

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **June 30, 2024**

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission File No. 000-51399

FEDERAL HOME LOAN BANK OF CINCINNATI

(Exact name of registrant as specified in its charter)

Federally chartered corporation of the United States

(State or other jurisdiction of incorporation or organization)

600 Atrium Two, P.O. Box 598, Cincinnati, Ohio

(Address of principal executive offices)

31-6000228

(I.R.S. Employer Identification No.)

45201-0598

(Zip Code)

(513) 852-7500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated Filer

Accelerated Filer

Non-accelerated Filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The capital stock of the registrant is not listed on any securities exchange or quoted on any automated quotation system, only may be owned by members and former members and is transferable only at its par value of \$100 per share. As of July 31, 2024, the registrant had 50,766,193 shares of capital stock outstanding, which included stock classified as mandatorily redeemable.

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements.

**FEDERAL HOME LOAN BANK OF CINCINNATI
STATEMENTS OF CONDITION
(Unaudited)**

(In thousands, except par value)

	June 30, 2024	December 31, 2023
ASSETS		
Cash and due from banks	\$ 23,248	\$ 20,824
Interest-bearing deposits	1,770,085	1,875,037
Securities purchased under agreements to resell	3,911,770	5,242,480
Federal funds sold	4,355,000	6,774,000
Investment securities:		
Trading securities	2,722,250	1,745,742
Available-for-sale securities (amortized cost of \$9,062,169 and \$10,247,585 and includes \$819,746 and \$819,794 pledged as collateral that may be repledged)	9,038,452	10,171,588
Held-to-maturity securities (fair value of \$15,785,334 and \$16,576,613)	16,068,845	16,832,133
Total investment securities	<u>27,829,547</u>	<u>28,749,463</u>
Advances (includes \$253,793 and \$214,035 at fair value under fair value option)	78,833,659	73,553,162
Mortgage loans held for portfolio, net of allowance for credit losses of \$331 and \$316	7,192,461	7,108,334
Accrued interest receivable	518,812	535,564
Derivative assets	65,407	101,991
Other assets, net	33,374	34,883
TOTAL ASSETS	<u>\$ 124,533,363</u>	<u>\$ 123,995,738</u>
LIABILITIES		
Deposits	\$ 1,169,785	\$ 1,113,704
Consolidated Obligations:		
Discount Notes (includes \$9,219,525 and \$14,085,003 at fair value under fair value option)	21,576,233	23,690,526
Bonds (includes \$5,319,289 and \$20,657,254 at fair value under fair value option)	94,023,232	91,756,430
Total Consolidated Obligations	<u>115,599,465</u>	<u>115,446,956</u>
Mandatorily redeemable capital stock	15,073	17,314
Accrued interest payable	552,914	422,886
Affordable Housing Program payable	158,026	139,807
Derivative liabilities	461	9,831
Other liabilities	538,552	418,557
Total liabilities	<u>118,034,276</u>	<u>117,569,055</u>
Commitments and contingencies		
CAPITAL		
Capital stock Class B putable (\$100 par value); issued and outstanding shares: 47,915 and 48,459	4,791,545	4,845,902
Retained earnings:		
Unrestricted	980,980	964,436
Restricted	751,701	693,682
Total retained earnings	<u>1,732,681</u>	<u>1,658,118</u>
Accumulated other comprehensive income (loss)	<u>(25,139)</u>	<u>(77,337)</u>
Total capital	<u>6,499,087</u>	<u>6,426,683</u>
TOTAL LIABILITIES AND CAPITAL	<u>\$ 124,533,363</u>	<u>\$ 123,995,738</u>

The accompanying notes are an integral part of these financial statements.

FEDERAL HOME LOAN BANK OF CINCINNATI
STATEMENTS OF INCOME
(Unaudited)

(In thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
INTEREST INCOME:				
Advances	\$ 1,079,650	\$ 1,439,257	\$ 2,136,627	\$ 2,335,866
Prepayment fees on Advances, net	227	1,703	498	1,734
Interest-bearing deposits	23,985	36,180	48,404	61,030
Securities purchased under agreements to resell	24,681	59,281	54,461	82,798
Federal funds sold	108,439	188,295	221,487	276,164
Investment securities:				
Trading securities	28,598	17,296	45,968	35,750
Available-for-sale securities	129,410	129,326	273,975	236,437
Held-to-maturity securities	219,180	190,568	443,363	360,465
Total investment securities	377,188	337,190	763,306	632,652
Mortgage loans held for portfolio	58,961	52,023	116,923	104,815
Loans to other FHLBanks	—	341	222	823
Total interest income	1,673,131	2,114,270	3,341,928	3,495,882
INTEREST EXPENSE:				
Consolidated Obligations:				
Discount Notes	274,652	768,292	534,801	1,315,733
Bonds	1,183,281	1,086,138	2,375,953	1,728,134
Total Consolidated Obligations	1,457,933	1,854,430	2,910,754	3,043,867
Deposits	14,051	12,227	28,775	23,945
Mandatorily redeemable capital stock	380	972	765	1,228
Other borrowings	—	1	—	1
Total interest expense	1,472,364	1,867,630	2,940,294	3,069,041
NET INTEREST INCOME	200,767	246,640	401,634	426,841
NON-INTEREST INCOME (LOSS):				
Net gains (losses) on trading securities	(11,980)	(26,646)	(25,774)	(1,286)
Net gains (losses) on sales of available-for-sale securities	289	—	1,425	—
Net gains (losses) on financial instruments held under fair value option	744	60,435	(7,855)	25,623
Net gains (losses) on derivatives	7,416	(4,363)	28,389	(12,279)
Other, net	8,189	7,493	15,983	14,483
Total non-interest income (loss)	4,658	36,919	12,168	26,541
NON-INTEREST EXPENSE:				
Compensation and benefits	13,897	13,634	28,585	27,718
Other operating expenses	9,798	7,649	18,706	15,071
Finance Agency	2,841	2,744	5,681	5,488
Office of Finance	1,652	1,919	3,399	3,239
Voluntary housing contributions	16,100	14,394	31,797	14,816
Other	1,516	1,389	3,217	3,623
Total non-interest expense	45,804	41,729	91,385	69,955
INCOME BEFORE ASSESSMENTS	159,621	241,830	322,417	383,427
Affordable Housing Program assessments	16,000	24,281	32,318	38,466
NET INCOME	\$ 143,621	\$ 217,549	\$ 290,099	\$ 344,961

The accompanying notes are an integral part of these financial statements.

FEDERAL HOME LOAN BANK OF CINCINNATI
STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)

(In thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Net income	\$ 143,621	\$ 217,549	\$ 290,099	\$ 344,961
Other comprehensive income (loss) adjustments:				
Net unrealized gains (losses) on available-for-sale securities	(1,879)	18,408	53,705	15,362
Reclassification adjustment for net realized (gains) losses on sale of available-for-sale securities included in net income	(289)	—	(1,425)	—
Pension and postretirement benefits	(90)	(98)	(82)	(196)
Total other comprehensive income (loss) adjustments	(2,258)	18,310	52,198	15,166
Comprehensive income (loss)	\$ 141,363	\$ 235,859	\$ 342,297	\$ 360,127

The accompanying notes are an integral part of these financial statements.

FEDERAL HOME LOAN BANK OF CINCINNATI
STATEMENTS OF CAPITAL
(Unaudited)

(In thousands)	Capital Stock Class B - Putable		Retained Earnings			Accumulated Other Comprehensive Income (Loss)	Total Capital
	Shares	Par Value	Unrestricted	Restricted	Total		
	BALANCE, MARCH 31, 2023	66,054	\$ 6,605,424	\$ 868,665	\$ 585,601		
Comprehensive income (loss)			174,039	43,510	217,549	18,310	235,859
Proceeds from issuance of capital stock	5,209	520,862					520,862
Repurchase of capital stock	(9,651)	(965,108)					(965,108)
Net stock reclassified to mandatorily redeemable capital stock	(3,128)	(312,763)					(312,763)
Cash dividends on capital stock			(89,499)		(89,499)		(89,499)
BALANCE, JUNE 30, 2023	<u>58,484</u>	<u>\$ 5,848,415</u>	<u>\$ 953,205</u>	<u>\$ 629,111</u>	<u>\$ 1,582,316</u>	<u>\$ (34,174)</u>	<u>\$ 7,396,557</u>
BALANCE, MARCH 31, 2024	46,790	\$ 4,678,997	\$ 970,615	\$ 722,977	\$ 1,693,592	\$ (22,881)	\$ 6,349,708
Comprehensive income (loss)			114,897	28,724	143,621	(2,258)	141,363
Proceeds from issuance of capital stock	7,508	750,787					750,787
Repurchase of capital stock	(6,319)	(631,835)					(631,835)
Net stock reclassified to mandatorily redeemable capital stock	(64)	(6,404)					(6,404)
Cash dividends on capital stock			(104,532)		(104,532)		(104,532)
BALANCE, JUNE 30, 2024	<u>47,915</u>	<u>\$ 4,791,545</u>	<u>\$ 980,980</u>	<u>\$ 751,701</u>	<u>\$ 1,732,681</u>	<u>\$ (25,139)</u>	<u>\$ 6,499,087</u>

(In thousands)	Capital Stock Class B - Putable		Retained Earnings			Accumulated Other Comprehensive Income (Loss)	Total Capital
	Shares	Par Value	Unrestricted	Restricted	Total		
	BALANCE, DECEMBER 31, 2022	51,507	\$ 5,150,679	\$ 840,774	\$ 560,118		
Comprehensive income (loss)			275,968	68,993	344,961	15,166	360,127
Proceeds from issuance of capital stock	36,295	3,629,524					3,629,524
Repurchase of capital stock	(26,184)	(2,618,405)					(2,618,405)
Net stock reclassified to mandatorily redeemable capital stock	(3,134)	(313,383)					(313,383)
Cash dividends on capital stock			(163,537)		(163,537)		(163,537)
BALANCE, JUNE 30, 2023	<u>58,484</u>	<u>\$ 5,848,415</u>	<u>\$ 953,205</u>	<u>\$ 629,111</u>	<u>\$ 1,582,316</u>	<u>\$ (34,174)</u>	<u>\$ 7,396,557</u>
BALANCE, DECEMBER 31, 2023	48,459	\$ 4,845,902	\$ 964,436	\$ 693,682	\$ 1,658,118	\$ (77,337)	\$ 6,426,683
Comprehensive income (loss)			232,080	58,019	290,099	52,198	342,297
Proceeds from issuance of capital stock	10,839	1,083,923					1,083,923
Repurchase of capital stock	(11,319)	(1,131,876)					(1,131,876)
Net stock reclassified to mandatorily redeemable capital stock	(64)	(6,404)					(6,404)
Cash dividends on capital stock			(215,536)		(215,536)		(215,536)
BALANCE, JUNE 30, 2024	<u>47,915</u>	<u>\$ 4,791,545</u>	<u>\$ 980,980</u>	<u>\$ 751,701</u>	<u>\$ 1,732,681</u>	<u>\$ (25,139)</u>	<u>\$ 6,499,087</u>

The accompanying notes are an integral part of these financial statements.

FEDERAL HOME LOAN BANK OF CINCINNATI
STATEMENTS OF CASH FLOWS
(Unaudited)

(In thousands)

	Six Months Ended June 30,	
	2024	2023
OPERATING ACTIVITIES:		
Net income	\$ 290,099	\$ 344,961
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization/(accretion)	(39,753)	347,249
Net change in derivative and hedging activities	487,944	36,237
Net change in fair value adjustments on trading securities	25,774	1,286
Net realized (gains) losses from sales of available-for-sale securities	(1,425)	—
Net change in fair value adjustments on financial instruments held under fair value option	7,855	(25,623)
Other adjustments, net	558	491
Net change in:		
Accrued interest receivable	16,819	(353,946)
Other assets	3,611	4,485
Accrued interest payable	(8,679)	338,261
Other liabilities	49,308	34,172
Total adjustments	542,012	382,612
Net cash provided by (used in) operating activities	832,111	727,573
INVESTING ACTIVITIES:		
Net change in:		
Interest-bearing deposits	166,724	(659,209)
Securities purchased under agreements to resell	1,330,710	(11,685,950)
Federal funds sold	2,419,000	(8,754,000)
Trading securities:		
Proceeds from maturities and paydowns	250,028	250,038
Purchases	(1,252,309)	—
Available-for-sale securities:		
Proceeds from maturities and paydowns	21,329	—
Proceeds from sales	1,205,248	—
Purchases	(178,603)	(933,804)
Held-to-maturity securities:		
Proceeds from maturities and paydowns	1,181,655	930,667
Purchases	(350,032)	(1,460,737)
Advances, net	(5,591,431)	(19,973,956)
Mortgage loans held for portfolio:		
Principal collected	303,714	295,371
Purchases	(396,701)	(138,398)
Premises, software, and equipment, net	(3,946)	(2,953)
Net cash provided by (used in) investing activities	(894,614)	(42,132,931)

The accompanying notes are an integral part of these financial statements.

(continued from previous page)

FEDERAL HOME LOAN BANK OF CINCINNATI
STATEMENTS OF CASH FLOWS
(Unaudited)

(In thousands)

	Six Months Ended June 30,	
	2024	2023
FINANCING ACTIVITIES:		
Net change in deposits and pass-through reserves	\$ (18,959)	\$ 163,655
Net proceeds from issuance of Consolidated Obligations:		
Discount Notes	48,555,223	137,487,809
Bonds	59,505,952	80,740,832
Bonds transferred from other FHLBanks	—	249,999
Payments for maturing and retiring Consolidated Obligations:		
Discount Notes	(50,612,752)	(130,182,033)
Discount Notes transferred to other FHLBanks	(998)	—
Bonds	(57,091,405)	(47,586,945)
Proceeds from issuance of capital stock	1,083,923	3,629,524
Payments for repurchase of capital stock	(1,131,876)	(2,618,405)
Payments for repurchase/redemption of mandatorily redeemable capital stock	(8,645)	(314,871)
Cash dividends paid	(215,536)	(163,537)
Net cash provided by (used in) financing activities	<u>64,927</u>	<u>41,406,028</u>
Net increase (decrease) in cash and due from banks	2,424	670
Cash and due from banks at beginning of the period	20,824	19,604
Cash and due from banks at end of the period	<u>\$ 23,248</u>	<u>\$ 20,274</u>
Supplemental Disclosures:		
Interest paid	<u>\$ 2,909,628</u>	<u>\$ 2,518,784</u>
Affordable Housing Program payments, net	<u>\$ 29,899</u>	<u>\$ 12,409</u>

The accompanying notes are an integral part of these financial statements.

FEDERAL HOME LOAN BANK OF CINCINNATI

NOTES TO UNAUDITED FINANCIAL STATEMENTS

Background Information

The Federal Home Loan Bank of Cincinnati (the FHLB), a federally chartered corporation, is one of 11 District Federal Home Loan Banks (FHLBanks). The FHLBanks are government-sponsored enterprises (GSEs) that were organized under the Federal Home Loan Bank Act of 1932, as amended (FHLBank Act), to serve the public by enhancing the availability of credit for residential mortgages and targeted community development. The FHLB is regulated by the Federal Housing Finance Agency (Finance Agency). The FHLBanks are financial cooperatives that provide a readily available, competitively-priced source of funds to their member institutions.

Note 1 - Basis of Presentation

The accompanying interim financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The preparation of financial statements in accordance with GAAP requires management to make assumptions and estimates. These assumptions and estimates affect the reported amount of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of income and expenses. Actual results could differ from these estimates. The interim financial statements presented are unaudited, but they include all adjustments (consisting of only normal recurring adjustments) which are, in the opinion of management, necessary for a fair presentation of the financial condition, results of operations, and cash flows for such periods. These financial statements do not include all disclosures associated with annual financial statements and accordingly should be read in conjunction with the audited financial statements and notes included in the FHLB's Annual Report on Form 10-K for the year ended December 31, 2023 filed with the Securities and Exchange Commission (SEC) on March 21, 2024. Results for the six months ended June 30, 2024 are not necessarily indicative of operating results for the full year.

The FHLB presents certain financial instruments, including derivative instruments and securities purchased under agreements to resell, on a net basis when it has a legal right of offset and all other requirements for netting are met (collectively referred to as the netting requirements). For these instruments, the FHLB has elected to offset its asset and liability positions, as well as cash collateral received or pledged, when it has met the netting requirements. The FHLB did not have any offsetting liabilities related to its securities purchased under agreements to resell for the periods presented.

The net exposure for these financial instruments can change on a daily basis; therefore, there may be a delay between the time this exposure change is identified and additional collateral is requested, and the time this collateral is received or pledged. Likewise, there may be a delay for excess collateral to be returned. For derivative instruments that meet the requirements for netting, any excess cash collateral received or pledged is recognized as a derivative liability or derivative asset. Additional information regarding these agreements is provided in Note 6. Based on the fair value of the related collateral held, the securities purchased under agreements to resell were fully collateralized for the periods presented. For more information about the FHLB's investments in securities purchased under agreements to resell, see "Item 8. Financial Statements and Supplementary Data - Note 1 - Summary of Significant Accounting Policies" in the FHLB's 2023 Annual Report on Form 10-K.

Subsequent Events

The FHLB has evaluated subsequent events for potential recognition or disclosure through the issuance of these financial statements and believes there have been no material subsequent events requiring additional disclosure or recognition in these financial statements.

Note 2 - Recently Issued and Adopted Accounting Guidance

Improvements to Reportable Segment Disclosures. In November 2023, the Financial Accounting Standards Board (FASB) issued guidance that improves reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. Among other things, the new guidance requires disclosure of significant segment expenses that are regularly provided to the chief operating decision maker and included within each reported measure of segment profit or loss, requires segment disclosures for entities with a single reportable segment, and expands interim disclosure requirements.

The guidance becomes effective for the FHLB for the annual period ending December 31, 2024 and the interim periods thereafter. Early adoption is permitted. The FHLB does not intend to adopt this guidance early. At this time, the FHLB expects this new guidance will impact its disclosures, but will not have a material impact on its financial condition, results of operations, and cash flows.

Note 3 - Investments

The FHLB makes short-term investments in interest-bearing deposits, securities purchased under agreements to resell, and Federal funds sold and may make other investments in debt securities, which are classified as either trading, available-for-sale, or held-to-maturity.

Interest-Bearing Deposits, Securities Purchased under Agreements to Resell, and Federal Funds Sold

The FHLB invests in interest-bearing deposits, securities purchased under agreements to resell, and Federal funds sold to provide liquidity.

At June 30, 2024 and December 31, 2023, interest-bearing deposits and Federal funds sold were transacted with counterparties that have received a credit rating of single-A or greater by a nationally recognized statistical rating organization (NRSRO). The FHLB’s internal ratings of these counterparties may differ from those issued by an NRSRO. Finance Agency regulations include a limit on the amount of unsecured credit the FHLB may extend to a counterparty. At June 30, 2024 and December 31, 2023, all investments in interest-bearing deposits and Federal funds sold were repaid or expected to be repaid according to their respective contractual terms. No allowance for credit losses was recorded for these assets at June 30, 2024 and December 31, 2023. Carrying values of interest-bearing deposits and Federal funds sold exclude accrued interest receivable of (in thousands) \$7,867 and \$1,934 as of June 30, 2024, and \$8,627 and \$3,006 as of December 31, 2023.

Securities purchased under agreements to resell are short-term and are structured such that they are evaluated regularly to determine if the market value of the underlying securities decreases below the market value required as collateral (i.e., subject to collateral maintenance provisions). If so, the counterparty must place an equivalent amount of additional securities as collateral or remit an equivalent amount of cash, generally by the next business day. Based upon the collateral held as security and collateral maintenance provisions with counterparties, the FHLB determined that no allowance for credit losses was needed for its securities purchased under agreements to resell at June 30, 2024 and December 31, 2023. The carrying value of securities purchased under agreements to resell excludes accrued interest receivable of (in thousands) \$1,778 and \$2,373 as of June 30, 2024 and December 31, 2023, respectively.

Debt Securities

The FHLB invests in debt securities, which are classified as either trading, available-for-sale, or held-to-maturity. The FHLB is prohibited by Finance Agency regulations from purchasing certain higher-risk securities, such as equity securities and debt instruments that are not investment quality, other than certain investments targeted at low-income persons or communities. The FHLB is not required to divest instruments that experience credit deterioration after their purchase.

Trading Securities

Table 3.1 - Trading Securities by Major Security Types (in thousands)

<u>Fair Value</u>	<u>June 30, 2024</u>	<u>December 31, 2023</u>
Non-mortgage-backed securities (non-MBS):		
U.S. Treasury obligations	\$ 1,252,224	\$ 248,688
GSE obligations	1,470,008	1,497,009
Total non-MBS	<u>2,722,232</u>	<u>1,745,697</u>
Mortgage-backed securities (MBS):		
U.S. obligation single-family	18	45
Total MBS	18	45
Total	<u>\$ 2,722,250</u>	<u>\$ 1,745,742</u>

Table 3.2 - Net Gains (Losses) on Trading Securities (in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Net unrealized gains (losses) on trading securities held at period end	\$ (11,980)	\$ (27,033)	\$ (27,086)	\$ (2,693)
Net gains (losses) on trading securities sold/matured during the period	—	387	1,312	1,407
Net gains (losses) on trading securities	<u>\$ (11,980)</u>	<u>\$ (26,646)</u>	<u>\$ (25,774)</u>	<u>\$ (1,286)</u>

Available-for-Sale Securities

Table 3.3 - Available-for-Sale Securities by Major Security Types (in thousands)

	June 30, 2024			
	Amortized Cost ⁽¹⁾	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Non-MBS:				
U.S. Treasury obligations	\$ 6,341,941	\$ 2,971	\$ (5,116)	\$ 6,339,796
GSE obligations	118,052	891	—	118,943
Total non-MBS	<u>6,459,993</u>	<u>3,862</u>	<u>(5,116)</u>	<u>6,458,739</u>
MBS:				
GSE multi-family	2,602,176	4,756	(27,219)	2,579,713
Total MBS	<u>2,602,176</u>	<u>4,756</u>	<u>(27,219)</u>	<u>2,579,713</u>
Total	<u>\$ 9,062,169</u>	<u>\$ 8,618</u>	<u>\$ (32,335)</u>	<u>\$ 9,038,452</u>
	December 31, 2023			
	Amortized Cost ⁽¹⁾	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Non-MBS:				
U.S. Treasury obligations	\$ 7,630,467	\$ 564	\$ (19,212)	\$ 7,611,819
GSE obligations	119,366	575	(29)	119,912
Total non-MBS	<u>7,749,833</u>	<u>1,139</u>	<u>(19,241)</u>	<u>7,731,731</u>
MBS:				
GSE multi-family	2,497,752	97	(57,992)	2,439,857
Total MBS	<u>2,497,752</u>	<u>97</u>	<u>(57,992)</u>	<u>2,439,857</u>
Total	<u>\$ 10,247,585</u>	<u>\$ 1,236</u>	<u>\$ (77,233)</u>	<u>\$ 10,171,588</u>

(1) Amortized cost of available-for-sale securities includes adjustments made to the cost basis of an investment for accretion, amortization, and/or fair value hedge accounting adjustments, and excludes accrued interest receivable of (in thousands) \$39,193 and \$47,969 at June 30, 2024 and December 31, 2023, respectively.

