FEDERAL HOME LOAN BANKS

Combined Financial Report for the Quarterly Period Ended September 30, 2023

This Combined Financial Report provides financial information on the Federal Home Loan Banks. The Federal Home Loan Banks issue consolidated bonds and consolidated discount notes (collectively referred to as consolidated obligations). Consolidated obligations are joint and several obligations of all Federal Home Loan Banks, which means that each individual Federal Home Loan Bank is responsible for the payment of principal and interest on all consolidated obligations. Each Federal Home Loan Bank is a separately chartered entity with its own board of directors and management. There is no centralized, system-wide management or oversight by a single board of directors of the Federal Home Loan Banks.

Federal Home Loan Bank consolidated obligations are not obligations of the United States and are not guaranteed by the United States. No person other than the Federal Home Loan Banks will have any obligations or liability with respect to consolidated obligations.

The Securities Act of 1933, as amended, does not require the registration of consolidated obligations; therefore, no registration statement with respect to consolidated obligations has been filed with the U.S. Securities and Exchange Commission. Neither the U.S. Securities and Exchange Commission, nor the Federal Housing Finance Agency, nor any state securities commission has approved or disapproved of these consolidated obligations or determined if this report is truthful or complete.

Carefully consider the risk factors provided in this and other Combined Financial Reports of the Federal Home Loan Banks (collectively referred to as Combined Financial Reports). Neither the Combined Financial Reports nor any offering materials provided by, or on behalf of, the Federal Home Loan Banks describe all the risks of investing in consolidated obligations. Investors should consult with their financial and legal advisors about the risks of investing in consolidated obligations.

The financial information contained in this Combined Financial Report is for the quarterly period ended September 30, 2023. This Combined Financial Report should be read in conjunction with the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, issued on March 24, 2023. Combined Financial Reports are available on the Federal Home Loan Banks Office of Finance website at fhlb-of.com. This website address is provided as a matter of convenience only, and its contents are not made part of or incorporated by reference into this report.

Investors should direct questions about consolidated obligations or the Combined Financial Reports to the Federal Home Loan Banks Office of Finance at (703) 467-3600 or at info@fhlb-of.com.

This Combined Financial Report was issued on November 14, 2023.

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EXPLANATORY STATEMENT ABOUT FEDERAL HOME LOAN BANKS COMBINED FINANCIAL REPORT

The Federal Home Loan Banks (FHLBanks) are government-sponsored enterprises (GSEs), federally-chartered but privately capitalized and independently managed. The FHLBanks together with the Federal Home Loan Banks Office of Finance (Office of Finance) comprise the FHLBank System.

The Office of Finance is responsible for preparing the Combined Financial Reports of the FHLBanks. Each FHLBank is responsible for the financial information and underlying data it provides to the Office of Finance for inclusion in the Combined Financial Reports. The Office of Finance is responsible for combining the financial information it receives from each of the FHLBanks.

The Combined Financial Reports are intended to be used by investors in consolidated obligations (consolidated bonds and consolidated discount notes) of the FHLBanks as these are joint and several obligations of all FHLBanks. This Combined Financial Report is provided using combination accounting principles generally accepted in the United States of America. This combined presentation in no way indicates that these assets and liabilities are under joint management and control as each individual FHLBank manages its operations independently. Therefore, each FHLBank's business, risk profile, financial condition, and results of operations will vary from FHLBank to FHLBank.

Because of the FHLBank System's structure, the Office of Finance does not prepare consolidated financial statements. Consolidated financial statements are generally considered to be appropriate when a controlling financial interest rests directly or indirectly in one of the enterprises included in the consolidation, which is the case in a typical holding company structure where there is a parent company that owns, directly or indirectly, one or more subsidiaries. However, the FHLBanks do not have a parent company that controls each of the FHLBanks. Instead, each of the FHLBanks is owned by its respective members and certain former members.

Each FHLBank is a separately chartered cooperative with its own board of directors and management and is responsible for establishing its own accounting and financial reporting policies in accordance with accounting principles generally accepted in the United States of America (GAAP). Although the FHLBanks work together in an effort to achieve consistency on significant accounting policies, the FHLBanks' accounting and financial reporting policies and practices may vary because alternative policies and presentations are permitted under GAAP in certain circumstances. Statements in this report may be qualified by a term such as "generally," "primarily," "typically," or words of similar meaning to indicate that the statement is generally applicable, but may not be applicable to all FHLBanks or their transactions as a result of their different business practices and accounting and financial reporting policies under GAAP.

An investor may not be able to obtain easily a system-wide view of the FHLBanks' business, risk profile, and financial information because there is no centralized, system-wide management or centralized board of director oversight of the individual FHLBanks. This decentralized structure is not conducive to preparing disclosures from a system-wide view in the same manner as is generally expected of U.S. Securities and Exchange Commission (SEC) registrants. For example, a conventional Management's Discussion and Analysis is not provided in this Combined Financial Report; instead, this report includes a "Financial Discussion and Analysis" prepared by the Office of Finance using information provided by each FHLBank.

Each FHLBank is subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and must file periodic reports and other information with the SEC. Each FHLBank prepares an annual financial report, filed on SEC Form 10-K, quarterly financial reports, filed on SEC Form 10-Q, and current reports, filed on SEC Form 8-K. Those reports contain additional information that is not contained in this Combined Financial Report. An investor should review those reports and other available information on individual FHLBanks to obtain additional detail on each FHLBank's business, risk profile, financial condition, results of operations, and accounting and financial reporting policies. Periodic reports and other information filed by each FHLBank with the SEC are made available on its website and on the SEC's website at sec.gov. References to websites and to reports and other information filed by individual FHLBanks with the SEC are provided as a matter of convenience only, and their contents are not made part of or incorporated by reference into this report.

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FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CONDITION
(UNAUDITED)

(dollars in millions, except par value)	September 30, 2023	December 31, 2022
Assets		
Cash and due from banks	$ 702	$ 417
Interest-bearing deposits *(Note 3)*	28,083	22,937
Securities purchased under agreements to resell *(Note 3)*	69,265	71,405
Federal funds sold *(Note 3)*	87,057	65,920
Investment securities *(Note 3)*		
Trading securities	11,821	15,865
Available-for-sale securities, net, amortized cost of $150,102 and $130,934	148,661	129,869
Held-to-maturity securities, net, fair value of $65,576 and $56,341	67,419	57,816
Total investment securities	**227,901**	**203,550**
Advances, includes $2,543 and $2,725 at fair value held under fair value option *(Note 4)*	826,945	819,121
Mortgage loans held for portfolio, net *(Note 5)*	59,783	56,048
Accrued interest receivable, net	4,393	3,327
Derivative assets, net *(Note 6)*	3,924	3,020
Other assets, net	1,436	1,502
Total assets	**$ 1,309,489**	**$ 1,247,247**
Liabilities		
Deposits *(Note 7)*	$ 13,256	$ 10,365
Consolidated obligations *(Note 8)*		
Discount notes, includes $51,554 and $65,795 at fair value held under fair value option	304,971	466,049
Bonds, includes $24,595 and $12,573 at fair value held under fair value option	906,531	695,381
Total consolidated obligations	**1,211,502**	**1,161,430**
Mandatorily redeemable capital stock *(Note 9)*	1,402	708
Accrued interest payable	6,879	3,229
Affordable Housing Program payable	1,292	944
Derivative liabilities, net *(Note 6)*	221	124
Other liabilities	3,560	2,640
Total liabilities	**1,238,112**	**1,179,440**
Commitments and contingencies *(Note 12)*		
Capital *(Note 9)*		
Capital stock		
Class B putable ($100 par value) issued and outstanding shares: 448,609,947 and 437,673,966	44,861	43,767
Class A putable ($100 par value) issued and outstanding shares: 3,579,633 and 2,387,767	358	239
Total capital stock	**45,219**	**44,006**
Retained earnings		
Unrestricted	19,942	18,322
Restricted	7,250	6,232
Total retained earnings	**27,192**	**24,554**
Accumulated other comprehensive income (loss) *(Note 10)*	(1,034)	(753)
Total capital	**71,377**	**67,807**
Total liabilities and capital	**$ 1,309,489**	**$ 1,247,247**

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

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF INCOME
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
(dollars in millions)	2023	2022	2023	2022
Interest income				
Advances	$ 12,067	$ 3,705	$ 36,538	$ 5,750
Interest-bearing deposits	567	133	1,568	175
Securities purchased under agreements to resell	709	235	2,262	314
Federal funds sold	1,443	534	4,213	715
Investment securities				
Trading securities	91	79	242	255
Available-for-sale securities	2,255	932	6,058	1,781
Held-to-maturity securities	837	298	2,233	614
Total investment securities	**3,183**	**1,309**	**8,533**	**2,650**
Mortgage loans held for portfolio	494	411	1,388	1,190
Other	—	—	1	1
Total interest income	**18,463**	**6,327**	**54,503**	**10,795**
Interest expense				
Consolidated obligations				
Discount notes	4,157	2,164	15,140	2,880
Bonds	11,766	2,720	32,123	4,390
Total consolidated obligations	**15,923**	**4,884**	**47,263**	**7,270**
Deposits	186	56	471	76
Mandatorily redeemable capital stock	24	8	48	20
Total interest expense	**16,133**	**4,948**	**47,782**	**7,366**
Net interest income	**2,330**	**1,379**	**6,721**	**3,429**
Provision (reversal) for credit losses	8	13	16	19
Net interest income after provision (reversal) for credit losses	**2,322**	**1,366**	**6,705**	**3,410**
Non-interest income				
Net gains (losses) on investment securities	(90)	(327)	(46)	(1,060)
Net gains (losses) on financial instruments held under fair value option	(75)	162	(144)	378
Net gains (losses) on derivatives	162	141	201	486
Other, net	41	34	201	111
Total non-interest income (loss)	**38**	**10**	**212**	**(85)**
Non-interest expense				
Compensation and benefits	202	181	617	547
Other operating expenses	140	128	406	361
Federal Housing Finance Agency	26	21	76	64
Office of Finance	16	16	53	49
Other, net	45	10	111	50
Total non-interest expense	**429**	**356**	**1,263**	**1,071**
Net income before assessments	**1,931**	**1,020**	**5,654**	**2,254**
Affordable Housing Program assessments	196	103	570	228
Net income	**$ 1,735**	**$ 917**	**$ 5,084**	**$ 2,026**

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

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
(dollars in millions)	2023	2022	2023	2022
Net income	**$ 1,735**	**$ 917**	**$ 5,084**	**$ 2,026**
Other comprehensive income				
Net unrealized gains (losses) on available-for-sale securities	(533)	(579)	(368)	(2,379)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	—	3	1
Net unrealized gains (losses) relating to hedging activities	58	184	63	537
Pension and postretirement benefits	(2)	3	21	—
Total other comprehensive income (loss)	**(477)**	**(392)**	**(281)**	**(1,841)**
Comprehensive income (loss)	**$ 1,258**	**$ 525**	**$ 4,803**	**$ 185**

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

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CAPITAL
(UNAUDITED)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

	Capital Stock - Putable					
	Class B		Class A		Total	
(dollars and shares in millions)	Shares	Par Value	Shares	Par Value	Shares	Par Value
Balance, June 30, 2023	**472**	**$ 47,218**	**4**	**$ 352**	**476**	**$ 47,570**
Comprehensive income (loss)	—	—	—	—	—	—
Proceeds from issuance of capital stock	117	11,725	—	1	117	11,726
Repurchases/redemptions of capital stock	(130)	(13,054)	(7)	(703)	(137)	(13,757)
Net shares reclassified (to)/from mandatorily redeemable capital stock	(4)	(421)	(1)	(54)	(5)	(475)
Transfers between Class B and Class A shares	(8)	(762)	8	762	—	—
Transfers to unrestricted/(from) restricted retained earnings	—	—	—	—	—	—
Dividends on capital stock						
Cash	—	—	—	—	—	—
Stock	2	155	—	—	2	155
Balance, September 30, 2023	**449**	**$ 44,861**	**4**	**$ 358**	**453**	**$ 45,219**
Balance, June 30, 2022	**321**	**$ 32,090**	**3**	**$ 272**	**324**	**$ 32,362**
Comprehensive income (loss)	—	—	—	—	—	—
Proceeds from issuance of capital stock	168	16,813	—	—	168	16,813
Repurchases/redemptions of capital stock	(103)	(10,247)	(5)	(520)	(108)	(10,767)
Net shares reclassified (to)/from mandatorily redeemable capital stock	(11)	(1,091)	—	(17)	(11)	(1,108)
Transfers between Class B and Class A shares	(5)	(540)	5	540	—	—
Transfers to unrestricted/(from) restricted retained earnings	—	—	—	—	—	—
Dividends on capital stock						
Cash	—	—	—	—	—	—
Stock	1	47	—	—	1	47
Balance, September 30, 2022	**371**	**$ 37,072**	**3**	**$ 275**	**374**	**$ 37,347**

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CAPITAL (continued)

(UNAUDITED)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

	Retained Earnings			Accumulated Other Comprehensive Income (Loss)	Total Capital
(dollars and shares in millions)	Unrestricted	Restricted	Total		
Balance, June 30, 2023	**$ 19,525**	**$ 6,902**	**$ 26,427**	**$ (557)**	**$ 73,440**
Comprehensive income (loss)	1,387	348	1,735	(477)	**1,258**
Proceeds from issuance of capital stock	—	—	—	—	**11,726**
Repurchases/redemptions of capital stock	—	—	—	—	**(13,757)**
Net shares reclassified (to)/from mandatorily redeemable capital stock	—	—	—	—	**(475)**
Transfers between Class B and Class A shares	—	—	—	—	—
Transfers to unrestricted/(from) restricted retained earnings	—	—	—	—	—
Dividends on capital stock					
Cash	(815)	—	(815)	—	**(815)**
Stock	(155)	—	(155)	—	—
Balance, September 30, 2023	**$ 19,942**	**$ 7,250**	**$ 27,192**	**$ (1,034)**	**$ 71,377**
Balance, June 30, 2022	**$ 17,551**	**$ 5,822**	**$ 23,373**	**$ (152)**	**$ 55,583**
Comprehensive income (loss)	734	183	917	(392)	525
Proceeds from issuance of capital stock	—	—	—	—	16,813
Repurchases/redemptions of capital stock	—	—	—	—	(10,767)
Net shares reclassified (to)/from mandatorily redeemable capital stock	—	—	—	—	(1,108)
Transfers between Class B and Class A shares	—	—	—	—	—
Transfers to unrestricted/(from) restricted retained earnings	1	(1)	—	—	—
Dividends on capital stock					
Cash	(315)	—	(315)	—	(315)
Stock	(47)	—	(47)	—	—
Balance, September 30, 2022	**$ 17,924**	**$ 6,004**	**$ 23,928**	**$ (544)**	**$ 60,731**

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

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CAPITAL
(UNAUDITED)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

	Capital Stock - Putable					
	Class B		Class A		Total	
(dollars and shares in millions)	Shares	Par Value	Shares	Par Value	Shares	Par Value
Balance, December 31, 2022	**438**	**$ 43,767**	**2**	**$ 239**	**440**	**$ 44,006**
Comprehensive income (loss)	—	—	—	—	—	—
Proceeds from issuance of capital stock	533	53,280	—	3	533	53,283
Repurchases/redemptions of capital stock	(482)	(48,176)	(16)	(1,715)	(498)	(49,891)
Net shares reclassified (to)/from mandatorily redeemable capital stock	(22)	(2,194)	(4)	(357)	(26)	(2,551)
Transfers between Class B and Class A shares	(22)	(2,188)	22	2,188	—	—
Transfers to unrestricted/(from) restricted retained earnings	—	—	—	—	—	—
Dividends on capital stock						
Cash	—	—	—	—	—	—
Stock	4	372	—	—	4	372
Balance, September 30, 2023	**449**	**$ 44,861**	**4**	**$ 358**	**453**	**$ 45,219**
Balance, December 31, 2021	**248**	**$ 24,831**	**2**	**$ 234**	**250**	**$ 25,065**
Comprehensive income (loss)	—	—	—	—	—	—
Proceeds from issuance of capital stock	409	40,819	—	2	409	40,821
Repurchases/redemptions of capital stock	(241)	(24,053)	(11)	(1,210)	(252)	(25,263)
Net shares reclassified (to)/from mandatorily redeemable capital stock	(31)	(3,097)	(3)	(280)	(34)	(3,377)
Transfers between Class B and Class A shares	(15)	(1,529)	15	1,529	—	—
Transfers to unrestricted/(from) restricted retained earnings	—	—	—	—	—	—
Dividends on capital stock						
Cash	—	—	—	—	—	—
Stock	1	101	—	—	1	101
Balance, September 30, 2022	**371**	**$ 37,072**	**3**	**$ 275**	**374**	**$ 37,347**

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CAPITAL (continued)

(UNAUDITED)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

	Retained Earnings			Accumulated Other Comprehensive Income (Loss)	Total Capital
(dollars and shares in millions)	Unrestricted	Restricted	Total		
Balance, December 31, 2022	**$ 18,322**	**$ 6,232**	**$ 24,554**	**$ (753)**	**$ 67,807**
Comprehensive income (loss)	4,066	1,018	5,084	(281)	4,803
Proceeds from issuance of capital stock	—	—	—	—	53,283
Repurchases/redemptions of capital stock	—	—	—	—	(49,891)
Net shares reclassified (to)/from mandatorily redeemable capital stock	—	—	—	—	(2,551)
Transfers between Class B and Class A shares	—	—	—	—	—
Transfers to unrestricted/(from) restricted retained earnings	—	—	—	—	—
Dividends on capital stock					
Cash	(2,074)	—	(2,074)	—	(2,074)
Stock	(372)	—	(372)	—	—
Balance, September 30, 2023	**$ 19,942**	**$ 7,250**	**$ 27,192**	**$ (1,034)**	**$ 71,377**
Balance, December 31, 2021	**$ 17,110**	**$ 5,650**	**$ 22,760**	**$ 1,297**	**$ 49,122**
Comprehensive income (loss)	1,655	371	2,026	(1,841)	185
Proceeds from issuance of capital stock	—	—	—	—	40,821
Repurchases/redemptions of capital stock	—	—	—	—	(25,263)
Net shares reclassified (to)/from mandatorily redeemable capital stock	—	—	—	—	(3,377)
Transfers between Class B and Class A shares	—	—	—	—	—
Transfers to unrestricted/(from) restricted retained earnings	17	(17)	—	—	—
Dividends on capital stock					
Cash	(757)	—	(757)	—	(757)
Stock	(101)	—	(101)	—	—
Balance, September 30, 2022	**$ 17,924**	**$ 6,004**	**$ 23,928**	**$ (544)**	**$ 60,731**

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

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Nine Months Ended September 30,	
(dollars in millions)	2023	2022
Operating activities		
Net income	$ 5,084	$ 2,026
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization/(accretion)	393	1,767
Net change in derivatives and hedging activities	3,557	13,225
Net change in fair value adjustments on trading securities	41	1,059
Net change in fair value adjustments on financial instruments held under fair value option	144	(378)
Other adjustments, net	5	64
Net change in		
Accrued interest receivable	(1,197)	(1,006)
Other assets	(19)	74
Accrued interest payable	3,965	1,027
Other liabilities	362	(92)
Total adjustments	7,251	15,740
Net cash provided by (used in) operating activities	**12,335**	**17,766**
Investing activities		
Net change in		
Interest-bearing deposits	(3,371)	(15,922)
Securities purchased under agreements to resell	2,140	(14,294)
Federal funds sold	(21,137)	(42,846)
Trading securities		
Proceeds from sales	1,141	8,366
Proceeds from maturities and paydowns	6,734	14,299
Purchases	(3,738)	(20,543)
Available-for-sale securities		
Proceeds from sales	2,991	647
Proceeds from maturities and paydowns	7,832	13,686
Purchases	(32,275)	(30,224)
Held-to-maturity securities		
Proceeds from sales	39	194
Proceeds from maturities and paydowns	8,140	11,212
Purchases	(17,519)	(16,423)
Advances		
Repaid	9,772,770	5,796,415
Originated	(9,783,232)	(6,110,486)
Mortgage loans held for portfolio		
Principal collected	3,725	6,334
Purchases	(7,556)	(7,065)
Other investing activities, net	(58)	(43)
Net cash provided by (used in) investing activities	**(63,374)**	**(406,693)**

FEDERAL HOME LOAN BANKS COMBINED STATEMENTS OF CASH FLOWS (continued)
(UNAUDITED)

	Nine Months Ended September 30,	
(dollars in millions)	2023	2022
Financing activities		
Net change in deposits and pass-through reserves, and other financing activities	$ 3,567	$ (1,784)
Net proceeds (payments) on derivative contracts with financing element	135	334
Net proceeds from issuance of consolidated obligations		
Discount notes	4,461,405	4,249,048
Bonds	847,639	370,027
Payments for maturing and retiring consolidated obligations		
Discount notes	(4,623,084)	(4,011,769)
Bonds	(637,799)	(231,661)
Proceeds from issuance of capital stock	53,283	40,821
Payments for repurchases/redemptions of capital stock	(49,891)	(25,263)
Payments for repurchases/redemptions of mandatorily redeemable capital stock	(1,857)	(3,204)
Cash dividends paid	(2,074)	(757)
Net cash provided by (used in) financing activities	**51,324**	**385,792**
Net increase (decrease) in cash and due from banks	285	(3,135)
Cash and due from banks at beginning of the period	417	3,532
Cash and due from banks at end of the period	**$ 702**	**$ 397**
Supplemental disclosures		
Cash activities		
Interest paid	$ 41,590	$ 4,680
Affordable Housing Program payments, net	$ 229	$ 243

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

NOTES TO COMBINED FINANCIAL STATEMENTS (Unaudited)

Background Information

These financial statements present the combined financial position and combined results of operations of the 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. Each FHLBank operates as a separate entity with its own management, employees, and board of directors. The FHLBanks are regulated by the Federal Housing Finance Agency (FHFA). The FHLBanks are financial cooperatives that provide a readily available, competitively-priced source of funds to their member institutions.

