing Finance Agency (FHFA), which was created by Congress in the Housing and Economic Recovery Act of 2008. The FHLBanks are also registered with the Securities and Exchange Commission, which requires them to file public financial statements.

Each FHLBank serves as a financial intermediary between its members and the capital markets by issuing debt, known as consolidated obligations (bonds and discount notes), and lending those proceeds to its members, primarily in the form of secured loans, known as advances. Advances are generally short-term and over-collateralized, minimizing the credit risk on these loans. In addition, the FHLBanks benefit from their statutory lien priority with respect to certain pledged member assets. The FHLBanks also purchase mortgage loans, principally 15-30 year conventional and government-guaranteed or insured fixed-rate loans. The FHLBanks also invest in securities, principally agency MBS, subject to an investment limit of three times regulatory capital without approval by the FHFA. Some FHLBanks offer correspondent services to their member institutions, including wire transfer, security safekeeping, and settlement services.

As of 31 December 2023, FHLBank Topeka reported total assets of \$74.9 billion.

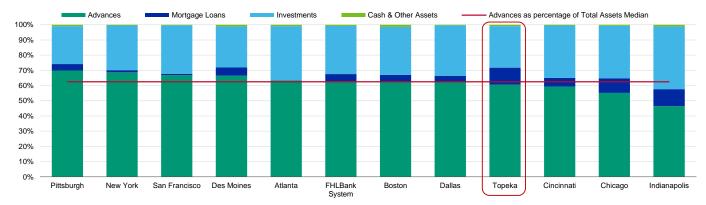
Detailed credit considerations

Asset quality and credit risk management

The asset quality of FHLBank Topeka is exceptional. Advances, which represented about 60.6% of total assets as of 31 December 2023, are over-collateralized and a FHLBank has never incurred a loss on an advance in its 90 year history. This is reflected in the aa3 assigned score for Asset Risk in our scorecard.

Similar to other FHLBanks, FHLBank Topeka's balance sheet composition is narrowly focused. Beyond its advance portfolio, investments, which are primarily high quality US government and agency guaranteed securities, comprise 27.3% of assets. FHLBank Topeka's mortgage portfolio, representing 11.1% of total assets as of 31 December 2023, has experienced far lower losses and delinquencies than industry averages. Nonetheless, asset-liability management of the mortgage portfolio can present challenges.

Exhibit 3
FHLBank Topeka's asset mix compared to those of the other FHLBanks
As of 31 December 2023



Source: Company filings and Moody's Ratings

Similar to other FHLBanks, FHLBank Topeka has significant borrower concentrations, a long-term earnings risk. Its top five advance borrowers represented 31.7% of total assets as of 31 December 2023, an amount comparable to the average for all FHLBanks. This has not changed much from a year ago.

Interest rate risk management

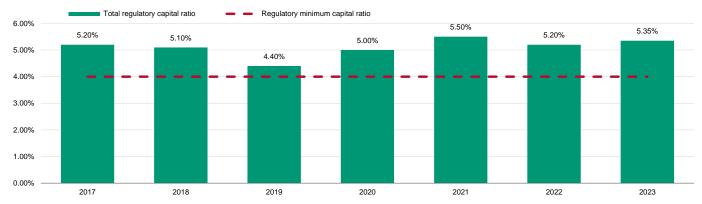
FHLBank Topeka conservatively manages its interest rate risk exposures through the use of debt with similar characteristics to its assets, as well as derivatives. The FHLBank's primary asset is advances, which come in a variety of types, including fixed rate, variable rate, and callable by the member. Prepayment fees, which mitigate interest rate risk, are also a common feature of advances.

Capital adequacy

FHLBank Topeka is required by legislation to maintain minimum regulatory capital of 4.00% of its total assets. As of 31 December 2023, the reported capital ratio of the FHLBank was 5.4%, compared to 5.2% as of 31 December 2022. The aa2 assigned score for Capital in our scorecard incorporates our estimate of FHLBank Topeka's TCE ratio on a risk-weighted basis, which is very strong.

To become a member of an FHLBank, financial institutions must purchase stock in the bank. All shares have a statutory par value of \$100. When a member needs to access advances, it must not only pledge high-quality collateral, but also purchase additional activity-based stock in proportion to their borrowings. As a result, during times of high advance activity, the dollar amount of capital automatically increases.

Exhibit 4
FHLBank Topeka's capital ratio has remained above the regulatory minimum
Total regulatory capital ratio and regulatory minimum capital ratio, 2017 - 2023



Source: Company filings and Moody's Ratings

Profitability

FHLBank Topeka's low but consistent profitability as measured by return on average assets (ROAA) reflects the primarily low to moderate risk profile of its asset base. FHLBank Topeka's reported ROAA was 0.49% in 2023, higher than 0.39% reported in the prior year. The baa1 assigned score for Profitability in our scorecard reflects the extremely low earnings volatility owing to the company's low asset risk profile.