Table 3.4 summarizes the available-for-sale securities with gross unrealized losses, which are aggregated by major security type and length of time that individual securities have been in a continuous gross unrealized loss position.

Table 3.4 - Available-for-Sale Securities in a Continuous Gross Unrealized Loss Position (in thousands)

	June 30, 2024					
	Less than 12 Months		12 Months or more		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Non-MBS:						
U.S. Treasury obligations	\$2,873,522	\$ (2,781)	\$ 900,309	\$ (2,335)	\$3,773,831	\$ (5,116)
Total non-MBS	2,873,522	(2,781)	900,309	(2,335)	3,773,831	(5,116)
MBS:						
GSE multi-family MBS	203,136	(409)	1,458,284	(26,810)	1,661,420	(27,219)
Total MBS	203,136	(409)	1,458,284	(26,810)	1,661,420	(27,219)
Total	\$3,076,658	\$ (3,190)	\$2,358,593	\$ (29,145)	\$5,435,251	\$ (32,335)

	December 31, 2023					
	Less than 12 Months		12 Months or more		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Non-MBS:						
U.S. Treasury obligations	\$5,738,322	\$ (14,385)	\$ 907,749	\$ (4,827)	\$6,646,071	\$ (19,212)
GSE obligations	—	—	4,478	(29)	4,478	(29)
Total non-MBS	5,738,322	(14,385)	912,227	(4,856)	6,650,549	(19,241)
MBS:						
GSE multi-family MBS	1,103,524	(12,797)	1,196,774	(45,195)	2,300,298	(57,992)
Total MBS	1,103,524	(12,797)	1,196,774	(45,195)	2,300,298	(57,992)
Total	\$6,841,846	\$ (27,182)	\$2,109,001	\$ (50,051)	\$8,950,847	\$ (77,233)

Table 3.5 - Available-for-Sale Securities by Contractual Maturity (in thousands)

Year of Maturity	June 30, 2024		December 31, 2023	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Non-MBS:				
Due in 1 year or less	\$ —	\$ —	\$ —	\$ —
Due after 1 year through 5 years	6,450,093	6,448,686	7,010,815	6,994,480
Due after 5 years through 10 years	7,938	8,039	728,761	726,993
Due after 10 years	1,962	2,014	10,257	10,258
Total non-MBS	6,459,993	6,458,739	7,749,833	7,731,731
MBS ⁽¹⁾	2,602,176	2,579,713	2,497,752	2,439,857
Total	\$ 9,062,169	\$ 9,038,452	\$ 10,247,585	\$ 10,171,588

(1) MBS are not presented by contractual maturity because their expected maturities will likely differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment fees.

Table 3.6 - Interest Rate Payment Terms of Available-for-Sale Securities (in thousands)

	June 30, 2024	December 31, 2023
Amortized cost of non-MBS:		
Fixed-rate	\$ 6,459,993	\$ 7,749,833
Total amortized cost of non-MBS	6,459,993	7,749,833
Amortized cost of MBS:		
Fixed-rate	2,602,176	2,497,752
Total amortized cost of MBS	2,602,176	2,497,752
Total	\$ 9,062,169	\$ 10,247,585

Realized Gains and Losses. During the three and six months ended June 30, 2024, for strategic and economic reasons, the FHLB sold a portion of available-for-sale securities. These securities had an amortized cost (determined by the specific identification method) of (in thousands) \$238,670 and \$1,203,823, respectively. During the three and six months ended June 30, 2024, proceeds from the sales totaled (in thousands) \$238,959 and \$1,205,248, respectively, resulting in realized gains of (in thousands) \$289 and \$1,425, respectively. The FHLB had no sales of securities out of its available-for-sale portfolio for the three and six months ended June 30, 2023.

Held-to-Maturity Securities

Table 3.7 - Held-to-Maturity Securities by Major Security Types (in thousands)

	June 30, 2024			
	Amortized Cost ⁽¹⁾	Gross Unrecognized Holding Gains	Gross Unrecognized Holding Losses	Fair Value
Non-MBS:				
U.S. Treasury obligations	\$ 48,637	\$ —	\$ (14)	\$ 48,623
Total non-MBS	48,637	—	(14)	48,623
MBS:				
U.S. obligation single-family	1,055,752	—	(150,192)	905,560
GSE single-family	3,320,308	4,568	(96,967)	3,227,909
GSE multi-family	11,644,148	2,497	(43,403)	11,603,242
Total MBS	16,020,208	7,065	(290,562)	15,736,711
Total	\$ 16,068,845	\$ 7,065	\$ (290,576)	\$ 15,785,334
	December 31, 2023			
	Amortized Cost ⁽¹⁾	Gross Unrecognized Holding Gains	Gross Unrecognized Holding Losses	Fair Value
Non-MBS:				
U.S. Treasury obligations	\$ 49,078	\$ —	\$ (6)	\$ 49,072
Total non-MBS	49,078	—	(6)	49,072
MBS:				
U.S. obligation single-family	1,109,265	—	(129,457)	979,808
GSE single-family	3,146,571	23,124	(79,336)	3,090,359
GSE multi-family	12,527,219	2,159	(72,004)	12,457,374
Total MBS	16,783,055	25,283	(280,797)	16,527,541
Total	\$ 16,832,133	\$ 25,283	\$ (280,803)	\$ 16,576,613

(1) Carrying value equals amortized cost. Amortized cost of held-to-maturity securities includes adjustments made to the cost basis of an investment for accretion and amortization and excludes accrued interest receivable of (in thousands) \$63,172 and \$68,866 at June 30, 2024 and December 31, 2023, respectively.

Table 3.8 - Held-to-Maturity Securities by Contractual Maturity (in thousands)

<u>Year of Maturity</u>	<u>June 30, 2024</u>		<u>December 31, 2023</u>	
	<u>Amortized Cost ⁽¹⁾</u>	<u>Fair Value</u>	<u>Amortized Cost ⁽¹⁾</u>	<u>Fair Value</u>
Non-MBS:				
Due in 1 year or less	\$ 48,637	\$ 48,623	\$ 49,078	\$ 49,072
Due after 1 year through 5 years	—	—	—	—
Due after 5 years through 10 years	—	—	—	—
Due after 10 years	—	—	—	—
Total non-MBS	48,637	48,623	49,078	49,072
MBS ⁽²⁾	16,020,208	15,736,711	16,783,055	16,527,541
Total	<u>\$ 16,068,845</u>	<u>\$ 15,785,334</u>	<u>\$ 16,832,133</u>	<u>\$ 16,576,613</u>

(1) Carrying value equals amortized cost.

(2) MBS are not presented by contractual maturity because their expected maturities will likely differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment fees.

Table 3.9 - Interest Rate Payment Terms of Held-to-Maturity Securities (in thousands)

	<u>June 30, 2024</u>	<u>December 31, 2023</u>
Amortized cost of non-MBS:		
Fixed-rate	\$ 48,637	\$ 49,078
Total amortized cost of non-MBS	48,637	49,078
Amortized cost of MBS:		
Fixed-rate	4,245,978	4,118,328
Variable-rate	11,774,230	12,664,727
Total amortized cost of MBS	16,020,208	16,783,055
Total	<u>\$ 16,068,845</u>	<u>\$ 16,832,133</u>

For the six months ended June 30, 2024 and 2023, the FHLB did not sell any held-to-maturity securities.

Allowance for Credit Losses on Available-for-Sale and Held-to-Maturity Securities

The FHLB evaluates available-for-sale and held-to-maturity investment securities for credit losses on a quarterly basis. The FHLB's available-for-sale and held-to-maturity securities are U.S. Treasury obligations, GSE obligations, and MBS issued by Fannie Mae, Freddie Mac and Ginnie Mae that are backed by single-family or multi-family mortgage loans. The FHLB only purchases securities considered investment quality. At June 30, 2024 and December 31, 2023, all available-for-sale and held-to-maturity securities were rated single-A, or above, by an NRSRO, based on the lowest long-term credit rating for each security owned by the FHLB. The FHLB's internal ratings of these securities may differ from those obtained from an NRSRO.

The FHLB evaluates individual available-for-sale securities for impairment by comparing the security's fair value to its amortized cost. Impairment may exist when the fair value of the investment is less than its amortized cost (i.e., in an unrealized loss position). At June 30, 2024 and December 31, 2023, certain available-for-sale securities were in an unrealized loss position. These losses are considered temporary as the FHLB expects to recover the entire amortized cost basis on these available-for-sale investment securities and does not intend to sell these securities nor considers it more likely than not that it will be required to sell these securities before the anticipated recovery of each security's remaining amortized cost basis. Further, the FHLB has not experienced any payment defaults on the instruments at June 30, 2024 or December 31, 2023 and all of these securities are highly-rated. In the case of U.S. obligations, they carry an explicit government guarantee. In the case of GSE securities, they are purchased under the assumption that the issuers' obligation to pay principal and interest on those securities will be honored, taking into account their status as GSEs. As a result, no allowance for credit losses was recorded on these available-for-sale securities at June 30, 2024 and December 31, 2023.

The FHLB evaluates its held-to-maturity securities for impairment on a collective, or pooled basis, unless an individual assessment is deemed necessary because the securities do not possess similar risk characteristics. As of June 30, 2024 and December 31, 2023, the FHLB had not established an allowance for credit loss on any held-to-maturity securities because the securities: (1) were all highly-rated and/or had short remaining terms to maturity, (2) had not experienced, nor did the FHLB

expect, any payment default on the instruments, (3) in the case of U.S. obligations, the securities carry an explicit government guarantee such that the FHLB considered the risk of nonpayment to be zero, and (4) in the case of GSE securities, they are purchased under an assumption that the issuers' obligation to pay principal and interest on those securities will be honored, taking into account their status as GSEs.

Note 4 - Advances

The following table presents Advance redemptions by contractual maturity, including index-amortizing Advances, which are presented according to their predetermined amortization schedules.

Table 4.1 - Advances by Redemption Term (dollars in thousands)

Redemption Term	June 30, 2024		December 31, 2023	
	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate
Overdrawn demand deposit accounts	\$ —	— %	\$ 458	5.54 %
Due in 1 year or less	34,594,380	5.38	31,560,442	5.42
Due after 1 year through 2 years	16,840,285	5.29	10,707,268	5.18
Due after 2 years through 3 years	16,111,019	5.03	17,456,336	5.28
Due after 3 years through 4 years	5,143,176	4.06	4,668,018	3.90
Due after 4 years through 5 years	5,180,664	5.49	7,677,484	5.05
Thereafter	1,359,698	2.60	1,567,786	2.52
Total principal amount	79,229,222	5.16	73,637,792	5.15
Commitment fees	(73)		(81)	
Discounts	(1,230)		(1,463)	
Fair value hedging adjustments	(394,009)		(87,501)	
Fair value option valuation adjustments and accrued interest	(251)		4,415	
Total ⁽¹⁾	<u>\$ 78,833,659</u>		<u>\$ 73,553,162</u>	

(1) Carrying values exclude accrued interest receivable of (in thousands) \$354,165 and \$366,930 at June 30, 2024 and December 31, 2023, respectively.

The FHLB offers certain fixed- and variable-rate Advances to members that may be prepaid on specified dates (call dates) without incurring prepayment or termination fees (callable Advances). Other Advances may only be prepaid subject to a prepayment fee paid to the FHLB that makes the FHLB financially indifferent to the prepayment of the Advance.

Table 4.2 - Advances by Redemption Term or Next Call Date (in thousands)

Redemption Term or Next Call Date	June 30, 2024	December 31, 2023
Overdrawn demand deposit accounts	\$ —	\$ 458
Due in 1 year or less	37,603,804	34,560,442
Due after 1 year through 2 years	19,862,905	15,207,268
Due after 2 years through 3 years	10,111,595	9,988,956
Due after 3 years through 4 years	9,120,556	8,668,018
Due after 4 years through 5 years	1,170,664	3,644,864
Thereafter	1,359,698	1,567,786
Total principal amount	<u>\$ 79,229,222</u>	<u>\$ 73,637,792</u>

The FHLB also offers puttable Advances. With a puttable Advance, the FHLB effectively purchases put options from the member that allows the FHLB to terminate the Advance at predetermined dates. The FHLB normally would exercise its put option when interest rates increase relative to contractual rates.

Table 4.3 - Advances by Redemption Term or Next Put Date for Putable Advances (in thousands)

Redemption Term or Next Put Date	June 30, 2024	December 31, 2023
Overdrawn demand deposit accounts	\$ —	\$ 458
Due in 1 year or less	35,059,380	31,985,442
Due after 1 year through 2 years	16,930,285	10,772,268
Due after 2 years through 3 years	16,041,019	17,471,336
Due after 3 years through 4 years	5,143,176	4,668,018
Due after 4 years through 5 years	5,080,664	7,577,484
Thereafter	974,698	1,162,786
Total principal amount	<u>\$ 79,229,222</u>	<u>\$ 73,637,792</u>

Table 4.4 - Advances by Interest Rate Payment Terms (in thousands)

	June 30, 2024	December 31, 2023
Total fixed-rate ⁽¹⁾	\$ 49,396,192	\$ 42,114,739
Total variable-rate ⁽¹⁾	29,833,030	31,523,053
Total principal amount	<u>\$ 79,229,222</u>	<u>\$ 73,637,792</u>

(1) Payment terms based on current interest rate terms, which reflect any option exercises or rate conversions that have occurred subsequent to the related Advance issuance.

Credit Risk Exposure and Security Terms

The FHLB manages its credit exposure to Advances through an integrated approach that includes establishing a credit limit for each borrower and ongoing review of each borrower's financial condition, coupled with collateral and lending policies to limit risk of loss while balancing borrowers' needs for a reliable source of funding.

In addition, the FHLB lends to eligible borrowers in accordance with federal law and Finance Agency regulations, which require the FHLB to obtain sufficient collateral to fully secure credit products. Under these regulations, collateral eligible to secure new or renewed Advances includes:

- one-to-four family mortgage loans (delinquent for no more than 60 days) and multi-family mortgage loans (delinquent for no more than 30 days) and securities representing such mortgages;
- loans and securities issued and insured, or guaranteed by the U.S. government or any U.S. government agency (for example, mortgage-backed securities issued or guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae);
- cash or deposits in the FHLB;
- certain other collateral that is real estate-related, provided that the collateral has a readily ascertainable value, can be reliably discounted to account for liquidation and other risks, can be liquidated in due course and the FHLB can perfect a security interest in it; and
- certain qualifying securities representing undivided equity interests in eligible Advance collateral.

Residential mortgage loans are the principal form of collateral for Advances. The estimated value of the collateral required to secure each member's credit products is calculated by applying collateral discounts, or haircuts, to the value of the collateral. In addition, community financial institutions are eligible to utilize expanded statutory collateral provisions for small business and agribusiness loans. The FHLB's capital stock owned by its member borrowers is also pledged as collateral. Collateral arrangements and a member's borrowing capacity vary based on the financial condition and performance of the institution, the types of collateral pledged and the overall quality of those assets. The FHLB can also require additional or substitute collateral to protect its security interest. The FHLB also has policies and procedures for validating the reasonableness of its collateral valuations and makes changes to its collateral guidelines, as necessary, based on current market conditions. In addition, collateral verifications and reviews are performed by the FHLB based on the risk profile of the borrower. Management of the FHLB believes that these policies effectively manage the FHLB's credit risk from Advances.

Members experiencing financial difficulties are subject to FHLB-performed "stress tests" to evaluate the impact of poorly performing assets on the member's capital and loss reserve positions. Depending on the results of these tests, a member may be allowed to maintain pledged loan assets in its custody, may be required to deliver those loans into the custody of the FHLB or its agent, or may be required to provide details on those loans to facilitate an estimate of their fair value. The FHLB perfects its security interest in all pledged collateral. The FHLBank Act affords any security interest granted to the FHLB by a member

priority over the claims or rights of any other party except for claims or rights of a third party that would otherwise be entitled to priority under applicable law and that are held by a bona fide purchaser for value or by a secured party holding a prior perfected security interest.

Using a risk-based approach, the FHLB considers the payment status, collateralization levels, and borrower's financial condition to be indicators of credit quality for its credit products. At June 30, 2024 and December 31, 2023, the FHLB did not have any Advances that were past due, in non-accrual status or considered impaired. In addition, there were no modifications of Advances with borrowers experiencing financial difficulty during the six months ended June 30, 2024 or 2023. At June 30, 2024 and December 31, 2023, the FHLB had rights to collateral on a member-by-member basis with an estimated value in excess of its outstanding extensions of credit.

Based upon the collateral held as security, its credit extension and collateral policies and the repayment history on Advances, the FHLB did not expect any credit losses on Advances as of June 30, 2024 and, therefore, no allowance for credit losses on Advances was recorded. For the same reasons, the FHLB did not record any allowance for credit losses on Advances at December 31, 2023.

Advance Concentrations

Table 4.5 - Borrowers Holding Five Percent or more of Total Advances, Including Any Known Affiliates that are Members of the FHLB (dollars in millions)

June 30, 2024			December 31, 2023		
	Principal	% of Total Principal Amount of Advances		Principal	% of Total Principal Amount of Advances
JPMorgan Chase Bank, N.A.	\$ 14,000	18 %	JPMorgan Chase Bank, N.A.	\$ 14,000	19 %
U.S. Bank, N.A.	10,000	13	U.S. Bank, N.A.	10,000	14
Keybank, N.A.	9,333	12	Keybank, N.A.	9,836	13
Fifth Third Bank	6,001	7	Third Federal Savings and Loan Association	5,008	7
Third Federal Savings and Loan Association	4,807	6	Fifth Third Bank	4,001	5
Total	<u>\$ 44,141</u>	<u>56 %</u>	Total	<u>\$ 42,845</u>	<u>58 %</u>

Note 5 - Mortgage Loans

Total mortgage loans held for portfolio represent residential mortgage loans under the Mortgage Purchase Program (MPP) that the FHLB's members originate, credit enhance, and then sell to the FHLB. The FHLB does not service any of these loans.

Table 5.1 - Mortgage Loans Held for Portfolio (in thousands)

	June 30, 2024	December 31, 2023
Fixed rate medium-term single-family mortgage loans ⁽¹⁾	\$ 468,271	\$ 462,554
Fixed rate long-term single-family mortgage loans ⁽²⁾	6,574,912	6,497,563
Total unpaid principal balance	7,043,183	6,960,117
Premiums	148,576	146,380
Discounts	(3,904)	(3,200)
Hedging basis adjustments ⁽³⁾	4,937	5,353
Total mortgage loans held for portfolio ⁽⁴⁾	7,192,792	7,108,650
Allowance for credit losses on mortgage loans	(331)	(316)
Mortgage loans held for portfolio, net	<u>\$ 7,192,461</u>	<u>\$ 7,108,334</u>

(1) Medium-term is defined as an original term of 15 years or less.

(2) Long-term is defined as an original term of greater than 15 years up to 30 years.

(3) Represents the unamortized balance of the mortgage purchase commitments' market values at the time of settlement. The market value of the commitment is included in the basis of the mortgage loan and amortized accordingly.

(4) Excludes accrued interest receivable of (in thousands) \$24,391 and \$23,193 at June 30, 2024 and December 31, 2023, respectively.

Table 5.2 - Mortgage Loans Held for Portfolio by Collateral/Guarantee Type (in thousands)

	June 30, 2024	December 31, 2023
Conventional mortgage loans	\$ 6,953,052	\$ 6,863,020
Federal Housing Administration (FHA) mortgage loans	90,131	97,097
Total unpaid principal balance	<u>\$ 7,043,183</u>	<u>\$ 6,960,117</u>

Table 5.3 - Members, Including Any Known Affiliates that are Members of the FHLB, and Former Members Selling Five Percent or more of Total Unpaid Principal (dollars in millions)

	June 30, 2024			December 31, 2023	
	Principal	% of Total		Principal	% of Total
Union Savings Bank	\$ 1,514	22 %	Union Savings Bank	\$ 1,513	22 %
FirstBank	703	10	FirstBank	725	10
LCNB National Bank	447	6	Guardian Savings Bank FSB	405	6
Guardian Savings Bank FSB	405	6	The Huntington National Bank	404	6
The Huntington National Bank	397	6			

Credit Risk Exposure

The FHLB manages credit risk exposure for conventional mortgage loans primarily through conservative underwriting and purchasing loans with characteristics consistent with favorable expected credit performance and by applying various credit enhancements.

Credit Enhancements. The conventional mortgage loans under the MPP are primarily supported by some combination of credit enhancements (primary mortgage insurance (PMI) and the Lender Risk Account (LRA), including pooled LRA for those members participating in an aggregated MPP pool). These credit enhancements apply after a homeowner's equity is exhausted. The LRA is funded by the FHLB upfront as a portion of the purchase proceeds to cover potential credit losses. The LRA is recorded in other liabilities in the Statements of Condition. Excess funds from the LRA are released to the member in accordance with the terms of the Master Commitment Contract, which is typically after five years, subject to performance of the related loan pool. Because the FHA makes an explicit guarantee on FHA mortgage loans, the FHLB does not require any credit enhancements on these loans beyond primary mortgage insurance.

Table 5.4 - Changes in the LRA (in thousands)

	Six Months Ended	
	June 30, 2024	
LRA at beginning of year	\$	239,051
Additions		7,893
Claims		(27)
Scheduled distributions		(2,860)
LRA at end of period	\$	<u>244,057</u>

Payment Status of Mortgage Loans. The key credit quality indicator for conventional mortgage loans is payment status, which allows the FHLB to monitor borrower performance. Past due loans are those where the borrower has failed to make a full payment of principal and interest within one month of its due date. Table 5.5 presents the payment status of conventional mortgage loans.

Table 5.5 - Credit Quality Indicator of Conventional Mortgage Loans (in thousands)

	June 30, 2024		
	Origination Year		
Payment status, at amortized cost:	Prior to 2020	2020 to June 30, 2024	Total
Past due 30-59 days	\$ 12,192	\$ 11,002	\$ 23,194
Past due 60-89 days	3,222	333	3,555
Past due 90 days or more	5,111	1,144	6,255
Total past due mortgage loans	20,525	12,479	33,004
Current mortgage loans	2,977,960	4,091,085	7,069,045
Total conventional mortgage loans	<u>\$ 2,998,485</u>	<u>\$ 4,103,564</u>	<u>\$ 7,102,049</u>
	December 31, 2023		
	Origination Year		
Payment status, at amortized cost:	Prior to 2019	2019 to 2023	Total
Past due 30-59 days	\$ 15,870	\$ 13,220	\$ 29,090
Past due 60-89 days	2,989	821	3,810
Past due 90 days or more	7,379	2,568	9,947
Total past due mortgage loans	26,238	16,609	42,847
Current mortgage loans	2,316,368	4,651,660	6,968,028
Total conventional mortgage loans	<u>\$ 2,342,606</u>	<u>\$ 4,668,269</u>	<u>\$ 7,010,875</u>

Other delinquency statistics include loans in process of foreclosure, serious delinquency rates, loans past due 90 days or more and still accruing interest, and non-accrual loans. Table 5.6 presents other delinquency statistics of mortgage loans.