The Office of Finance is a joint office of the FHLBanks established to facilitate the issuance and servicing of the debt instruments of the FHLBanks, known as consolidated obligations (consolidated bonds and consolidated discount notes), and to prepare the quarterly and annual combined financial reports of the FHLBanks. As provided by the FHLBank Act and applicable regulations, consolidated obligations are backed only by the financial resources of the FHLBanks. Consolidated obligations are the primary source of funds for the FHLBanks in addition to deposits, other borrowings, and capital stock issued to members. The FHLBanks primarily use these funds to provide advances to members.

Unless otherwise stated, dollar amounts disclosed in this Combined Financial Report represent values rounded to the nearest million. Dollar amounts rounding to less than one million are not reflected in this Combined Financial Report.

Note 1 - Summary of Significant Accounting Policies

These unaudited quarterly combined financial statements do not include all disclosures associated with annual combined financial statements, and therefore should be read in conjunction with the audited combined financial statements included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022. In addition, the results of operations for interim periods are not necessarily indicative of the results to be expected for the year ending December 31, 2023.

Basis of Presentation

These combined financial statements include the financial statements and records of the FHLBanks that are prepared in accordance with generally accepted accounting principles in the United States of America (GAAP). The information contained in these combined financial statements is not audited. Each FHLBank's financial statements, in the opinion of its management, contain all the necessary adjustments for a fair presentation of its interim financial information.

Principles of Combination. Transactions between the FHLBanks have been eliminated in accordance with combination accounting principles similar to consolidation under GAAP. (See the *Condensed Combining Schedules* for the combining adjustments, consisting of interbank eliminations and rounding adjustments, made to the combined financial statements.)

Segment Reporting. FHFA regulations consider each FHLBank to be a segment. However, there is no single chief operating decision maker because there is no centralized, system-wide management or centralized board of director oversight of the individual FHLBanks. (See the *Condensed Combining Schedules* for segment information.)

Use of Estimates

The preparation of financial statements in accordance with GAAP requires each FHLBank's management to make subjective assumptions and estimates that may affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of income and expense. The most significant of these estimates include those used in conjunction with fair value estimates and derivatives and hedging activities. Actual results could differ from these estimates significantly.

Financial Instruments Meeting Netting Requirements

The FHLBanks present certain financial instruments on a net basis when they have a legal right of offset and all other requirements for netting are met (collectively referred to as the netting requirements). For these financial instruments, each of the affected FHLBanks 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 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 when this collateral is received or pledged. Likewise, there may be a delay for excess collateral to be returned. For derivative instruments that meet the netting requirements, any excess cash collateral received or pledged is recognized as a derivative liability or derivative asset. (See *Note 6 - Derivatives and Hedging Activities* for additional information regarding these agreements.)

Securities purchased under agreements to resell are also subject to netting requirements. Based on the fair value of the related collateral held, securities purchased under agreements to resell were fully collateralized for the periods presented. There were no offsetting liabilities related to these securities at September 30, 2023 or December 31, 2022.

Mortgage Loans Held for Portfolio

Troubled Debt Restructuring. Prior to January 1, 2023, an FHLBank considered a troubled debt restructuring (TDR) to have occurred when a concession was granted to a borrower for economic or legal reasons related to the borrower's financial difficulties and that concession would not have been considered otherwise. An FHLBank granted a concession when it did not expect to collect all amounts due to the FHLBank under the original contract as a result of the restructuring. Loans that were discharged in Chapter 7 bankruptcy and were not reaffirmed by the borrowers were also considered to be TDRs, except in certain cases where supplemental mortgage insurance policies were held or where all contractual amounts due were still expected to be collected as a result of certain credit enhancements or government guarantees.

Beginning January 1, 2023, the FHLBanks adopted, on a prospective basis, the new accounting guidance pertaining to TDRs and vintage disclosures, which discontinues recognition and measurement guidance on TDRs for entities that have adopted the measurement of credit losses on financial instruments accounting guidance. Mortgage loan modifications occurring after the date of adoption are subject to the accounting guidance pertaining to loan modifications.

Mortgage Loan Modifications. Generally, the FHLBanks only grant mortgage loan modifications to borrowers experiencing financial difficulty. If the terms of the modified loan are at least as favorable to the lender as the terms offered to borrowers with similar collection risks for comparable loans and the modification to the terms of the loan is more than minor, the loan meets the accounting criteria for a new loan. Generally, a modification would not result in a new loan because the modified terms are not as favorable to the lender as terms for comparable loans that would be offered to similar borrowers.

Note 2 - Recently Issued and Adopted Accounting Guidance

The following table provides a summary of recently issued accounting standards which may have an effect on the combined financial statements.

Accounting Standards Update (ASU)	Description	Effective Date	Effect on the Combined Financial Statements or Other Significant Matters
Facilitation of the Effects of Reference Rate Reform on Financial Reporting, as amended (ASU 2020-04)	This update provides temporary optional guidance to ease the potential burden in accounting for reference rate reform. The new guidance provides optional expedients and exceptions for applying generally accepted accounting principles to transactions affected by reference rate reform if certain criteria are met. These transactions include: • contract modifications, • hedging relationships, and • sale and/or transfer of debt securities classified as held-to-maturity.	This guidance became effective for the FHLBanks beginning March 12, 2020 through December 31, 2024.	The FHLBanks have elected certain practical expedients provided, including with respect to qualifying hedging relationships, and after June 30, 2023, the FHLBanks have no further variable-rate exposure to U.S. dollar London Interbank Offered Rate (LIBOR) settings. To date, these elections did not have a material effect on the FHLBanks' combined financial condition, combined results of operations, or combined cash flows.

Note 3 - Investments

The FHLBanks make 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 trading, available-for-sale (AFS), or held-to-maturity (HTM).

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

The FHLBanks invest in interest-bearing deposits, securities purchased under agreements to resell, and federal funds sold to provide short-term liquidity. These investments are generally transacted with counterparties that have received a credit rating of triple-B or greater (investment grade) by a nationally recognized statistical rating organization. At September 30, 2023 and December 31, 2022, none of these investments were with counterparties rated below triple-B and 8% and 3% of these investments, based on amortized cost, were with counterparties that were unrated. These may differ from any internal ratings of the investments by an FHLBank, if applicable.

Federal funds sold are unsecured loans that are generally transacted on an overnight term. FHFA regulations include a limit on the amount of unsecured credit an individual FHLBank may extend to a counterparty. At September 30, 2023 and December 31, 2022, all investments in interest-bearing deposits and federal funds sold were repaid or expected to be repaid according to the contractual terms. No allowance for credit losses was recorded for these assets at September 30, 2023 and December 31, 2022. The carrying values of interest-bearing deposits and federal funds sold exclude accrued interest receivable totaling $100 million and $66 million at September 30, 2023 and December 31, 2022.

Securities purchased under agreements to resell are short-term collateralized loans 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 the relevant counterparties, each FHLBank determined that no allowance for credit losses was needed for its securities purchased under agreements to resell at September 30, 2023 and December 31, 2022. The carrying value of securities purchased under agreements to resell excludes accrued interest receivable of $20 million and $17 million at September 30, 2023 and December 31, 2022.

Debt Securities

The FHLBanks invest in debt securities, which are classified as trading, AFS, or HTM. Within these investments, the FHLBanks are primarily subject to credit risk related to private-label mortgage-backed securities (private-label MBS or PLMBS) that are supported by underlying mortgage or asset-backed loans. The FHLBanks are prohibited by FHFA 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 and instruments that experienced credit deterioration after their purchase by the FHLBanks.

Trading Securities

Table 3.1 presents the fair value of trading securities by major security type at September 30, 2023 and December 31, 2022.

Table 3.1 - Trading Securities by Major Security Type

(dollars in millions)

Fair Value	September 30, 2023	December 31, 2022
Non-mortgage-backed securities		
U.S. Treasury obligations	$ 8,981	$ 12,920
Other U.S. obligations	67	76
GSE and Tennessee Valley Authority obligations	1,989	2,035
Other	121	148
Total non-mortgage-backed securities	**11,158**	**15,179**
Mortgage-backed securities		
U.S. obligations single-family	1	1
GSE single-family	15	17
GSE multifamily	647	668
Total mortgage-backed securities	**663**	**686**
Total	**$ 11,821**	**$ 15,865**

Table 3.2 presents a summary of net gains (losses) on trading securities for the three and nine months ended September 30, 2023 and 2022.

Table 3.2 - Net Gains (Losses) on Trading Securities

(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net unrealized gains (losses) on trading securities held at period-end	$ (85)	$ (329)	$ (74)	$ (980)
Net gains (losses) on trading securities sold/matured during the period	1	3	33	(79)
Net gains (losses) on trading securities	**$ (84)**	**$ (326)**	**$ (41)**	**$ (1,059)**

Available-for-Sale Securities

Table 3.3 presents the amortized cost and fair value of AFS securities by major security type at September 30, 2023 and December 31, 2022.

Table 3.3 - AFS Securities by Major Security Type

(dollars in millions)

	September 30, 2023				
	Amortized Cost[(1)]	Allowance for Credit Losses	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Non-mortgage-backed securities					
U.S. Treasury obligations	$ 31,880	$ —	$ 43	$ (61)	$ 31,862
Other U.S. obligations	1,762	—	1	(162)	1,601
GSE and Tennessee Valley Authority obligations	6,618	—	101	(29)	6,690
State or local housing agency obligations	1,759	—	—	(34)	1,725
Federal Family Education Loan Program ABS	1,969	—	53	(4)	2,018
Other	563	—	6	(3)	566
Total non-mortgage-backed securities	**44,551**	**—**	**204**	**(293)**	**44,462**
Mortgage-backed securities					
U.S. obligations single-family	5,337	—	3	(43)	5,297
U.S. obligations multifamily	523	—	—	(53)	470
GSE single-family	6,095	—	2	(199)	5,898
GSE multifamily	92,360	—	1,000	(2,028)	91,332
Private-label	1,236	(46)	42	(30)	1,202
Total mortgage-backed securities	**105,551**	**(46)**	**1,047**	**(2,353)**	**104,199**
Total	**$ 150,102**	**$ (46)**	**$ 1,251**	**$ (2,646)**	**$ 148,661**

	December 31, 2022				
	Amortized Cost[(1)]	Allowance for Credit Losses	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Non-mortgage-backed securities					
U.S. Treasury obligations	$ 33,492	$ —	$ 29	$ (102)	$ 33,419
Other U.S. obligations	2,177	—	4	(128)	2,053
GSE and Tennessee Valley Authority obligations	7,115	—	100	(41)	7,174
State or local housing agency obligations	1,790	—	—	(22)	1,768
Federal Family Education Loan Program ABS	2,253	—	61	(10)	2,304
Other	590	—	6	(5)	591
Total non-mortgage-backed securities	**47,417**	**—**	**200**	**(308)**	**47,309**
Mortgage-backed securities					
U.S. obligations single-family	4,365	—	5	(32)	4,338
U.S. obligations multifamily	531	—	—	(55)	476
GSE single-family	4,219	—	9	(136)	4,092
GSE multifamily	73,079	—	765	(1,515)	72,329
Private-label	1,323	(38)	67	(27)	1,325
Total mortgage-backed securities	**83,517**	**(38)**	**846**	**(1,765)**	**82,560**
Total	**$ 130,934**	**$ (38)**	**$ 1,046**	**$ (2,073)**	**$ 129,869**

(1) Includes adjustments made to the cost basis of an investment for accretion, amortization, net charge-offs, and/or fair value hedge accounting adjustments, and excludes accrued interest receivable of $584 million and $468 million at September 30, 2023 and December 31, 2022.

Table 3.4 presents the AFS securities with gross unrealized losses by major security type and length of time that individual securities have been in a continuous unrealized loss position at September 30, 2023 and December 31, 2022.

Table 3.4 - AFS Securities in a Continuous Gross Unrealized Loss Position

(dollars in millions)

	September 30, 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-mortgage-backed securities						
U.S. Treasury obligations	$ 5,279	$ (12)	$ 6,354	$ (49)	$ 11,633	$ (61)
Other U.S. obligations	104	(4)	1,090	(158)	1,194	(162)
GSE and Tennessee Valley Authority obligations	93	—	419	(29)	512	(29)
State or local housing agency obligations	1,149	(4)	576	(30)	1,725	(34)
Federal Family Education Loan Program ABS	—	—	321	(4)	321	(4)
Other	94	—	247	(3)	341	(3)
Total non-mortgage-backed securities	**6,719**	**(20)**	**9,007**	**(273)**	**15,726**	**(293)**
Mortgage-backed securities						
U.S. obligations single-family	1,188	(15)	2,865	(28)	4,053	(43)
U.S. obligations multifamily	—	—	470	(53)	470	(53)
GSE single-family	2,559	(40)	2,839	(159)	5,398	(199)
GSE multifamily	31,690	(358)	33,913	(1,670)	65,603	(2,028)
Private-label	89	(3)	312	(27)	401	(30)
Total mortgage-backed securities	**35,526**	**(416)**	**40,399**	**(1,937)**	**75,925**	**(2,353)**
Total	**$ 42,245**	**$ (436)**	**$ 49,406**	**$ (2,210)**	**$ 91,651**	**$ (2,646)**

	December 31, 2022					
	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-mortgage-backed securities						
U.S. Treasury obligations	$ 13,714	$ (41)	$ 3,564	$ (61)	$ 17,278	$ (102)
Other U.S. obligations	1,061	(55)	448	(73)	1,509	(128)
GSE and Tennessee Valley Authority obligations	247	(5)	398	(36)	645	(41)
State or local housing agency obligations	1,158	(16)	440	(6)	1,598	(22)
Federal Family Education Loan Program ABS	347	(10)	—	—	347	(10)
Other	—	—	337	(5)	337	(5)
Total non-mortgage-backed securities	**16,527**	**(127)**	**5,187**	**(181)**	**21,714**	**(308)**
Mortgage-backed securities						
U.S. obligations single-family	3,498	(31)	142	(1)	3,640	(32)
U.S. obligations multifamily	310	(36)	166	(19)	476	(55)
GSE single-family	3,052	(102)	388	(34)	3,440	(136)
GSE multifamily	41,891	(740)	8,506	(775)	50,397	(1,515)
Private-label	327	(19)	70	(8)	397	(27)
Total mortgage-backed securities	**49,078**	**(928)**	**9,272**	**(837)**	**58,350**	**(1,765)**
Total	**$ 65,605**	**$ (1,055)**	**$ 14,459**	**$ (1,018)**	**$ 80,064**	**$ (2,073)**

Table 3.5 presents the amortized cost and fair value of AFS securities by contractual maturity at September 30, 2023 and December 31, 2022.

Table 3.5 - AFS Securities by Contractual Maturity

(dollars in millions)

	September 30, 2023		December 31, 2022	
Year of Maturity	**Amortized Cost**	**Fair Value**	**Amortized Cost**	**Fair Value**
Non-mortgage-backed securities				
Due in one year or less	$ 3,658	$ 3,665	$ 6,247	$ 6,211
Due after one year through five years	30,225	30,243	22,724	22,769
Due after five years through ten years	5,986	5,968	13,355	13,324
Due after ten years	2,713	2,568	2,838	2,701
Federal Family Education Loan Program ABS[1]	1,969	2,018	2,253	2,304
Total non-mortgage-backed securities	**44,551**	**44,462**	**47,417**	**47,309**
Mortgage-backed securities[1]	**105,551**	**104,199**	**83,517**	**82,560**
Total	**$ 150,102**	**$ 148,661**	**$ 130,934**	**$ 129,869**

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

Table 3.6 presents the proceeds from sale and gross gains and losses on sale of AFS securities for the three and nine months ended September 30, 2023 and 2022.

Table 3.6 - Proceeds from Sale and Gross Gains and Losses on Sale of AFS Securities

(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
Proceeds from sale of AFS securities	**$ 1,058**	**$ 328**	**$ 2,991**	**$ 647**
Gross gains on sale of AFS securities	$ 1	$ —	$ 1	$ —
Gross losses on sale of AFS securities	(7)	—	(7)	—
Net realized gains (losses) from sale of AFS securities	**$ (6)**	**$ —**	**$ (6)**	**$ —**

Held-to-Maturity Securities

Table 3.7 presents the amortized cost, net carrying value, and fair value of HTM securities by major security type at September 30, 2023 and December 31, 2022.