Liquidity and funding

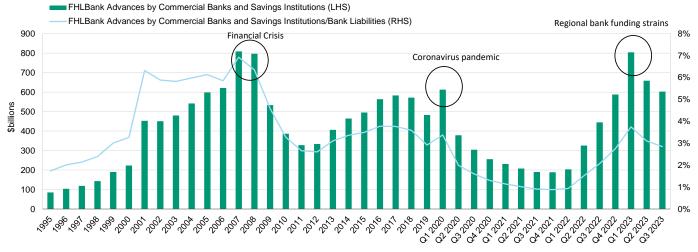
FHLBanks' GSE status provides them with reliable debt market access and informs the baa1 assigned score for Funding Structure in our scorecard. As of 31 December 2023, FHLBank Topeka had liquid assets as a percentage of short term debt of 41.4% and of 31 December 2023 and 42.1% as of 30 September 2023, as compared to 42.0% for the FHLBank system as of 30 September 2023.

The FHFA issued updated liquidity guidance in the summer of 2018 that took full effect on 31 December 2019. Under the updated guidance, the FHFA established requirements for the FHLBanks' base case liquidity and implemented new funding gap metrics for three-month and one-year maturity horizons. In addition, the guidance addressed liquidity stress testing and contingency funding plans. The FHLBank Topeka continues to be in compliance with all its liquidity requirements.

Role as a provider of liquidity to US financial institutions

The FHLBanks' demonstrated ability to access funding throughout the cycle underpins their importance to the financial system. As shown below, advances to regulated depository members spiked several times in recent years: at the height of the global financial crisis in 2008/9, in early 2020 at the beginning of the pandemic, throughout 2022 as banks sought alternative funding given both declines in their deposit balances and rising unrealized losses in their AFS securities portfolios, which increased their reluctance to sell those securities, and most recently, in March 2023 when there was a scramble for liquidity in the wake of multiple regional bank failures and acute deposit outflows at select institutions. Advances have since come down from their highs. All of these episodes are reminders of the FHLBank's important role as a liquidity provider to the financial system in times of stress.

Exhibit 5
FHLBank advances have proven to be a reliable source of bank funding, especially during times of crisis Q4 1995 - Q3 2023



Source: FDIC

FHFA review and report

As noted above, in late 2023, the FHFA published a report that indicated three key priorities for the FHLBank System:

- 1) strengthening the FHLBanks' focus on housing goals, including affordable housing;
- 2) shifting the FHLBanks away from providing emergency funding for commercial banks, particularly those in strained financial condition, while also remaining a stable and reliable source of liquidity for members in the ordinary course of business; and

3) increasing the FHLBanks' efficiency and strengthening their governance.

The biggest immediate impact of the FHFA agenda would be to curtail the reliance of members, specifically banks in troubled financial condition, on emergency financing from the FHLBanks. However, we expect the FHLBanks will remain a reliable source of liquidity to their members in the ordinary course of business, just as they are today.

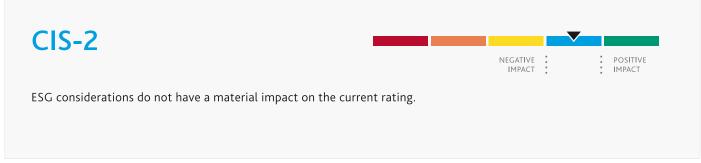
The FHFA's report raised a number of possible areas of change, some of which could be enacted through its ongoing supervision of the FHLBanks, some through more formal rule-making and still others that would require Congressional action in the months and years ahead. A key take-away is that although some of the proposed changes will require rule-making and/or statutory changes, which can be lengthy processes, the FHFA has the ability to implement other changes through its current supervisory process. For example, we believe access to FHLBank funding for banks in a weakened financial condition can, and likely will, be tightened under the existing regulatory oversight regime.

That said, we are monitoring official sector statements regarding the FHLBs' role in liquidity provision to banks and note that they emphasize the discount window for banks' emergency liquidity. Acting OCC Comptroller Hsu's speech on 18 January proposed a new regulatory requirement for mid-size and large banks to have sufficient liquidity to cover stress outflows over a five-day period. Hsu argued that the denominator should consider the potential speed and severity of uninsured deposit outflows, while the numerator should consider the liquidity value of pre-positioned discount window collateral as well as reserves. Hsu also proposed periodic testing of banks' readiness to use the discount window. Press reports indicate that the Fed is cooperating with the OCC on this proposal. On 14 February, the Fed's Vice Chair Barr similarly noted that banks need to do more, including testing discount window usage, to ensure they are operationally ready to tap the window. This echoed a speech he gave in December in which he said that banks' use of discount window is not an action to be viewed negatively.

ESG considerations

Federal Home Loan Bank of Topeka's ESG credit impact score is CIS-2





Source: Moody's Ratings

FHLB Topeka's CIS-2 reflects that ESG considerations have no material impact on the current ratings.

Exhibit 7
ESG issuer profile scores



Source: Moody's Ratings

Environmental

FHLB Topeka faces low environmental risks. Its loan portfolio consists of wholesale advances to banks, insurance companies and credit unions. Although most of its bank customers face moderate carbon transition risks through their own loan portfolios, and many of its insurance companies face moderate physical climate risks through their client exposures, FHLB Topeka is only indirectly exposed to these risks and its advance portfolio is diversified.