Table 5.6 - Other Delinquency Statistics (dollars in thousands)

	June 30, 2024		
	Conventional MPP Loans	FHA Loans	Total
Amortized Cost:			
In process of foreclosure ⁽¹⁾	\$ 3,129	\$ 174	\$ 3,303
Serious delinquency rate ⁽²⁾	0.09 %	1.07 %	0.10 %
Past due 90 days or more still accruing interest ⁽³⁾	\$ 5,960	\$ 832	\$ 6,792
Loans on non-accrual status ⁽⁴⁾	\$ 1,030	\$ —	\$ 1,030

	December 31, 2023		
	Conventional MPP Loans	FHA Loans	Total
Amortized Cost:			
In process of foreclosure ⁽¹⁾	\$ 5,826	\$ 134	\$ 5,960
Serious delinquency rate ⁽²⁾	0.14 %	0.98 %	0.16 %
Past due 90 days or more still accruing interest ⁽³⁾	\$ 9,383	\$ 959	\$ 10,342
Loans on non-accrual status ⁽⁴⁾	\$ 1,294	\$ —	\$ 1,294

(1) Includes loans where the decision of foreclosure or a similar alternative such as pursuit of deed-in-lieu has been reported.

(2) Loans that are 90 days or more past due or in the process of foreclosure (including past due or current loans in the process of foreclosure) expressed as a percentage of the total loan portfolio class.

(3) Each conventional loan past due 90 days or more still accruing interest is on a schedule/scheduled monthly settlement basis and contains one or more credit enhancements. Loans that are well secured and in the process of collection as a result of remaining credit enhancements and schedule/scheduled settlement are not placed on non-accrual status.

(4) At June 30, 2024 and December 31, 2023, (in thousands) \$1,030 and \$1,162, respectively, of conventional MPP loans on non-accrual status do not have a related allowance because these loans were either previously charged off to their expected recoverable value and/or the fair value of the underlying collateral, including any credit enhancements, is greater than the amortized cost of the loans.

The FHLB did not have any real estate owned at June 30, 2024 or December 31, 2023.

Mortgage Loan Modifications. Under certain circumstances, the FHLB offers loan modifications within its MPP. Most commonly, loan modifications consist of capitalization of any past due interest with a corresponding increase in unpaid principal and a recast of the monthly principal and interest payment. Less frequently, loan modifications may include interest rate reductions, term extensions, balloon payments, or a combination of these types. The amortized cost basis of mortgage loans modified with borrowers experiencing financial difficulty during the three months ended June 30, 2024 and 2023 was (in thousands) \$215 and \$1,543, respectively, and during the six months ended June 30, 2024 and 2023 was (in thousands) \$1,337 and \$2,878, respectively. The financial effect of the modifications was not material to the FHLB's financial condition or results of operations.

Allowance for Credit Losses. At June 30, 2024 and December 31, 2023 the FHLB's allowance for credit losses on its conventional mortgage loans held for portfolio was (in thousands) \$331 and \$316, respectively. For additional information on the FHLB's methodology to determine current expected credit losses, see Note 6 - Mortgage Loans in the FHLB's 2023 Annual Report on Form 10-K.

Note 6 - Derivatives and Hedging Activities

Nature of Business Activity

The FHLB is exposed to interest rate risk primarily from the effect of changes in interest rates. The goal of the FHLB's interest-rate risk management strategy is not to eliminate interest-rate risk, but to manage it within appropriate limits. To mitigate the risk of loss, the FHLB has established policies and procedures, which include guidelines on the amount of exposure to interest rate changes it is willing to accept. In addition, the FHLB monitors the risk to its interest income, net interest margin and average maturity of interest-earning assets and interest-bearing liabilities. The FHLB uses derivatives when they are considered to be the most cost-effective alternative to achieve the FHLB's financial and risk management objectives. See Note 7 - Derivatives and Hedging Activities in the FHLB's 2023 Annual Report on Form 10-K for additional information on the FHLB's derivative transactions.

The FHLB transacts its derivatives with counterparties that are large banks and major broker-dealers. Some of these banks and broker-dealers or their affiliates buy, sell, and distribute Consolidated Obligations. Derivative transactions may be executed either with a counterparty, referred to as uncleared derivatives, or cleared through a Futures Commission Merchant (i.e., clearing agent) with a Derivative Clearing Organization, referred to as cleared derivatives. The FHLB is not a derivative dealer and does not trade derivatives for short-term profit.

Financial Statement Effect and Additional Financial Information

The notional amount of derivatives serves as a factor in determining periodic interest payments or cash flows received and paid. The notional amount reflects the FHLB's involvement in the various classes of financial instruments and represents neither the actual amounts exchanged nor the overall exposure of the FHLB to credit and market risk. The risks of derivatives only can be measured meaningfully on a portfolio basis that takes into account the counterparties, the types of derivatives, the items being hedged and any offsets between the derivatives and the items being hedged.

Table 6.1 summarizes the notional amount and fair value of derivative instruments and total derivative assets and liabilities. Total derivative assets and liabilities include the effect of netting adjustments and cash collateral. For purposes of this disclosure, the derivative values include the fair value of derivatives and the related accrued interest.

Table 6.1 - Fair Value of Derivative Instruments (in thousands)

	June 30, 2024		
	Notional Amount of Derivatives	Derivative Assets	Derivative Liabilities
Derivatives designated as fair value hedging instruments:			
Interest rate swaps	\$ 43,282,912	\$ 35,608	\$ 19,535
Derivatives not designated as hedging instruments:			
Interest rate swaps	17,580,361	58,689	19,657
Interest rate swaptions	200,000	1,669	—
Mortgage delivery commitments	39,801	16	89
Total derivatives not designated as hedging instruments	17,820,162	60,374	19,746
Total derivatives before adjustments	<u>\$ 61,103,074</u>	<u>95,982</u>	<u>39,281</u>
Netting adjustments and cash collateral ⁽¹⁾		(30,575)	(38,820)
Total derivative assets and total derivative liabilities		<u>\$ 65,407</u>	<u>\$ 461</u>
		December 31, 2023	
	Notional Amount of Derivatives	Derivative Assets	Derivative Liabilities
Derivatives designated as fair value hedging instruments:			
Interest rate swaps	\$ 41,383,192	\$ 9,352	\$ 34,302
Derivatives not designated as hedging instruments:			
Interest rate swaps	36,585,870	141,676	23,465
Interest rate swaptions	425,000	2,748	—
Mortgage delivery commitments	100,924	1,202	6
Total derivatives not designated as hedging instruments	37,111,794	145,626	23,471
Total derivatives before adjustments	<u>\$ 78,494,986</u>	<u>154,978</u>	<u>57,773</u>
Netting adjustments and cash collateral ⁽¹⁾		(52,987)	(47,942)
Total derivative assets and total derivative liabilities		<u>\$ 101,991</u>	<u>\$ 9,831</u>

(1) Amounts represent the application of the netting requirements that allow the FHLB to settle positive and negative positions, and also cash collateral, including accrued interest, held or placed by the FHLB with the same clearing agent and/or counterparty. Cash collateral posted, including accrued interest, was (in thousands) \$36,441 and \$98,438 at June 30, 2024 and December 31, 2023, respectively. Cash collateral received, including accrued interest, was (in thousands) \$28,196 and \$103,483 at June 30, 2024 and December 31, 2023, respectively.

Table 6.2 presents the impact of qualifying fair value hedging relationships on net interest income as well as the total interest income (expense) by product.

Table 6.2 - Impact of Fair Value Hedging Relationships on Net Interest Income (in thousands)

	Three Months Ended June 30, 2024		
	Advances	Available-for-Sale Securities	Consolidated Bonds
Total interest income (expense) recorded in the Statements of Income	\$ 1,079,650	\$ 129,410	\$ (1,183,281)
Impact of Fair Value Hedging Relationships			
Interest rate swaps:			
Net interest settlements	\$ 106,124	\$ 87,934	\$ (7,941)
Gain (loss) on derivatives	14,182	1,323	(809)
Gain (loss) on hedged items	(14,291)	(1,384)	823
Price alignment amount ⁽¹⁾	(7,262)	(13,696)	132
Effect on net interest income	\$ 98,753	\$ 74,177	\$ (7,795)
	Three Months Ended June 30, 2023		
	Advances	Available-for-Sale Securities	Consolidated Bonds
Total interest income (expense) recorded in the Statements of Income	\$ 1,439,257	\$ 129,326	\$ (1,086,138)
Impact of Fair Value Hedging Relationships			
Interest rate swaps:			
Net interest settlements	\$ 84,234	\$ 85,335	\$ (8,064)
Gain (loss) on derivatives	259,677	219,026	(6,038)
Gain (loss) on hedged items	(259,956)	(217,129)	6,372
Price alignment amount ⁽¹⁾	(4,385)	(10,991)	125
Effect on net interest income	\$ 79,570	\$ 76,241	\$ (7,605)
	Six Months Ended June 30, 2024		
	Advances	Available-for-Sale Securities	Consolidated Bonds
Total interest income (expense) recorded in the Statements of Income	\$ 2,136,627	\$ 273,975	\$ (2,375,953)
Impact of Fair Value Hedging Relationships			
Interest rate swaps:			
Net interest settlements	\$ 213,383	\$ 184,902	\$ (17,029)
Gain (loss) on derivatives	306,214	161,181	(17,300)
Gain (loss) on hedged items	(306,513)	(160,433)	17,261
Price alignment amount ⁽¹⁾	(11,639)	(26,839)	107
Effect on net interest income	\$ 201,445	\$ 158,811	\$ (16,961)

	Six Months Ended June 30, 2023		
	Advances	Available-for-Sale Securities	Consolidated Bonds
Total interest income (expense) recorded in the Statements of Income	\$ 2,335,866	\$ 236,437	\$ (1,728,134)
Impact of Fair Value Hedging Relationships			
Interest rate swaps:			
Net interest settlements	\$ 141,883	\$ 155,696	\$ (15,923)
Gain (loss) on derivatives	101,866	9,910	5,853
Gain (loss) on hedged items	(102,117)	(7,857)	(5,580)
Price alignment amount ⁽¹⁾	(8,805)	(21,569)	287
Effect on net interest income	\$ 132,827	\$ 136,180	\$ (15,363)

(1) This amount is for derivatives for which variation margin is characterized as a daily settled contract.

Table 6.3 presents the cumulative basis adjustments on hedged items designated as fair value hedges and the related amortized cost of the hedged items.

Table 6.3 - Cumulative Basis Adjustments for Fair Value Hedges (in thousands)

	June 30, 2024		
	Advances	Available-for-Sale Securities	Consolidated Bonds
Amortized cost of hedged asset or liability ⁽¹⁾	\$ 30,767,057	\$ 9,036,807	\$ 2,173,116
Fair value hedging adjustments			
Basis adjustments for active hedging relationships included in amortized cost	\$ (394,432)	\$ (886,673)	\$ (19,495)
Basis adjustments for discontinued hedging relationships included in amortized cost	423	15,010	—
Total amount of fair value hedging basis adjustments	\$ (394,009)	\$ (871,663)	\$ (19,495)
	December 31, 2023		
	Advances	Available-for-Sale Securities	Consolidated Bonds
Amortized cost of hedged asset or liability ⁽¹⁾	\$ 28,017,560	\$ 10,222,924	\$ 2,271,192
Fair value hedging adjustments			
Basis adjustments for active hedging relationships included in amortized cost	\$ (88,047)	\$ (775,129)	\$ (2,234)
Basis adjustments for discontinued hedging relationships included in amortized cost	546	16,064	—
Total amount of fair value hedging basis adjustments	\$ (87,501)	\$ (759,065)	\$ (2,234)

(1) Includes only the portion of amortized cost representing the hedged items in active or discontinued fair value hedging relationships. Amortized cost includes fair value hedging adjustments.

Table 6.4 presents net gains (losses) recorded in non-interest income (loss) on derivatives not designated as hedging instruments.

Table 6.4 - Net Gains (Losses) Recorded in Non-interest Income (Loss) on Derivatives Not Designated as Hedging Instruments (in thousands)

	Three Months Ended June 30,	
	2024	2023
Derivatives not designated as hedging instruments:		
Economic hedges:		
Interest rate swaps	\$ 1,590	\$ 2,398
Interest rate swaptions	1,356	(526)
Net interest settlements	7,111	(4,932)
Mortgage delivery commitments	(834)	(200)
Total net gains (losses) related to derivatives not designated as hedging instruments	9,223	(3,260)
Price alignment amount ⁽¹⁾	(1,807)	(1,103)
Net gains (losses) on derivatives	<u>\$ 7,416</u>	<u>\$ (4,363)</u>
	Six Months Ended June 30,	
	2024	2023
Derivatives not designated as hedging instruments:		
Economic hedges:		
Interest rate swaps	\$ 19,756	\$ 4,984
Interest rate swaptions	699	(5,027)
Net interest settlements	12,478	(9,941)
Mortgage delivery commitments	(1,195)	(73)
Total net gains (losses) related to derivatives not designated as hedging instruments	31,738	(10,057)
Price alignment amount ⁽¹⁾	(3,349)	(2,222)
Net gains (losses) on derivatives	<u>\$ 28,389</u>	<u>\$ (12,279)</u>

(1) This amount is for derivatives for which variation margin is characterized as a daily settled contract.

Credit Risk on Derivatives

The FHLB is subject to credit risk given the risk of non-performance by counterparties to its derivative transactions and manages credit risk through credit analyses of derivative counterparties, collateral requirements and adherence to the requirements set forth in its policies, U.S. Commodity Futures Trading Commission regulations, and Finance Agency regulations.

For uncleared derivatives, the degree of credit risk depends on the extent to which master netting arrangements are included in these contracts to mitigate this risk. The FHLB requires collateral agreements on its uncleared derivatives with the collateral delivery threshold set to zero.

For cleared derivatives, the Clearinghouse is the FHLB's counterparty. The Clearinghouse notifies the clearing agent of the required initial and variation margin and the clearing agent in turn notifies the FHLB. The FHLB utilizes two Clearinghouses for all cleared derivative transactions, LCH Ltd. and CME Clearing. At both Clearinghouses, variation margin is characterized as daily settlement payments, while initial margin is considered to be collateral. The requirement that the FHLB post initial and variation margin through the clearing agent, to the Clearinghouse, exposes the FHLB to credit risk if the clearing agent or the Clearinghouse fails to meet its obligations. The use of cleared derivatives is intended to mitigate credit risk exposure because a central counterparty is substituted for individual counterparties and collateral/payments for changes in the value of cleared derivatives is posted daily through a clearing agent. On the Statements of Cash Flows, the variation margin cash payments, or daily settlement payments, are included in net change in derivative and hedging activities, as an operating activity.

For cleared derivatives, the Clearinghouse determines initial margin requirements and generally credit ratings are not factored into the initial margin. However, clearing agents may require additional initial margin to be posted based on credit considerations, including, but not limited to, credit rating downgrades. At June 30, 2024, the FHLB was not required to post additional initial margin by its clearing agents based on credit considerations.

Offsetting of Derivative Assets and Derivative Liabilities

The FHLB presents derivative instruments, related cash collateral received or pledged, and associated accrued interest, on a net basis by clearing agent and/or by counterparty when it has met the netting requirements.

The FHLB has analyzed the enforceability of offsetting rights incorporated in its cleared derivative transactions, and it expects that the exercise of those offsetting rights by a non-defaulting party under these transactions would be upheld under applicable law upon an event of default, including bankruptcy, insolvency, or similar proceeding involving the Clearinghouse or the FHLB's clearing agent, or both. Based on this analysis, the FHLB presents a net derivative receivable or payable for all of its transactions through a particular clearing agent with a particular Clearinghouse.

Table 6.5 presents separately the fair value of derivative instruments meeting or not meeting netting requirements, including the related collateral. Any over-collateralization under an individual clearing agent and/or counterparty level is not included in the determination of the net unsecured amount.

Table 6.5 - Offsetting of Derivative Assets and Derivative Liabilities (in thousands)

June 30, 2024							
	Derivative Instruments Meeting Netting Requirements			Non-cash Collateral Not Offset			
	Gross Recognized Amount	Gross Amount of Netting Adjustments and Cash Collateral	Derivative Instruments Not Meeting Netting Requirements ⁽¹⁾	Total Derivative Assets and Total Derivative Liabilities	Can Be Sold or Repledged		
Derivative Assets:							
Uncleared	\$ 57,991	\$ (54,296)	\$ 16	\$ 3,711	\$ —	\$ 3,711	
Cleared	37,975	23,721	—	61,696	—	61,696	
Total				<u>\$ 65,407</u>		<u>\$ 65,407</u>	
Derivative Liabilities:							
Uncleared	\$ 36,836	\$ (36,464)	\$ 89	\$ 461	\$ —	\$ 461	
Cleared	2,356	(2,356)	—	—	—	—	
Total				<u>\$ 461</u>		<u>\$ 461</u>	

December 31, 2023							
	Derivative Instruments Meeting Netting Requirements			Non-cash Collateral Not Offset			
	Gross Recognized Amount	Gross Amount of Netting Adjustments and Cash Collateral	Derivative Instruments Not Meeting Netting Requirements ⁽¹⁾	Total Derivative Assets and Total Derivative Liabilities	Can Be Sold or Repledged		
Derivative Assets:							
Uncleared	\$ 149,580	\$ (139,559)	\$ 1,202	\$ 11,223	\$ —	\$ 11,223	
Cleared	4,196	86,572	—	90,768	—	90,768	
Total				<u>\$ 101,991</u>		<u>\$ 101,991</u>	
Derivative Liabilities:							
Uncleared	\$ 42,910	\$ (42,320)	\$ 6	\$ 596	\$ —	\$ 596	
Cleared	14,857	(5,622)	—	9,235	9,235	—	
Total				<u>\$ 9,831</u>		<u>\$ 596</u>	

(1) Includes mortgage delivery commitments that are not subject to an enforceable netting agreement.

(2) Any over-collateralization at the individual clearing agent and/or counterparty level is not included in the determination of the net amount. At June 30, 2024 and December 31, 2023, the FHLB had additional net credit exposure of (in thousands) \$819,746 and \$810,559, respectively, due to instances where the FHLB's non-cash collateral to a counterparty exceeded the FHLB's net derivative position.

Note 7 - Consolidated Obligations

Consolidated Obligations consist of Consolidated Bonds and Discount Notes. The 11 FHLBanks have joint and several liability for the par amount of all of the Consolidated Obligations issued on their behalves. The par amount of the outstanding Consolidated Obligations for all of the FHLBanks was (in billions) \$1,192.0 and \$1,204.3 at June 30, 2024 and December 31, 2023, respectively.

Table 7.1 - Consolidated Discount Notes Outstanding (dollars in thousands)

	<u>Carrying Value</u>	<u>Principal Amount</u>	<u>Weighted Average Interest Rate ⁽¹⁾</u>
June 30, 2024	\$ 21,576,233	\$ 21,776,567	5.15 %
December 31, 2023	\$ 23,690,526	\$ 23,837,675	5.22 %

(1) Represents an implied rate without consideration of concessions.

Table 7.2 - Consolidated Bonds Outstanding by Original Contractual Maturity (dollars in thousands)

<u>Year of Original Contractual Maturity</u>	<u>June 30, 2024</u>		<u>December 31, 2023</u>	
	<u>Amount</u>	<u>Weighted Average Interest Rate</u>	<u>Amount</u>	<u>Weighted Average Interest Rate</u>
Due in 1 year or less	\$ 59,638,500	5.23 %	\$ 59,008,905	5.30 %
Due after 1 year through 2 years	24,314,000	5.15	23,809,000	5.09
Due after 2 years through 3 years	2,471,300	3.43	2,111,000	3.49
Due after 3 years through 4 years	1,470,500	2.42	1,604,500	1.96
Due after 4 years through 5 years	1,507,000	3.85	1,536,500	3.45
Thereafter	4,581,140	3.78	3,502,140	3.42
Total principal amount	93,982,440	5.03	91,572,045	5.04
Premiums	45,236		37,559	
Discounts	(30,738)		(27,194)	
Fair value hedging adjustments	(19,495)		(2,234)	
Fair value option valuation adjustment and accrued interest	45,789		176,254	
Total	\$ 94,023,232		\$ 91,756,430	

Table 7.3 - Consolidated Bonds Outstanding by Call Features (in thousands)

	<u>June 30, 2024</u>	<u>December 31, 2023</u>
Principal Amount of Consolidated Bonds:		
Non-callable	\$ 70,623,140	\$ 63,921,045
Callable	23,359,300	27,651,000
Total principal amount	\$ 93,982,440	\$ 91,572,045

Table 7.4 - Consolidated Bonds Outstanding by Original Contractual Maturity or Next Call Date (in thousands)

Year of Original Contractual Maturity or Next Call Date	June 30, 2024	December 31, 2023
Due in 1 year or less	\$ 77,782,500	\$ 69,410,905
Due after 1 year through 2 years	9,378,800	16,402,000
Due after 2 years through 3 years	1,519,500	1,648,000
Due after 3 years through 4 years	550,500	326,500
Due after 4 years through 5 years	1,079,000	1,081,500
Thereafter	3,672,140	2,703,140
Total principal amount	\$ 93,982,440	\$ 91,572,045

Table 7.5 - Consolidated Bonds by Interest-rate Payment Type (in thousands)

	June 30, 2024	December 31, 2023
Principal Amount of Consolidated Bonds:		
Fixed-rate	\$ 19,600,440	\$ 33,686,045
Variable-rate	74,382,000	57,886,000
Total principal amount	\$ 93,982,440	\$ 91,572,045

Note 8 - Affordable Housing Program (AHP)

The FHLBank Act requires each FHLBank to establish an AHP. Each FHLBank provides subsidies in the form of direct grants or below-market interest rates on Advances to members who provide the funds to assist in the purchase, construction, or rehabilitation of housing for very low-, low-, and moderate-income households. Each FHLBank recognizes AHP assessment expense equal to the greater of 10 percent of its annual income subject to assessment or the prorated sum required to ensure the aggregate contribution by the FHLBanks is no less than \$100 million for each year. For purposes of the statutory AHP calculation, income subject to assessment is defined as net income before AHP assessments, plus interest expense related to mandatorily redeemable capital stock. The FHLB accrues AHP expense monthly based on its income subject to assessment. The FHLB reduces the AHP liability as members use subsidies. In addition to the required AHP assessment, the Board of Directors may elect to make voluntary contributions to the AHP, which are recorded as other non-interest expenses.