Table 3.7 - HTM Securities by Major Security Type

(dollars in millions)

	September 30, 2023						
	Amortized Cost[(1)]	Allowance for Credit Losses	OTTI Recognized in AOCI	Net Carrying Value	Gross Unrecognized Holding Gains[(2)]	Gross Unrecognized Holding Losses[(2)]	Fair Value
Non-mortgage-backed securities							
U.S. Treasury obligations	$ 48	$ —	$ —	$ 48	$ —	$ —	$ 48
Other U.S. obligations	584	—	—	584	—	(14)	570
GSE and Tennessee Valley Authority obligations	1,915	—	—	1,915	6	(25)	1,896
State or local housing agency obligations	241	—	—	241	—	(14)	227
Total non-mortgage-backed securities	**2,788**	**—**	**—**	**2,788**	**6**	**(53)**	**2,741**
Mortgage-backed securities							
U.S. obligations single-family	8,552	—	—	8,552	3	(317)	8,238
GSE single-family	15,594	—	—	15,594	4	(620)	14,978
GSE multifamily	40,260	—	—	40,260	11	(866)	39,405
Private-label	227	(1)	(1)	225	4	(15)	214
Total mortgage-backed securities	**64,633**	**(1)**	**(1)**	**64,631**	**22**	**(1,818)**	**62,835**
Total	**$ 67,421**	**$ (1)**	**$ (1)**	**$ 67,419**	**$ 28**	**$ (1,871)**	**$ 65,576**

	December 31, 2022						
	Amortized Cost[(1)]	Allowance for Credit Losses	OTTI Recognized in AOCI	Net Carrying Value	Gross Unrecognized Holding Gains[(2)]	Gross Unrecognized Holding Losses[(2)]	Fair Value
Non-mortgage-backed securities							
U.S. Treasury obligations	$ 47	$ —	$ —	$ 47	$ —	$ —	$ 47
Other U.S. obligations	1,211	—	—	1,211	—	(14)	1,197
GSE and Tennessee Valley Authority obligations	1,919	—	—	1,919	12	(38)	1,893
State or local housing agency obligations	281	—	—	281	—	(16)	265
Total non-mortgage-backed securities	**3,458**	**—**	**—**	**3,458**	**12**	**(68)**	**3,402**
Mortgage-backed securities							
U.S. obligations single-family	4,769	—	—	4,769	5	(221)	4,553
GSE single-family	10,764	—	—	10,764	12	(426)	10,350
GSE multifamily	38,531	—	—	38,531	5	(787)	37,749
Private-label	298	—	(4)	294	11	(18)	287
Total mortgage-backed securities	**54,362**	**—**	**(4)**	**54,358**	**33**	**(1,452)**	**52,939**
Total	**$ 57,820**	**$ —**	**$ (4)**	**$ 57,816**	**$ 45**	**$ (1,520)**	**$ 56,341**

(1) Amortized cost of HTM securities includes adjustments made to the cost basis of an investment for accretion, amortization, and/or net charge-offs and excludes accrued interest receivable of $197 million and $149 million at September 30, 2023 and December 31, 2022.

(2) Gross unrecognized holding gains (losses) represent the difference between fair value and net carrying value.

Table 3.8 presents the amortized cost, net carrying value, and fair value of HTM securities by contractual maturity at September 30, 2023 and December 31, 2022.

Table 3.8 - HTM Securities by Contractual Maturity

(dollars in millions)

	September 30, 2023			December 31, 2022		
Year of Maturity	**Amortized Cost**	**Net Carrying Value(1)**	**Fair Value**	**Amortized Cost**	**Net Carrying Value(1)**	**Fair Value**
Non-mortgage-backed securities						
Due in one year or less	$ 1,174	$ 1,174	$ 1,154	$ 1,116	$ 1,116	$ 1,116
Due after one year through five years	1,034	1,034	1,031	1,698	1,698	1,664
Due after five years through ten years	335	335	322	365	365	354
Due after ten years	245	245	234	279	279	268
Total non-mortgage-backed securities	**2,788**	**2,788**	**2,741**	**3,458**	**3,458**	**3,402**
Mortgage-backed securities(2)	**64,633**	**64,631**	**62,835**	**54,362**	**54,358**	**52,939**
Total	**$ 67,421**	**$ 67,419**	**$ 65,576**	**$ 57,820**	**$ 57,816**	**$ 56,341**

(1) Net carrying value of HTM securities represents amortized cost after adjustments for non-credit-related losses recognized in AOCI and allowance for credit losses.
(2) MBS are not presented by contractual maturity because their expected maturities will likely differ from contractual maturities as borrowers may have the right to call or prepay obligations with or without call or prepayment fees.

Certain FHLBanks sold securities out of their respective HTM portfolio that were near enough to their maturity date (for example, within three months of maturity) that changes in market interest rates would not have a significant effect on the security's fair value or had less than 15% of the acquired principal outstanding at the time of the sale. These sales are considered maturities for purposes of security classification. Table 3.9 presents the proceeds from sale and gains and losses on sale of HTM securities for the three and nine months ended September 30, 2023 and 2022.

Table 3.9 - Proceeds from Sale and Gains and Losses on Sale of HTM Securities

(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
Proceeds from sale of HTM securities	$ —	$ 184	$ 39	$ 194
Amortized cost of HTM securities sold	—	185	38	195
Net realized gains (losses) from sale of HTM securities	**$ —**	**$ (1)**	**$ 1**	**$ (1)**

Allowance for Credit Losses on AFS and HTM Securities

The FHLBanks evaluate AFS and HTM securities for credit losses on a quarterly basis. During the three and nine months ended September 30, 2023, the FHLBanks recognized a provision for credit losses of $8 million and $10 million on AFS securities. During the three and nine months ended September 30, 2022, the FHLBanks recognized a provision for credit losses of $11 million and $14 million on AFS securities.

Table 3.10 presents a rollforward of the allowance for credit losses on debt securities for the three and nine months ended September 30, 2023 and 2022.

Table 3.10 - Allowance for Credit Losses on Debt Securities

(dollars in millions)

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2023		2022		2023		2022	
	AFS	**HTM**	**AFS**	**HTM**	**AFS**	**HTM**	**AFS**	**HTM**
Balance, at beginning of period	$ 38	$ 1	$ 22	$ —	$ 38	$ —	$ 19	$ —
Provision (reversal) for credit losses	8	—	11	—	10	—	14	—
Charge-offs, net of recoveries	—	—	(1)	—	(2)	1	(1)	—
Balance, at end of period	**$ 46**	**$ 1**	**$ 32**	**$ —**	**$ 46**	**$ 1**	**$ 32**	**$ —**

To evaluate investment securities for credit losses at September 30, 2023 and December 31, 2022, the FHLBanks employed the following methodologies, based on the type of security:

AFS and HTM Securities (Excluding PLMBS)

The FHLBanks' AFS and HTM securities are principally certificates of deposit, U.S. Treasury and other U.S. obligations, GSE and Tennessee Valley Authority obligations, state or local housing agency obligations, and MBS issued by Ginnie Mae, Freddie Mac, and Fannie Mae that are backed by single-family or multifamily mortgage loans. The FHLBanks only purchase securities that are considered investment quality. Excluding PLMBS investments, at September 30, 2023 and December 31, 2022, substantially all and all of the AFS and HTM securities, based on amortized cost, were rated single-A or above by a nationally recognized statistical rating organization, based on the lowest long-term credit rating for each security used by each individual FHLBank. These may differ from any internal ratings of the securities by an FHLBank, if applicable.

Each FHLBank evaluates its individual AFS 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 September 30, 2023 and December 31, 2022, certain of the FHLBanks' AFS securities were in an unrealized loss position. These losses are considered temporary as each FHLBank expects to recover the entire amortized cost basis on these AFS securities and neither intends to sell these securities nor considers it more likely than not that it will be required to sell these securities before its anticipated recovery of each security's remaining amortized cost basis. Furthermore, the FHLBanks had not experienced any material payment defaults on these securities at September 30, 2023 or December 31, 2022; and substantially 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 an 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 AFS securities at September 30, 2023 and December 31, 2022.

Each FHLBank evaluates its HTM 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. At September 30, 2023 and December 31, 2022, the FHLBanks had not established an allowance for credit losses on any of these HTM securities because the securities: (1) were all highly-rated and/or had short remaining terms to maturity, (2) had not experienced, nor did the FHLBanks expect, any payment default on these securities, (3) in the case of U.S. obligations, carry an explicit government guarantee, and (4) in the case of GSE securities, 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.

Private-label MBS

Certain FHLBanks also hold investments in private-label MBS. No FHLBank has purchased private-label MBS since 2008. Although the FHLBanks invested in private-label MBS that at the date of purchase were substantially all rated triple-A, many of these securities have subsequently experienced significant credit deterioration. At September 30, 2023 and December 31, 2022, 7% and 8% of private-label MBS, based on amortized cost, were rated single-A, or above, by a nationally recognized statistical rating organization; and the remaining securities were either rated less than single-A, or were unrated. To determine whether an allowance for credit losses is necessary on these securities, the FHLBanks perform cash flow analyses.

Each applicable FHLBank performs a cash flow analysis using third-party models to assess whether the entire amortized cost basis of its private-label MBS will be recovered. The projected cash flows are based on a number of assumptions and expectations, and the results of these models can vary significantly with changes in assumptions and expectations. The projected cash flows, determined based on the model approach, reflect a best estimate scenario and include a base case housing price forecast and a base case housing price recovery path. At

September 30, 2023 and December 31, 2022, the allowance for credit losses was $46 million and $38 million for AFS PLMBS. There was $1 million of allowance for credit losses on HTM PLMBS at September 30, 2023, and there was no allowance for credit losses on HTM PLMBS at December 31, 2022. For certain private-label MBS where underlying collateral data is not available, alternative procedures as determined by each FHLBank are used to assess these securities for credit loss.

Note 4 - Advances

The FHLBanks offer a wide range of fixed- and variable-rate advance products with different maturities, interest rates, payment characteristics, and optionality. Fixed-rate advances generally have maturities ranging from one day to 30 years. Variable-rate advances generally have maturities ranging from less than 30 days to 20 years, where the interest rates reset periodically at a fixed spread to the Secured Overnight Financing Rate (SOFR) or other specified indices, or to consolidated obligation yields.

Table 4.1 presents advances outstanding by redemption term and weighted-average interest rate at September 30, 2023 and December 31, 2022.

Table 4.1 - Advances by Redemption Term

(dollars in millions)

	September 30, 2023		December 31, 2022	
Redemption Term	**Amount(1)**	**Weighted-Average Interest Rate**	**Amount(1)**	**Weighted-Average Interest Rate**
Overdrawn demand and overnight deposit accounts	$ 90	3.59 %	$ 20	4.78 %
Due in 1 year or less	453,027	4.94 %	529,606	4.10 %
Due after 1 year through 2 years	135,293	4.38 %	112,434	3.70 %
Due after 2 years through 3 years	77,506	4.30 %	57,420	3.33 %
Due after 3 years through 4 years	53,981	3.72 %	36,117	3.24 %
Due after 4 years through 5 years	70,063	4.53 %	37,754	3.42 %
Thereafter	47,549	3.17 %	53,707	2.92 %
Total principal amount	**837,509**	4.58 %	**827,058**	3.85 %
Premiums	50		68	
Discounts	(60)		(65)	
Hedging adjustments	(10,483)		(7,874)	
Fair value option valuation adjustments	(71)		(66)	
Total	**$ 826,945**		**$ 819,121**	

(1) Carrying amounts exclude accrued interest receivable of $3,125 million and $2,302 million at September 30, 2023 and December 31, 2022.

The FHLBanks offer advances to members and housing associates that provide the right, based upon predetermined option exercise dates, to call the advance prior to maturity without incurring prepayment or termination fees (callable advances). The FHLBanks also offer certain floating-rate and/or amortizing advances that may be contractually prepaid by the borrower on specified dates without incurring prepayment or termination fees (prepayable advances). Other advances may only be prepaid by paying a fee to the FHLBank (prepayment fee) that makes the FHLBank financially indifferent to the prepayment of the advance.

Some advances contain embedded options allowing an FHLBank to offer putable and convertible advances. A member can either sell an embedded option to an FHLBank or purchase an embedded option from an FHLBank. With a putable advance to a member, an FHLBank effectively purchases a put option from the member that allows that FHLBank to put or extinguish the fixed-rate advance to the member on predetermined exercise dates. Generally, these put options are exercised when interest rates increase relative to contractual rates.

Convertible advances allow an FHLBank to convert an advance from one interest-payment term structure to another. Fixed-rate to variable-rate convertible advances have a defined lockout period after which they convert to the current market rate or another structure. A convertible advance generally carries a lower initial interest rate than a comparable-maturity fixed-rate advance without the conversion feature. Variable- to fixed-rate convertible advances have a defined lockout period during which the interest rates adjust based on a spread to SOFR or other specified indices, or to consolidated obligation yields. At the end of the lockout period, these advances may convert to fixed-rate advances. The fixed rates on the converted advances are determined at origination.

Table 4.2 presents advances by redemption term or next call date and next put or convert date at September 30, 2023 and December 31, 2022.

Table 4.2 - Advances by Redemption Term or Next Call Date and Next Put or Convert Date

(dollars in millions)

	Redemption Term or Next Call Date[1]		Redemption Term or Next Put or Convert Date	
	September 30, 2023	December 31, 2022	September 30, 2023	December 31, 2022
Overdrawn demand and overnight deposit accounts	$ 90	$ 20	$ 90	$ 20
Due in 1 year or less	518,695	588,352	480,970	548,332
Due after 1 year through 2 years	116,206	90,752	137,424	116,152
Due after 2 years through 3 years	62,555	43,731	76,154	59,351
Due after 3 years through 4 years	46,514	26,201	53,273	36,086
Due after 4 years through 5 years	48,728	31,313	60,611	34,365
Thereafter	44,721	46,689	28,987	32,752
Total principal amount	**$ 837,509**	**$ 827,058**	**$ 837,509**	**$ 827,058**

(1) Also includes certain floating-rate and/or amortizing advances that may be contractually prepaid by the borrower on specified dates without incurring prepayment or termination fees.

Table 4.3 presents fixed-rate and variable-rate advances at September 30, 2023 and December 31, 2022.

Table 4.3 - Advances by Current Interest Rate Terms

(dollars in millions)

	September 30, 2023	December 31, 2022
Total fixed-rate	$ 540,712	$ 550,822
Total variable-rate	296,797	276,236
Total principal amount	**$ 837,509**	**$ 827,058**

Credit Risk Exposure and Security Terms

The FHLBanks' advances are primarily made to member financial institutions, including commercial banks and insurance companies. Each FHLBank manages its credit exposure to advances through an integrated approach that includes establishing a credit limit for each borrower. This approach includes an ongoing review of each borrower's financial condition, in conjunction with the FHLBank's collateral and lending policies to limit risk of loss, while balancing borrowers' needs for a reliable source of funding.

In addition, each FHLBank lends to eligible borrowers in accordance with federal law and FHFA regulations. Specifically, each FHLBank is required to obtain sufficient collateral to fully secure credit products up to the counterparty's total credit limit. Residential mortgage loans are the principal form of collateral for advances.

An FHLBank either allows a borrower to retain physical possession of the collateral assigned to it, or requires the borrower to specifically assign or place physical possession of the collateral with the FHLBank or its safekeeping agent. Each FHLBank perfects its security interest in all pledged collateral. (See *Note 5 - Advances* on pages F-37 to F-39 of the audited combined financial statements included in the Federal Home Loan Banks Combined Financial

Report for the year ended December 31, 2022, for additional information about the FHLBanks' collateral securing advances, including eligible collateral types, valuation and other risk mitigation procedures.)

Using a risk-based approach and taking into consideration each borrower's financial strength, the FHLBanks consider the types and level of collateral to be the primary indicator of credit quality on their advances. At September 30, 2023 and December 31, 2022, each FHLBank had rights to collateral on a borrower-by-borrower basis with an estimated value equal to, or greater than, its outstanding advances.

Each FHLBank continues to evaluate and make changes to its collateral guidelines, as necessary, based on current market conditions. At September 30, 2023 and December 31, 2022, none of the FHLBanks had any advances that were considered past due, on nonaccrual status, or considered impaired. In addition, there were no modifications related to advances with borrowers experiencing financial difficulties at any FHLBank during the three and nine months ended September 30, 2023. However, during the first half of 2023, certain FHLBank depository members experienced financial difficulties, which resulted in voluntary liquidation or FDIC receivership. The FHLBank advances to these members were either no longer outstanding as of June 30, 2023, or assumed by a successor entity. Based on the collateral held as security, each FHLBank management's credit extension and collateral policies, and repayment history on advances, no allowance for credit losses on advances was recorded at September 30, 2023 or December 31, 2022.

Note 5 - Mortgage Loans

Mortgage Loans Held for Portfolio

Mortgage loans held for portfolio consist of loans obtained through the Mortgage Purchase Program (MPP), Mortgage Partnership Finance® (MPF®) Program ("Mortgage Partnership Finance," "MPF," and "MPF Xtra®" are registered trademarks of the FHLBank of Chicago), and Mortgage Asset Program (MAP®), and are either conventional mortgage loans or government-guaranteed or -insured mortgage loans. Under these mortgage programs, the FHLBanks purchase single-family mortgage loans that are originated or acquired by participating financial institutions. These mortgage loans are credit-enhanced by participating financial institutions or are guaranteed or insured by federal agencies.

Table 5.1 presents the composition of mortgage loans held for portfolio, net of the allowance for credit losses at September 30, 2023 and December 31, 2022.

Table 5.1 - Mortgage Loans Held for Portfolio

(dollars in millions)

	September 30, 2023	December 31, 2022
Fixed-rate, long-term single-family mortgage loans	$ 53,669	$ 49,489
Fixed-rate, medium-term[1] single-family mortgage loans	5,319	5,750
Total unpaid principal balance	**58,988**	**55,239**
Premiums	949	938
Discounts	(74)	(64)
Hedging adjustments	(45)	(35)
Total mortgage loans held for portfolio[2]	**59,818**	**56,078**
Allowance for credit losses on mortgage loans	(35)	(30)
Mortgage loans held for portfolio, net	**$ 59,783**	**$ 56,048**

(1) Medium-term is defined as a term of 15 years or less.
(2) Excludes accrued interest receivable of $299 million and $258 million at September 30, 2023 and December 31, 2022.

Table 5.2 presents mortgage loans held for portfolio by collateral/guarantee type at September 30, 2023 and December 31, 2022.

Table 5.2 - Mortgage Loans Held for Portfolio by Collateral/Guarantee Type

(dollars in millions)

	September 30, 2023	December 31, 2022
Conventional mortgage loans	$ 56,868	$ 53,013
Government-guaranteed or -insured mortgage loans	2,120	2,226
Total unpaid principal balance	**$ 58,988**	**$ 55,239**

Credit Enhancements. An FHLBank's allowance for credit losses considers the credit enhancements associated with conventional mortgage loans under the MPF Program, MPP, and MAP. Credit enhancements may include primary mortgage insurance, supplemental mortgage insurance, the credit enhancement amount plus any recoverable performance-based credit enhancement fees (for certain MPF loans), Lender Risk Account (for MPP loans), and Member Performance Account (for MAP loans). The credit risk analysis of all conventional loans is performed at the individual master commitment level to determine the credit enhancements available to recover losses on loans under each individual master commitment.

MPF Program. Participating financial institutions are paid a credit enhancement fee for assuming credit risk, and in some instances all or a portion of the credit enhancement fee may be performance-based. An FHLBank records credit enhancement fees paid to the participating financial institutions as a reduction to mortgage interest income. A participating financial institution may obtain supplemental mortgage insurance that it intends to use to cover a portion of its credit loss obligation under a master commitment.

Conventional MPF loans are evaluated for credit enhancement by use of third-party models. Each FHLBank participating in the MPF program (MPF FHLBank) and its participating financial institution share the risk of credit losses on conventional MPF loan products held for portfolio, by structuring potential losses into layers with respect to each master commitment. Credit losses in a master commitment are first absorbed by an FHLBank, up to a specified amount referred to as the First Loss Account. For certain product master commitments, the FHLBank may withhold a participating financial institution's scheduled performance credit enhancement fee in order to reimburse the FHLBank for a portion of credit losses allocated to the First Loss Account.

The First Loss Account represents the first layer or portion of credit losses that each MPF FHLBank absorbs with respect to its MPF loans after considering the borrower's equity, primary mortgage insurance, and recoverable credit enhancement fees. The participating financial institution is required to cover the next layer of losses up to an agreed-upon credit enhancement obligation amount, which may consist of a direct liability of the participating financial institution to pay credit losses up to a specified amount, a contractual obligation of a participating financial institution to provide supplemental mortgage insurance, or a combination of both. Any remaining unallocated losses are absorbed by the MPF FHLBank.