Social

FHLB Topeka faces low social risks. Its clients are member institutions, such as banks, insurance companies and credit unions, and minimal interaction with retail clients mitigates the risks related to customer relations and demographic and societal trends. While FHLBank Topeka also faces high cyber risk similar to its banking peers, it faces lower risks of customer relations fallout than a typical bank because of its institutional client base.

Governance

FHLB Topeka faces low governance risks. The bank has never reported credit losses on advances, it primary product, highlighting its strong financial strategy and risk management. The bank's strategy and asset composition are based on its Congressional mission and reinforced by its regulators. Like its FHLBank peers, FHLB Topeka is a separately chartered cooperative owned by its respective members, with its own board of directors, management and employees. The bank's mandate, regulatory oversight and policies limit the ability of board members to act against the interest of bondholders, which mitigates the potential conflict of interest resulting from board members being executives of its borrowers.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Methodology and scorecard

Support and Structural Considerations

Loss Given Failure (LGF) Analysis and Government Support Considerations

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section. In the event that the FHLBank Topeka were to require support, we do not believe there is an existing regulatory framework in place that provides a clear understanding of the impact of a resolution on creditors. Therefore, we do not apply the Advanced LGF approach to the FHLBank System as we do for US banks subject to an FDIC resolution, which we consider to be an operational resolution regimes. Instead we apply the Basic LGF approach.

The rating on senior unsecured systemwide debt is Aaa, or four notches above the BCA. This reflects our assumptions about the probability of government support for FHLBank systemwide debt. Specifically, we consider the likelihood of support to be 'Government-Backed', corresponding to a 95 - 100% probability of government support. For the individual deposit ratings assigned to each of the eleven regional FHLBanks, we assume a 'Very High' probability of government support, corresponding to a 70 - 95% probability.

Our BCA scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our BCA scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The BCA scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

FINANCIAL INSTITUTIONS MOODY'S INVESTORS SERVICE

Exhibit 8 Federal Home Loan Bank of Topeka

MACRO FACTORS									1
WEIGHTED MACRO PROFILE STRONG	+ 100%								
FACTOR	HISTORIC RATIO	INITIAL SCORE	EXPECTED TREND	ASSIGNE	D SCORE	KEY DRI	VER #1	KEY DI	RIVER #2
Solvency									
Asset Risk									
Problem Loans / Gross Loans	0.1%	aa1	\leftrightarrow	aa	a3	Long-ru perforr			
Capital									
Tangible Common Equity / Risk Weighted Assets				aa	a2	Risk-we	ighted		
(Basel I)						capitali	sation		
Profitability									
Net Income / Tangible Assets	0.4%	ba1	\leftrightarrow	ba	ia1	Earnings	quality		
Combined Solvency Score				a	1				
Liquidity									
Funding Structure									
Market Funds / Tangible Banking Assets	93.1%	caa3	\leftrightarrow	ba	ia1	Mar funding			
Liquid Resources									
Liquid Banking Assets / Tangible Banking Assets	27.0%	a3	\leftrightarrow	ba	ia1	Expected	d trend		
Combined Liquidity Score		Ь1		ba	ia1				
Financial Profile				a	2				
Qualitative Adjustments				Adjus ⁻	tment				
Business Diversification				()				
Opacity and Complexity				()				
Corporate Behavior				()				
Total Qualitative Adjustments				()				
Sovereign or Affiliate constraint				A	aa				
BCA Scorecard-indicated Outcome - Range				a1 -	- a3				
Assigned BCA				a	1				
Affiliate Support notching				()				
Adjusted BCA				a	1				
BALANCE SHEET IS NOT APPLICABLE									
INSTRUME	WATERFALL INT SUB- IN -ORDINATION TION SUB	NSTRUMEN	NT SUB- ORDINATION	DE JURE	CHING DE FACTO	LGF NOTCHING GUIDANCEN VS. ADJUSTED BCA	LGF	NOTCHING	APRELIMINAF G RATING ASSESSMEN
Deposits 3.9%	3.0%	3.9%	3.0%	na	na	0	0	0	a1
	S GIVEN A NOTCHING I	DDITION/				RNMENT NOTCHING		URRENCY	FOREIGN CURRENCY RATING
Deposits	0	0	a1	1		4	Δ	ıaa	
[1] Where dashes are shown for a particular factor (or sub-fact									

^[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information. Source: Moody's Ratings

Ratings

Exhibit 9

Category	Moody's Rating		
FEDERAL HOME LOAN BANK OF TOPEKA			
Outlook	Negative		
Bank Deposits	Aaa/P-1		
Baseline Credit Assessment	a1		
PARENT: FEDERAL HOME LOAN BANKS			
Outlook	Negative		
Baseline Credit Assessment	a1		
Senior Unsecured	Aaa		
ST Issuer Rating	P-1		
Source: Moody's Ratings			

24 April 2024

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