Table 8.1 - Rollforward of the AHP Liability (in thousands)

Balance at December 31, 2023	\$ 139,807
Assessments (current year additions)	32,318
Voluntary contribution	15,800
Subsidy uses, net of recaptured amounts	(29,899)
Balance at June 30, 2024	\$ 158,026

Note 9 - Capital
Table 9.1 - Capital Requirements (dollars in thousands)

	June 30, 2024		December 31, 2023	
	Minimum Requirement	Actual	Minimum Requirement	Actual
Risk-based capital	\$ 920,123	\$ 6,539,299	\$ 1,373,464	\$ 6,521,334
Capital-to-assets ratio (regulatory)	4.00 %	5.25 %	4.00 %	5.26 %
Regulatory capital	\$ 4,981,335	\$ 6,539,299	\$ 4,959,830	\$ 6,521,334
Leverage capital-to-assets ratio (regulatory)	5.00 %	7.88 %	5.00 %	7.89 %
Leverage capital	\$ 6,226,668	\$ 9,808,949	\$ 6,199,787	\$ 9,782,001

Restricted Retained Earnings. At June 30, 2024 and December 31, 2023 the FHLB had (in thousands) \$751,701 and \$693,682, respectively, in restricted retained earnings. These restricted retained earnings are not available to pay dividends but are available to absorb unexpected losses, if any, that an FHLBank may experience.

Table 9.2 - Rollforward of Mandatorily Redeemable Capital Stock (in thousands)

Balance, December 31, 2023	\$ 17,314
Capital stock subject to mandatory redemption reclassified from equity	6,404
Repurchase/redemption of mandatorily redeemable capital stock	(8,645)
Balance, June 30, 2024	<u>\$ 15,073</u>

Table 9.3 - Mandatorily Redeemable Capital Stock by Contractual Year of Redemption (in thousands)

<u>Contractual Year of Redemption</u>	<u>June 30, 2024</u>	<u>December 31, 2023</u>
Year 1	\$ 9	\$ 9
Year 2	—	—
Year 3	7,457	4,915
Year 4	506	2,963
Year 5	981	2,865
Past contractual redemption date due to remaining activity ⁽¹⁾	6,120	6,562
Total	<u>\$ 15,073</u>	<u>\$ 17,314</u>

(1) Represents mandatorily redeemable capital stock that is past the end of the contractual redemption period because there is activity outstanding to which the mandatorily redeemable capital stock relates.

Note 10 - Accumulated Other Comprehensive Income (Loss)

The following tables summarize the changes in accumulated other comprehensive income (loss) for the three and six months ended June 30, 2024 and 2023.

Table 10.1 - Accumulated Other Comprehensive Income (Loss) (in thousands)

	Net unrealized gains (losses) on available-for-sale securities	Pension and postretirement benefits	Total accumulated other comprehensive income (loss)
BALANCE, MARCH 31, 2023	\$ (51,772)	\$ (712)	\$ (52,484)
Other comprehensive income before reclassification:			
Net unrealized gains (losses)	18,408	—	18,408
Reclassifications from other comprehensive income (loss) to net income:			
Amortization - pension and postretirement benefits ⁽¹⁾	—	(98)	(98)
Net current period other comprehensive income (loss)	18,408	(98)	18,310
BALANCE, JUNE 30, 2023	<u>\$ (33,364)</u>	<u>\$ (810)</u>	<u>\$ (34,174)</u>
<hr/>			
BALANCE, MARCH 31, 2024	\$ (21,549)	\$ (1,332)	\$ (22,881)
Other comprehensive income before reclassification:			
Net unrealized gains (losses)	(1,879)	—	(1,879)
Reclassifications from other comprehensive income (loss) to net income:			
Net realized (gains) losses from sale of available-for- sale securities	(289)	—	(289)
Amortization - pension and postretirement benefits ⁽¹⁾	—	(90)	(90)
Net current period other comprehensive income (loss)	(2,168)	(90)	(2,258)
BALANCE, JUNE 30, 2024	<u>\$ (23,717)</u>	<u>\$ (1,422)</u>	<u>\$ (25,139)</u>

	Net unrealized gains (losses) on available-for-sale securities	Pension and postretirement benefits	Total accumulated other comprehensive income (loss)
BALANCE, DECEMBER 31, 2022	\$ (48,726)	\$ (614)	\$ (49,340)
Other comprehensive income before reclassification:			
Net unrealized gains (losses)	15,362	—	15,362
Reclassifications from other comprehensive income (loss) to net income:			
Amortization - pension and postretirement benefits ⁽¹⁾	—	(196)	(196)
Net current period other comprehensive income (loss)	15,362	(196)	15,166
BALANCE, JUNE 30, 2023	<u>\$ (33,364)</u>	<u>\$ (810)</u>	<u>\$ (34,174)</u>
<hr/>			
BALANCE, DECEMBER 31, 2023	\$ (75,997)	\$ (1,340)	\$ (77,337)
Other comprehensive income before reclassification:			
Net unrealized gains (losses)	53,705	—	53,705
Reclassifications from other comprehensive income (loss) to net income:			
Net realized (gains) losses from sale of available-for- sale securities	(1,425)	—	(1,425)
Amortization - pension and postretirement benefits ⁽¹⁾	—	(82)	(82)
Net current period other comprehensive income (loss)	52,280	(82)	52,198
BALANCE, JUNE 30, 2024	<u>\$ (23,717)</u>	<u>\$ (1,422)</u>	<u>\$ (25,139)</u>

(1) Included in Non-Interest Expense - Other in the Statements of Income.

Note 11 - Segment Information

The FHLB has identified two primary operating segments based on its method of internal reporting: Traditional Member Finance and the MPP. These segments reflect the FHLB's two primary Mission Asset Activities and the manner in which they are managed from the perspective of development, resource allocation, product delivery, pricing, credit risk and operational administration. The segments identify the principal ways the FHLB provides services to member stockholders.

Table 11.1 - Financial Performance by Operating Segment (in thousands)

	Three Months Ended June 30,		
	Traditional Member Finance	MPP	Total
2024			
Net interest income (loss)	\$ 176,532	\$ 24,235	\$ 200,767
Non-interest income (loss)	4,137	521	4,658
Non-interest expense	41,158	4,646	45,804
Income (loss) before assessments	139,511	20,110	159,621
Affordable Housing Program assessments	13,989	2,011	16,000
Net income (loss)	<u>\$ 125,522</u>	<u>\$ 18,099</u>	<u>\$ 143,621</u>
2023			
Net interest income (loss)	\$ 211,488	\$ 35,152	\$ 246,640
Non-interest income (loss)	37,645	(726)	36,919
Non-interest expense	37,070	4,659	41,729
Income (loss) before assessments	212,063	29,767	241,830
Affordable Housing Program assessments	21,304	2,977	24,281
Net income (loss)	<u>\$ 190,759</u>	<u>\$ 26,790</u>	<u>\$ 217,549</u>
	Six Months Ended June 30,		
	Traditional Member Finance	MPP	Total
2024			
Net interest income (loss)	\$ 354,153	\$ 47,481	\$ 401,634
Non-interest income (loss)	12,664	(496)	12,168
Non-interest expense	82,314	9,071	91,385
Income (loss) before assessments	284,503	37,914	322,417
Affordable Housing Program assessments	28,527	3,791	32,318
Net income (loss)	<u>\$ 255,976</u>	<u>\$ 34,123</u>	<u>\$ 290,099</u>
2023			
Net interest income (loss)	\$ 357,977	\$ 68,864	\$ 426,841
Non-interest income (loss)	31,641	(5,100)	26,541
Non-interest expense	62,519	7,436	69,955
Income (loss) before assessments	327,099	56,328	383,427
Affordable Housing Program assessments	32,833	5,633	38,466
Net income (loss)	<u>\$ 294,266</u>	<u>\$ 50,695</u>	<u>\$ 344,961</u>

Table 11.2 - Asset Balances by Operating Segment (in thousands)

	Assets		
	Traditional Member Finance	MPP	Total
June 30, 2024	\$ 116,326,253	\$ 8,207,110	\$ 124,533,363
December 31, 2023	116,828,245	7,167,493	123,995,738

Note 12 - Fair Value Disclosures

The fair value amounts recorded on the Statements of Condition and presented in the related note disclosures have been determined by the FHLB using available market information and the FHLB's best judgment of appropriate valuation methods. GAAP defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., an exit price). The fair values reflect the FHLB's judgment of how a market participant would estimate the fair values.

Fair Value Hierarchy. GAAP establishes a fair value hierarchy and requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The inputs are evaluated and an overall level for the measurement is determined. This overall level is an indication of how market observable the fair value measurement is.

The fair value hierarchy prioritizes the inputs used to measure fair value into three broad levels:

Level 1 Inputs - Quoted prices (unadjusted) for identical assets or liabilities in an active market that the reporting entity can access on the measurement date. An active market for the asset or liability is a market in which the transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 Inputs - Inputs other than quoted prices within Level 1 that are observable inputs for the asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include the following: (1) quoted prices for similar assets or liabilities in active markets; (2) quoted prices for identical or similar assets or liabilities in markets that are not active; (3) inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates and yield curves that are observable at commonly quoted intervals, and implied volatilities); and (4) inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 Inputs - Unobservable inputs for the asset or liability, which are supported by limited to no market activity and reflect the FHLB's own assumptions.

The FHLB reviews the fair value hierarchy classifications on a quarterly basis. Changes in the observability of the valuation inputs may result in a reclassification of certain financial assets or liabilities. The FHLB did not have any transfers of assets or liabilities into or out of Level 3 of the fair value hierarchy during the six months ended June 30, 2024 or 2023.

Table 12.1 presents the carrying value, fair value, and fair value hierarchy of financial assets and liabilities of the FHLB. The FHLB records trading securities, available-for-sale securities, derivative assets, derivative liabilities, certain Advances and certain Consolidated Obligations at fair value on a recurring basis, and on occasion, certain mortgage loans held for portfolio on a nonrecurring basis. The FHLB records all other financial assets and liabilities at amortized cost. Refer to Table 12.2 for further details about the financial assets and liabilities held at fair value on either a recurring or nonrecurring basis.

Table 12.1 - Fair Value Summary (in thousands)

	June 30, 2024					
	Carrying Value ⁽¹⁾	Fair Value				Netting Adjustments and Cash Collateral ⁽²⁾
Total		Level 1	Level 2	Level 3		
Financial Instruments						
Assets:						
Cash and due from banks	\$ 23,248	\$ 23,248	\$ 23,248	\$ —	\$ —	\$ —
Interest-bearing deposits	1,770,085	1,770,085	—	1,770,085	—	—
Securities purchased under agreements to resell	3,911,770	3,911,772	—	3,911,772	—	—
Federal funds sold	4,355,000	4,355,000	—	4,355,000	—	—
Trading securities	2,722,250	2,722,250	—	2,722,250	—	—
Available-for-sale securities	9,038,452	9,038,452	—	9,038,452	—	—
Held-to-maturity securities	16,068,845	15,785,334	—	15,785,334	—	—
Advances ⁽³⁾	78,833,659	78,917,199	—	78,917,199	—	—
Mortgage loans held for portfolio	7,192,461	6,251,406	—	6,245,251	6,155	—
Accrued interest receivable	518,812	518,812	—	518,812	—	—
Derivative assets	65,407	65,407	—	95,982	—	(30,575)
Liabilities:						
Deposits	1,169,785	1,166,761	—	1,166,761	—	—
Consolidated Obligations:						
Discount Notes ⁽⁴⁾	21,576,233	21,575,837	—	21,575,837	—	—
Bonds ⁽⁵⁾	94,023,232	93,332,761	—	93,332,761	—	—
Mandatorily redeemable capital stock	15,073	15,073	15,073	—	—	—
Accrued interest payable	552,914	552,914	—	552,914	—	—
Derivative liabilities	461	461	—	39,281	—	(38,820)

- (1) For certain financial instruments, the amounts represent net carrying value, which include an allowance for credit losses.
- (2) Amounts represent the application of the netting requirements that allow the FHLB to settle positive and negative positions and also cash collateral and related accrued interest held or placed by the FHLB with the same counterparty.
- (3) Includes (in thousands) \$253,793 of Advances recorded under the fair value option at June 30, 2024.
- (4) Includes (in thousands) \$9,219,525 of Consolidated Obligation Discount Notes recorded under the fair value option at June 30, 2024.
- (5) Includes (in thousands) \$5,319,289 of Consolidated Obligation Bonds recorded under the fair value option at June 30, 2024.

Financial Instruments	December 31, 2023					
	Carrying Value ⁽¹⁾	Fair Value				Netting Adjustments and Cash Collateral ⁽²⁾
		Total	Level 1	Level 2	Level 3	
Assets:						
Cash and due from banks	\$ 20,824	\$ 20,824	\$ 20,824	\$ —	\$ —	\$ —
Interest-bearing deposits	1,875,037	1,875,037	—	1,875,037	—	—
Securities purchased under agreements to resell	5,242,480	5,242,482	—	5,242,482	—	—
Federal funds sold	6,774,000	6,774,000	—	6,774,000	—	—
Trading securities	1,745,742	1,745,742	—	1,745,742	—	—
Available-for-sale securities	10,171,588	10,171,588	—	10,171,588	—	—
Held-to-maturity securities	16,832,133	16,576,613	—	16,576,613	—	—
Advances ⁽³⁾	73,553,162	73,499,705	—	73,499,705	—	—
Mortgage loans held for portfolio	7,108,334	6,369,152	—	6,359,230	9,922	—
Accrued interest receivable	535,564	535,564	—	535,564	—	—
Derivative assets	101,991	101,991	—	154,978	—	(52,987)
Liabilities:						
Deposits	1,113,704	1,109,999	—	1,109,999	—	—
Consolidated Obligations:						
Discount Notes ⁽⁴⁾	23,690,526	23,689,599	—	23,689,599	—	—
Bonds ⁽⁵⁾	91,756,430	90,983,204	—	90,983,204	—	—
Mandatorily redeemable capital stock	17,314	17,314	17,314	—	—	—
Accrued interest payable	422,886	422,886	—	422,886	—	—
Derivative liabilities	9,831	9,831	—	57,773	—	(47,942)

- (1) For certain financial instruments, the amounts represent net carrying value, which include an allowance for credit losses.
- (2) Amounts represent the application of the netting requirements that allow the FHLB to settle positive and negative positions and also cash collateral and related accrued interest held or placed by the FHLB with the same counterparty.
- (3) Includes (in thousands) \$214,035 of Advances recorded under the fair value option at December 31, 2023.
- (4) Includes (in thousands) \$14,085,003 of Consolidated Obligation Discount Notes recorded under the fair value option at December 31, 2023.
- (5) Includes (in thousands) \$20,657,254 of Consolidated Obligation Bonds recorded under the fair value option at December 31, 2023.

Summary of Valuation Methodologies and Primary Inputs.

The valuation methodologies and primary inputs used to develop the measurement of fair value for assets and liabilities that are measured at fair value on a recurring or nonrecurring basis in the Statements of Condition are disclosed in Note 15 - Fair Value Disclosures in the FHLB's 2023 Annual Report on Form 10-K. There have been no significant changes in the valuation methodologies during the six months ended June 30, 2024.

Fair Value Measurements.

Table 12.2 presents the fair value of financial assets and liabilities that are recorded on a recurring basis at June 30, 2024 and December 31, 2023, by level within the fair value hierarchy.

Table 12.2 - Fair Value Measurements (in thousands)

	Fair Value Measurements at June 30, 2024				Netting Adjustments and Cash Collateral ⁽¹⁾
	Total	Level 1	Level 2	Level 3	
Recurring fair value measurements - Assets					
Trading securities:					
U.S. Treasury obligations	\$ 1,252,224	\$ —	\$ 1,252,224	\$ —	\$ —
GSE obligations	1,470,008	—	1,470,008	—	—
U.S. obligation single-family MBS	18	—	18	—	—
Total trading securities	2,722,250	—	2,722,250	—	—
Available-for-sale securities:					
U.S. Treasury obligations	6,339,796	—	6,339,796	—	—
GSE obligations	118,943	—	118,943	—	—
GSE multi-family MBS	2,579,713	—	2,579,713	—	—
Total available-for-sale securities	9,038,452	—	9,038,452	—	—
Advances	253,793	—	253,793	—	—
Derivative assets:					
Interest rate related	65,391	—	95,966	—	(30,575)
Mortgage delivery commitments	16	—	16	—	—
Total derivative assets	65,407	—	95,982	—	(30,575)
Total assets at fair value	\$ 12,079,902	\$ —	\$ 12,110,477	\$ —	\$ (30,575)
Recurring fair value measurements - Liabilities					
Consolidated Obligations:					
Discount Notes	\$ 9,219,525	\$ —	\$ 9,219,525	\$ —	\$ —
Bonds	5,319,289	—	5,319,289	—	—
Total Consolidated Obligations	14,538,814	—	14,538,814	—	—
Derivative liabilities:					
Interest rate related	372	—	39,192	—	(38,820)
Mortgage delivery commitments	89	—	89	—	—
Total derivative liabilities	461	—	39,281	—	(38,820)
Total liabilities at fair value	\$ 14,539,275	\$ —	\$ 14,578,095	\$ —	\$ (38,820)

(1) Amounts represent the application of the netting requirements that allow the FHLB to settle positive and negative positions and also cash collateral and related accrued interest held or placed by the FHLB with the same counterparty.

Fair Value Measurements at December 31, 2023

	Total	Level 1	Level 2	Level 3	Netting Adjustments and Cash Collateral ⁽¹⁾
Recurring fair value measurements - Assets					
Trading securities:					
U.S. Treasury obligations	\$ 248,688	\$ —	\$ 248,688	\$ —	\$ —
GSE obligations	1,497,009	—	1,497,009	—	—
U.S. obligation single-family MBS	45	—	45	—	—
Total trading securities	1,745,742	—	1,745,742	—	—
Available-for-sale securities:					
U.S. Treasury obligations	7,611,819	—	7,611,819	—	—
GSE obligations	119,912	—	119,912	—	—
GSE multi-family MBS	2,439,857	—	2,439,857	—	—
Total available-for-sale securities	10,171,588	—	10,171,588	—	—
Advances	214,035	—	214,035	—	—
Derivative assets:					
Interest rate related	100,789	—	153,776	—	(52,987)
Mortgage delivery commitments	1,202	—	1,202	—	—
Total derivative assets	101,991	—	154,978	—	(52,987)
Total assets at fair value	\$ 12,233,356	\$ —	\$ 12,286,343	\$ —	\$ (52,987)
Recurring fair value measurements - Liabilities					
Consolidated Obligations:					
Discount Notes	\$ 14,085,003	\$ —	\$ 14,085,003	\$ —	\$ —
Bonds	20,657,254	—	20,657,254	—	—
Total Consolidated Obligations	34,742,257	—	34,742,257	—	—
Derivative liabilities:					
Interest rate related	9,825	—	57,767	—	(47,942)
Mortgage delivery commitments	6	—	6	—	—
Total derivative liabilities	9,831	—	57,773	—	(47,942)
Total liabilities at fair value	\$ 34,752,088	\$ —	\$ 34,800,030	\$ —	\$ (47,942)

(1) Amounts represent the application of the netting requirements that allow the FHLB to settle positive and negative positions and also cash collateral and related accrued interest held or placed by the FHLB with the same counterparty.

Fair Value Option. The fair value option provides an irrevocable option to elect fair value as an alternative measurement for selected financial assets, financial liabilities, unrecognized firm commitments, and written loan commitments not previously carried at fair value. It requires a company to display the fair value of those assets and liabilities for which it has chosen to use fair value on the face of the Statements of Condition. Fair value is used for both the initial and subsequent measurement of the designated assets, liabilities and commitments, with the changes in fair value recognized in net income. If elected, interest income and interest expense on Advances and Consolidated Obligations carried at fair value are recognized based solely on the contractual amount of interest due or unpaid. Any transaction fees or costs are immediately recognized into other non-interest income or other non-interest expense.

The FHLB has elected the fair value option for certain financial instruments that either do not qualify for hedge accounting or may be at risk for not meeting hedge effectiveness requirements. These fair value elections were made primarily in an effort to mitigate the potential income statement volatility that can arise from economic hedging relationships in which the carrying value of the hedged item is not adjusted for changes in fair value.

Table 12.3 presents net gains (losses) recognized in earnings related to financial assets and liabilities in which the fair value option was elected during the three and six months ended June 30, 2024 and 2023.

Table 12.3 – Fair Value Option - Financial Assets and Liabilities (in thousands)

Net Gains (Losses) from Changes in Fair Value Recognized in Earnings	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Advances	\$ (321)	\$ (1,568)	\$ (4,825)	\$ (1,535)
Consolidated Discount Notes	3,551	16,214	4,965	(334)
Consolidated Bonds	(2,486)	45,789	(7,995)	27,492
Total net gains (losses)	\$ 744	\$ 60,435	\$ (7,855)	\$ 25,623

For instruments recorded under the fair value option, the related contractual interest income, contractual interest expense and the discount amortization on Discount Notes are recorded as part of net interest income on the Statements of Income. The remaining changes in fair value for instruments in which the fair value option has been elected are recorded as “Net gains (losses) on financial instruments held under fair value option” in the Statements of Income, except for changes in fair value related to instrument specific credit risk, which are recorded in accumulated other comprehensive income (loss) in the Statements of Condition. The FHLB has determined that none of the remaining changes in fair value were related to instrument-specific credit risk for the six months ended June 30, 2024 or 2023. In determining that there has been no change in instrument-specific credit risk period to period, the FHLB primarily considered the following factors:

- The FHLB is a federally chartered GSE, and as a result of this status, the FHLB’s Consolidated Obligations have historically received the same credit ratings as the government bond credit rating of the United States, even though they are not obligations of the United States and are not guaranteed by the United States.
- The FHLB is jointly and severally liable with the other 10 FHLBanks for the payment of principal and interest on all Consolidated Obligations of each of the other FHLBanks.

The following table reflects the difference between the aggregate unpaid principal balance outstanding and the aggregate fair value for Advances and Consolidated Obligations for which the fair value option has been elected.

Table 12.4 – Aggregate Unpaid Balance and Aggregate Fair Value (in thousands)

	June 30, 2024			December 31, 2023		
	Aggregate Unpaid Principal Balance	Aggregate Fair Value	Aggregate Fair Value Over/ (Under) Aggregate Unpaid Principal Balance	Aggregate Unpaid Principal Balance	Aggregate Fair Value	Aggregate Fair Value Over/ (Under) Aggregate Unpaid Principal Balance
Advances	\$ 254,044	\$ 253,793	\$ (251)	\$ 209,620	\$ 214,035	\$ 4,415
Consolidated Discount Notes	9,336,053	9,219,525	(116,528)	14,193,486	14,085,003	(108,483)
Consolidated Bonds	5,273,500	5,319,289	45,789	20,481,000	20,657,254	176,254

Note 13- Commitments and Contingencies

Off-Balance Sheet Commitments. Table 13.1 represents off-balance sheet commitments at June 30, 2024 and December 31, 2023. The FHLB has deemed it unnecessary to record any liabilities for credit losses on these commitments at June 30, 2024 and December 31, 2023, based on its credit extension and collateral policies.