Unlike conventional MPF products held for portfolio, under the MPF Xtra®, MPF Government, and MPF Government MBS products, participating financial institutions are not required to provide credit enhancement and do not receive credit enhancement fees. Loans sold to the FHLBank of Chicago under the MPF Xtra® product are concurrently sold to third-party investors, and are not recorded on the MPF FHLBank's statement of condition.

MPP and MAP Loans. The conventional mortgage loans under the MPP are supported by a Lender Risk Account, and may also be supported by primary or supplemental mortgage insurance, in addition to the associated property as collateral. The Lender Risk Account is funded by an FHLBank participating in the MPP (MPP FHLBank) either upfront as a portion of the purchase proceeds or through a portion of the net interest remitted monthly by the borrower in an amount sufficient to cover expected losses on the pool of mortgages. The Lender Risk Account is recorded in other liabilities on the Combined Statements of Condition. To the extent available, Lender Risk

Account funds are used to offset any losses that occur. Typically after five years, excess funds over required balances are returned to the participating financial institution in accordance with a step-down schedule that is established upon execution of a master commitment contract. The Lender Risk Account is released in accordance with the terms of the master commitment. Similar to the MPP's Lender Risk Account, the FHLBank of New York maintains a Member Performance Account as credit enhancement for MAP loans. At both September 30, 2023 and December 31, 2022, the amount of the credit enhancements in the Lender Risk and Member Performance accounts remaining to cover future potential losses totaled $483 million.

Payment Status of Mortgage Loans. Payment status is the key credit quality indicator for conventional mortgage loans and allows the FHLBanks to monitor borrower performance. A past due loan is one where the borrower has failed to make a full payment of principal and interest within 30 days of its due date. Other delinquency statistics include, non-accrual loans and loans in process of foreclosure. Tables 5.3 and 5.4 present the payment status for conventional mortgage loans and other delinquency statistics for all of the FHLBanks' mortgage loans at September 30, 2023 and December 31, 2022.

Table 5.3 - Credit Quality Indicator for Conventional Mortgage Loans

(dollars in millions)

	September 30, 2023		
	Conventional Mortgage Loans		
	Origination Year		
Payment Status at Amortized Cost(1)	**Prior to 2019**	**2019 to 2023**	**Total**
Past due 30-59 days	$ 147	$ 192	$ 339
Past due 60-89 days	39	36	75
Past due 90 days or more	87	42	129
Total past due mortgage loans	**273**	**270**	**543**
Total current mortgage loans	13,941	43,183	57,124
Total conventional mortgage loans	**$ 14,214**	**$ 43,453**	**$ 57,667**

	December 31, 2022		
	Conventional Mortgage Loans		
	Origination Year		
Payment Status at Amortized Cost(1)	**Prior to 2018**	**2018 to 2022**	**Total**
Past due 30-59 days	$ 133	$ 182	$ 315
Past due 60-89 days	35	38	73
Past due 90 days or more	93	78	171
Total past due mortgage loans	**261**	**298**	**559**
Total current mortgage loans	13,149	40,112	53,261
Total conventional mortgage loans	**$ 13,410**	**$ 40,410**	**$ 53,820**

(1) Amortized cost excludes accrued interest receivable.

Table 5.4 - Other Delinquency Statistics

(dollars in millions)

	September 30, 2023		
Amortized Cost	**Conventional Mortgage Loans**	**Government-Guaranteed or -Insured**	**Total**
In process of foreclosure(1)	$ 51	$ 9	$ 60
Serious delinquency rate(2)	0.24 %	1.38 %	0.28 %
Past due 90 days or more and still accruing interest	$ 15	$ 29	$ 44
Loans on non-accrual status(3)	$ 167	$ —	$ 167

Amortized Cost	December 31, 2022 Conventional Mortgage Loans	Government-Guaranteed or -Insured	Total
In process of foreclosure[1]	$ 64	$ 13	$ 77
Serious delinquency rate[2]	0.33 %	1.86 %	0.39 %
Past due 90 days or more and still accruing interest	$ 21	$ 40	$ 61
Loans on non-accrual status[3]	$ 201	$ —	$ 201

(1) Includes loans where the decision of foreclosure or a similar alternative, such as pursuit of deed-in-lieu, has been reported.
(2) Represents seriously delinquent loans as a percentage of total mortgage loans. Seriously delinquent loans are comprised of all loans past due 90 days or more and loans that are in the process of foreclosure.
(3) At September 30, 2023 and December 31, 2022, $83 million and $104 million of conventional mortgage loans on non-accrual status did not have a related allowance for credit losses because either these loans were previously charged-off to the expected recoverable value or the fair value of the underlying collateral, including any credit enhancements, was greater than the amortized cost of the loans.

Allowance for Credit Losses for Mortgage Loans

See *Note 1 - Summary of Significant Accounting Policies* on pages F-20 to F-22 and *Note 6 - Mortgage Loans* on pages F-40 to F-44 of the audited combined financial statements included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for information on measuring credit losses on mortgage loans, placing them on non-accrual status, and charging them off when necessary.

Each FHLBank established an allowance for credit losses on its conventional mortgage loans held for portfolio. Table 5.5 presents a rollforward of the allowance for credit losses on conventional mortgage loans for the three and nine months ended September 30, 2023 and 2022.

Table 5.5 - Allowance for Credit Losses on Conventional Mortgage Loans

(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Balance, at beginning of period	$ 36	$ 25	$ 30	$ 23
(Charge-offs), net of recoveries	(1)	1	—	—
Provision (reversal) for credit losses	—	1	5	4
Balance, at end of period	**$ 35**	**$ 27**	**$ 35**	**$ 27**

Government-Guaranteed or -Insured Mortgage Loans. An FHLBank may invest in fixed-rate mortgage loans that are insured or guaranteed by the Federal Housing Administration, the Department of Veterans Affairs, the Rural Housing Service of the Department of Agriculture, and/or the Department of Housing and Urban Development. The servicer provides and maintains insurance or a guarantee from the applicable government agency. Therefore, each FHLBank only has credit risk for these loans if the servicer fails to pay for losses not covered by the guarantee or insurance, but in such instance, the FHLBank would have recourse against the servicer for such failure. Based on each FHLBank's assessment of its servicers and the collateral backing the loans, the risk of loss was immaterial and, consequently, no FHLBank recorded an allowance for credit losses for government-guaranteed or -insured mortgage loans at September 30, 2023 and December 31, 2022.

Note 6 - Derivatives and Hedging Activities

Nature of Business Activity

The FHLBanks are exposed to interest-rate risk primarily from the effect of interest rate changes on their interest-earning assets and their interest-bearing liabilities that finance these assets. The goal of each FHLBank'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, each FHLBank has established policies and procedures, which include guidelines on the amount of exposure to interest rate changes it is willing to accept. In addition, each FHLBank monitors the risk to its interest income, net interest margin, and average maturity of interest-earning assets and interest-bearing liabilities. (See *Note 7 - Derivatives and Hedging Activities* on pages F-44 to F-52 of the audited combined financial statements included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for a description of the application of derivatives and the types of derivatives and hedged items.)

Each FHLBank reevaluates its hedging strategies periodically and may change the hedging techniques it uses or may adopt new strategies. Each FHLBank transacts most of 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 either executed 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 FHLBanks are not derivative dealers and do not trade derivatives for short-term profit.

Financial Statement Effect and Additional Financial Information

Derivative Notional Amounts. The notional amount of derivatives serves as a factor in determining periodic interest payments or cash flows received and paid. However, the notional amount of derivatives reflects the FHLBanks' involvement in the various classes of financial instruments and represents neither the actual amounts exchanged nor the overall exposure of the FHLBanks to credit and market risk; the overall risk is much smaller. The risks of derivatives 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 presents the notional amount, fair value of derivative instruments, and total derivative assets and liabilities at September 30, 2023 and December 31, 2022. 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

(dollars in millions)

	September 30, 2023			December 31, 2022		
	Notional Amount of Derivatives	Derivative Assets	Derivative Liabilities	Notional Amount of Derivatives	Derivative Assets	Derivative Liabilities
Derivatives designated as hedging instruments						
Interest-rate swaps	$ 1,011,319	$ 7,409	$ 16,575	$ 726,249	$ 4,749	$ 17,023
Derivatives not designated as hedging instruments						
Interest-rate swaps	167,651	1,922	927	222,381	1,512	1,161
Interest-rate swaptions	2,125	15	—	1,505	12	—
Interest-rate caps or floors	6,340	11	—	6,730	9	—
Interest-rate futures or forwards	319	1	—	76	—	—
Mortgage delivery commitments	812	1	4	299	1	1
Other	161	1	—	153	1	—
Total derivatives not designated as hedging instruments	**177,408**	**1,951**	**931**	**231,144**	**1,535**	**1,162**
Total derivatives before netting and collateral adjustments	**$ 1,188,727**	**9,360**	**17,506**	**$ 957,393**	**6,284**	**18,185**
Netting adjustments and cash collateral[1]		(5,436)	(17,285)		(3,264)	(18,061)
Total derivative assets and total derivative liabilities		**$ 3,924**	**$ 221**		**$ 3,020**	**$ 124**

(1) Amounts represent the application of the netting requirements that allow an FHLBank to settle positive and negative positions, and also cash collateral, including accrued interest, held or placed by that FHLBank with the same clearing agent and/or counterparty. Cash collateral posted, including accrued interest, was $12,982 million and $15,131 million at September 30, 2023 and December 31, 2022. Cash collateral received, including accrued interest, was $2,452 million and $1,755 million at September 30, 2023 and December 31, 2022.

Table 6.2 presents the net gains (losses) on qualifying and discontinued fair value and cash flow hedging relationships for the three and nine months ended September 30, 2023 and 2022.

Table 6.2 - Net Gains (Losses) on Fair Value and Cash Flow Hedging Relationships
(dollars in millions)

	Three Months Ended September 30, 2023				
	Interest Income/Expense				Other Comprehensive Income
	Advances	Available-for-Sale Securities	Consolidated Discount Notes	Consolidated Bonds	
Total interest income (expense) presented on the Combined Statements of Income	$ 12,067	$ 2,255	$ (4,157)	$ (11,766)	
Gains (losses) on fair value hedging relationships					
Interest rate contracts					
Derivatives[1]	$ 3,064	$ 3,813	$ (5)	$ (2,182)	
Hedged items[2]	(1,365)	(2,924)	(22)	(112)	
Net gains (losses) on fair value hedging relationships	**$ 1,699**	**$ 889**	**$ (27)**	**$ (2,294)**	
Gains (losses) on cash flow hedging relationships[3]					
Interest rate contracts					
Reclassified from AOCI into interest income (expense)	$ —	$ —	$ 19	$ (1)	
Recognized in OCI					$ 76

	Three Months Ended September 30, 2022				
	Interest Income/Expense				Other Comprehensive Income
	Advances	Available-for-Sale Securities	Consolidated Discount Notes	Consolidated Bonds	
Total interest income (expense) presented on the Combined Statements of Income	$ 3,705	$ 932	$ (2,164)	$ (2,720)	
Gains (losses) on fair value hedging relationships					
Interest rate contracts					
Derivatives[1]	$ 3,756	$ 4,146	$ (61)	$ (6,449)	
Hedged items[2]	(3,470)	(4,052)	30	5,954	
Net gains (losses) on fair value hedging relationships	**$ 286**	**$ 94**	**$ (31)**	**$ (495)**	
Gains (losses) on cash flow hedging relationships[3]					
Interest rate contracts					
Reclassified from AOCI into interest income (expense)	$ —	$ —	$ 1	$ (2)	
Recognized in OCI					$ 183

	Nine Months Ended September 30, 2023				
	Interest Income/Expense				Other Comprehensive Income
	Advances	Available-for-Sale Securities	Consolidated Discount Notes	Consolidated Bonds	
Total interest income (expense) presented on the Combined Statements of Income	$ 36,538	$ 6,058	$ (15,140)	$ (32,123)	
Gains (losses) on fair value hedging relationships					
Interest rate contracts					
Derivatives[1]	$ 6,636	$ 5,454	$ (22)	$ (5,193)	
Hedged items[2]	(2,607)	(3,106)	(50)	(1,067)	
Net gains (losses) on fair value hedging relationships	**$ 4,029**	**$ 2,348**	**$ (72)**	**$ (6,260)**	
Gains (losses) on cash flow hedging relationships[3]					
Interest rate contracts					
Reclassified from AOCI into interest income (expense)	$ —	$ —	$ 51	$ (4)	
Recognized in OCI					$ 110

	Nine Months Ended September 30, 2022				
	Interest Income/Expense				Other Comprehensive Income
	Advances	Available-for-Sale Securities	Consolidated Discount Notes	Consolidated Bonds	
Total interest income (expense) presented on the Combined Statements of Income	$ 5,750	$ 1,781	$ (2,880)	$ (4,390)	
Gains (losses) on fair value hedging relationships					
Interest rate contracts					
Derivatives(1)	$ 9,780	$ 10,320	$ (134)	$ (15,954)	
Hedged items(2)	(10,036)	(10,730)	141	16,128	
Net gains (losses) on fair value hedging relationships	**$ (256)**	**$ (410)**	**$ 7**	**$ 174**	
Gains (losses) on cash flow hedging relationships(3)					
Interest rate contracts					
Reclassified from AOCI into interest income (expense)	$ —	$ —	$ (14)	$ (6)	
Recognized in OCI					$ 517

(1) Includes changes in fair value and net interest settlements and excludes the interest income (expense) of the respective hedged item.
(2) Includes changes in fair value and amortization and accretion of basis adjustments.
(3) Includes changes in fair value, net interest settlements, and amortization and accretion of hedging activities into interest income. Excludes the interest income (expense) of the respective hedged item.

For the three and nine months ended September 30, 2023 and 2022, no material amounts were reclassified from AOCI into earnings as a result of discontinued cash flow hedges because the original forecasted transactions occurred by the end of the originally specified time period or within a two-month period thereafter. At September 30, 2023, $34 million of deferred net gains on derivative instruments in AOCI was expected to be reclassified to earnings during the next twelve months. At September 30, 2023, the maximum length of time over which an FHLBank was hedging its exposure to the variability in future cash flows for forecasted transactions was nine years, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments.

Table 6.3 presents the cumulative basis adjustments on hedged items designated in fair value hedging relationships and the related amortized cost of the hedged items at September 30, 2023 and December 31, 2022.

Table 6.3 - Cumulative Basis Adjustments for Fair Value Hedges

(dollars in millions)

	September 30, 2023				
	Advances	Available-for-Sale Securities	Mortgage Loans	Consolidated Discount Notes	Consolidated Bonds
Amortized cost of hedged asset or liability(1)	$ 331,760	$ 117,980	$ 186	$ 51,755	$ 476,654
Fair value hedging adjustments					
Basis adjustments for active hedging relationships included in amortized cost	$ (10,443)	$ (12,987)	$ —	$ (37)	$ (15,520)
Basis adjustments for discontinued hedging relationships included in amortized cost	(40)	1,069	3	—	97
Total amount of fair value hedging basis adjustments	**$ (10,483)**	**$ (11,918)**	**$ 3**	**$ (37)**	**$ (15,423)**

	December 31, 2022				
	Advances	Available-for-Sale Securities	Mortgage Loans	Consolidated Discount Notes	Consolidated Bonds
Amortized cost of hedged asset or liability(1)	$ 208,973	$ 100,261	$ 211	$ 85,593	$ 315,913
Fair value hedging adjustments					
Basis adjustments for active hedging relationships included in amortized cost	$ (7,882)	$ (10,144)	$ —	$ (87)	$ (16,716)
Basis adjustments for discontinued hedging relationships included in amortized cost	8	1,408	4	—	126
Total amount of fair value hedging basis adjustments	**$ (7,874)**	**$ (8,736)**	**$ 4**	**$ (87)**	**$ (16,590)**

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

Table 6.4 presents net gains (losses) related to derivatives and economic hedging activities recorded in non-interest income for the three and nine months ended September 30, 2023 and 2022.

Table 6.4 - Net Gains (Losses) on Derivatives and Economic Hedging Activities Recorded in Non-interest Income
(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
Derivatives not designated as hedging instruments	**2023**	**2022**	**2023**	**2022**
Economic hedges				
Interest-rate swaps	$ 175	$ 199	$ 266	$ 586
Interest-rate swaptions	3	(8)	(4)	(1)
Interest-rate caps or floors	(1)	3	(3)	9
Interest-rate futures or forwards	4	6	6	24
Net interest settlements	22	(40)	24	(78)
Other	3	5	4	18
Mortgage delivery commitments	(10)	(14)	(14)	(59)
Total net gains (losses) related to derivatives not designated as hedging instruments	**196**	**151**	**279**	**499**
Price alignment amount[(1)]	(34)	(10)	(78)	(13)
Net gains (losses) on derivatives	**$ 162**	**$ 141**	**$ 201**	**$ 486**

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

Managing Credit Risk on Derivatives

Each FHLBank is subject to credit risk due to the risk of non-performance by counterparties to its derivative transactions, and manages credit risk through credit analysis, collateral requirements, and adherence to the requirements set forth in its policies, U.S. Commodity Futures Trading Commission regulations, and FHFA regulations.

Uncleared Derivatives. For uncleared derivatives, the degree of credit risk depends on the extent to which master netting arrangements are included in these contracts to mitigate the risk. Each FHLBank requires collateral agreements on its uncleared derivatives. Additionally, collateral related to derivatives with member institutions includes collateral assigned to an FHLBank, as evidenced by a written security agreement and held by the member institution for the benefit of that FHLBank.

Certain of the FHLBanks' uncleared derivative instruments contain provisions that require an FHLBank to post additional collateral with its counterparties if there is deterioration in that FHLBank's credit rating. If an FHLBank's credit rating is lowered by a nationally recognized statistical rating organization, that FHLBank may be required to deliver additional collateral on uncleared derivative instruments in net liability positions, unless the collateral delivery threshold is set to zero. The aggregate fair value of all uncleared derivative instruments with credit-risk-related contingent features that require an FHLBank to deliver additional collateral due to a credit downgrade and were in a net liability position (before cash collateral and related accrued interest) at September 30, 2023, was $1,673 million, for which the FHLBanks have posted collateral with a fair value of $1,683 million in the normal course of business. If each FHLBank's credit rating had been lowered from its current rating to the next lower rating that could have triggered additional collateral to be delivered, the FHLBanks would not have been required to post any additional collateral to their uncleared derivatives counterparties at September 30, 2023.

Uncleared derivative transactions executed on or after the dates specified in applicable regulations are subject to two-way initial margin requirements as mandated by the Wall Street Reform and Consumer Protection Act, or Dodd-Frank Act, if an FHLBank's aggregate uncleared derivative transactions exposure to a counterparty exceeds a specified threshold. The initial margin is required to be held at a third-party custodian and does not change ownership. Rather, the party in respect of which the initial margin has been posted to the third-party custodian will have a security interest in the amount of initial margin required under the uncleared margin rules and can only take ownership upon the occurrence of certain events, including an event of default due to bankruptcy, insolvency, or similar proceeding.

For all uncleared transactions entered into on or after March 1, 2017, the derivative agreements are fully collateralized with a zero unsecured threshold in accordance with variation margin requirements issued by the U.S. federal bank regulatory agencies and the Commodity Futures Trading Commission.

Cleared Derivatives. For cleared derivatives, a Derivative Clearing Organization (Clearinghouse) is an FHLBank's counterparty. The Clearinghouse notifies the clearing agent of the required initial and variation margin and the clearing agent in turn notifies the FHLBank. Each FHLBank utilizes one or two Clearinghouses for all cleared derivative transactions, LCH Ltd. and/or CME Clearing. At both Clearinghouses, variation margin is characterized as daily settlement payments and initial margin is considered collateral. The requirement that an FHLBank post initial and variation margin, through the clearing agent to the Clearinghouse, exposes an FHLBank 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 fair value of cleared derivatives is posted daily through a clearing agent.

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. None of the FHLBanks were required to post additional initial margin by its clearing agents, based on credit considerations, at September 30, 2023.

Offsetting of Derivative Assets and Derivative Liabilities

An FHLBank 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.

Each FHLBank has analyzed the enforceability of offsetting rights incorporated in its cleared derivative transactions and determined that the exercise of those offsetting rights by a non-defaulting party under these transactions should be upheld under applicable law upon an event of default including a bankruptcy, insolvency, or similar proceeding involving the Clearinghouse or that FHLBank's clearing agent, or both. Based on this analysis, each FHLBank 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, with and without the legal right of offset, including the related collateral at September 30, 2023 and December 31, 2022.

Table 6.5 - Offsetting of Derivative Assets and Derivative Liabilities

(dollars in millions)

	September 30, 2023						
	Derivative Instruments Meeting Netting Requirements				Non-cash Collateral Not Offset		
	Gross Recognized Amount	Gross Amounts 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	Cannot Be Sold or Repledged	Net Amount[2][3]
Derivative Assets							
Uncleared	$ 7,687	$ (7,302)	$ 1	$ 386	$ 127	$ 88	$ 171
Cleared	1,672	1,866	—	3,538	—	—	3,538
Total				**$ 3,924**			**$ 3,709**
Derivative Liabilities							
Uncleared	$ 15,530	$ (15,458)	$ 4	$ 76	$ —	$ 17	$ 59
Cleared	1,972	(1,827)	—	145	105	—	40
Total				**$ 221**			**$ 99**

	December 31, 2022						
	Derivative Instruments Meeting Netting Requirements				Non-cash Collateral Not Offset		
	Gross Recognized Amount	Gross Amounts 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	Cannot Be Sold or Repledged	Net Amount(2)
Derivative Assets							
Uncleared	$ 4,409	$ (4,236)	$ 1	$ 174	$ —	$ 109	$ 65
Cleared	1,874	972	—	2,846	(435)	—	3,281
Total				**$ 3,020**			**$ 3,346**
Derivative Liabilities							
Uncleared	$ 16,526	$ (16,406)	$ 1	$ 121	$ —	$ —	$ 121
Cleared	1,658	(1,655)	—	3	1	—	2
Total				**$ 124**			**$ 123**

(1) Represents derivatives that are not subject to an enforceable netting agreement (e.g., mortgage delivery commitments and certain interest-rate futures or forwards).
(2) Any over-collateralization at an FHLBank's individual clearing agent and/or counterparty level is not included in the determination of the net amount. At September 30, 2023 and December 31, 2022, the FHLBanks had additional net credit exposure of $3,504 million and $1,703 million due to instances where an FHLBank's non-cash collateral to a counterparty exceeded the FHLBank's net derivative position.
(3) The amount of non-cash collateral for uncleared derivatives included in the determination of the net amount is limited to the amount needed to secure the FHLBanks' or counterparties' uncleared exposure. At September 30, 2023, the FHLBanks pledged excess non-cash collateral with a fair value of $42 million and the FHLBanks received excess non-cash collateral with a fair value of $29 million.

Note 7 - Deposits

The FHLBanks offer demand and overnight deposit programs to members and to qualifying non-members. In addition, certain FHLBanks offer short-term interest-bearing deposit programs to members, and in certain cases, to qualifying non-members. A member that services mortgage loans may deposit in its FHLBank funds collected in connection with the mortgage loans, pending disbursement of these funds to the owners of the mortgage loans. The FHLBanks classify these funds as other deposits. Deposits classified as demand, overnight, or other pay interest based on a daily interest rate. Term deposits pay interest based on a fixed rate determined at the issuance of the deposit.

Table 7.1 presents interest-bearing and non-interest bearing deposits at September 30, 2023 and December 31, 2022.

Table 7.1 - Deposits
(dollars in millions)

	September 30, 2023	December 31, 2022
Interest-bearing		
Demand and overnight	$ 12,690	$ 9,942
Term	193	139
Other	6	9
Total interest-bearing	**12,889**	**10,090**
Non-interest-bearing		
Demand and overnight	159	100
Other	208	175
Total non-interest-bearing	**367**	**275**
Total deposits	**$ 13,256**	**$ 10,365**

Note 8 - Consolidated Obligations

Consolidated obligations consist of consolidated bonds and consolidated discount notes, which are joint and several obligations of all FHLBanks. The FHLBanks issue consolidated obligations through the Office of Finance as their agent. In connection with each debt issuance, an FHLBank specifies the amount of debt it wants issued on its behalf. The Office of Finance tracks the amount of debt issued on behalf of each FHLBank. In addition, each FHLBank records as a liability its specific portion of consolidated obligations for which it is the primary obligor.

The FHFA and the Secretary of the Treasury oversee the issuance of FHLBank debt through the Office of Finance. Consolidated bonds may be issued to raise short-, intermediate-, or long-term funds for the FHLBanks and are not subject to any statutory or regulatory limits on their maturity. Consolidated discount notes are issued primarily to raise short-term funds and have original maturities of up to one year. These notes generally sell below their face value and are redeemed at face value when they mature.

Although each FHLBank is primarily liable for its portion of consolidated obligations, each FHLBank is also jointly and severally liable with the other FHLBanks for the payment of principal and interest on all consolidated obligations of the FHLBanks. The principal amount of the FHLBanks' outstanding consolidated obligations, including consolidated obligations held by other FHLBanks, was $1,229.9 billion and $1,181.7 billion at September 30, 2023 and December 31, 2022.

Table 8.1 presents the carrying value and principal amount of consolidated discount notes outstanding and the weighted-average interest rate at September 30, 2023 and December 31, 2022.

Table 8.1 - Consolidated Discount Notes Outstanding

(dollars in millions)

	Carrying Value	Principal Amount	Weighted-Average Interest Rate[(1)]
September 30, 2023	$ 304,971	$ 308,114	5.16 %
December 31, 2022	$ 466,049	$ 469,565	4.00 %

(1) Represents yield to maturity excluding concession fees.

Table 8.2 presents consolidated bonds outstanding by contractual maturity and the weighted-average interest rate at September 30, 2023 and December 31, 2022.

Table 8.2 - Consolidated Bonds Outstanding by Contractual Maturity

(dollars in millions)

	September 30, 2023		December 31, 2022	
Year of Contractual Maturity	**Amount**	**Weighted-Average Interest Rate**	**Amount**	**Weighted-Average Interest Rate**
Due in 1 year or less	$ 561,792	4.82 %	$ 375,821	3.85 %
Due after 1 year through 2 years	160,468	3.63 %	117,726	2.47 %
Due after 2 years through 3 years	77,412	1.74 %	55,935	1.82 %
Due after 3 years through 4 years	48,034	2.10 %	73,648	1.22 %
Due after 4 years through 5 years	24,323	3.04 %	33,575	2.27 %
Thereafter	49,731	2.63 %	55,367	2.33 %
Total principal amount	**921,760**	4.05 %	**712,072**	3.00 %
Net premiums	144		232	
Hedging adjustments	(15,423)		(16,590)	
Fair value option valuation adjustments	50		(333)	
Total	**$ 906,531**		**$ 695,381**	

Consolidated bonds outstanding were issued with either fixed-rate coupon payment terms or variable-rate coupon payment terms that are indexed to specified indices, such as SOFR. To meet the specific needs of both the FHLBanks and certain investors in consolidated obligations, both fixed-rate and variable-rate consolidated bonds may contain features that result in complex coupon payment terms and call options. When these consolidated bonds are issued, an FHLBank may enter into derivatives containing features that offset the terms and embedded options, if any, of the consolidated bond obligations.

Table 8.3 presents consolidated bonds outstanding by call features at September 30, 2023 and December 31, 2022.

Table 8.3 - Consolidated Bonds Outstanding by Call Features

(dollars in millions)

Principal Amount of Consolidated Bonds	September 30, 2023	December 31, 2022
Non-callable/non-putable	$ 504,707	$ 438,252
Callable	417,053	273,820
Total principal amount	**$ 921,760**	**$ 712,072**

Table 8.4 presents consolidated bonds outstanding by contractual maturity or next call date at September 30, 2023 and December 31, 2022.

Table 8.4 - Consolidated Bonds Outstanding by Contractual Maturity or Next Call Date

(dollars in millions)

Year of Contractual Maturity or Next Call Date	September 30, 2023	December 31, 2022
Due in 1 year or less	$ 771,691	$ 604,575
Due after 1 year through 2 years	95,810	60,103
Due after 2 years through 3 years	20,887	13,509
Due after 3 years through 4 years	9,472	13,525
Due after 4 years through 5 years	10,073	5,332
Thereafter	13,827	15,028
Total principal amount	**$ 921,760**	**$ 712,072**

Note 9 - Capital

Each FHLBank is subject to three capital requirements under its capital plan and the FHFA rules and regulations. Regulatory capital does not include AOCI, but does include mandatorily redeemable capital stock.

1. *Risk-based capital.* Each FHLBank must maintain at all times permanent capital, defined as the amounts paid-in for Class B stock and retained earnings, in an amount at least equal to the sum of its credit risk, market risk, and operational risk capital requirements, all of which are calculated in accordance with the rules and regulations of the FHFA.

2. *Regulatory capital.* Each FHLBank must maintain at all times a total capital-to-assets ratio of at least four percent. Regulatory capital is the sum of permanent capital, the amounts paid-in for Class A stock, any general loss allowance, if consistent with GAAP and not established for specific assets, and other amounts from sources determined by the FHFA as available to absorb losses.

3. *Leverage capital.* Each FHLBank must maintain at all times a leverage capital-to-assets ratio of at least five percent. Leverage capital is defined as the sum of permanent capital weighted 1.5 times and all other components of total capital.

The FHFA may require an FHLBank to maintain greater minimum capital levels than are required based on FHFA rules and regulation. At September 30, 2023, each FHLBank was in compliance with FHFA regulatory capital requirements.

Table 9.1 presents the risk-based capital requirements at September 30, 2023.

Table 9.1 - Risk-Based Capital Requirements at September 30, 2023

(dollars in millions)

	Risk-Based Capital	
FHLBank	Minimum Requirement	Actual
Boston	$ 744	$ 3,792
New York	990	8,079
Pittsburgh	747	5,650
Atlanta	1,349	8,620
Cincinnati	1,259	6,173
Indianapolis	1,112	4,064
Chicago	2,019	8,613
Des Moines	1,440	9,828
Dallas	1,420	7,494
Topeka	755	3,663
San Francisco	1,255	7,483
Combined(1)	13,090	73,455

(1) Based on FHFA rules and regulations, risk-based capital requirements apply to individual FHLBanks, and there are no minimum risk-based capital requirements at a combined level. The combined risk-based capital amounts are for analysis only and are calculated based on the sum of the individual FHLBanks' risk-based capital amounts. The sum of the individual FHLBank risk-based capital amounts may not agree to the combined amount due to combining adjustments.

Table 9.2 presents the regulatory capital requirements at September 30, 2023.

Table 9.2 - Regulatory Capital Requirements at September 30, 2023

(dollars in millions)

	Regulatory Capital Ratio		Regulatory Capital	
FHLBank	Minimum Requirement	Actual	Minimum Requirement	Actual
Boston	4.00 %	6.04 %	$ 2,510	$ 3,792
New York	4.00 %	5.59 %	5,777	8,079
Pittsburgh	4.00 %	5.28 %	4,277	5,650
Atlanta	4.00 %	5.28 %	6,535	8,620
Cincinnati	4.00 %	5.21 %	4,744	6,173
Indianapolis	4.00 %	5.72 %	2,842	4,064
Chicago	4.00 %	6.32 %	5,450	8,613
Des Moines	4.00 %	5.15 %	7,627	9,828
Dallas	4.00 %	5.08 %	5,905	7,494
Topeka	4.00 %	5.50 %	2,925	4,021
San Francisco	4.00 %	7.87 %	3,801	7,483
Combined(1)		5.64 %	52,393	73,813

(1) Based on FHFA rules and regulations, regulatory capital requirements apply to individual FHLBanks, and there are no minimum regulatory capital requirements at a combined level. The combined regulatory capital ratio and amounts are for analysis only. The combined regulatory capital ratio is calculated based on the combined regulatory capital as a percentage of combined total assets, and the combined regulatory capital amounts are calculated based on the sum of the individual FHLBanks' regulatory capital amounts. The sum of the individual FHLBank regulatory capital amounts may not agree to the combined amount due to combining adjustments.

Table 9.3 presents the leverage capital requirements at September 30, 2023.

Table 9.3 - Leverage Capital Requirements at September 30, 2023
(dollars in millions)

	Leverage Capital Ratio		Leverage Capital	
FHLBank	Minimum Requirement	Actual	Minimum Requirement	Actual
Boston	5.00 %	9.07 %	$ 3,137	$ 5,689
New York	5.00 %	8.39 %	7,221	12,118
Pittsburgh	5.00 %	7.92 %	5,347	8,474
Atlanta	5.00 %	7.91 %	8,169	12,929
Cincinnati	5.00 %	7.81 %	5,929	9,260
Indianapolis	5.00 %	8.58 %	3,552	6,096
Chicago	5.00 %	9.48 %	6,812	12,918
Des Moines	5.00 %	7.73 %	9,533	14,742
Dallas	5.00 %	7.62 %	7,381	11,241
Topeka	5.00 %	8.00 %	3,657	5,853
San Francisco	5.00 %	11.81 %	4,751	11,224
Combined[1]		8.44 %	65,489	110,540

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(1) Based on FHFA rules and regulations, leverage capital requirements apply to individual FHLBanks, and there are no minimum leverage capital requirements at a combined level. The combined leverage capital ratio and amounts are for analysis only. The combined leverage capital ratio is calculated based on the combined leverage capital as a percentage of combined total assets, and the combined leverage capital amounts are calculated based on the sum of the individual FHLBanks' leverage capital amounts. The sum of the individual FHLBank leverage capital amounts may not agree to the combined amount due to combining adjustments.

Capital Stock

Each FHLBank is a cooperative whose member financial institutions own most of the FHLBank's capital stock. Former members (including certain non-members that own FHLBank capital stock as a result of merger or acquisition, relocation, charter termination, voluntary termination, or involuntary termination of an FHLBank member) own the remaining capital stock to support business transactions still carried on an FHLBank's statement of condition. Shares of capital stock cannot be purchased or sold except between an FHLBank and its members at its $100 per share par value, as mandated by each FHLBank's capital plan. Members can redeem Class A stock by giving six-months' written notice, and members can redeem Class B stock by giving five-years' written notice, subject to certain restrictions. An FHLBank's board of directors may declare and pay dividends in either cash or capital stock, assuming the FHLBank is in compliance with FHFA rules.

Restricted Retained Earnings

The Joint Capital Enhancement Agreement, as amended (Capital Agreement), is intended to enhance the capital position of each FHLBank. The Capital Agreement provides that each FHLBank will, on a quarterly basis, allocate 20% of its net income to a separate restricted retained earnings account until the balance of that account, calculated as of the last day of each calendar quarter, equals at least one percent of that FHLBank's average balance of outstanding consolidated obligations for the calendar quarter. These restricted retained earnings are not available to pay dividends. Additionally, the Capital Agreement provides that amounts in restricted retained earnings in excess of 150% of an FHLBank's restricted retained earnings minimum (i.e., one percent of that FHLBank's average balance of outstanding consolidated obligations calculated as of the last day of each calendar quarter) may be released from restricted retained earnings. As of September 30, 2023, none of the FHLBanks had restricted retained earnings that exceeded one percent of its average balance of outstanding consolidated obligations.

Mandatorily Redeemable Capital Stock

An FHLBank generally reclassifies capital stock subject to redemption from capital to the mandatorily redeemable capital stock liability upon expiration of a grace period, if applicable, after a member exercises a written redemption right, or gives notice of intent to withdraw from membership, or attains non-member status by merger or acquisition, relocation, charter termination, or involuntary termination from membership. Shares of capital stock meeting these definitions are reclassified to mandatorily redeemable capital stock at fair value. Dividends related to capital stock classified as mandatorily redeemable capital stock are accrued at the expected dividend rate and reported as interest expense on the Combined Statements of Income. For the three and nine months ended September 30, 2023, dividends on mandatorily redeemable capital stock of $24 million and $48 million were recorded as interest expense. For the three and nine months ended September 30, 2022, dividends on mandatorily redeemable capital stock of $8 million and $20 million were recorded as interest expense.

A member may cancel or revoke its written notice of redemption or its notice of withdrawal from membership prior to the end of the applicable redemption period. Each FHLBank's capital plan provides the terms for cancellation fees that may be incurred by the member upon cancellation.

Table 9.4 presents a rollforward of capital stock subject to mandatory redemption for the three and nine months ended September 30, 2023 and 2022. Payment is contingent on, among other things, each FHLBank's waiting period and the FHLBank's ability to meet its minimum regulatory capital requirements. These amounts have been classified as a liability on the Combined Statements of Condition.

Table 9.4 - Rollforward of Mandatorily Redeemable Capital Stock

(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Balance, beginning of year	$ 1,538	$ 416	$ 708	$ 398
Capital stock subject to mandatory redemption reclassified from capital	475	1,108	2,551	3,377
Redemption/repurchase of mandatorily redeemable capital stock	(611)	(953)	(1,857)	(3,204)
Balance, end of year	**$ 1,402**	**$ 571**	**$ 1,402**	**$ 571**

Table 9.5 presents the amount of mandatorily redeemable capital stock by contractual year of redemption at September 30, 2023 and December 31, 2022. The year of redemption in the table is the end of the appropriate redemption period applicable to each FHLBank's capital plan. An FHLBank is not required to redeem membership stock until either five years or six months, depending on the type of capital stock issuable under its capital plan, after the membership is terminated or the FHLBank receives notice of withdrawal. However, for certain membership terminations such as mergers, consolidations, terminations related to insolvency, or out-of-district relocations, the FHLBank may recalculate the former member's stock requirement following that termination and the stock may be deemed excess stock subject to repurchase at the FHLBank's discretion. An FHLBank is not required to redeem activity-based stock until the later of the expiration of the notice of redemption or until the activity to which the capital stock relates no longer remains outstanding. If activity-based stock becomes excess stock as a result of an activity no longer remaining outstanding, an FHLBank may repurchase those shares, at its sole discretion, subject to the statutory and regulatory restrictions on excess capital stock redemption.

Table 9.5 - Mandatorily Redeemable Capital Stock by Contractual Year of Redemption

(dollars in millions)

	September 30, 2023	December 31, 2022
Year 1	$ 16	$ 38
Year 2	4	11
Year 3	210	20
Year 4	17	264
Year 5	1,114	353
Past contractual redemption date due to remaining activity[1]	41	22
Total	**$ 1,402**	**$ 708**

(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.

Excess Capital Stock

The FHLBanks define excess capital stock as the amount of stock held by a member (or former member) in excess of that institution's minimum stock ownership requirement. FHFA rules limit the ability of an FHLBank to create member excess capital stock under certain circumstances. An FHLBank may not pay dividends in the form of capital stock or issue new excess capital stock to members if that FHLBank's excess capital stock exceeds one percent of its total assets or if the issuance of excess capital stock would cause that FHLBank's excess capital stock to exceed one percent of its total assets. At September 30, 2023, the FHLBank of Indianapolis had excess capital stock outstanding totaling more than one percent of its total assets.