Table 13.1 - Off-Balance Sheet Commitments (in thousands)

Notional Amount	June 30, 2024			December 31, 2023		
	Expire within one year	Expire after one year	Total	Expire within one year	Expire after one year	Total
Letters of Credit	\$ 47,298,588	\$ 539,796	\$47,838,384	\$ 46,707,728	\$ 389,930	\$47,097,658
Commitments to fund additional Advances	20,000	—	20,000	—	—	—
Commitments to purchase mortgage loans	39,801	—	39,801	100,924	—	100,924
Unsettled Consolidated Bonds, principal amount ⁽¹⁾	1,015,000	—	1,015,000	—	—	—
Unsettled Consolidated Discount Notes, principal amount ⁽¹⁾	11,400	—	11,400	—	—	—

(1) Expiration is based on settlement period rather than underlying contractual maturity of Consolidated Obligations.

The carrying value of guarantees related to Letters of Credit are recorded in other liabilities and were (in thousands) \$10,792 and \$11,775 at June 30, 2024 and December 31, 2023.

Legal Proceedings. From time to time, the FHLB is subject to legal proceedings arising in the normal course of business. The FHLB would record an accrual for a loss contingency when it is probable that a loss has been incurred and the amount could be reasonably estimated. After consultation with legal counsel, management does not anticipate that the ultimate liability and the range of reasonably possible losses, if any, arising out of any matters will have a material effect on the FHLB's financial condition or results of operations.

Note 14 - Transactions with Other FHLBanks

The FHLB notes transactions with other FHLBanks on the face of its financial statements. Occasionally, the FHLB loans short-term funds to and borrows short-term funds from other FHLBanks. These loans and borrowings are transacted at current market rates when traded. There were no such loans or borrowings outstanding at June 30, 2024 or December 31, 2023. The following table details the average daily balance of lending and borrowing between the FHLB and other FHLBanks for the six months ended June 30, 2024 and 2023.

Table 14.1 - Lending and Borrowing Between the FHLB and Other FHLBanks (in thousands)

	Average Daily Balances for the Six Months Ended June 30,	
	2024	2023
Loans to other FHLBanks	\$ 8,242	\$ 34,530

In addition, from time to time, one FHLBank may transfer to another FHLBank the Consolidated Obligations (at current market rates on the day when the transfer is traded) for which the transferring FHLBank was originally the primary obligor but upon transfer the assuming FHLBank becomes the primary obligor. There were no Consolidated Obligations transferred to the FHLB during the six months ended June 30, 2024. During the six months ended June 30, 2023, the par amount of the liability on Consolidated Obligations transferred to the FHLB totaled (in thousands) \$250,000. During the six months ended June 30, 2024 the FHLB transferred Consolidated Obligations with a par amount of (in thousands) \$1,000 to another FHLBank. The gain on this transfer during the six months ended June 30, 2024 was not material. There were no Consolidated Obligations transferred to another FHLBank during the six months ended June 30, 2023.

Note 15 - Transactions with Stockholders

As a cooperative, the FHLB's capital stock is owned by its members, by former members that retain the stock as provided in the FHLB's Capital Plan and by nonmember institutions that have acquired members and must retain the stock to support Advances or other capital-requiring activities with the FHLB. All Advances were issued to members and all mortgage loans held for portfolio were purchased from members during the six months ended June 30, 2024 and 2023. The FHLB also maintains demand deposit accounts for members, primarily to facilitate settlement activities that are directly related to Advances and mortgage loan purchases. Additionally, the FHLB may enter into interest rate swaps with its stockholders. The FHLB may not invest in any equity securities issued by its stockholders. At June 30, 2024 and December 31, 2023, the FHLB did not own any MBS securitized by, or other direct long-term investments issued by its stockholders.

For financial statement purposes, the FHLB defines related parties as those members with more than 10 percent of the voting interests of the FHLB capital stock outstanding. Federal statute prescribes the voting rights of members in the election of both Member and Independent directors. For Member directorships, the Finance Agency designates the number of Member directorships in a given year and an eligible voting member may vote only for candidates seeking election in its respective state. For Independent directors, the FHLB's Board of Directors nominates candidates to be placed on the ballot in an at-large election. For both Member and Independent director elections, a member is entitled to vote one share of required capital stock, subject to a statutory limitation, for each applicable directorship. Under this limitation, the total number of votes that a member may cast is limited to the average number of shares of the FHLB's capital stock that were required to be held by all members in that state as of the record date for voting. Nonmember stockholders are not eligible to vote in director elections. Given these statutory limitations, no member owned more than 10 percent of the voting interests of the FHLB at June 30, 2024 or December 31, 2023.

All transactions with stockholders are entered into in the ordinary course of business. Finance Agency regulations require the FHLB to offer the same pricing for Advances and other services to all members regardless of asset or transaction size, charter type, or geographic location. However, the FHLB may, in pricing its Advances, distinguish among members based upon its assessment of the credit and other risks to the FHLB of lending to any particular member or upon other reasonable criteria that may be applied equally to all members. The FHLB's policies and procedures require that such standards and criteria be applied consistently and without discrimination to all members applying for Advances and other services.

Transactions with Directors' Financial Institutions. In the ordinary course of its business, the FHLB provides products and services to members whose officers or directors serve as directors of the FHLB (Directors' Financial Institutions). Finance Agency regulations require that transactions with Directors' Financial Institutions be made on the same terms as those with any other member. The following table reflects balances with Directors' Financial Institutions for the items indicated below. The FHLB had no MBS or derivatives transactions with Directors' Financial Institutions at June 30, 2024 or December 31, 2023.

Table 15.1 - Transactions with Directors' Financial Institutions (dollars in millions)

	June 30, 2024		December 31, 2023	
	Balance	% of Total ⁽¹⁾	Balance	% of Total ⁽¹⁾
Advances	\$ 9,170	11.6 %	\$ 7,309	9.9 %
MPP	74	1.0	47	0.7
Regulatory capital stock	494	10.3	431	8.9

(1) Percentage of total principal (Advances), unpaid principal balance (MPP), and regulatory capital stock.

Concentrations. The following table shows regulatory capital stock balances, outstanding Advance principal balances, and unpaid principal balances of mortgage loans held for portfolio of stockholders holding five percent or more of regulatory capital stock and includes any known affiliates that are members of the FHLB.

Table 15.2 - Stockholders Holding Five Percent or more of Regulatory Capital Stock (dollars in millions)

June 30, 2024	Regulatory Capital Stock		Advance Principal	MPP Unpaid Principal Balance
	Balance	% of Total		
JPMorgan Chase Bank, N.A.	\$ 673	14 %	\$ 14,000	\$ —
U.S. Bank, N.A.	552	11	10,000	6
Keybank, N.A.	509	11	9,333	—
Fifth Third Bank	293	6	6,001	26
The Huntington National Bank	267	6	4,501	397

December 31, 2023	Regulatory Capital Stock		Advance Principal	MPP Unpaid Principal Balance
	Balance	% of Total		
U.S. Bank, N.A.	\$ 858	18 %	\$ 10,000	\$ 7
JPMorgan Chase Bank, N.A.	673	14	14,000	—
Keybank, N.A.	526	11	9,836	—
Third Federal Savings & Loan Association	255	5	5,008	23

Nonmember Housing Associates. The FHLB has relationships with three nonmember housing associates, the Kentucky Housing Corporation, the Ohio Housing Finance Agency and the Tennessee Housing Development Agency. The FHLB had no investments in or borrowings to any of these nonmember housing associates at June 30, 2024 or December 31, 2023.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

This report contains forward-looking statements that describe the objectives, expectations, estimates, and assessments of the Federal Home Loan Bank of Cincinnati (the FHLB). These statements use words such as “anticipates,” “expects,” “believes,” “could,” “estimates,” “may,” and “should.” By their nature, forward-looking statements relate to matters involving risks or uncertainties, including the risk factors set forth in Part I, Item 1A. “Risk Factors” in our 2023 Annual Report on Form 10-K, some of which we may not be able to know, control, or completely manage. Actual future results could differ materially from those expressed or implied in forward-looking statements or could affect the extent to which we are able to realize an objective, expectation, estimate, or assessment. These risks and uncertainties include, among others, the following:

- the effects of economic, financial, credit, market, and member conditions on our financial condition and results of operations, including changes in economic growth, general liquidity conditions and liquidity within the banking sector, inflation and deflation, interest rates, interest rate spreads, interest rate volatility, mortgage originations, prepayment activity, housing prices, asset delinquencies, and members' mergers and consolidations, deposit flows, liquidity needs, and loan demand;
- national or world events, acts of war, civil unrest, terrorism, natural disasters, climate change, pandemics, or other unanticipated or catastrophic events;

- political events, including legislative, regulatory, judicial or other developments that affect us, our members, counterparties, or investors in the Federal Home Loan Bank System's (FHLBank System or System) unsecured debt securities, which are called Consolidated Obligations (or Obligations), such as any government-sponsored enterprise (GSE) reforms, any changes resulting from the Federal Housing Finance Agency's (Finance Agency) review and analysis of the FHLBank System, including recommendations published in its "FHLBank System at 100: Focusing on the Future" report, changes in the Federal Home Loan Bank Act of 1932, as amended (FHLBank Act), changes in applicable sections of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, or changes in other statutes or regulations applicable to the Federal Home Loan Banks (FHLBanks);
- competitive forces, including those related to other sources of funding available to members, to purchases of mortgage loans, and to our issuance of Consolidated Obligations;
- the financial results and actions of other FHLBanks that could affect our ability, in relation to the FHLBank System's joint and several liability for Consolidated Obligations, to access the capital markets on acceptable terms or preserve our profitability, or could alter the regulations and legislation to which we are subject;
- changes in the credit ratings or outlook assigned to FHLBank System Obligations or the FHLB;
- changes in investor demand for Obligations;
- the volatility of market prices, interest rates, credit quality, and other indices that could affect the value of investments and collateral we hold as security for member obligations and/or for counterparty obligations;
- the ability to attract and retain skilled management and other key employees;
- the ability to develop, secure and support technology and information systems that help effectively manage the risks we face (including cybersecurity risks);
- the risk of loss arising from failures or interruptions in our ongoing business operations, internal controls, information systems or other operating technologies;
- the ability to successfully manage new products and services; and
- the risk of loss arising from litigation filed against us or one or more other FHLBanks.

We do not undertake any obligation to update any forward-looking statements made in this report.

EXECUTIVE OVERVIEW

Recent Developments

Business Environment

During the first six months of 2024, we delivered on our dual mission of providing access to ongoing liquidity funding to member financial institutions and expanding support for affordable housing and community investment. We continue to monitor the changing economic landscape and are committed to assisting members in meeting their funding needs.

We maintained strong profitability, which enabled us to bolster capital adequacy by increasing retained earnings, to pay a competitive dividend rate to stockholders, and to make meaningful contributions to affordable housing. Overall, we contributed \$64 million to support affordable housing and community investment needs in the first six months of 2024. Specifically, \$32 million was allocated to the required Affordable Housing Program (AHP) and \$32 million was provided through voluntary housing programs. We recognize that funding in addition to the required 10 percent statutory AHP assessments is beneficial to affordable housing and community investment and have voluntarily committed to increase our support in 2024 by at least 50 percent above the statutory AHP level.

In the first six months of 2024, our voluntary housing contributions were allocated as follows:

- The Carol M. Peterson (CMP) Housing Fund received contributions of nearly \$15 million. This program provides grants to cover accessibility and emergency repairs for special needs and elderly homeowners within the Fifth District.
- The Welcome Home program received funding through the required AHP allocation plus an additional \$16 million voluntary contribution in order to help fulfill a record number of requests during the first six months of 2024. This program assists homebuyers with down payments and closing costs.
- The Rise Up program received contributions of \$1 million during the first six months of 2024. This program offers grants of \$25,000 for down payment, closing cost, and principal reduction assistance for first-generation homebuyers who are looking to purchase their first home in Franklin County, Ohio.

Our capital and liquidity positions continue to remain strong, as has our overall ability to fund operations through the issuance of Consolidated Obligations at acceptable interest costs. Additionally, overall residual credit risk exposure from our Credit Services, mortgage loan portfolio, investments, and derivative transactions has remained de minimis. Likewise, our market risk measures continue to be within our risk appetite.

Financial Condition

Mission Assets and Activities

Primary Mission Assets (i.e., principal balances of Advances and mortgage loans held for portfolio) and Supplemental Mission Activities (i.e., Letters of Credit, Mandatory Delivery Contracts and standby bond purchase agreements) are the principal business activities by which we fulfill our mission with direct connections to members and what we refer to as Mission Assets and Activities. We regularly monitor our level of Mission Assets and Activities. One measure we use to assess mission achievement is our Primary Mission Asset ratio, which measures the sum of average Advances and mortgage loans as a percentage of average Consolidated Obligations (adjusted for certain high-quality liquid assets, as permitted by regulation). In the first six months of 2024, the Primary Mission Asset ratio averaged 77 percent, above the Finance Agency's preferred ratio of 70 percent. In assessing overall mission achievement, we also consider supplemental sources of Mission Assets and Activities, the most significant of which is Letters of Credit issued for the benefit of members.

The following table summarizes our Mission Assets and Activities.

(In millions)	Ending Balances			Average Balances		
	June 30,		December 31,	Six Months Ended June 30,		Year Ended December 31,
	2024	2023	2023	2024	2023	2023
Primary Mission Assets ⁽¹⁾:						
Advances	\$ 79,229	\$ 87,402	\$ 73,638	\$ 75,131	\$ 93,089	\$ 83,678
Mortgage loans held for portfolio	7,043	6,847	6,960	7,014	6,920	6,917
Total Primary Mission Assets	<u>\$ 86,272</u>	<u>\$ 94,249</u>	<u>\$ 80,598</u>	<u>\$ 82,145</u>	<u>\$ 100,009</u>	<u>\$ 90,595</u>
Supplemental Mission Activities ⁽²⁾:						
Letters of Credit (notional)	\$ 47,838	\$ 45,738	\$ 47,098	\$ 46,992	\$ 41,755	\$ 43,775
Mandatory Delivery Contracts (notional)	40	65	101	67	28	62
Standby bond purchase agreements (notional)	—	—	—	—	3	1
Total Supplemental Mission Activities	<u>\$ 47,878</u>	<u>\$ 45,803</u>	<u>\$ 47,199</u>	<u>\$ 47,059</u>	<u>\$ 41,786</u>	<u>\$ 43,838</u>

(1) Amounts represent principal balances.

(2) Amounts represent off-balance sheet commitments.

Advance principal balances at June 30, 2024 increased \$5.6 billion (eight percent) from year-end 2023 given depository members' steady demand for liquidity. However, average principal Advance balances for the six months ended June 30, 2024 decreased \$18.0 billion (19 percent) compared to the same period of 2023. Average Advance balances were higher for the six months ended June 30, 2023 as member demand increased in March 2023 in response to the turmoil in the banking industry and financial markets. Most of these Advances had matured or were prepaid by the end of 2023.

Advance balances are often volatile given our members' ability to quickly, normally on the same day, increase or decrease the amount of their Advances. We believe that a key benefit of membership comes from our business model as a wholesale lender GSE, which provides members flexibility in their Advance funding levels and helps support their asset-liability management needs. We act as a reliable source of funding for our members. Our business model is designed to support significant changes in asset levels without having to undergo material changes in staffing, operations, risk practices, or general resource needs. A key reason for this scalability is that our Capital Plan provides for additional capital when Advances grow and the opportunity for us to retire capital when Advances decline, thereby acting to preserve competitive profitability.

MPP principal balances at June 30, 2024 increased \$0.1 billion (one percent) from the year-end 2023 balance. During the first six months of 2024, we purchased \$0.4 billion of mortgage loans, while principal reductions were \$0.3 billion. Principal purchases and reductions in the first six months of 2024 were limited due in large part to the elevated mortgage rate environment.

Letters of Credit increased \$0.7 billion (two percent) from year-end 2023. Letters of Credit balances are primarily used by members to secure public unit deposits. We normally earn fees on Letters of Credit based on the actual average amount of the Letters utilized, which generally is less than the notional amount issued.

Investments

The balance of investments at June 30, 2024 was \$37.9 billion, a decrease of \$4.8 billion (11 percent) from year-end 2023. At June 30, 2024, investments included \$18.6 billion of mortgage-backed securities (MBS) and \$19.3 billion of other investments, which consisted primarily of short-term instruments and longer-term U.S. Treasury and GSE obligations held for liquidity. All of our MBS held at June 30, 2024 were issued and guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae. The decrease in investments was primarily driven by a decline in liquidity investments. Liquidity investments can vary significantly on a daily basis to support actual and anticipated borrowing needs of members and in order to meet all current and anticipated financial commitments. We maintained a robust amount of asset liquidity throughout the first six months of 2024 across a variety of liquidity measures, as discussed in the "Liquidity Risk" section of "Quantitative and Qualitative Disclosures About Risk Management."

Investments averaged \$40.2 billion in the first six months of 2024, a decrease of \$3.9 billion (nine percent) compared to the average during the same period of 2023, which was driven by lower average liquidity investments. We held fewer liquidity investments on average in the first six months of 2024 compared to the same period of 2023 due to Advance balances being more stable after the large spike in the first half of 2023.

Capital

The GAAP and regulatory capital-to-assets ratios at June 30, 2024 were 5.22 percent and 5.25 percent, respectively. Both ratios exceeded the regulatory required minimum of four percent. Regulatory capital includes mandatorily redeemable capital stock accounted for as a liability under GAAP. Both GAAP and regulatory capital increased less than \$0.1 billion from year-end 2023. Retained earnings totaled \$1.7 billion on June 30, 2024, an increase of four percent from year-end 2023. We believe the amount of retained earnings is sufficient to protect against members' impairment risk of their capital stock investment in the FHLB and to provide the opportunity to stabilize or increase future dividends.

Results of Operations

Overall Results

Our earnings over time reflect the combination of a stable business model and conservative management of risk. Key market driven factors that can cause significant periodic volatility in our profitability include changes in the level of interest rates, changes in spreads between benchmark interest rates and our short-term funding costs, recognition of net amortization from accelerated prepayments of mortgage assets, and fair value adjustments related to the use of derivatives and the associated hedged items. Our profitability may also be affected by our members' overall Advance demand, which is largely influenced by the monetary policies of the U.S. government and its agencies, including the Federal Reserve, and general economic conditions. The table below summarizes our results of operations.

(Dollars in millions)	Three Months Ended June 30,		Six Months Ended June 30,		Year Ended
	2024	2023	2024	2023	December 31,
					2023
Net income	\$ 144	\$ 218	\$ 290	\$ 345	\$ 668
Return on average equity (ROE)	9.05 %	10.71 %	9.17 %	9.53 %	9.63 %
Return on average assets	0.47	0.52	0.47	0.48	0.49
Weighted average dividend rate	9.00	7.25	9.00	6.62	7.60
Dividend payout ratio ⁽¹⁾	72.8	41.1	74.3	47.4	61.5
Average Secured Overnight Financing Rate (SOFR)	5.32	4.97	5.32	4.73	5.01
ROE spread to average SOFR	3.73	5.74	3.85	4.80	4.62
Dividend rate spread to average SOFR	3.68	2.28	3.68	1.89	2.59

(1) Dividend payout ratio is dividends declared in the period as a percentage of net income.

Net income decreased \$74 million in the three-months comparison period and \$55 million in the six-months comparison period. The primary driver of the lower net income was net market value changes related to interest rate swaps and associated financial instruments carried at fair value. The net market value changes resulted in net losses in the three and six months ended June 30, 2024 compared to net gains in the three and six months ended June 30, 2023. Additionally, in the three-months comparison period, net income decreased due to lower average Advance balances as well as lower average capital stock balances, which reduced the earnings generated from investing the FHLB's capital. Average Advance and capital stock balances were elevated during the second quarter of 2023 due to member demand for Advances in light of the turmoil in the banking industry and financial markets at the time.

In the first six months of 2024, we accrued \$32 million for the AHP available to members. In addition to the required AHP assessment, for 2024, we have committed to a minimum of \$38 million, or approximately five percent of 2023 income subject to assessments, in voluntary housing contributions to support our Housing and Community Investment programs. In the first six months of 2024, we allocated \$32 million to voluntary housing programs.

We strive to provide a competitive return on members' capital investment in our company through quarterly dividend payments. In June 2024, we paid stockholders a quarterly dividend at a 9.00 percent annualized rate on their capital investment in our company, which was 3.68 percentage points above the second quarter average SOFR.

Effect of Interest Rate Environment

Trends in market interest rates and the resulting shapes of the market yield curves strongly influence our results of operations and profitability because of how they affect members' demand for Mission Assets and Activities, spreads on assets, funding costs and decisions in managing the tradeoffs in our market risk/return profile. The following table presents key market interest rates (obtained from Bloomberg L.P.).

	Quarter 2 2024		Quarter 1 2024		Six Months Ended June 30,		Year 2023	
	Ending	Average	Ending	Average	2024	2023	Ending	Average
					Average	Average		
Federal funds effective	5.33 %	5.33 %	5.33 %	5.33 %	5.33 %	4.75 %	5.33 %	5.03 %
SOFR	5.33	5.32	5.34	5.31	5.32	4.73	5.38	5.01
2-year U.S. Treasury	4.76	4.84	4.62	4.49	4.67	4.32	4.25	4.60
10-year U.S. Treasury	4.40	4.45	4.20	4.15	4.30	3.62	3.88	3.96
15-year mortgage current coupon ⁽¹⁾	5.30	5.31	4.96	5.03	5.17	4.69	4.62	5.11
30-year mortgage current coupon ⁽¹⁾	5.87	5.90	5.60	5.61	5.75	5.25	5.25	5.62

(1) Current coupon rate of Fannie Mae par MBS indications.

On June 30, 2024, the target overnight Federal funds rate was in the range of 5.25 to 5.50 percent, unchanged from the range on December 31, 2023.

Average overnight rates were approximately 60 basis points higher in the first six months of 2024 compared to the same period of 2023, while average mortgage rates increased approximately 50 basis points. Despite the increase in short-term rates, our earnings from capital was flat in the first six months of 2024 compared to the same period of 2023 due to lower average capital stock balances.

During the first six months of 2024 and throughout 2023, the market risk exposure to changing interest rates was moderate and within policy limits. We believe that longer-term profitability will be competitive, unless interest rates were to further increase significantly for a sustained period of time.

Regulatory and Legislative Developments

Significant regulatory and legislative actions and developments with updates, or not previously disclosed, are summarized below for the period covered by this Report.