Capital Classification Determination

The FHFA determines each FHLBank's capital classification on at least a quarterly basis. If an FHLBank is determined to be other than adequately capitalized, that FHLBank becomes subject to additional supervisory authority by the FHFA. Before implementing a reclassification, the Director of the FHFA is required to provide that FHLBank with written notice of the proposed action and an opportunity to submit a response. Each FHLBank was classified by the FHFA as adequately capitalized as of the date of the FHFA's most recent notification to each FHLBank.

Note 10 - Accumulated Other Comprehensive Income (Loss)

Table 10.1 presents a summary of changes in accumulated other comprehensive income (loss) for the three and nine months ended September 30, 2023 and 2022.

Table 10.1 - Accumulated Other Comprehensive Income (Loss)
(dollars in millions)

	Net Unrealized Gains (Losses) on AFS Securities (Note 3)	Net Non-Credit Portion of OTTI Gains (Losses) on HTM Securities (Note 3)	Net Unrealized Gains (Losses) Relating to Hedging Activities (Note 6)	Pension and Postretirement Benefits	Total Accumulated Other Comprehensive Income (Loss)
Balance, June 30, 2023	**$ (862)**	**$ (1)**	**$ 330**	**$ (24)**	**$ (557)**
Other comprehensive income before reclassifications					
Unrealized gains (losses)	(539)	—	76	—	(463)
Non-credit losses included in basis of HTM securities sold	—	—	—	—	—
Reclassifications from accumulated other comprehensive income (loss) to net income					
Reclassification of realized net (gains) losses included in net income	6	—	—	—	6
Amortization on hedging activities	—	—	(18)	—	(18)
Pension and postretirement benefits	—	—	—	(2)	(2)
Net current period other comprehensive income (loss)	**(533)**	**—**	**58**	**(2)**	**(477)**
Balance, September 30, 2023	**$ (1,395)**	**$ (1)**	**$ 388**	**$ (26)**	**$ (1,034)**
Balance, June 30, 2022	**$ (192)**	**$ (5)**	**$ 160**	**$ (115)**	**$ (152)**
Other comprehensive income before reclassifications					
Unrealized gains (losses)	(579)	—	183	—	(396)
Accretion of non-credit loss	—	—	—	—	—
Reclassifications from accumulated other comprehensive income (loss) to net income					
Amortization on hedging activities	—	—	1	—	1
Pension and postretirement benefits	—	—	—	3	3
Net current period other comprehensive income (loss)	**(579)**	**—**	**184**	**3**	**(392)**
Balance, September 30, 2022	**$ (771)**	**$ (5)**	**$ 344**	**$ (112)**	**$ (544)**

	Net Unrealized Gains (Losses) on AFS Securities (Note 3)	Net Non-Credit Portion of OTTI Gains (Losses) on HTM Securities (Note 3)	Net Unrealized Gains (Losses) Relating to Hedging Activities (Note 6)	Pension and Postretirement Benefits	Total Accumulated Other Comprehensive Income (Loss)
Balance, December 31, 2022	**$ (1,027)**	**$ (4)**	**$ 325**	**$ (47)**	**$ (753)**
Other comprehensive income before reclassifications					
Unrealized gains (losses)	(374)	—	110	—	(264)
Non-credit losses included in basis of HTM securities sold	—	3	—	—	3
Reclassifications from accumulated other comprehensive income (loss) to net income					
Reclassification of realized net (gains) losses included in net income	6	—	—	—	6
Amortization on hedging activities	—	—	(47)	—	(47)
Pension and postretirement benefits	—	—	—	21	21
Net current period other comprehensive income (loss)	**(368)**	**3**	**63**	**21**	(281)
Balance, September 30, 2023	**$ (1,395)**	**$ (1)**	**$ 388**	**$ (26)**	**$ (1,034)**
Balance, December 31, 2021	**$ 1,608**	**$ (6)**	**$ (193)**	**$ (112)**	**$ 1,297**
Other comprehensive income before reclassifications					
Unrealized gains (losses)	(2,379)	—	517	—	(1,862)
Accretion of non-credit loss	—	1	—	—	1
Reclassifications from accumulated other comprehensive income (loss) to net income					
Amortization on hedging activities	—	—	20	—	20
Pension and postretirement benefits	—	—	—	—	—
Net current period other comprehensive income (loss)	**(2,379)**	**1**	**537**	**—**	**(1,841)**
Balance, September 30, 2022	**$ (771)**	**$ (5)**	**$ 344**	**$ (112)**	**$ (544)**

Note 11 - Fair Value

The fair value amounts recorded on the Combined Statements of Condition and presented in the note disclosures for the periods presented have been determined by the FHLBanks using available market and other pertinent information and reflect each FHLBank'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). Although each FHLBank uses its best judgment in estimating the fair value of its financial instruments, there are inherent limitations in any valuation technique. Therefore, the fair values may not be indicative of the amounts that would have been realized in market transactions at September 30, 2023 and December 31, 2022. Additionally, these values do not represent an estimate of the overall market value of the FHLBanks as going concerns, which would take into account future business opportunities and the net profitability of assets and liabilities.

Fair Value Hierarchy

GAAP establishes a fair value hierarchy and requires an entity to maximize the use of significant observable inputs and minimize the use of significant unobservable inputs when measuring fair value. The inputs are evaluated and an overall level for the fair value measurement is determined. This overall level is an indication of market observability of the fair value measurement for the asset or liability. An entity must disclose the level within the fair value hierarchy in which the measurements are classified.

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 or 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. Valuations are derived from techniques that use significant assumptions not observable in the market, which include pricing models, discounted cash flow models, or similar techniques.

Each FHLBank reviews its fair value hierarchy classifications on a quarterly basis. Changes in the observability of the valuation inputs may result in a reclassification of certain assets or liabilities. The FHLBanks had no transfers of assets or liabilities into or out of Level 3 of the fair value hierarchy during the three and nine months ended September 30, 2023 and 2022.

Table 11.1 presents the carrying value, fair value, and fair value hierarchy of financial assets and liabilities of the FHLBanks at September 30, 2023 and December 31, 2022. The FHLBanks record trading securities, AFS securities, derivative assets, derivative liabilities, certain advances, certain consolidated obligations, and certain other assets at fair value on a recurring basis, and on occasion certain mortgage loans held for portfolio and certain other assets at fair value on a non-recurring basis. The FHLBanks record all other financial assets and liabilities at amortized cost. Refer to Table 11.2 for further details about the financial assets and liabilities held at fair value on either a recurring or non-recurring basis.

Table 11.1 - Fair Value Summary

(dollars in millions)

	September 30, 2023					
		Fair Value				
Financial Instruments	**Carrying Value[1]**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustment and Cash Collateral[2]**
Assets						
Cash and due from banks	$ 702	$ 702	$ 702	$ —	$ —	$ —
Interest-bearing deposits	28,083	28,083	11,925	16,158	—	—
Securities purchased under agreements to resell	69,265	69,265	—	69,265	—	—
Federal funds sold	87,057	87,057	—	87,057	—	—
Trading securities	11,821	11,821	4,849	6,972	—	—
Available-for-sale securities	148,661	148,661	—	146,322	2,339	—
Held-to-maturity securities	67,419	65,576	—	65,166	410	—
Advances[3]	826,945	826,120	—	826,120	—	—
Mortgage loans held for portfolio	59,783	51,043	—	50,967	76	—
Mortgage loans held for sale[4]	29	29	—	29	—	—
Accrued interest receivable	4,393	4,393	—	4,393	—	—
Derivative assets, net	3,924	3,924	—	9,360	—	(5,436)
Other assets	362	358	263	95	—	—
Liabilities						
Deposits	13,256	13,256	—	13,256	—	—
Consolidated obligations						
Discount notes[5]	304,971	304,928	—	304,928	—	—
Bonds[6]	906,531	895,894	—	895,894	—	—
Total consolidated obligations	**1,211,502**	**1,200,822**	**—**	**1,200,822**	**—**	**—**
Mandatorily redeemable capital stock	1,402	1,402	1,402	—	—	—
Accrued interest payable	6,879	6,879	—	6,879	—	—
Derivative liabilities, net	221	221	—	17,506	—	(17,285)
Other liabilities	35	32	—	32	—	—

	December 31, 2022					
		Fair Value				
Financial Instruments	**Carrying Value[1]**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustment and Cash Collateral[2]**
Assets						
Cash and due from banks	$ 417	$ 417	$ 417	$ —	$ —	$ —
Interest-bearing deposits	22,937	22,937	11,054	11,883	—	—
Securities purchased under agreements to resell	71,405	71,405	—	71,405	—	—
Federal funds sold	65,920	65,920	—	65,920	—	—
Trading securities	15,865	15,865	7,113	8,752	—	—
Available-for-sale securities	129,869	129,869	—	127,403	2,466	—
Held-to-maturity securities	57,816	56,341	—	55,823	518	—
Advances[3]	819,121	817,235	—	817,235	—	—
Mortgage loans held for portfolio	56,048	49,180	—	49,085	95	—
Mortgage loans held for sale[4]	59	59	—	59	—	—
Accrued interest receivable	3,327	3,327	—	3,327	—	—
Derivative assets, net	3,020	3,020	—	6,284	—	(3,264)
Other assets	357	354	258	96	—	—
Liabilities						
Deposits	10,365	10,365	—	10,365	—	—
Consolidated obligations						
Discount notes[5]	466,049	465,810	—	465,810	—	—
Bonds[6]	695,381	685,133	—	685,133	—	—
Total consolidated obligations	**1,161,430**	**1,150,943**	—	**1,150,943**	—	—
Mandatorily redeemable capital stock	708	708	708	—	—	—
Accrued interest payable	3,229	3,229	—	3,229	—	—
Derivative liabilities, net	124	124	—	18,185	—	(18,061)
Other liabilities	35	32	—	32	—	—

(1) For certain financial instruments, the amounts represent net carrying value, which includes an allowance for credit losses.
(2) Amounts represent the application of the netting requirements that allow an FHLBank to settle positive and negative positions, and also cash collateral and related accrued interest held or placed by that FHLBank with the same clearing agent and/or counterparty.
(3) Includes $2,543 million and $2,725 million of advances recorded under fair value option at September 30, 2023 and December 31, 2022.
(4) Represents mortgage loans held for sale recorded under fair value option, included in other assets, net on the Combined Statements of Condition.
(5) Includes $51,554 million and $65,795 million of consolidated discount notes recorded under fair value option at September 30, 2023 and December 31, 2022.
(6) Includes $24,595 million and $12,573 million of consolidated bonds recorded under fair value option at September 30, 2023 and December 31, 2022.

Summary of Valuation Methodologies and Primary Inputs

A description of the valuation methodologies and primary inputs is disclosed in Note 14 - Fair Value, pages F-67 to F-70, of the audited combined financial statements included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022. There were no significant changes in these valuation methodologies and primary inputs during the nine months ended September 30, 2023.

Fair Value Measurements

Table 11.2 presents the fair value of assets and liabilities that are recorded on a recurring or non-recurring basis at September 30, 2023 and December 31, 2022, by level within the fair value hierarchy. The FHLBanks measure certain mortgage loans at fair value on a non-recurring basis due to the recognition of a credit loss. Real estate owned is measured using fair value when the asset’s fair value less costs to sell is lower than its carrying amount.

Table 11.2 - Fair Value Measurements

(dollars in millions)

	September 30, 2023				
	Total	Level 1	Level 2	Level 3	Netting Adjustment and Cash Collateral[1]
Recurring fair value measurements - Assets					
Trading securities					
U.S. Treasury obligations	$ 8,981	$ 4,849	$ 4,132	$ —	$ —
Other U.S. obligations	67	—	67	—	—
GSE and Tennessee Valley Authority obligations	1,989	—	1,989	—	—
Other non-MBS	121	—	121	—	—
U.S. obligations single-family MBS	1	—	1	—	—
GSE single-family MBS	15	—	15	—	—
GSE multifamily MBS	647	—	647	—	—
Total trading securities	**11,821**	**4,849**	**6,972**	**—**	**—**
Available-for-sale securities					
U.S. Treasury obligations	31,862	—	31,862	—	—
Other U.S. obligations	1,601	—	1,601	—	—
GSE and Tennessee Valley Authority obligations	6,690	—	6,690	—	—
State or local housing agency obligations	1,725	—	588	1,137	—
Federal Family Education Loan Program ABS	2,018	—	2,018	—	—
Other non-MBS	566	—	566	—	—
U.S. obligations single-family MBS	5,297	—	5,297	—	—
U.S. obligations multifamily MBS	470	—	470	—	—
GSE single-family MBS	5,898	—	5,898	—	—
GSE multifamily MBS	91,332	—	91,332	—	—
Private-label MBS	1,202	—	—	1,202	—
Total available-for-sale securities	**148,661**	**—**	**146,322**	**2,339**	**—**
Advances[2]	2,543	—	2,543	—	—
Mortgage loans held for sale[2]	29	—	29	—	—
Derivative assets, net					
Interest-rate related	3,923	—	9,359	—	(5,436)
Mortgage delivery commitments	1	—	1	—	—
Total derivative assets, net	**3,924**	**—**	**9,360**	**—**	**(5,436)**
Other assets	326	263	63	—	—
Total recurring assets at fair value	**$ 167,304**	**$ 5,112**	**$ 165,289**	**$ 2,339**	**$ (5,436)**
Recurring fair value measurements - Liabilities					
Consolidated Obligations					
Discount notes[2]	$ 51,554	$ —	$ 51,554	$ —	$ —
Bonds[2]	24,595	—	24,595	—	—
Total consolidated obligations	**76,149**	**—**	**76,149**	**—**	**—**
Derivative liabilities, net					
Interest-rate related	217	—	17,502	—	(17,285)
Mortgage delivery commitments	4	—	4	—	—
Total derivative liabilities, net	**221**	**—**	**17,506**	**—**	**(17,285)**
Total recurring liabilities at fair value	**$ 76,370**	**$ —**	**$ 93,655**	**$ —**	**$ (17,285)**
Non-recurring fair value measurements - Assets[3]					
Mortgage loans held for portfolio	$ 36	$ —	$ —	$ 36	
Real estate owned	1	—	—	1	
Total non-recurring assets at fair value	**$ 37**	**$ —**	**$ —**	**$ 37**	

	December 31, 2022				
	Total	Level 1	Level 2	Level 3	Netting Adjustment and Cash Collateral[1]
Recurring fair value measurements - Assets					
Trading securities					
U.S. Treasury obligations	$ 12,920	$ 7,113	$ 5,807	$ —	$ —
Other U.S. obligations	76	—	76	—	—
GSE and Tennessee Valley Authority obligations	2,035	—	2,035	—	—
Other non-MBS	148	—	148	—	—
U.S. obligations single-family MBS	1	—	1	—	—
GSE single-family MBS	17	—	17	—	—
GSE multifamily MBS	668	—	668	—	—
Total trading securities	**15,865**	**7,113**	**8,752**	**—**	**—**
Available-for-sale securities					
U.S. Treasury obligations	33,419	—	33,419	—	—
Other U.S. obligations	2,053	—	2,053	—	—
GSE and Tennessee Valley Authority obligations	7,174	—	7,174	—	—
State or local housing agency obligations	1,768	—	627	1,141	—
Federal Family Education Loan Program ABS	2,304	—	2,304	—	—
Other non-MBS	591	—	591	—	—
U.S. obligations single-family MBS	4,338	—	4,338	—	—
U.S. obligations multifamily MBS	476	—	476	—	—
GSE single-family MBS	4,092	—	4,092	—	—
GSE multifamily MBS	72,329	—	72,329	—	—
Private-label MBS	1,325	—	—	1,325	—
Total available-for-sale securities	**129,869**	**—**	**127,403**	**2,466**	**—**
Advances[2]	2,725	—	2,725	—	—
Mortgage loans held for sale[2]	59	—	59	—	—
Derivative assets, net					
Interest-rate related	3,019	—	6,283	—	(3,264)
Mortgage delivery commitments	1	—	1	—	—
Total derivative assets, net	**3,020**	**—**	**6,284**	**—**	**(3,264)**
Other assets	322	258	64	—	—
Total recurring assets at fair value	**$ 151,860**	**$ 7,371**	**$ 145,287**	**$ 2,466**	**$ (3,264)**
Recurring fair value measurements - Liabilities					
Consolidated Obligations					
Discount notes[2]	$ 65,795	$ —	$ 65,795	$ —	$ —
Bonds[2]	12,573	—	12,573	—	—
Total consolidated obligations	**78,368**	**—**	**78,368**	**—**	**—**
Derivative liabilities, net					
Interest-rate related	123	—	18,184	—	(18,061)
Mortgage delivery commitments	1	—	1	—	—
Total derivative liabilities, net	**124**	**—**	**18,185**	**—**	**(18,061)**
Total recurring liabilities at fair value	**$ 78,492**	**$ —**	**$ 96,553**	**$ —**	**$ (18,061)**
Non-recurring fair value measurements - Assets[3]					
Mortgage loans held for portfolio	$ 34	$ —	$ —	$ 34	
Real estate owned	1	—	—	1	
Total non-recurring assets at fair value	**$ 35**	**$ —**	**$ —**	**$ 35**	

(1) Amounts represent the application of the netting requirements that allow an FHLBank to settle positive and negative positions, and also cash collateral and related accrued interest held or placed by that FHLBank with the same clearing agent and/or counterparty.
(2) Represents financial instruments recorded under fair value option at September 30, 2023 and December 31, 2022.
(3) The fair value information presented is as of the date the fair value adjustment was recorded during the period.

Level 3 Disclosures for All Assets and Liabilities that are Measured at Fair Value on a Recurring Basis

Table 11.3 presents a rollforward of assets and liabilities measured at fair value on a recurring basis and classified as Level 3 during the three and nine months ended September 30, 2023 and 2022.

Table 11.3 - Rollforward of Level 3 Assets and Liabilities

(dollars in millions)

	Three Months Ended September 30,			
	2023		2022	
	State and Local Housing Agency Obligations	Private-Label MBS	State and Local Housing Agency Obligations	Private-Label MBS
Balance, at beginning of period	$ 1,138	$ 1,253	$ 1,173	$ 1,490
Total gains (losses) included in earnings				
Interest income	—	10	—	16
(Provision) reversal for credit losses on available-for-sale securities	—	(8)	—	(11)
Total gains (losses) included in other comprehensive income				
Net unrealized gains (losses) on available-for-sale securities	—	(15)	1	(44)
Purchases, issuances, sales, and settlements				
Settlements	(1)	(38)	—	(63)
Transfers from held-to-maturity securities to available-for-sale securities	—	—	—	1
Balance, at end of period	**$ 1,137**	**$ 1,202**	**$ 1,174**	**$ 1,389**
Total amount of unrealized gains (losses) for the period included in OCI relating to assets held at the end of the period	$ —	$ (14)	$ 1	$ (44)
Total amount of gains (losses) for the period included in earnings attributable to the change in unrealized gains/losses relating to assets held at the end of period	$ —	$ 1	$ —	$ 5

	Nine Months Ended September 30,			
	2023		2022	
	State and Local Housing Agency Obligations	Private-Label MBS	State and Local Housing Agency Obligations	Private-Label MBS
Balance, at beginning of period	$ 1,141	$ 1,325	$ 1,061	$ 1,804
Total gains (losses) included in earnings				
Interest income	—	32	—	49
(Provision) reversal for credit losses on available-for-sale securities	—	(10)	—	(14)
Other income (loss)	—	—	—	28
Total gains (losses) included in other comprehensive income				
Net unrealized gains (losses) on available-for-sale securities	—	(29)	—	(141)
Purchases, issuances, sales, and settlements				
Purchases	—	—	308	—
Settlements	(4)	(118)	(195)	(354)
Transfers from held-to-maturity securities to available-for-sale securities	—	2	—	17
Balance, at end of period	**$ 1,137**	**$ 1,202**	**$ 1,174**	**$ 1,389**
Total amount of unrealized gains (losses) for the period included in OCI relating to assets held at the end of the period	$ —	$ (28)	$ —	$ (141)
Total amount of gains (losses) for the period included in earnings attributable to the change in unrealized gains/losses relating to assets held at the end of period	$ —	$ 21	$ —	$ 35

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 entities to display the fair value of those assets and liabilities for which the entity has chosen to use fair value on the face of the statement 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. Interest income and interest expense on advances and consolidated obligations at fair value are recognized solely on the contractual amount of interest due or unpaid. Any transaction fees or costs are immediately recognized into non-interest income or non-interest expense.

The FHLBanks of New York, Cincinnati, Chicago, Des Moines, and San Francisco (Electing FHLBanks) have each elected the fair value option for certain financial instruments when a hedge relationship does 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 when an economic derivative is adjusted for changes in fair value, but the related hedged item is not.

Table 11.4 presents net gains (losses) recognized in earnings related to financial assets and liabilities for which the fair value option was elected during the three and nine months ended September 30, 2023 and 2022.

Table 11.4 - Fair Value Option - Financial Assets and Liabilities

(dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
Net Gains (Losses) from Changes in Fair Value Recognized in Earnings	**2023**	**2022**	**2023**	**2022**
Advances	$ (14)	$ (51)	$ (9)	$ (191)
Mortgage loans held for sale[(1)]	(1)	(2)	(1)	(9)
Consolidated discount notes	(17)	48	(71)	189
Consolidated bonds	(43)	167	(63)	389
Total net gains (losses)	**$ (75)**	**$ 162**	**$ (144)**	**$ 378**

(1) Included in other assets, net on the Combined Statements of Condition.

For instruments for which the fair value option has been elected, the related contractual interest income, contractual interest expense, and the discount amortization on fair value option discount notes are recorded as part of net interest income on the Combined Statements of Income. The remaining changes in fair value for instruments for which the fair value option has been elected are recorded as net gains (losses) on financial instruments held under fair value option on the Combined Statements of Income, except for changes in fair value related to instrument specific credit risk, which are recorded in AOCI on the Combined Statements of Condition. Each of the Electing FHLBanks determined that none of the remaining changes in fair value were related to instrument specific credit risk during the three and nine months ended September 30, 2023 and 2022. In determining that there has been no change in instrument specific credit risk period to period, the Electing FHLBanks primarily considered the following factors:

- The FHLBanks are federally chartered GSEs, and as a result of this status, the FHLBanks' 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.

- Each FHLBank is jointly and severally liable with the other FHLBanks for the payment of principal and interest on all consolidated obligations of each of the FHLBanks.

Table 11.5 presents the difference between the aggregate fair value and the aggregate unpaid principal balance outstanding for advances, mortgage loans held for sale, and consolidated obligations for which the fair value option has been elected at September 30, 2023 and December 31, 2022.

Table 11.5 - Aggregate Fair Value and Aggregate Unpaid Principal Balance

(dollars in millions)

	September 30, 2023			December 31, 2022		
	Aggregate Fair Value	Aggregate Unpaid Principal Balance	Aggregate Fair Value Over/(Under) Aggregate Unpaid Principal Balance	Aggregate Fair Value	Aggregate Unpaid Principal Balance	Aggregate Fair Value Over/(Under) Aggregate Unpaid Principal Balance
Advances	$ 2,543	$ 2,614	$ (71)	$ 2,725	$ 2,791	$ (66)
Mortgage loans held for sale[1]	29	30	(1)	59	61	(2)
Consolidated discount notes	51,554	52,397	(843)	65,795	66,682	(887)
Consolidated bonds	24,595	24,545	50	12,573	12,906	(333)

(1) Included in other assets, net on the Combined Statements of Condition.

Note 12 - Commitments and Contingencies

Off-Balance Sheet Commitments

Table 12.1 represents off-balance sheet commitments at September 30, 2023 and December 31, 2022. Each FHLBank has deemed it unnecessary to record any liabilities for credit losses on these commitments at September 30, 2023 and December 31, 2022.

Table 12.1 - Off-Balance Sheet Commitments

(dollars in millions)

	September 30, 2023			December 31, 2022
Notional amount	Expire Within One Year	Expire After One Year	Total	Total
Standby letters of credit notional amount[1]	$ 167,550	$ 27,059	$ 194,609	$ 169,449
Unsettled consolidated bonds, principal amount	4,901	—	4,901	16,505
Commitments for standby bond purchases	528	2,671	3,199	2,989
Unused lines of credit - advances	2,348	—	2,348	2,219
Unsettled consolidated discount notes, principal amount	1,021	—	1,021	777
Commitments to fund additional advances	691	77	768	1,265
Commitments to purchase mortgage loans	757	—	757	250
Other	1	—	1	2

(1) Excludes unconditional commitments to issue standby letters of credit of $21 million and $22 million at September 30, 2023 and December 31, 2022.

Standby Letters of Credit. An FHLBank issues standby letters of credit on behalf of its members to support certain obligations of the members (or member's customers) to third-party beneficiaries. These standby letters of credit are generally subject to the same collateralization and borrowing limits that are applicable to advances. Standby letters of credit may be offered to assist members and non-member housing associates in facilitating residential housing finance, community lending, and asset-liability management, and to provide liquidity. In particular, members often use standby letters of credit as collateral for deposits from federal, state, and local government agencies. Standby letters of credit are executed for members for a fee. If an FHLBank is required to make payment for a beneficiary's draw, the member either reimburses the FHLBank for the amount drawn or, subject to the applicable FHLBank's discretion, the amount drawn may be converted into a collateralized advance to the member. However, standby letters of credit usually expire without being drawn upon. At September 30, 2023, the outstanding standby letters of credits issued by the FHLBanks expire no later than 2047. The carrying value of guarantees related to standby letters of credit is recorded in other liabilities and was $123 million and $95 million at September 30, 2023 and December 31, 2022.

Each FHLBank monitors the creditworthiness of its members that have standby letters of credit. In addition, standby letters of credit are subject to the same collateralization and borrowing limits that apply to advances and are fully collateralized at the time of issuance.

Standby Bond-Purchase Agreements. Certain FHLBanks have entered into standby bond-purchase agreements with state housing authorities within their district whereby these FHLBanks agree to provide liquidity for a fee. If required, the affected FHLBanks will purchase and hold the state housing authority's bonds until the designated marketing agent can find a suitable investor or the state housing authority repurchases the bond according to a schedule established by the standby bond-purchase agreement. Each standby bond-purchase agreement dictates the specific terms that would require the affected FHLBank to purchase the bond and typically allows the FHLBank to terminate the agreement upon the occurrence of a default event of the issuer. At September 30, 2023, the outstanding standby bond-purchase commitments entered into by these FHLBanks expire no later than 2028, although some are renewable at the option of the affected FHLBank. At September 30, 2023 and December 31, 2022, the FHLBanks had standby bond-purchase commitments with 13 state housing authorities. During the nine months ended September 30, 2023 and 2022, the FHLBanks were not required to purchase any bonds under these agreements.

Pledged Collateral

Certain FHLBanks pledged securities, as collateral, related to derivatives. (See *Note 6 - Derivatives and Hedging Activities* for additional information about the FHLBanks' pledged collateral and other credit-risk-related contingent features.)

Legal Proceedings

The FHLBanks are subject to legal proceedings arising in the normal course of business. The FHLBanks would record an accrual for a loss contingency when it is probable that a loss has been incurred and the amount can be reasonably estimated. After consultation with legal counsel, management of each FHLBank does not anticipate that the ultimate liability, if any, arising out of these matters will have a material effect on its FHLBank's financial condition, results of operations, or cash flows.

Note 13 - Subsequent Events

Subsequent events have been evaluated from October 1, 2023, through the time of this Combined Financial Report publication and no significant subsequent events were identified. Significant subsequent events do not include the declaration of dividends or repurchase or redemption of excess capital stock, which generally occur in the normal course of business unless there are regulatory or self-imposed restrictions.

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CONDITION (unaudited)

SEPTEMBER 30, 2023

(dollars in millions, except par value)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Assets							
Cash and due from banks	$ 702	$ 1	$ 319	$ 47	$ 20	$ 43	$ 21
Investments, net	412,306	(11)	18,736	39,870	25,066	53,839	40,813
Advances	826,945	—	40,131	101,488	76,202	108,091	69,786
Mortgage loans held for portfolio, net	59,783	1	2,940	2,165	4,664	107	7,076
Other assets, net	9,753	(301)	621	851	985	1,301	892
Total assets	**$ 1,309,489**	**$ (310)**	**$ 62,747**	**$ 144,421**	**$ 106,937**	**$ 163,381**	**$ 118,588**
Liabilities							
Deposits	$ 13,256	$ (9)	$ 1,151	$ 2,721	$ 856	$ 2,106	$ 1,220
Consolidated obligations							
Discount notes	304,971	(1)	20,337	36,397	12,520	34,443	24,297
Bonds	906,531	1	37,364	96,374	86,843	117,092	86,058
Total consolidated obligations	**1,211,502**	**—**	**57,701**	**132,771**	**99,363**	**151,535**	**110,355**
Mandatorily redeemable capital stock	1,402	—	6	7	28	—	19
Other liabilities	11,952	(299)	430	1,040	1,184	1,121	890
Total liabilities	**1,238,112**	**(308)**	**59,288**	**136,539**	**101,431**	**154,762**	**112,484**
Capital							
Capital stock							
Class B putable ($100 par value) issued and outstanding	44,861	1	2,007	5,750	3,841	6,165	4,535
Class A putable ($100 par value) issued and outstanding	358	—	—	—	—	—	—
Total capital stock	**45,219**	**1**	**2,007**	**5,750**	**3,841**	**6,165**	**4,535**
Retained earnings							
Unrestricted	19,942	(4)	1,338	1,291	1,191	1,708	956
Restricted	7,250	—	441	1,030	590	746	663
Total retained earnings	**27,192**	**(4)**	**1,779**	**2,321**	**1,781**	**2,454**	**1,619**
Accumulated other comprehensive income (loss)	(1,034)	1	(327)	(189)	(116)	—	(50)
Total capital	**71,377**	**(2)**	**3,459**	**7,882**	**5,506**	**8,619**	**6,104**
Total liabilities and capital	**$ 1,309,489**	**$ (310)**	**$ 62,747**	**$ 144,421**	**$ 106,937**	**$ 163,381**	**$ 118,588**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CONDITION (unaudited, continued)

SEPTEMBER 30, 2023

(dollars in millions, except par value)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Assets						
Cash and due from banks	$ 56	$ 38	$ 84	$ 36	$ 27	$ 10
Investments, net	27,122	49,294	56,667	50,708	19,967	30,235
Advances	34,782	74,963	122,258	91,338	44,322	63,584
Mortgage loans held for portfolio, net	8,261	11,064	9,546	4,982	8,207	770
Other assets, net	820	886	2,113	550	613	422
Total assets	**$ 71,041**	**$ 136,245**	**$ 190,668**	**$ 147,614**	**$ 73,136**	**$ 95,021**
Liabilities						
Deposits	$ 603	$ 690	$ 1,140	$ 1,258	$ 752	$ 768
Consolidated obligations						
Discount notes	17,458	42,088	64,315	20,931	17,893	14,293
Bonds	47,895	83,830	113,766	116,303	50,098	70,907
Total consolidated obligations	**65,353**	**125,918**	**178,081**	**137,234**	**67,991**	**85,200**
Mandatorily redeemable capital stock	368	185	12	1	—	776
Other liabilities	1,047	1,136	1,825	1,452	501	1,625
Total liabilities	**67,371**	**127,929**	**181,058**	**139,945**	**69,244**	**88,369**
Capital						
Capital stock						
Class B putable ($100 par value) issued and outstanding	2,227	3,544	6,811	5,204	2,291	2,485
Class A putable ($100 par value) issued and outstanding	—	—	—	—	358	—
Total capital stock	**2,227**	**3,544**	**6,811**	**5,204**	**2,649**	**2,485**
Retained earnings						
Unrestricted	1,092	4,000	2,161	1,826	977	3,406
Restricted	378	884	844	463	395	816
Total retained earnings	**1,470**	**4,884**	**3,005**	**2,289**	**1,372**	**4,222**
Accumulated other comprehensive income (loss)	(27)	(112)	(206)	176	(129)	(55)
Total capital	**3,670**	**8,316**	**9,610**	**7,669**	**3,892**	**6,652**
Total liabilities and capital	**$ 71,041**	**$ 136,245**	**$ 190,668**	**$ 147,614**	**$ 73,136**	**$ 95,021**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CONDITION

DECEMBER 31, 2022

(dollars in millions, except par value)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Assets							
Cash and due from banks	$ 417	$ —	$ 8	$ 27	$ 13	$ 141	$ 20
Investments, net	363,812	(114)	17,919	39,021	22,082	40,902	33,605
Advances	819,121	—	41,600	115,293	68,856	109,595	67,019
Mortgage loans held for portfolio, net	56,048	(1)	2,758	2,107	4,591	120	7,163
Other assets, net	7,849	(4)	613	943	599	864	803
Total assets	**$ 1,247,247**	**$ (119)**	**$ 62,898**	**$ 157,391**	**$ 96,141**	**$ 151,622**	**$ 108,610**
Liabilities							
Deposits	$ 10,365	$ (15)	$ 656	$ 1,027	$ 554	$ 1,821	$ 1,040
Consolidated obligations							
Discount notes	466,049	2	26,975	61,793	33,745	39,781	40,691
Bonds	695,381	(106)	31,566	85,498	56,471	101,729	59,668
Total consolidated obligations	**1,161,430**	**(104)**	**58,541**	**147,291**	**90,216**	**141,510**	**100,359**
Mandatorily redeemable capital stock	708	—	10	5	28	—	17
Other liabilities	6,937	2	276	721	446	645	692
Total liabilities	**1,179,440**	**(117)**	**59,483**	**149,044**	**91,244**	**143,976**	**102,108**
Capital							
Capital stock							
Class B putable ($100 par value) issued and outstanding	43,767	—	2,031	6,387	3,428	5,397	5,151
Class A putable ($100 par value) issued and outstanding	239	—	—	—	—	—	—
Total capital stock	**44,006**	**—**	**2,031**	**6,387**	**3,428**	**5,397**	**5,151**
Retained earnings							
Unrestricted	18,322	(1)	1,290	1,185	1,037	1,632	841
Restricted	6,232	(2)	400	911	499	651	560
Total retained earnings	**24,554**	**(3)**	**1,690**	**2,096**	**1,536**	**2,283**	**1,401**
Accumulated other comprehensive income (loss)	(753)	1	(306)	(136)	(67)	(34)	(50)
Total capital	**67,807**	**(2)**	**3,415**	**8,347**	**4,897**	**7,646**	**6,502**
Total liabilities and capital	**$ 1,247,247**	**$ (119)**	**$ 62,898**	**$ 157,391**	**$ 96,141**	**$ 151,622**	**$ 108,610**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CONDITION (continued)