Finance Agency’s Review and Analysis of the FHLBank System

On November 7, 2023, the Finance Agency issued a written report titled “FHLBank System at 100: Focusing on the Future” (System at 100 Report), presenting its review and analysis of the FHLBank System and the actions and recommendations it plans to pursue in service of its vision for the future of the FHLBank System. The report focused on four broad themes: (1) the mission of the FHLBank System; (2) the FHLBank System as a stable and reliable source of liquidity; (3) housing and community development; and (4) FHLBank System operational efficiency, structure, and governance. The Finance Agency has stated that it expects to continue a multi-year, collaborative effort with the FHLBanks, their member institutions, and other stakeholders to address the recommended actions in the System at 100 Report and has stated that it can implement some of the recommendations from the report through ongoing supervision, guidance, or rulemaking, as well as through statutory changes by proposing specific requests for Congressional action.

The Finance Agency made legislative recommendations for the FHLBank System in its 2023 Report to Congress issued on June 14, 2024, consistent with proposed plans and actions included in the System at 100 Report.

In April 2024, the Finance Agency provided an update on its plan to implement the System at 100 Report’s recommendations and announced key priorities for 2024, including, among others, (1) clarifying the FHLBank System mission; (2) aligning eligibility requirements for different types of FHLBank members; and (3) streamlining requirements related to the AHP. The Finance Agency stated it would maintain transparency and continue robust stakeholder engagement during the implementation process.

On May 16, 2024, the Finance Agency issued a request for input on updates to the mission statement for the FHLBank System, establishment of methods for measuring and evaluating mission achievement, which could include updating the list of the FHLBanks' core mission activities, and institution of a member incentive program that would provide added benefits in accordance with the members' respective engagement with the FHLBanks' housing finance and community development mission.

On June 20, 2024, the Finance Agency issued a request for input regarding the efficiency and effectiveness of the FHLBanks' AHP competitive application process, including scope, complexity, documentation requirements, and interaction with other funders' requirements, as well as suggestions for potential improvements, such as simplification of the AHP application process.

Feedback received from commentators in response to the Finance Agency's requests for input may impact future Finance Agency supervisory, advisory, regulatory, or statutory proposals. We continue to monitor the Finance Agency's efforts to implement the recommendations from the System at 100 Report, and we are not able to predict what actions will ultimately result, the timing or extent of any actions or changes, or the ultimate effect on us, our members, or the FHLBank System in the future. We plan to continue to engage with the Finance Agency and other stakeholders during this process. For a further discussion of the System at 100 Report, including proposed plans and actions, and related risks, see Part I. Item 1A. "Risk Factors" and the Regulatory and Legislative Developments section in Part II. Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Executive Overview" in our 2023 Annual Report on Form 10-K.

ANALYSIS OF FINANCIAL CONDITION

Credit Services

Credit Activity and Advance Composition

The table below shows trends in Advance balances by major programs and in the notional amount of Letters of Credit.

(Dollars in millions)	June 30, 2024		December 31, 2023	
	Balance	Percent ⁽¹⁾	Balance	Percent ⁽¹⁾
Adjustable/Variable-Rate Indexed:				
SOFR	\$ 26,012	33 %	\$ 30,306	41 %
Other	3,821	5	1,217	2
Total	29,833	38	31,523	43
Fixed-Rate:				
Repurchase based (REPO)	9,462	12	7,232	10
Regular Fixed-Rate	35,834	45	30,805	42
Putable ⁽²⁾	575	1	565	1
Amortizing/Mortgage Matched	1,118	1	1,210	1
Other	2,407	3	2,303	3
Total	49,396	62	42,115	57
Total Advances Principal	\$ 79,229	100 %	\$ 73,638	100 %
Letters of Credit (notional) ⁽³⁾	\$ 47,838		\$ 47,098	

(1) As a percentage of total Advances principal.

(2) Excludes Putable Advances where the related put options have expired or where the Advance is indexed to a variable-rate. These Advances are classified based on their current terms.

(3) Represents the amount of an off-balance sheet commitment.

Advance principal balances on June 30, 2024 increased \$5.6 billion compared to year-end 2023. The increase in Advances resulted primarily from depository members' steady demand for liquidity. The future levels of Advance balances are difficult to predict and depend on many factors, including changes in the level of liquidity in the financial markets, changes in our members' deposit levels compared to loan growth and the general health of the economy.

Letters of Credit are issued on behalf of members to support certain obligations of members (or members' customers) to third-party beneficiaries. Letters of Credit increased \$0.7 billion (two percent) in the first six months of 2024 as members continue to use them primarily to secure higher levels of public unit deposits. Letters of Credit usually expire without being drawn upon.

The following tables present principal balances for the five members with the largest Advance borrowings.

(Dollars in millions)

June 30, 2024			December 31, 2023		
Name	Principal Amount of Advances	Percent of Total Principal Amount of Advances	Name	Principal Amount of Advances	Percent of Total Principal Amount of Advances
JPMorgan Chase Bank, N.A.	\$ 14,000	18 %	JPMorgan Chase Bank, N.A.	\$ 14,000	19 %
U.S. Bank, N.A.	10,000	13	U.S. Bank, N.A.	10,000	14
Keybank, N.A.	9,333	12	Keybank, N.A.	9,836	13
Fifth Third Bank	6,001	7	Third Federal Savings and Loan Association	5,008	7
Third Federal Savings and Loan Association	4,807	6	Fifth Third Bank	4,001	5
Total of Top 5	<u>\$ 44,141</u>	<u>56 %</u>	Total of Top 5	<u>\$ 42,845</u>	<u>58 %</u>

Mortgage Loans Held for Portfolio (Mortgage Purchase Program, or MPP)

MPP balances are influenced by conditions in the housing and mortgage markets, the competitiveness of prices we offer to purchase loans, as well as program features and activity from our largest sellers. We manage purchases and balances at a prudent level relative to capital and total assets to effectively manage market and credit risks consistent with our risk appetite.

The table below shows principal purchases and reductions of loans in the MPP for the first six months of 2024. All loans acquired in the first six months of 2024 were conventional loans.

(In millions)	MPP Principal
Balance, December 31, 2023	\$ 6,960
Principal purchases	387
Principal collections	(304)
Balance, June 30, 2024	<u>\$ 7,043</u>

We closely track the refinancing incentives of our mortgage assets (including loans in the MPP and MBS) because the option for homeowners to change their principal payments normally represents the largest portion of our market risk exposure and can affect MPP balances. MPP principal paydowns equated to a five percent annual constant prepayment rate during the first six months of 2024 and all of 2023. Mortgage prepayment rates have remained low due to the elevated mortgage rate environment that has persisted over the last several quarters. Likewise, elevated mortgage rates and low housing inventories have substantially eliminated borrower incentive to refinance and have slowed mortgage purchase originations, which in turn contributed to the slow pace of our purchases of new MPP loans in the first six months of 2024.

Overall, MPP yields on new purchases and existing portfolio balances, relative to their market and credit risks, are expected to continue to generate a profitable long-term return.

Investments

The table below presents the ending and average balances of our investment portfolio.

(In millions)	Six Months Ended		Year Ended	
	June 30, 2024		December 31, 2023	
	Ending Balance	Average Balance	Ending Balance	Average Balance
Liquidity investments	\$ 19,266	\$ 21,257	\$ 23,418	\$ 26,346
MBS	18,600	18,865	19,223	18,106
Other investments ⁽¹⁾	—	59	—	532
Total investments	<u>\$ 37,866</u>	<u>\$ 40,181</u>	<u>\$ 42,641</u>	<u>\$ 44,984</u>

(1) The average balance includes the rights or obligations to cash collateral, which are included in the fair value of derivative assets or derivative liabilities on the Statements of Condition at period end.

Liquidity investments are either short-term (primarily overnight), or longer-term investments that may be pledged or sold and converted to cash. The ending and average balances of liquidity investments for the six months ended June 30, 2024 decreased compared to year-end 2023 as the level of Advances were more stable in the first six months of 2024 compared to the volatility in Advance balances experienced in 2023. It is normal for liquidity investments to vary by up to several billion dollars on a daily basis. Liquidity investment levels can vary significantly based on changes in the amount of actual Advances, anticipated demand for Advances, regulatory liquidity requirements, the availability of acceptable net spreads, and the number of eligible counterparties that meet our unsecured credit risk criteria.

Our overarching strategy for balances of MBS is to keep holdings as close as possible to the regulatory maximum. Finance Agency regulations prohibit us from purchasing MBS if our investment in these securities exceeds three times regulatory capital on the day we intend to purchase the securities. The ratio of MBS to regulatory capital was 2.88 on June 30, 2024. The balance of MBS at June 30, 2024 consisted of \$17.5 billion of securities issued by Fannie Mae or Freddie Mac (of which \$11.8 billion were floating-rate securities), and \$1.1 billion of securities issued by Ginnie Mae (which are primarily fixed rate).

The table below shows principal purchases and paydowns of our MBS for the first six months of 2024.

(In millions)	MBS Principal
Balance at December 31, 2023	\$ 19,409
Principal purchases	564
Principal paydowns	(1,155)
Balance at June 30, 2024	<u>\$ 18,818</u>

As mortgage rates remained elevated in the first six months of 2024, MBS principal paydowns were at an 11 percent annual constant prepayment rate, similar to the 10 percent rate experienced in all of 2023.

Consolidated Obligations

We generally fund variable-rate assets with Discount Notes (a portion of which may be swapped), adjustable-rate Bonds, and swapped fixed-rate Bonds because they give us the ability to effectively match the underlying rate reset periods embedded in these assets. Total Consolidated Obligations on June 30, 2024 were \$115.6 billion, an increase of \$0.2 billion compared to the balance at year-end 2023. The balances and composition of our Consolidated Obligations tend to fluctuate with changes in the balances and composition of our assets. In addition, changes in the amount and composition of our funding may be necessary from time to time to meet the days of positive liquidity and asset/liability maturity funding gap requirements discussed in the "Liquidity Risk" section of "Quantitative and Qualitative Disclosures About Risk Management."

Deposits

Total deposits with us are normally a relatively minor source of funding. Deposits with us are not insured, but are subject to statutory deposit reserve requirements. Total interest-bearing deposits on June 30, 2024 were \$1.2 billion, an increase of \$0.1 billion compared to the balance at year-end 2023. See the "Liquidity Risk" section of "Quantitative and Qualitative Disclosures About Risk Management" for additional information.

Derivatives Hedging Activity and Liquidity

Our use of derivatives is discussed in the "Effect of the Use of Derivatives on Net Interest Income" and "Non-Interest Income (Loss)" sections in "Results of Operations." Liquidity is discussed in the "Liquidity Risk" section in "Quantitative and Qualitative Disclosures About Risk Management."

Capital Resources

The following tables present capital amounts and capital-to-assets ratios, on both a GAAP and regulatory basis. We consider the regulatory ratio to be a better representation of financial leverage than the GAAP ratio because, although the GAAP ratio treats mandatorily redeemable capital stock as a liability, it protects investors in our debt in the same manner as GAAP capital stock and retained earnings.

(In millions)	Six Months Ended		Year Ended	
	June 30, 2024		December 31, 2023	
	Period End	Average	Period End	Average
GAAP and Regulatory Capital				
GAAP Capital Stock	\$ 4,791	\$ 4,661	\$ 4,846	\$ 5,397
Mandatorily Redeemable Capital Stock	15	17	17	34
Regulatory Capital Stock	4,806	4,678	4,863	5,431
Retained Earnings	1,733	1,735	1,658	1,586
Regulatory Capital	<u>\$ 6,539</u>	<u>\$ 6,413</u>	<u>\$ 6,521</u>	<u>\$ 7,017</u>
	Six Months Ended		Year Ended	
	June 30, 2024		December 31, 2023	
	Period End	Average	Period End	Average
GAAP and Regulatory Capital-to-Assets Ratio				
GAAP	5.22 %	5.18 %	5.18 %	5.07 %
Regulatory ⁽¹⁾	5.25	5.22	5.26	5.14

(1) At all times, the FHLB must maintain at least a four percent minimum regulatory capital-to-assets ratio.

Our business model is structured to be able to absorb sharp changes in assets because we can execute commensurate changes in liability and capital stock balances. For example, in the first six months of 2024, we issued \$1.1 billion of capital stock to members primarily in support of Advance borrowings, while repurchasing \$1.1 billion of excess capital stock no longer supporting Mission Assets and Activities.

Excess capital stock is the amount of stock held by a member (or former member) in excess of that institution's minimum stock ownership requirement. Excess capital stock provides a base of capital to manage financial leverage at prudent levels, augments loss protections for bondholders, and may be used by a member to capitalize additional Mission Assets and Activities, before purchasing activity stock. At June 30, 2024, the amount of excess stock, as defined by our Capital Plan, was \$0.3 billion, a decrease of \$0.3 billion compared to the balance at year-end 2023 due to the repurchase of excess stock noted above.

See the "Capital Adequacy" section in "Quantitative and Qualitative Disclosures About Risk Management" for discussion of our retained earnings.

RESULTS OF OPERATIONS

Components of Earnings and Return on Equity

The following table is a summary income statement for the three and six months ended June 30, 2024 and 2023. Each ROE percentage is computed by dividing income or expense for the category by the average amount of stockholders' equity for the period.

(Dollars in millions)	Three Months Ended June 30,				Six Months Ended June 30,			
	2024		2023		2024		2023	
	Amount	ROE ⁽¹⁾	Amount	ROE ⁽¹⁾	Amount	ROE ⁽¹⁾	Amount	ROE ⁽¹⁾
Net interest income	\$ 201	12.65 %	\$ 247	12.14 %	\$ 402	12.70 %	\$ 427	11.80 %
Non-interest income (loss):								
Net gains (losses) on trading securities	(12)	(0.76)	(27)	(1.31)	(26)	(0.82)	(1)	(0.04)
Net gains (losses) on sales of available-for-sale securities	—	0.02	—	—	2	0.04	—	—
Net gains (losses) on derivatives	8	0.47	(4)	(0.21)	28	0.90	(12)	(0.34)
Net gains (losses) on financial instruments held under fair value option	1	0.05	60	2.97	(8)	(0.25)	25	0.71
Other non-interest income, net	8	0.51	8	0.37	16	0.51	14	0.40
Total non-interest income (loss)	5	0.29	37	1.82	12	0.38	26	0.73
Total income	206	12.94	284	13.96	414	13.08	453	12.53
Non-interest expense	46	2.88	42	2.05	92	2.89	70	1.94
Affordable Housing Program assessments	16	1.01	24	1.20	32	1.02	38	1.06
Net income	\$ 144	9.05 %	\$ 218	10.71 %	\$ 290	9.17 %	\$ 345	9.53 %

(1) The ROE amounts have been computed using dollars in thousands. Accordingly, recalculations based upon the disclosed amounts in millions may produce nominally different results.

Details on the individual factors contributing to the level and changes in profitability are explained in the sections below.

Net Interest Income

Components of Net Interest Income

The following table shows selected components of net interest income.

(Dollars in millions)	Three Months Ended June 30,				Six Months Ended June 30,			
	2024		2023		2024		2023	
	Amount	% of Earning Assets	Amount	% of Earning Assets	Amount	% of Earning Assets	Amount	% of Earning Assets
Components of net interest rate spread:								
Net (amortization)/accretion ⁽¹⁾⁽²⁾	\$ (6)	(0.02)%	\$ (6)	(0.01)%	\$ (13)	(0.02)%	\$ (12)	(0.02)%
Prepayment fees on Advances, net ⁽²⁾	—	—	2	—	—	—	2	—
Other components of net interest rate spread	119	0.39	146	0.36	238	0.39	260	0.37
Total net interest rate spread	113	0.37	142	0.35	225	0.37	250	0.35
Earnings from funding assets with interest-free capital	88	0.29	105	0.25	177	0.29	177	0.25
Total net interest income/net interest margin ⁽³⁾	\$ 201	0.66 %	\$ 247	0.60 %	\$ 402	0.66 %	\$ 427	0.60 %

- (1) Includes monthly recognition of premiums and discounts paid on purchases of mortgage assets, premiums, discounts and concessions paid on Consolidated Obligations and other hedging basis adjustments.
- (2) This component of net interest rate spread has been segregated to display its relative impact.
- (3) Net interest margin is net interest income as a percentage of average total interest-earning assets.

Net Amortization/Accretion (generally referred to as amortization): Net amortization can become substantial and volatile with changes in interest rates, especially for mortgage assets. For example, when mortgage rates decrease, premium amortization of mortgage assets generally increases, which reduces net interest income. However, in the three and six months ended June 30, 2024 and 2023, mortgage rates were relatively stable and remained at elevated levels, keeping mortgage refinance activity along with net amortization low.

Prepayment Fees on Advances: Fees received from members for their early repayment of certain Advances, which are included in net interest income, are designed to make us economically indifferent to whether members hold Advances to maturity or repay them before maturity. Advance prepayment fees were minimal in the three and six months ended June 30, 2024 and 2023.

Other Components of Net Interest Rate Spread: The total other components of net interest rate spread decreased \$27 million and \$22 million in the three- and six-months comparison periods, respectively. The net decreases were primarily due to the factors below.

Six-Months Comparison

- **Lower average Advance balances-Unfavorable:** A decline of \$18.0 billion in average Advance balances decreased net interest income by an estimated \$35 million. Average Advance balances were higher in the six months ended June 30, 2023 as member demand increased in March 2023 in response to the turmoil in the banking industry and financial markets. Most of these Advances had matured or were prepaid by the end of 2023.
- **Lower spreads earned on mortgage loans held for portfolio-Unfavorable:** Lower spreads on mortgage loans held for portfolio decreased net interest income by an estimated \$21 million. Spreads declined primarily because of the maturity of lower-cost debt.
- **Lower spreads earned on liquidity investments-Unfavorable:** Lower spreads earned on liquidity investments decreased net interest income by an estimated \$20 million. However, the decrease in net interest income was partially offset by net interest settlements received on related derivatives not receiving hedge accounting, as discussed below.
- **Higher spreads earned on Advances-Favorable:** Net interest income earned on Advances increased by an estimated \$29 million, primarily driven by a shift in the composition of Advance balances from overnight to longer-term, floating rate, Advance products.

- **Higher spreads earned on MBS-Favorable:** Higher spreads earned on MBS increased net interest income by an estimated \$16 million. The higher spreads were driven by widening market spreads, which benefited new MBS purchases.
- **Higher average MBS balances-Favorable:** An increase of \$1.6 billion in average MBS improved net interest income by an estimated \$4 million.

Three-Months Comparison

The same factors generally affected the other components of net interest rate spread as in the six-months comparison and by approximately the same relative magnitude.

Earnings from Capital: Despite the higher average short-term interest rates, earnings from capital decreased \$17 million in the three-months comparison period and was flat in the six-months comparison period because of lower average capital stock balances.

Average Balance Sheet and Rates

The following tables provide average balances and rates for major balance sheet accounts, which determine the changes in net interest rate spreads. Interest amounts and average rates are affected by our use of derivatives and the related accounting elections we make. Interest amounts reported for Advances, MBS, Other investments and Swapped Bonds include gains (losses) on hedged items and derivatives in qualifying fair value hedge relationships.

In addition, the net interest settlements of interest receivables or payables and the price alignment amount associated with derivatives in a fair value hedge relationship are included in net interest income and interest rate spread. The price alignment amount approximates the amount of interest that we would receive or pay if the variation margin payments were characterized as collateral pledged to secure outstanding credit exposure on the derivative contracts. However, if the derivatives do not qualify for fair value hedge accounting, the related net interest settlements of interest receivables or payables and the price alignment amount are recorded in “Non-interest income (loss)” as “Net gains (losses) on derivatives” and therefore are excluded from the calculation of net interest rate spread. Amortization associated with some hedging-related basis adjustments is also reflected in net interest income, which affects interest rate spread.

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	Three Months Ended			Three Months Ended		
	June 30, 2024			June 30, 2023		
	Average Balance	Interest	Average Rate ⁽¹⁾	Average Balance	Interest	Average Rate ⁽¹⁾
Assets:						
Advances ⁽²⁾	\$ 75,545	\$ 1,080	5.75 %	\$ 108,835	\$ 1,441	5.31 %
Mortgage loans held for portfolio ⁽³⁾	7,185	59	3.30	7,028	52	2.97
Securities purchased under agreements to resell	1,833	25	5.42	4,722	59	5.04
Federal funds sold	8,052	108	5.42	14,929	188	5.06
Interest-bearing deposits in banks ⁽⁴⁾	1,763	24	5.47	2,933	36	4.95
MBS ⁽⁵⁾	18,747	256	5.50	17,708	218	4.94
Other investments ⁽⁵⁾	9,151	121	5.32	9,525	119	5.01
Loans to other FHLBanks	—	—	—	28	1	4.98
Total interest-earning assets	122,276	1,673	5.50	165,708	2,114	5.12
Other assets	687			1,468		
Total assets	<u>\$ 122,963</u>			<u>\$ 167,176</u>		
Liabilities and Capital:						
Term deposits	\$ 139	2	5.33	\$ 67	1	3.28
Other interest bearing deposits ⁽⁴⁾	1,003	12	4.90	1,057	12	4.43
Discount Notes	20,935	275	5.28	62,500	768	4.93
Unswapped fixed-rate Bonds	11,869	81	2.73	12,215	65	2.14
Unswapped adjustable-rate Bonds	71,430	975	5.49	63,644	811	5.11
Swapped Bonds	9,967	127	5.13	17,427	209	4.82
Mandatorily redeemable capital stock	17	—	9.01	52	1	7.54
Total interest-bearing liabilities	115,360	1,472	5.13	156,962	1,867	4.77
Other liabilities	1,218			2,064		
Total capital	6,385			8,150		
Total liabilities and capital	<u>\$ 122,963</u>			<u>\$ 167,176</u>		
Net interest rate spread			<u>0.37 %</u>			<u>0.35 %</u>
Net interest income and net interest margin ⁽⁶⁾		<u>\$ 201</u>	<u>0.66 %</u>		<u>\$ 247</u>	<u>0.60 %</u>
Average interest-earning assets to interest-bearing liabilities			<u>106.00 %</u>			<u>105.57 %</u>

- (1) Amounts used to calculate average rates are based on dollars in thousands. Accordingly, recalculations based upon the disclosed amounts in millions may not produce the same results.
- (2) Interest on Advances includes prepayment fees of \$2 million for the three months ended June 30, 2023. Advances prepayments fees for the three months ended June 30, 2024 totaled less than \$1 million.
- (3) Non-accrual loans are included in average balances used to determine average rate.
- (4) The average balance amounts include the rights or obligations to cash collateral, which are included in the fair value of derivative assets or derivative liabilities on the Statements of Condition at period end.
- (5) Includes available-for-sale securities based on their amortized costs. The yield information does not give effect to changes in fair value that are reflected as a component of stockholders' equity for available-for-sale securities.
- (6) Net interest margin is net interest income as a percentage of average total interest-earning assets.

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(Dollars in millions)

	Six Months Ended			Six Months Ended		
	June 30, 2024			June 30, 2023		
	Average Balance	Interest	Average Rate ⁽¹⁾	Average Balance	Interest	Average Rate ⁽¹⁾
Assets:						
Advances ⁽²⁾	\$ 74,775	\$ 2,137	5.75 %	\$ 92,746	\$ 2,338	5.08 %
Mortgage loans held for portfolio ⁽³⁾	7,163	117	3.28	7,073	105	2.99
Securities purchased under agreements to resell	2,025	55	5.41	3,403	83	4.91
Federal funds sold	8,223	222	5.42	11,385	276	4.89
Interest-bearing deposits in banks ⁽⁴⁾	1,783	48	5.46	2,598	61	4.74
MBS ⁽⁵⁾	18,903	517	5.50	17,286	408	4.76
Other investments ⁽⁵⁾	9,283	246	5.34	9,451	224	4.79
Loans to other FHLBanks	8	—	5.42	34	1	4.81
Total interest-earning assets	122,163	3,342	5.50	143,976	3,496	4.90
Other assets	698			1,267		
Total assets	<u>\$122,861</u>			<u>\$145,243</u>		
Liabilities and Capital:						
Term deposits	\$ 136	3	5.29	\$ 74	1	3.21
Other interest bearing deposits ⁽⁴⁾	1,031	25	4.91	1,080	23	4.25
Discount Notes	20,282	535	5.30	56,073	1,316	4.73
Unswapped fixed-rate Bonds	11,570	153	2.66	12,386	132	2.15
Unswapped adjustable-rate Bonds	67,891	1,856	5.50	54,591	1,329	4.91
Swapped Bonds	14,318	367	5.15	11,905	267	4.52
Mandatorily redeemable capital stock	17	1	9.01	34	1	7.16
Total interest-bearing liabilities	115,245	2,940	5.13	136,143	3,069	4.55
Other liabilities	1,258			1,802		
Total capital	6,358			7,298		
Total liabilities and capital	<u>\$122,861</u>			<u>\$145,243</u>		
Net interest rate spread			<u>0.37 %</u>			<u>0.35 %</u>
Net interest income and net interest margin ⁽⁶⁾		<u>\$ 402</u>	<u>0.66 %</u>		<u>\$ 427</u>	<u>0.60 %</u>
Average interest-earning assets to interest-bearing liabilities			<u>106.00 %</u>			<u>105.75 %</u>

(1) Amounts used to calculate average rates are based on dollars in thousands. Accordingly, recalculations based upon the disclosed amounts in millions may not produce the same results.

(2) Interest on Advances includes prepayment fees of \$2 million for the six months ended June 30, 2023. Advances prepayments fees for the six months ended June 30, 2024 totaled less than \$1 million.

(3) Non-accrual loans are included in average balances used to determine average rate.

(4) The average balance amounts include the rights or obligations to cash collateral, which are included in the fair value of derivative assets or derivative liabilities on the Statements of Condition at period end.

(5) Includes available-for-sale securities based on their amortized costs. The yield information does not give effect to changes in fair value that are reflected as a component of stockholders' equity for available-for-sale securities.

(6) Net interest margin is net interest income as a percentage of average total interest-earning assets.

Rates on our interest-bearing assets and liabilities generally increased in the three and six months ended June 30, 2024 compared to the same periods of 2023, as these assets and liabilities have repriced to the higher interest rates.

Volume/Rate Analysis

Changes in both average balances (volume) and interest rates influence changes in net interest income, as shown in the following table.

(In millions)	Three Months Ended June 30, 2024 over 2023			Six Months Ended June 30, 2024 over 2023		
	Volume ⁽¹⁾⁽³⁾	Rate ⁽²⁾⁽³⁾	Total	Volume ⁽¹⁾⁽³⁾	Rate ⁽²⁾⁽³⁾	Total
<u>Increase (decrease) in interest income</u>						
Advances	\$ (469)	\$ 108	\$ (361)	\$ (489)	\$ 288	\$ (201)
Mortgage loans held for portfolio	1	6	7	1	11	12
Securities purchased under agreements to resell	(38)	4	(34)	(36)	8	(28)
Federal funds sold	(92)	12	(80)	(83)	29	(54)
Interest-bearing deposits in banks	(15)	3	(12)	(21)	8	(13)
MBS	13	25	38	41	68	109
Other investments	(5)	7	2	(4)	26	22
Loans to other FHLBanks	—	(1)	(1)	(1)	—	(1)
Total	(605)	164	(441)	(592)	438	(154)
<u>Increase (decrease) in interest expense</u>						
Term deposits	1	—	1	1	1	2
Other interest-bearing deposits	(1)	1	—	(1)	3	2
Discount Notes	(542)	49	(493)	(927)	146	(781)
Unswapped fixed-rate Bonds	(2)	18	16	(9)	30	21
Unswapped adjustable-rate Bonds	104	60	164	351	176	527
Swapped Bonds	(94)	12	(82)	58	42	100
Mandatorily redeemable capital stock	(1)	—	(1)	(1)	1	—
Total	(535)	140	(395)	(528)	399	(129)
Increase (decrease) in net interest income	\$ (70)	\$ 24	\$ (46)	\$ (64)	\$ 39	\$ (25)

(1) Volume changes are calculated as the change in volume multiplied by the prior year rate.

(2) Rate changes are calculated as the change in rate multiplied by the prior year average balance.

(3) Changes that are not identifiable as either volume-related or rate-related, but rather are equally attributable to both volume and rate changes, have been allocated to the volume and rate categories based upon the proportion of the absolute value of the volume and rate changes.

Effect of the Use of Derivatives on Net Interest Income

The following table shows the impact on net interest income from the effect of derivatives and hedging activities. As noted above, gains (losses) on hedged items and derivatives in qualifying fair value hedge relationships are recorded in interest income or expense. In addition, for derivatives designated as a fair value hedge, the net interest settlements of interest receivables or payables and the price alignment amount related to such derivatives are recognized as adjustments to the interest income or expense of the designated hedged item. As such, all the effects on earnings of derivatives qualifying for fair value hedge accounting are reflected in net interest income. The effect on earnings from derivatives not receiving fair value hedge accounting is provided in the “Non-Interest Income (Loss)” section below.

(In millions)

	<u>Advances</u>	<u>Investment Securities</u>	<u>Bonds</u>
Three Months Ended June 30, 2024			
Net interest settlements included in net interest income	\$ 106	\$ 88	\$ (8)
Price alignment amount ⁽¹⁾	(7)	(14)	—
Increase (decrease) to net interest income	<u>\$ 99</u>	<u>\$ 74</u>	<u>\$ (8)</u>

Three Months Ended June 30, 2023

Gains (losses) on designated fair value hedges	\$ —	\$ 2	\$ —
Net interest settlements included in net interest income	84	85	(8)
Price alignment amount ⁽¹⁾	(4)	(11)	—
Increase (decrease) to net interest income	<u>\$ 80</u>	<u>\$ 76</u>	<u>\$ (8)</u>

(In millions)

	<u>Advances</u>	<u>Investment Securities</u>	<u>Bonds</u>
Six Months Ended June 30, 2024			
(Amortization)/accretion of hedging activities in net interest income	\$ —	\$ (1)	\$ —
Gains (losses) on designated fair value hedges	—	2	—
Net interest settlements included in net interest income	213	185	(17)
Price alignment amount ⁽¹⁾	(12)	(27)	—
Increase (decrease) to net interest income	<u>\$ 201</u>	<u>\$ 159</u>	<u>\$ (17)</u>

Six Months Ended June 30, 2023

(Amortization)/accretion of hedging activities in net interest income	\$ —	\$ (1)	\$ —
Gains (losses) on designated fair value hedges	—	3	—
Net interest settlements included in net interest income	142	156	(16)
Price alignment amount ⁽¹⁾	(9)	(22)	—
Increase (decrease) to net interest income	<u>\$ 133</u>	<u>\$ 136</u>	<u>\$ (16)</u>

(1) This amount is for derivatives for which variation margin is characterized as a daily settled contract.

We primarily use derivatives to more closely match actual cash flows between assets and liabilities by synthetically converting the fixed interest rates on certain Advances, investments and Consolidated Obligations to adjustable rates tied to an eligible benchmark rate (e.g., the Federal funds effective rate or SOFR). The increases in average short-term interest rates primarily benefited net interest income in both the three and six months ended June 30, 2024 as the conversion of certain Advances' and investments' fixed interest rates to adjustable-coupon rates resulted in an increase in the amount of net interest settlements being received. The fluctuation in net interest income from the use of derivatives was acceptable because it enabled us to lower market risk exposure.

Non-Interest Income (Loss)

Non-interest income (loss) consists of certain gains (losses) on investment securities, derivatives activities, financial instruments held under the fair value option, and other non-interest earning activities. The following tables present the net effect of derivatives and hedging activities on non-interest income (loss). The effects of derivatives and hedging activities on non-interest income (loss) relate only to derivatives not qualifying for fair value hedge accounting.

(In millions)

	Advances	Investment Securities	Mortgage Loans	Bonds	Discount Notes	Other	Total
Three Months Ended June 30, 2024							
<u>Net effect of derivatives and hedging activities</u>							
Gains (losses) on derivatives not receiving hedge accounting	\$ —	\$ 2	\$ 1	\$ 1	\$ (2)	\$ —	\$ 2
Net interest settlements on derivatives not receiving hedge accounting	1	16	—	(6)	(3)	—	8
Price alignment amount ⁽¹⁾	—	—	—	—	—	(2)	(2)
Net gains (losses) on derivatives	1	18	1	(5)	(5)	(2)	8
Gains (losses) on trading securities ⁽²⁾	—	(12)	—	—	—	—	(12)
Gains (losses) on financial instruments held under fair value option ⁽³⁾	—	—	—	(3)	4	—	1
Total net effect on non-interest income (loss)	<u>\$ 1</u>	<u>\$ 6</u>	<u>\$ 1</u>	<u>\$ (8)</u>	<u>\$ (1)</u>	<u>\$ (2)</u>	<u>\$ (3)</u>

Three Months Ended June 30, 2023

Net effect of derivatives and hedging activities

Gains (losses) on derivatives not receiving hedge accounting	\$ 3	\$ 31	\$ (1)	\$ (22)	\$ (9)	\$ —	\$ 2
Net interest settlements on derivatives not receiving hedge accounting	—	13	—	(7)	(11)	—	(5)
Price alignment amount ⁽¹⁾	—	—	—	—	—	(1)	(1)
Net gains (losses) on derivatives	3	44	(1)	(29)	(20)	(1)	(4)
Gains (losses) on trading securities ⁽²⁾	—	(27)	—	—	—	—	(27)
Gains (losses) on financial instruments held under fair value option ⁽³⁾	(2)	—	—	46	16	—	60
Total net effect on non-interest income (loss)	<u>\$ 1</u>	<u>\$ 17</u>	<u>\$ (1)</u>	<u>\$ 17</u>	<u>\$ (4)</u>	<u>\$ (1)</u>	<u>\$ 29</u>

(In millions)	Advances	Investment Securities	Mortgage Loans	Bonds	Discount Notes	Other	Total
Six Months Ended June 30, 2024							
<u>Net effect of derivatives and hedging activities</u>							
Gains (losses) on derivatives not receiving hedge accounting	\$ 4	\$ 22	\$ (1)	\$ (1)	\$ (5)	\$ —	\$ 19
Net interest settlements on derivatives not receiving hedge accounting	3	28	—	(13)	(6)	—	12
Price alignment amount ⁽¹⁾	—	—	—	—	—	(3)	(3)
Net gains (losses) on derivatives	7	50	(1)	(14)	(11)	(3)	28
Gains (losses) on trading securities ⁽²⁾	—	(26)	—	—	—	—	(26)
Gains (losses) on financial instruments held under fair value option ⁽³⁾	(5)	—	—	(8)	5	—	(8)
Total net effect on non-interest income (loss)	\$ 2	\$ 24	\$ (1)	\$ (22)	\$ (6)	\$ (3)	\$ (6)

Six Months Ended June 30, 2023							
<u>Net effect of derivatives and hedging activities</u>							
Gains (losses) on derivatives not receiving hedge accounting	\$ 3	\$ (4)	\$ (5)	\$ (1)	\$ 7	\$ —	\$ —
Net interest settlements on derivatives not receiving hedge accounting	—	24	—	(19)	(15)	—	(10)
Price alignment amount ⁽¹⁾	—	—	—	—	—	(2)	(2)
Net gains (losses) on derivatives	3	20	(5)	(20)	(8)	(2)	(12)
Gains (losses) on trading securities ⁽²⁾	—	(1)	—	—	—	—	(1)
Gains (losses) on financial instruments held under fair value option ⁽³⁾	(2)	—	—	27	—	—	25
Total net effect on non-interest income (loss)	\$ 1	\$ 19	\$ (5)	\$ 7	\$ (8)	\$ (2)	\$ 12

(1) This amount is for derivatives for which variation margin is characterized as a daily settled contract.

(2) Includes only those gains (losses) on trading securities that have an assigned economic derivative; therefore, this line item may not agree to the Statements of Income.

(3) Includes only those gains or losses on financial instruments held at fair value that have an economic derivative "assigned."

The decrease in earnings from the net effect of derivatives and hedging activities in the three and six months ended June 30, 2024 compared to the same periods of 2023 was primarily due to net market value changes related to Bonds held under the fair value option and the related derivatives hedging them. The net market value changes resulted in net losses in the three and six months ended June 30, 2024 compared to net gains in the three and six months ended June 30, 2023. We elect the fair value option for certain financial instruments that either do not qualify for hedge accounting or may be at risk for not meeting hedge effectiveness requirements. Because we intend to hold these derivatives and the related financial instruments to maturity, any unrealized gains or losses are expected to reverse in future periods. The impact of the net market value changes was partially offset by net interest settlements being received on interest rate swaps in the 2024 periods rather than net payments being made in the 2023 periods.

In the tables above, "Gains (losses) on trading securities" consist of fixed-rate U.S. Treasury and GSE obligations that have been swapped to a variable rate. Trading securities are recorded at fair value, with changes in fair value reported in non-interest income (loss). There are a number of factors that affect the fair value of these securities, such as changes in interest rates, the passage of time, and volatility. By hedging these trading securities, the gains or losses on these trading securities will generally be offset by the gains or losses on the associated interest rate swaps.

As noted above, the fluctuation in earnings from the use of derivatives was acceptable because it enabled us to lower market risk exposure.

Non-Interest Expense

The following table presents non-interest expense.

(In millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
<u>Non-interest expense</u>				
Compensation and benefits	\$ 14	\$ 13	\$ 29	\$ 28
Other operating expense	10	8	19	15
Finance Agency	3	3	6	5
Office of Finance	2	2	3	3
Voluntary housing contributions	16	15	32	15
Other	1	1	3	4
Total non-interest expense	<u>\$ 46</u>	<u>\$ 42</u>	<u>\$ 92</u>	<u>\$ 70</u>

Our business is designed to support significant changes in asset levels without having to undergo material changes in staffing, operations, risk practices, or general resource needs. Total non-interest expense increased in the first six months of 2024 compared to the same period of 2023 primarily as a result of making voluntary housing contributions of \$32 million to help address affordable housing needs and community investment in the Fifth District. These voluntary housing contributions are in addition to the 10 percent of earnings that are required to be set aside as AHP assessments.

Segment Information

Note 11 of the Notes to Unaudited Financial Statements presents information on our two operating business segments. We manage financial operations and market risk exposure primarily at the macro level, and within the context of the entire balance sheet, rather than exclusively at the level of individual segments. Under this approach, the market risk/return profile of each segment may not match, or possibly even have the same trends as, what would occur if we managed each segment on a stand-alone basis. The tables below summarize each segment's operating results for the periods shown.

(Dollars in millions)	Traditional Member Finance	MPP	Total
Three Months Ended June 30, 2024			
Net interest income (loss)	\$ 177	\$ 24	\$ 201
Net income (loss)	\$ 126	\$ 18	\$ 144
Average assets	\$ 115,088	\$ 7,875	\$ 122,963
Assumed average capital allocation	\$ 5,976	\$ 409	\$ 6,385
Return on average assets ⁽¹⁾	0.44 %	0.92 %	0.47 %
Return on average equity ⁽¹⁾	8.45 %	17.81 %	9.05 %
Three Months Ended June 30, 2023			
Net interest income (loss)	\$ 212	\$ 35	\$ 247
Net income (loss)	\$ 191	\$ 27	\$ 218
Average assets	\$ 158,374	\$ 8,802	\$ 167,176
Assumed average capital allocation	\$ 7,721	\$ 429	\$ 8,150
Return on average assets ⁽¹⁾	0.48 %	1.22 %	0.52 %
Return on average equity ⁽¹⁾	9.91 %	25.07 %	10.71 %
Six Months Ended June 30, 2024			
Net interest income (loss)	\$ 354	\$ 48	\$ 402
Net income (loss)	\$ 256	\$ 34	\$ 290
Average assets	\$ 115,282	\$ 7,579	\$ 122,861
Assumed average capital allocation	\$ 5,966	\$ 392	\$ 6,358
Return on average assets ⁽¹⁾	0.45 %	0.91 %	0.47 %
Return on average equity ⁽¹⁾	8.63 %	17.49 %	9.17 %
Six Months Ended June 30, 2023			
Net interest income (loss)	\$ 358	\$ 69	\$ 427
Net income (loss)	\$ 294	\$ 51	\$ 345
Average assets	\$ 136,391	\$ 8,852	\$ 145,243
Assumed average capital allocation	\$ 6,851	\$ 447	\$ 7,298
Return on average assets ⁽¹⁾	0.44 %	1.15 %	0.48 %
Return on average equity ⁽¹⁾	8.66 %	22.87 %	9.53 %

(1) Amounts used to calculate returns are based on numbers in thousands. Accordingly, recalculations based upon the disclosed amounts in millions may not produce the same results.

Traditional Member Finance Segment

Net income declined in the three- and six-months comparisons largely because of net market value changes related to interest rate swaps and associated financial instruments carried at fair value. The net market value changes resulted in losses in the three and six months ended June 30, 2024 compared to net gains in the three and six months ended June 30, 2023. Additionally, in the three-months comparison period, net income decreased due to lower average Advance balances as well as lower average capital stock balances, which reduced the earnings generated from investing the FHLB's capital. Additionally, the lower net income was partially due to higher voluntary housing contributions in the six months ended June 30, 2024 compared to the same period of 2023.

MPP Segment

Earnings from the MPP segment decreased in the three and six months ended June 30, 2024 compared to the same periods of 2023 primarily because of lower net interest income. Net interest income decreased as the benefits from low cost debt diminished in the three and six months ended June 30, 2024. However, the overall decrease in net income in the six-months comparison period was partially offset by lower net unrealized losses on derivatives related to the MPP segment.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT RISK MANAGEMENT

Market Risk

Market Value of Equity and Duration of Equity

Two key measures of long-term market risk exposure are the sensitivities of the market value of equity and the duration of equity to changes in interest rates and other variables, as presented in the following tables for various instantaneous and permanent interest rate shocks (in basis points). Market value of equity represents the difference between the market value of total assets and the market value of total liabilities, including off-balance sheet items. The duration of equity provides an estimate of the change in market value of equity to further changes in interest rates. We compiled average results using data for each month end.

Market Value of Equity

(Dollars in millions)	Down 300	Down 200	Down 100	Flat Rates	Up 100	Up 200	Up 300
<u>Average Results</u>							
<i>2024 Year-to-Date</i>							
Market Value of Equity	\$ 6,053	\$ 6,051	\$ 6,012	\$ 5,940	\$ 5,853	\$ 5,762	\$ 5,672
% Change from Flat Case	1.9 %	1.9 %	1.2 %	—	(1.5)%	(3.0)%	(4.5)%
<i>2023 Full Year</i>							
Market Value of Equity	\$ 6,919	\$ 6,788	\$ 6,688	\$ 6,579	\$ 6,461	\$ 6,347	\$ 6,241
% Change from Flat Case	5.2 %	3.2 %	1.7 %	—	(1.8)%	(3.5)%	(5.1)%
<u>Month-End Results</u>							
<i>June 30, 2024</i>							
Market Value of Equity	\$ 5,983	\$ 6,032	\$ 6,038	\$ 6,002	\$ 5,940	\$ 5,868	\$ 5,792
% Change from Flat Case	(0.3)%	0.5 %	0.6 %	—	(1.0)%	(2.2)%	(3.5)%
<i>December 31, 2023</i>							
Market Value of Equity	\$ 6,241	\$ 6,170	\$ 6,084	\$ 5,968	\$ 5,845	\$ 5,718	\$ 5,595
% Change from Flat Case	4.6 %	3.4 %	1.9 %	—	(2.1)%	(4.2)%	(6.2)%

Duration of Equity

(In years)	Down 300	Down 200	Down 100	Flat Rates	Up 100	Up 200	Up 300
<u>Average Results</u>							
2024 Year-to-Date	(0.1)	0.5	1.1	1.5	1.6	1.6	1.5
2023 Full Year	1.8	1.4	1.8	1.8	1.8	1.7	1.5
<u>Month-End Results</u>							
June 30, 2024	(1.1)	(0.4)	0.4	1.0	1.2	1.4	1.4
December 31, 2023	1.2	1.5	1.8	2.0	2.2	2.1	1.9

The mortgage assets portfolio normally accounts for almost all market risk exposure because of prepayment volatility that we cannot completely hedge while maintaining sufficient net spreads. The overall market risk exposure to changing interest rates was well within policy limits during the periods presented. At June 30, 2024, market risk exposure to falling and rising rate shocks remained stable.

Based on the totality of our risk analysis, we expect that overall profitability, defined as the level of ROE compared with short-term market rates, will be competitive over the long term unless interest rates increase further by large amounts in a short period of time. Substantial declines in long-term interest rates could decrease income temporarily before reverting to average levels. This temporary reduction in income would be driven by additional recognition of mortgage asset premiums as the incentive for borrowers to refinance results in faster than anticipated repayments of those mortgage assets. However, we believe the mortgage assets portfolio will continue to provide an acceptable risk-adjusted return consistent with our risk appetite philosophy.

Capital Adequacy

Retained Earnings

We must hold sufficient capital to protect against exposure to various risks, including market, credit, and operational risks. We regularly conduct a variety of measurements and assessments for capital adequacy. At June 30, 2024, our capital management policy set forth approximately \$915 million as the minimum amount of retained earnings we believe is necessary to mitigate impairment risk.

The following table presents retained earnings.

(In millions)	June 30, 2024	December 31, 2023
Unrestricted retained earnings	\$ 981	\$ 964
Restricted retained earnings ⁽¹⁾	752	694
Total retained earnings	\$ 1,733	\$ 1,658

(1) Pursuant to the FHLBank System's Joint Capital Enhancement Agreement we are not permitted to distribute as dividends.

As indicated in the table above, our current balance of retained earnings exceeds the policy minimum, which we expect will continue to be the case as we bolster capital adequacy over time by allocating a portion of earnings to the restricted retained earnings account.

Market Capitalization Ratios

We measure two sets of market capitalization ratios. One measures the market value of equity (i.e., total capital) relative to the par value of regulatory capital stock (which is GAAP capital stock and mandatorily redeemable capital stock). The other measures the market value of total capital relative to the book value of total capital, which includes all components of capital, and mandatorily redeemable capital stock. The measures provide a point-in-time indication of the FHLB's liquidation or franchise value and can also serve as a measure of realized or potential market risk exposure.

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The following table presents the market value of equity to regulatory capital stock (excluding retained earnings) for several interest rate environments.

	June 30, 2024	December 31, 2023
Market Value of Equity to Par Value of Regulatory Capital Stock - Base Case (Flat Rates) Scenario	125 %	123 %
Market Value of Equity to Par Value of Regulatory Capital Stock - Down Shock ⁽¹⁾	126	127
Market Value of Equity to Par Value of Regulatory Capital Stock - Up Shock ⁽²⁾	122	118

(1) Represents a down shock of 200 basis points.

(2) Represents an up shock of 200 basis points.

A base case value below 100 percent could indicate that, in the remote event of an immediate liquidation scenario involving redemption of all capital stock, capital stock may be returned to stockholders at a value below par. This could be due to experiencing risks that lower the market value of capital and/or to having an insufficient amount of retained earnings. In the first six months of 2024, the market capitalization ratios in the scenarios presented continued to be above our policy requirements. The base case ratio at June 30, 2024 was still well above 100 percent because retained earnings were 36 percent of regulatory capital stock and we maintained stable market risk exposure.

The following table presents the market value of equity to the book value of total capital and mandatorily redeemable capital stock.

	June 30, 2024	December 31, 2023
Market Value of Equity to Book Value of Capital - Base Case (Flat Rates) Scenario ⁽¹⁾	92 %	93 %
Market Value of Equity to Book Value of Capital - Down Shock ⁽¹⁾⁽²⁾	93	96
Market Value of Equity to Book Value of Capital - Up Shock ⁽¹⁾⁽³⁾	90	89

(1) Capital includes total capital and mandatorily redeemable capital stock.

(2) Represents a down shock of 200 basis points.

(3) Represents an up shock of 200 basis points.

A base-case value below 100 percent can indicate that we have realized or could realize risks (especially market risk), such that the market value of total capital owned by stockholders is below the book value of total capital. The base-case ratio at June 30, 2024 indicates that the market value of total capital is \$512 million below the book value of total capital. In a scenario in which interest rates increase 200 basis points, the market value of total capital would be \$646 million below the book value of total capital. This indicates that in a liquidation scenario, stockholders would not receive the full sum of their total equity ownership in the FHLB. We believe the likelihood of a liquidation scenario is extremely remote.

Credit Risk

Overview

We believe our risk management practices, discussed below, minimize residual credit risk levels. At June 30, 2024, we had no loan loss reserves or impairment recorded for Credit Services, investments and derivatives and had a minimal amount of credit risk exposure in the MPP.

Credit Services

Overview: The objective of our credit risk management activities is to equalize risk exposure across members and counterparties to a zero level of expected losses. This approach is consistent with our conservative risk management principles and desire to have no residual credit risk related to Advances and Letters of Credit.

Collateral: We require each member to provide a security interest in eligible collateral before it can undertake any secured borrowing. Eligible loan collateral types include the following: single- and multi-family residential, home equity, commercial real estate, government guaranteed and farm real estate. Eligible security types include those that are government or agency backed, highly-rated municipal securities, and highly-rated private-label residential and commercial mortgage-backed securities. We have conservative eligibility criteria within each of the above asset types. The estimated value of pledged collateral is discounted in order to offset market, credit, and liquidity risks that may affect the collateral's realizable value in the event it must be liquidated. At June 30, 2024, total eligible pledged collateral of \$518.2 billion resulted in total borrowing

capacity of \$396.8 billion of which \$127.1 billion was used to support outstanding Advances and Letters of Credit. Borrowers often pledge collateral in excess of their collateral requirement to demonstrate access to liquidity and to have the ability to borrow additional amounts in the future. Over-collateralization by one member is not applied to another member.

Borrowing Capacity/Lendable Value: Lendable Value Rates (LVRs) represent the percent of collateral value net of the discount, or haircut, we apply for purposes of determining borrowing capacity. LVRs are derived using scenario analysis, statistical analysis and management assumptions relating to historical price volatility, inherent credit risks, liquidation costs, and the current credit and economic environment. We apply LVR results to the estimated values of pledged assets. LVRs vary among pledged assets and members based on the member institution type, the financial strength of the member institution, the form of valuation, lien position, the issuer of bond collateral or the quality of securitized assets, the quality of the loan collateral as reflected in the manner in which it was underwritten, and the marketability of the pledged assets.

Internal Credit Ratings: We perform credit underwriting of our members and nonmember institutions and assign them an internal credit rating. These credit ratings are based on internal and third-party ratings models, credit analyses and consideration of credit ratings from independent credit rating organizations. Credit ratings are used in conjunction with other measures of credit risk in managing secured credit risk exposure.

MPP

Overview: The residual amount of credit risk exposure to loans in the MPP is minimal, based on the same factors described in the 2023 Annual Report on Form 10-K.

Conventional Loan Portfolio Characteristics: At June 30, 2024, the weighted average loan-to-value ratios for conventional loans based on origination values and estimated current values were 73 percent and 46 percent, respectively. The estimated weighted average current loan-to-value ratio at June 30, 2024 decreased two percent from the ratio at December 31, 2023 as overall home values have returned to normal growth rates.

Credit Performance: The table below provides an analysis of conventional loans delinquent or in the process of foreclosure, along with the national average serious delinquency rate.

(Dollars in millions)	Conventional Loan Delinquencies	
	June 30, 2024	December 31, 2023
Early stage delinquencies - unpaid principal balance ⁽¹⁾	\$ 26	\$ 32
Serious delinquencies - unpaid principal balance ⁽²⁾	\$ 6	\$ 10
Early stage delinquency rate ⁽³⁾	0.4 %	0.5 %
Serious delinquency rate ⁽⁴⁾	0.1 %	0.1 %
National average serious delinquency rate ⁽⁵⁾	1.0 %	1.1 %

- (1) Includes conventional loans 30 to 89 days delinquent and not in foreclosure.
- (2) Includes conventional loans that are 90 days or more past due or where the decision of foreclosure or a similar alternative such as pursuit of deed-in-lieu has been reported.
- (3) Early stage delinquencies expressed as a percentage of the total conventional loan portfolio.
- (4) Serious delinquencies expressed as a percentage of the total conventional loan portfolio.
- (5) National average number of fixed-rate prime and subprime conventional loans that are 90 days or more past due or in the process of foreclosure is based on the most recent national delinquency data available. The June 30, 2024 rate is based on March 31, 2024 data.

Overall, the MPP has experienced a minimal amount of delinquencies, with delinquency rates continuing to be well below national averages. This further supports our view that the portfolio is comprised of high-quality, well-performing loans.

Credit Enhancements: Conventional mortgage loans are primarily supported against credit losses by some combination of credit enhancements (primary mortgage insurance (PMI) and the Lender Risk Account (LRA)). The LRA is a hold back of a portion of the initial purchase price to cover potential credit losses. Starting after five years from the loan purchase date, we may return the hold back to Participating Financial Institutions (PFIs) if they manage credit risk to predefined acceptable levels of exposure on the pools of loans they sell to us. As a result, some pools of loans may have sufficient credit enhancements to recapture all losses while other pools of loans may not. The LRA had balances of \$244 million and \$239 million at June 30, 2024 and December 31, 2023, respectively. For more information, see Note 5 of the Notes to Unaudited Financial Statements.

Credit Losses: Residual credit risk exposure depends on the actual and potential credit performance of the loans in each pool compared to the pool's equity (on individual loans) and credit enhancements. Our available credit enhancements at June 30, 2024 were ample and able to cover nearly all of the estimated gross credit losses. As a result, estimated credit losses at June 30, 2024 were less than \$1 million. Estimated credit losses, after credit enhancements, are accounted for in the allowance for credit losses or as a charge off (i.e., a reduction to the principal of mortgage loans held for portfolio).

Separate from our allowance for credit losses analysis, we regularly analyze potential adverse scenarios of lifetime credit risk exposure for the loans in the MPP. Even under severely adverse macroeconomic scenarios, we expect credit losses to remain low.

Investments

Liquidity Investments: We hold liquidity investments that can be converted to cash and may be unsecured, guaranteed or supported by the U.S. government, or secured (i.e., collateralized). For unsecured liquidity investments, we invest in the instruments of investment-grade rated institutions, have appropriate and conservative limits on dollar and maturity exposure to each institution, and have strong credit underwriting practices, including active monitoring of credit quality of our counterparties and of the environment in which they operate. In addition, we believe the portion of our liquidity investments for which the investments are secured with collateral (secured resale agreements) present no credit risk exposure to us. Liquidity investments generally fluctuate because of changes in the amount of actual Advances, anticipated demand for Advances, regulatory liquidity requirements, the availability of acceptable net spreads, and the number of eligible counterparties that meet our unsecured credit risk criteria.

The following table presents the carrying value of liquidity investments outstanding in relation to the counterparties' lowest long-term credit ratings provided by Standard & Poor's, Moody's, and/or Fitch Advisory Services. Our internal ratings of these investments may differ from those obtained from Standard & Poor's, Moody's, and/or Fitch Advisory Services. The ratings displayed in this table should not be taken as an indication of future ratings.

(In millions)

	June 30, 2024			
	Long-Term Rating			
	AA	A	Unrated	Total
<u>Unsecured Liquidity Investments</u>				
Interest-bearing deposits	\$ —	\$ 1,770	\$ —	\$ 1,770
Federal funds sold	2,505	1,850	—	4,355
Total unsecured liquidity investments	2,505	3,620	—	6,125
<u>Guaranteed/Secured Liquidity Investments</u>				
Securities purchased under agreements to resell	2,162	500	1,250	3,912
U.S. Treasury obligations	7,640	—	—	7,640
GSE obligations	1,589	—	—	1,589
Total guaranteed/secured liquidity investments	11,391	500	1,250	13,141
Total liquidity investments	\$ 13,896	\$ 4,120	\$ 1,250	\$ 19,266

Some counterparties used to transact our securities purchased under agreements to resell are not rated by an NRSRO because they are not issuers of debt or are otherwise not required to be rated by an NRSRO. However, each of the counterparties are considered to have the equivalent of at least an investment grade rating based on our internal ratings resulting from a fundamental credit analysis. Securities purchased under agreements to resell are secured by the following types of collateral: U.S. Treasury obligations, U.S. agency/GSE obligations, or U.S. agency/GSE MBS. At June 30, 2024, the collateral received had long-term credit ratings of AA, based on the lowest long-term credit ratings of the issuer as provided by Standard & Poor's, Moody's, and/or Fitch Advisory Services. The terms of our securities purchased under agreements to resell are structured such that if the fair value of the underlying securities decreases below the fair value required as collateral, the counterparty must place an equivalent amount of additional securities as collateral or remit an equivalent amount of cash. Additionally, these investments primarily mature overnight. All overnight investments in securities purchased under agreements to resell outstanding at June 30, 2024 were repaid according to their respective contractual terms.

The following table presents the lowest long-term credit ratings provided by Standard & Poor's, Moody's, and/or Fitch Advisory Services of our unsecured investment credit exposure by the domicile of the counterparty or the domicile of the counterparty's immediate parent for U.S. branches and agency offices of foreign commercial banks. Our internal ratings of these investments may differ from those obtained from Standard & Poor's, Moody's, and/or Fitch Advisory Services. The ratings displayed in this table should not be taken as an indication of future ratings.

(In millions)

Domicile of Counterparty	June 30, 2024		
	Counterparty Rating		Total
	AA	A	
Domestic	\$ —	\$ 2,020	\$ 2,020
U.S. branches and agency offices of foreign commercial banks:			
Canada	1,500	250	1,750
Australia	650	—	650
Netherlands	—	650	650
Finland	355	—	355
Germany	—	250	250
Sweden	—	250	250
United Kingdom	—	200	200
Total U.S. branches and agency offices of foreign commercial banks	2,505	1,600	4,105
Total unsecured investment credit exposure	<u>\$ 2,505</u>	<u>\$ 3,620</u>	<u>\$ 6,125</u>

We are prohibited by Finance Agency regulation from investing in financial instruments issued by non-U.S. entities. Furthermore, we restrict a significant portion of unsecured lending to overnight maturities, which further limits credit risk exposure.

MBS:

GSE MBS

At June 30, 2024, \$17.5 billion of MBS held were GSE securities issued by Fannie Mae and Freddie Mac, which provide credit safeguards by guaranteeing either timely or ultimate payments of principal and interest. We believe that the conservatorships of Fannie Mae and Freddie Mac lower the chance that they would not be able to fulfill their credit guarantees.

MBS Issued by Other Government Agencies

We also invest in MBS issued and guaranteed by Ginnie Mae. These investments totaled \$1.1 billion at June 30, 2024. We believe that the strength of Ginnie Mae's guarantee and backing by the full faith and credit of the U.S. government is sufficient to protect us against credit losses on these securities.

Derivatives

Credit Risk Exposure: We mitigate most of the credit risk exposure resulting from derivative transactions through collateralization or use of daily settled contracts. The table below presents the lowest long-term counterparty credit ratings provided by Standard & Poor's, Moody's, and/or Fitch Advisory Services for derivative positions to which we had credit risk exposure at June 30, 2024. The ratings displayed in this table should not be taken as an indication of future ratings.

(In millions)	Total Notional	Net Derivatives Fair Value Before Collateral	Cash Collateral Pledged to (from) Counterparties	Non-cash Collateral Pledged to (from) Counterparties	Net Credit Exposure to Counterparties
Nonmember counterparties:					
<u>Asset positions with credit exposure:</u>					
Uncleared derivatives:					
AA-rated	\$ 50	\$ 1	\$ (1)	\$ —	\$ —
A-rated	2,098	5	(2)	—	3
Total uncleared derivatives	2,148	6	(3)	—	3
Cleared derivatives ⁽¹⁾	53,930	35	26	820	881
<u>Liability positions with credit exposure:</u>					
Uncleared derivatives:					
BBB-rated	1,390	(9)	10	—	1
Total uncleared derivatives	1,390	(9)	10	—	1
Total derivative positions with credit exposure to nonmember counterparties	57,468	32	33	820	885
Member institutions ⁽²⁾	9	—	—	—	—
Total	\$ 57,477	\$ 32	\$ 33	\$ 820	\$ 885

(1) Represents derivative transactions cleared with LCH Ltd. and CME Clearing, the FHLB's clearinghouses. LCH Ltd. is rated AA- by Standard & Poor's, and CME Clearing is not rated, but its parent company, CME Group Inc., is rated AA- by Standard & Poor's and Fitch Ratings.

(2) Represents Mandatory Delivery Contracts.

Our net exposure to cleared derivatives is primarily associated with the requirement to post initial margin through the clearing agent to the Derivatives Clearing Organizations. We may pledge both cash and non-cash (i.e., securities) as collateral to satisfy this initial margin requirement. However, the use of cleared derivatives mitigates credit risk exposure because a central counterparty is substituted for individual counterparties.

Our net exposure to uncleared derivatives is managed to acceptable credit risk levels due to the contractual collateral provisions in these derivatives.

Although we cannot predict if we will realize credit risk losses from any of our derivatives counterparties, we believe that all of the counterparties will be able to continue making timely interest payments and, more generally, to continue to satisfy the terms and conditions of their derivative contracts with us.

Liquidity Risk

Liquidity Overview

We strive to be in a liquidity position at all times to meet the borrowing needs of our members and to meet all current and future financial commitments. This objective is achieved by managing liquidity positions to maintain stable, reliable, and cost-effective sources of funds while taking into account market conditions, member demand, and the maturity profile of assets and liabilities. At June 30, 2024, our liquidity position complied with the FHLBank Act, Finance Agency regulations, and internal policies.

The FHLBank System's primary source of funds is the sale of Consolidated Obligations in the capital markets. Our ability to obtain funds through the sale of Consolidated Obligations at acceptable interest costs depends on the financial market's perception of the riskiness of the Obligations and on prevailing conditions in the capital markets, particularly the short-term

capital markets. The System's favorable debt ratings, which take into account our status as a GSE, and our effective risk management practices are instrumental in ensuring stable and satisfactory access to the capital markets.

We believe our liquidity position, as well as that of the System, continued to be strong during the first six months of 2024. Our overall ability to effectively fund our operations through debt issuances remained sufficient. Investor demand for System debt was robust in the first six months of 2024, as investors continued to prefer high-quality money market instruments. We believe there is a low probability of a liquidity or funding crisis in the System that would impair our ability to participate, on a cost-effective basis, in issuances of debt, service outstanding debt, maintain adequate capitalization, or pay competitive dividends.

The System works collectively to manage and monitor the System-wide liquidity and funding risks. Liquidity risk includes the risk that the System could have difficulty rolling over short-term Obligations when market conditions change, also called refinancing risk. The System has a large reliance on short-term funding; therefore, it has a sharp focus on managing liquidity risk to very low levels. As shown on the unaudited Statements of Cash Flows, in the first six months of 2024, our portion of the System's debt issuances totaled \$48.6 billion for Discount Notes and \$59.5 billion for Bonds. Access to short-term debt markets has been reliable because investors, driven by liquidity preferences and risk aversion, have sought the System's short-term debt, which has resulted in strong demand for debt maturing in one year or less.

See the Notes to Unaudited Financial Statements for more detailed information regarding maturities of certain financial assets and liabilities which are instrumental in determining the amount of liquidity risk. In addition to contractual maturities, other assumptions regarding cash flows such as estimated prepayments, embedded call optionality, and scheduled amortization are considered when managing liquidity risks.

Liquidity Management and Regulatory Requirements

We manage liquidity risk by ensuring compliance with our regulatory liquidity requirements and regularly monitoring other metrics.

The Finance Agency establishes the expectations with respect to the maintenance of sufficient liquidity without access to the capital markets for a specified number of days, which was set as a period of between 10 to 30 calendar days in the base case. Under these expectations, all Advance maturities are assumed to renew, unless the Advances relate to former members who are ineligible to borrow new Advances. The maintenance of sufficient liquidity each day is intended to provide additional assurance that we can continue to provide Advances and Letters of Credit to members over an extended period without access to the capital markets. We were in compliance with these liquidity requirements at all times during the first six months of 2024.

The Finance Agency also provides guidance related to asset/liability maturity funding gap limits. Funding gap metrics measure the difference between assets and liabilities that are scheduled to mature during a specified period of time and are expressed as a percentage of total assets. Although subject to change depending on conditions in the financial markets, the current regulatory requirement for funding gaps is between -10 percent to -20 percent for the three-month maturity horizon and is between -25 percent to -35 percent for the one-year maturity horizon. During the six months ended June 30, 2024, we operated within those limits.

To support our member deposits, we also must meet a statutory deposit reserve requirement. The sum of our investments in obligations of the United States, deposits in eligible banks or trust companies, and Advances with a final maturity not exceeding five years must equal or exceed the current amount of member deposits. The following table presents the components of this liquidity requirement.

(In millions)	June 30, 2024	December 31, 2023
<u>Deposit Reserve Requirement</u>		
Total Eligible Deposit Reserves	\$ 92,063	\$ 88,988
Total Member Deposits	(1,175)	(1,120)
Excess Deposit Reserves	<u>\$ 90,888</u>	<u>\$ 87,868</u>

Member Concentration Risk

We regularly assess concentration risks from business activity. We believe the effect on credit risk exposure from borrower concentration is minimal because of our application of credit risk mitigations, the most important of which is over-collateralization of borrowings. Advance concentration has a minimal effect on market risk exposure because Advances are largely funded by Consolidated Obligations and interest rate swaps that have similar interest rate characteristics. Furthermore, additional increases in Advance concentration would not materially affect capital adequacy because Advance growth is supported by new purchases of capital stock as required by the Capital Plan.

Operational Risks

There were no material developments regarding our operational risk exposure during the first six months of 2024.

CRITICAL ACCOUNTING ESTIMATES

There have been no material changes in the first six months of 2024 to our critical accounting estimates. Our critical accounting estimates are described in detail in our 2023 Annual Report on Form 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Information required by this Item is set forth under the caption “Quantitative and Qualitative Disclosures About Risk Management” in Part I, Item 2, of this Report.

Item 4. Controls and Procedures.

DISCLOSURE CONTROLS AND PROCEDURES

The FHLB's management, including its principal executive officer and principal financial officer, evaluate the effectiveness of the FHLB's disclosure controls and procedures as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the “Exchange Act”). Based upon that evaluation, these two officers each concluded that, as of June 30, 2024, the FHLB maintained effective disclosure controls and procedures designed to ensure that information required to be disclosed in the reports that it files under the Exchange Act is (1) accumulated and communicated to management as appropriate to allow timely decisions regarding disclosure and (2) recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

The FHLB's management, including its principal executive officer and principal financial officer, evaluate the FHLB's internal control over financial reporting. Based upon that evaluation, these two officers each concluded that there were no changes in the FHLB's internal control over financial reporting that occurred during the quarter ended June 30, 2024 that materially affected, or are reasonably likely to materially affect, the FHLB's internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

Information regarding legal proceedings is set forth in Note 13 - Commitments and Contingencies in Part I, Item 1, of this Report.

Item 1A. Risk Factors.

For a discussion of our risk factors, see Part I, Item 1A. "Risk Factors" in our 2023 Annual Report on Form 10-K. There have been no material changes from the risk factors in our 2023 Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

From time to time the FHLB provides Letters of Credit in the ordinary course of business to support members' obligations issued in support of unaffiliated, third-party offerings of notes, bonds or other securities. The FHLB provided \$28.3 million of such credit support during the three months ended June 30, 2024. To the extent that these Letters of Credit are securities for purposes of the Securities Act of 1933, their issuance is exempt from registration pursuant to Section 3(a)(2) thereof.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Number ⁽¹⁾	Description of exhibit	Document filed or furnished, as indicated below
10.1	Federal Home Loan Bank of Cincinnati 2024 Incentive Compensation Plan	Filed Herewith
31.1	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer	Filed Herewith
31.2	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer	Filed Herewith
32	Section 1350 Certifications	Furnished Herewith
101.INS	XBRL Instance Document	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document	Filed Herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed Herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed Herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed Herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed Herewith
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)	Filed Herewith

(1) Numbers coincide with Item 601 of Regulation S-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, as of the 8th day of August 2024.

FEDERAL HOME LOAN BANK OF CINCINNATI
(Registrant)

By: /s/ Andrew S. Howell
Andrew S. Howell
President and Chief Executive Officer
(principal executive officer)

By: /s/ Stephen J. Sponaugle
Stephen J. Sponaugle
Executive Vice President - Chief Financial Officer
(principal financial officer)