DECEMBER 31, 2022

(dollars in millions, except par value)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Assets						
Cash and due from banks	$ 21	$ 35	$ 89	$ 28	$ 26	$ 9
Investments, net	27,204	49,647	43,381	40,613	19,261	30,291
Advances	36,683	66,288	111,202	68,922	44,263	89,400
Mortgage loans held for portfolio, net	7,687	10,160	8,348	4,395	7,905	815
Other assets, net	689	723	1,149	391	538	541
Total assets	**$ 72,284**	**$ 126,853**	**$ 164,169**	**$ 114,349**	**$ 71,993**	**$ 121,056**
Liabilities						
Deposits	$ 596	$ 571	$ 1,076	$ 1,339	$ 711	$ 989
Consolidated obligations						
Discount notes	27,387	59,531	69,170	46,270	24,775	35,929
Bonds	39,882	58,116	84,337	59,946	42,506	75,768
Total consolidated obligations	**67,269**	**117,647**	**153,507**	**106,216**	**67,281**	**111,697**
Mandatorily redeemable capital stock	373	248	15	7	—	5
Other liabilities	662	922	820	786	323	642
Total liabilities	**68,900**	**119,388**	**155,418**	**108,348**	**68,315**	**113,333**
Capital						
Capital stock						
Class B putable ($100 par value) issued and outstanding	2,123	2,989	6,250	3,984	2,269	3,758
Class A putable ($100 par value) issued and outstanding	—	—	—	—	239	—
Total capital stock	**2,123**	**2,989**	**6,250**	**3,984**	**2,508**	**3,758**
Retained earnings						
Unrestricted	964	3,778	1,915	1,504	915	3,262
Restricted	323	786	703	330	339	732
Total retained earnings	**1,287**	**4,564**	**2,618**	**1,834**	**1,254**	**3,994**
Accumulated other comprehensive income (loss)	(26)	(88)	(117)	183	(84)	(29)
Total capital	**3,384**	**7,465**	**8,751**	**6,001**	**3,678**	**7,723**
Total liabilities and capital	**$ 72,284**	**$ 126,853**	**$ 164,169**	**$ 114,349**	**$ 71,993**	**$ 121,056**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF INCOME (unaudited)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
September 30, 2023							
Interest income							
Advances	$ 12,067	$ 3	$ 486	$ 1,436	$ 1,071	$ 1,546	$ 1,058
Investments	5,902	(5)	341	577	392	710	607
Mortgage loans held for portfolio	494	(1)	24	17	38	2	53
Other interest income	—	(2)	1	—	—	—	—
Total interest income	**18,463**	**(5)**	**852**	**2,030**	**1,501**	**2,258**	**1,718**
Interest expense							
Consolidated obligations - Discount notes	4,157	1	258	539	221	323	446
Consolidated obligations - Bonds	11,766	(1)	478	1,209	1,080	1,667	1,034
Other interest expense	210	(2)	12	40	12	28	16
Total interest expense	**16,133**	**(2)**	**748**	**1,788**	**1,313**	**2,018**	**1,496**
Net interest income	**2,330**	**(3)**	**104**	**242**	**188**	**240**	**222**
Provision (reversal) for credit losses	8	(1)	—	—	2	—	—
Net interest income after provision (reversal) for credit losses	**2,322**	**(2)**	**104**	**242**	**186**	**240**	**222**
Non-interest income (loss)	38	(9)	2	12	14	(2)	(5)
Non-interest expense	429	(8)	28	52	26	40	28
Affordable Housing Program assessments	196	(1)	8	20	18	20	19
Net income	**$ 1,735**	**$ (2)**	**$ 70**	**$ 182**	**$ 156**	**$ 178**	**$ 170**
September 30, 2022							
Interest income							
Advances	$ 3,705	$ (1)	$ 180	$ 566	$ 271	$ 488	$ 382
Investments	2,211	(2)	161	224	144	230	234
Mortgage loans held for portfolio	411	1	21	16	34	2	52
Other interest income	—	(2)	—	—	—	—	—
Total interest income	**6,327**	**(4)**	**362**	**806**	**449**	**720**	**668**
Interest expense							
Consolidated obligations - Discount notes	2,164	—	90	253	143	283	281
Consolidated obligations - Bonds	2,720	(2)	186	380	195	345	237
Other interest expense	64	—	3	4	4	11	8
Total interest expense	**4,948**	**(2)**	**279**	**637**	**342**	**639**	**526**
Net interest income	**1,379**	**(2)**	**83**	**169**	**107**	**81**	**142**
Provision (reversal) for credit losses	13	1	—	—	2	—	—
Net interest income after provision (reversal) for credit losses	**1,366**	**(3)**	**83**	**169**	**105**	**81**	**142**
Non-interest income (loss)	10	(6)	4	24	4	1	(14)
Non-interest expense	356	(9)	21	49	25	30	26
Affordable Housing Program assessments	103	(1)	6	14	9	5	11
Net income	**$ 917**	**$ 1**	**$ 60**	**$ 130**	**$ 75**	**$ 47**	**$ 91**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF INCOME (unaudited, continued)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
September 30, 2023						
Interest income						
Advances	$ 502	$ 1,204	$ 1,740	$ 1,519	$ 635	$ 867
Investments	409	697	718	665	286	505
Mortgage loans held for portfolio	64	91	83	47	67	9
Other interest income	—	1	—	—	—	—
Total interest income	**975**	**1,993**	**2,541**	**2,231**	**988**	**1,381**
Interest expense						
Consolidated obligations - Discount notes	233	607	671	355	285	218
Consolidated obligations - Bonds	599	1,068	1,517	1,573	579	963
Other interest expense	15	21	13	18	8	29
Total interest expense	**847**	**1,696**	**2,201**	**1,946**	**872**	**1,210**
Net interest income	**128**	**297**	**340**	**285**	**116**	**171**
Provision (reversal) for credit losses	—	—	—	—	—	7
Net interest income after provision (reversal) for credit losses	**128**	**297**	**340**	**285**	**116**	**164**
Non-interest income (loss)	—	(16)	3	20	12	7
Non-interest expense	26	78	48	30	26	55
Affordable Housing Program assessments	11	20	30	28	10	13
Net income	**$ 91**	**$ 183**	**$ 265**	**$ 247**	**$ 92**	**$ 103**
September 30, 2022						
Interest income						
Advances	$ 187	$ 366	$ 442	$ 268	$ 211	$ 345
Investments	162	248	227	198	122	263
Mortgage loans held for portfolio	53	73	62	31	58	8
Other interest income	—	1	—	—	1	—
Total interest income	**402**	**688**	**731**	**497**	**392**	**616**
Interest expense						
Consolidated obligations - Discount notes	108	196	264	118	118	310
Consolidated obligations - Bonds	218	341	266	235	176	143
Other interest expense	4	9	4	8	3	6
Total interest expense	**330**	**546**	**534**	**361**	**297**	**459**
Net interest income	**72**	**142**	**197**	**136**	**95**	**157**
Provision (reversal) for credit losses	—	1	—	—	—	9
Net interest income after provision (reversal) for credit losses	**72**	**141**	**197**	**136**	**95**	**148**
Non-interest income (loss)	7	27	(12)	(6)	(1)	(18)
Non-interest expense	28	62	39	25	19	41
Affordable Housing Program assessments	5	11	15	11	8	9
Net income	**$ 46**	**$ 95**	**$ 131**	**$ 94**	**$ 67**	**$ 80**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES
STATEMENTS OF INCOME (unaudited)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
September 30, 2023							
Interest income							
Advances	$ 36,538	$ 2	$ 1,588	$ 4,494	$ 3,121	$ 5,091	$ 3,396
Investments	16,576	(5)	936	1,719	1,066	1,976	1,659
Mortgage loans held for portfolio	1,388	(2)	67	51	109	5	158
Other interest income	1	(6)	1	—	—	—	1
Total interest income	**54,503**	**(11)**	**2,592**	**6,264**	**4,296**	**7,072**	**5,214**
Interest expense							
Consolidated obligations - Discount notes	15,140	(3)	920	1,871	944	1,362	1,762
Consolidated obligations - Bonds	32,123	(2)	1,350	3,559	2,779	4,986	2,762
Other interest expense	519	(7)	26	87	27	76	41
Total interest expense	**47,782**	**(12)**	**2,296**	**5,517**	**3,750**	**6,424**	**4,565**
Net interest income	**6,721**	**1**	**296**	**747**	**546**	**648**	**649**
Provision (reversal) for credit losses	16	—	—	2	4	—	—
Net interest income after provision (reversal) for credit losses	**6,705**	**1**	**296**	**745**	**542**	**648**	**649**
Non-interest income (loss)	212	(24)	10	71	44	2	21
Non-interest expense	1,263	(23)	77	154	80	122	98
Affordable Housing Program assessments	570	—	23	66	51	53	57
Net income	**$ 5,084**	**$ —**	**$ 206**	**$ 596**	**$ 455**	**$ 475**	**$ 515**
September 30, 2022							
Interest income							
Advances	$ 5,750	$ (1)	$ 287	$ 915	$ 382	$ 723	$ 551
Investments	3,854	(6)	289	451	244	349	411
Mortgage loans held for portfolio	1,190	1	64	49	100	5	151
Other interest income	1	(2)	—	—	—	—	—
Total interest income	**10,795**	**(8)**	**640**	**1,415**	**726**	**1,077**	**1,113**
Interest expense							
Consolidated obligations - Discount notes	2,880	(1)	117	350	182	370	376
Consolidated obligations - Bonds	4,390	(2)	308	620	319	473	431
Other interest expense	96	(2)	3	7	7	14	12
Total interest expense	**7,366**	**(5)**	**428**	**977**	**508**	**857**	**819**
Net interest income	**3,429**	**(3)**	**212**	**438**	**218**	**220**	**294**
Provision (reversal) for credit losses	19	—	—	—	5	—	—
Net interest income after provision (reversal) for credit losses	**3,410**	**(3)**	**212**	**438**	**213**	**220**	**294**
Non-interest income (loss)	(85)	(21)	9	(4)	4	7	(51)
Non-interest expense	1,071	(23)	78	142	71	105	78
Affordable Housing Program assessments	228	1	14	29	15	12	17
Net income	**$ 2,026**	**$ (2)**	**$ 129**	**$ 263**	**$ 131**	**$ 110**	**$ 148**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES
STATEMENTS OF INCOME (unaudited, continued)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
September 30, 2023						
Interest income						
Advances	$ 1,428	$ 3,316	$ 4,742	$ 4,391	$ 1,785	$ 3,184
Investments	1,134	1,906	2,022	1,805	806	1,552
Mortgage loans held for portfolio	181	253	226	128	191	21
Other interest income	—	3	1	—	1	—
Total interest income	**2,743**	**5,478**	**6,991**	**6,324**	**2,783**	**4,757**
Interest expense						
Consolidated obligations - Discount notes	759	1,894	2,133	1,611	837	1,050
Consolidated obligations - Bonds	1,589	2,756	3,864	3,891	1,581	3,008
Other interest expense	40	55	35	53	24	62
Total interest expense	**2,388**	**4,705**	**6,032**	**5,555**	**2,442**	**4,120**
Net interest income	**355**	**773**	**959**	**769**	**341**	**637**
Provision (reversal) for credit losses	—	—	1	2	—	7
Net interest income after provision (reversal) for credit losses	**355**	**773**	**958**	**767**	**341**	**630**
Non-interest income (loss)	39	(20)	(29)	71	42	(15)
Non-interest expense	88	204	144	102	69	148
Affordable Housing Program assessments	32	56	79	74	31	48
Net income	**$ 274**	**$ 493**	**$ 706**	**$ 662**	**$ 283**	**$ 419**
September 30, 2022						
Interest income						
Advances	$ 289	$ 622	$ 737	$ 417	$ 327	$ 501
Investments	273	441	380	351	212	459
Mortgage loans held for portfolio	152	207	171	83	169	38
Other interest income	—	2	—	—	1	—
Total interest income	**714**	**1,272**	**1,288**	**851**	**709**	**998**
Interest expense						
Consolidated obligations - Discount notes	138	259	372	170	148	399
Consolidated obligations - Bonds	369	544	489	342	292	205
Other interest expense	7	18	6	11	5	8
Total interest expense	**514**	**821**	**867**	**523**	**445**	**612**
Net interest income	**200**	**451**	**421**	**328**	**264**	**386**
Provision (reversal) for credit losses	—	2	3	—	—	9
Net interest income after provision (reversal) for credit losses	**200**	**449**	**418**	**328**	**264**	**377**
Non-interest income (loss)	(2)	42	13	(33)	(18)	(31)
Non-interest expense	79	178	115	72	59	117
Affordable Housing Program assessments	12	32	32	22	19	23
Net income	**$ 107**	**$ 281**	**$ 284**	**$ 201**	**$ 168**	**$ 206**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES
STATEMENTS OF COMPREHENSIVE INCOME (unaudited)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
September 30, 2023							
Net income	**$ 1,735**	**$ (2)**	**$ 70**	**$ 182**	**$ 156**	**$ 178**	**$ 170**
Other comprehensive income							
Net unrealized gains (losses) on available-for-sale securities	(533)	—	(59)	(79)	(65)	2	(16)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	—	—	—	—	—	—
Net unrealized gains (losses) relating to hedging activities	58	1	24	16	—	—	—
Pension and postretirement benefits	(2)	(2)	—	—	—	—	—
Total other comprehensive income (loss)	**(477)**	**(1)**	**(35)**	**(63)**	**(65)**	**2**	**(16)**
Comprehensive income (loss)	**$ 1,258**	**$ (3)**	**$ 35**	**$ 119**	**$ 91**	**$ 180**	**$ 154**
September 30, 2022							
Net income	**$ 917**	**$ 1**	**$ 60**	**$ 130**	**$ 75**	**$ 47**	**$ 91**
Other comprehensive income							
Net unrealized gains (losses) on available-for-sale securities	(579)	1	(54)	(113)	(72)	(5)	(10)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	(1)	—	1	—	—	—
Net unrealized gains (losses) relating to hedging activities	184	2	26	74	—	—	—
Pension and postretirement benefits	3	(1)	—	—	1	—	—
Total other comprehensive income (loss)	**(392)**	**1**	**(28)**	**(38)**	**(71)**	**(5)**	**(10)**
Comprehensive income (loss)	**$ 525**	**$ 2**	**$ 32**	**$ 92**	**$ 4**	**$ 42**	**$ 81**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF COMPREHENSIVE INCOME (unaudited, continued)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
September 30, 2023						
Net income	$ 91	$ 183	$ 265	$ 247	$ 92	$ 103
Other comprehensive income						
Net unrealized gains (losses) on available-for-sale securities	(17)	(64)	(100)	(55)	(45)	(35)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	—	—	—	—	—
Net unrealized gains (losses) relating to hedging activities	—	5	—	12	—	—
Pension and postretirement benefits	—	—	1	—	—	(1)
Total other comprehensive income (loss)	**(17)**	**(59)**	**(99)**	**(43)**	**(45)**	**(36)**
Comprehensive income (loss)	**$ 74**	**$ 124**	**$ 166**	**$ 204**	**$ 47**	**$ 67**
September 30, 2022						
Net income	$ 46	$ 95	$ 131	$ 94	$ 67	$ 80
Other comprehensive income						
Net unrealized gains (losses) on available-for-sale securities	(16)	(152)	(64)	23	(29)	(88)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	—	—	—	—	—
Net unrealized gains (losses) relating to hedging activities	—	34	—	48	—	—
Pension and postretirement benefits	1	1	1	—	—	—
Total other comprehensive income (loss)	**(15)**	**(117)**	**(63)**	**71**	**(29)**	**(88)**
Comprehensive income (loss)	**$ 31**	**$ (22)**	**$ 68**	**$ 165**	**$ 38**	**$ (8)**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF COMPREHENSIVE INCOME (unaudited)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
September 30, 2023							
Net income	**$ 5,084**	**$ —**	**$ 206**	**$ 596**	**$ 455**	**$ 475**	**$ 515**
Other comprehensive income							
Net unrealized gains (losses) on available-for-sale securities	(368)	—	(49)	(73)	(49)	34	—
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	3	—	—	—	—	—	—
Net unrealized gains (losses) relating to hedging activities	63	2	28	20	—	—	—
Pension and postretirement benefits	21	(2)	—	—	—	—	—
Total other comprehensive income (loss)	**(281)**	**—**	**(21)**	**(53)**	**(49)**	**34**	**—**
Comprehensive income (loss)	**$ 4,803**	**$ —**	**$ 185**	**$ 543**	**$ 406**	**$ 509**	**$ 515**
September 30, 2022							
Net income	**$ 2,026**	**$ (2)**	**$ 129**	**$ 263**	**$ 131**	**$ 110**	**$ 148**
Other comprehensive income							
Net unrealized gains (losses) on available-for-sale securities	(2,379)	(1)	(346)	(403)	(177)	(36)	(57)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	1	(1)	—	1	—	—	—
Net unrealized gains (losses) relating to hedging activities	537	1	73	210	—	—	—
Pension and postretirement benefits	—	(1)	—	1	1	1	1
Total other comprehensive income (loss)	**(1,841)**	**(2)**	**(273)**	**(191)**	**(176)**	**(35)**	**(56)**
Comprehensive income (loss)	**$ 185**	**$ (4)**	**$ (144)**	**$ 72**	**$ (45)**	**$ 75**	**$ 92**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF COMPREHENSIVE INCOME (unaudited, continued)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
September 30, 2023						
Net income	**$ 274**	**$ 493**	**$ 706**	**$ 662**	**$ 283**	**$ 419**
Other comprehensive income						
Net unrealized gains (losses) on available-for-sale securities	(3)	(44)	(90)	(24)	(45)	(25)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	—	—	3	—	—
Net unrealized gains (losses) relating to hedging activities	—	(1)	—	14	—	—
Pension and postretirement benefits	2	21	1	—	—	(1)
Total other comprehensive income (loss)	**(1)**	**(24)**	**(89)**	**(7)**	**(45)**	**(26)**
Comprehensive income (loss)	**$ 273**	**$ 469**	**$ 617**	**$ 655**	**$ 238**	**$ 393**
September 30, 2022						
Net income	**$ 107**	**$ 281**	**$ 284**	**$ 201**	**$ 168**	**$ 206**
Other comprehensive income						
Net unrealized gains (losses) on available-for-sale securities	(136)	(532)	(175)	(74)	(125)	(317)
Net non-credit portion of other-than-temporary impairment gains (losses) on held-to-maturity securities	—	—	—	1	—	—
Net unrealized gains (losses) relating to hedging activities	—	115	—	138	—	—
Pension and postretirement benefits	2	(2)	(1)	—	—	(2)
Total other comprehensive income (loss)	**(134)**	**(419)**	**(176)**	**65**	**(125)**	**(319)**
Comprehensive income (loss)	**$ (27)**	**$ (138)**	**$ 108**	**$ 266**	**$ 43**	**$ (113)**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CAPITAL (unaudited)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Balance, June 30, 2023	**$ 73,440**	**$ 2**	**$ 3,470**	**$ 8,518**	**$ 5,640**	**$ 7,945**	**$ 7,397**
Comprehensive income (loss)	1,258	(3)	35	119	91	180	154
Proceeds from issuance of capital stock	11,726	4	1,366	1,173	958	2,718	539
Repurchases/redemptions of capital stock	(13,757)	(3)	(1,363)	(1,735)	(1,097)	(2,097)	(1,592)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	(475)	1	(2)	(50)	(5)	—	(261)
Dividends of capital stock	155	1	—	—	—	—	—
Dividends							
Cash	(815)	(3)	(47)	(143)	(81)	(127)	(133)
Stock	(155)	(1)	—	—	—	—	—
Balance, September 30, 2023	**$ 71,377**	**$ (2)**	**$ 3,459**	**$ 7,882**	**$ 5,506**	**$ 8,619**	**$ 6,104**
Balance, June 30, 2022	**$ 55,583**	**$ (1)**	**$ 2,948**	**$ 6,763**	**$ 3,497**	**$ 5,642**	**$ 5,695**
Comprehensive income (loss)	525	2	32	92	4	42	81
Proceeds from issuance of capital stock	16,813	—	944	2,039	1,883	2,454	1,202
Repurchases/redemptions of capital stock	(10,767)	(2)	(783)	(1,643)	(890)	(1,654)	(208)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	(1,108)	(2)	—	(4)	(6)	(1)	(945)
Dividends of capital stock	47	—	—	—	—	—	—
Dividends							
Cash	(315)	—	(11)	(64)	(25)	(33)	(44)
Stock	(47)	—	—	—	—	—	—
Balance, September 30, 2022	**$ 60,731**	**$ (3)**	**$ 3,130**	**$ 7,183**	**$ 4,463**	**$ 6,450**	**$ 5,781**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CAPITAL (unaudited, continued)

THREE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Balance, June 30, 2023	**$ 3,784**	**$ 8,254**	**$ 9,196**	**$ 8,575**	**$ 3,896**	**$ 6,763**
Comprehensive income (loss)	74	124	166	204	47	67
Proceeds from issuance of capital stock	46	998	2,362	469	847	246
Repurchases/redemptions of capital stock	(200)	(987)	(1,999)	(1,579)	(745)	(360)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	—	(3)	(1)	—	(153)	(1)
Dividends of capital stock	—	—	—	98	56	—
Dividends						
Cash	(34)	(70)	(114)	—	—	(63)
Stock	—	—	—	(98)	(56)	—
Balance, September 30, 2023	**$ 3,670**	**$ 8,316**	**$ 9,610**	**$ 7,669**	**$ 3,892**	**$ 6,652**
Balance, June 30, 2022	**$ 3,476**	**$ 6,886**	**$ 6,305**	**$ 4,632**	**$ 2,996**	**$ 6,744**
Comprehensive income (loss)	31	(22)	68	165	38	(8)
Proceeds from issuance of capital stock	74	758	3,300	867	996	2,296
Repurchases/redemptions of capital stock	1	(524)	(2,088)	(662)	(590)	(1,724)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	—	—	(2)	—	(144)	(4)
Dividends of capital stock	—	—	—	10	37	—
Dividends						
Cash	(18)	(29)	(51)	—	—	(40)
Stock	—	—	—	(10)	(37)	—
Balance, September 30, 2022	**$ 3,564**	**$ 7,069**	**$ 7,532**	**$ 5,002**	**$ 3,296**	**$ 7,264**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES
STATEMENTS OF CAPITAL (unaudited)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Balance, December 31, 2022	**$ 67,807**	**$ (2)**	**$ 3,415**	**$ 8,347**	**$ 4,897**	**$ 7,646**	**$ 6,502**
Comprehensive income (loss)	4,803	—	185	543	406	509	515
Proceeds from issuance of capital stock	53,283	2	4,129	7,804	4,314	10,398	4,169
Repurchases/redemptions of capital stock	(49,891)	(2)	(4,151)	(8,387)	(3,888)	(9,628)	(4,211)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	(2,551)	—	(2)	(54)	(13)	(2)	(574)
Dividends of capital stock	372	1	—	—	—	—	—
Dividends							
Cash	(2,074)	—	(117)	(371)	(210)	(304)	(297)
Stock	(372)	(1)	—	—	—	—	—
Balance, September 30, 2023	**$ 71,377**	**$ (2)**	**$ 3,459**	**$ 7,882**	**$ 5,506**	**$ 8,619**	**$ 6,104**
Balance, December 31, 2021	**$ 49,122**	**$ 1**	**$ 2,531**	**$ 6,446**	**$ 2,734**	**$ 4,595**	**$ 3,796**
Comprehensive income (loss)	185	(4)	(144)	72	(45)	75	92
Proceeds from issuance of capital stock	40,821	2	3,005	5,051	4,043	5,977	4,546
Repurchases/redemptions of capital stock	(25,263)	(1)	(2,232)	(3,959)	(2,214)	(4,095)	(208)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	(3,377)	(1)	(9)	(262)	(6)	(24)	(2,365)
Dividends of capital stock	101	—	—	—	—	—	—
Dividends							
Cash	(757)	—	(21)	(165)	(49)	(78)	(80)
Stock	(101)	—	—	—	—	—	—
Balance, September 30, 2022	**$ 60,731**	**$ (3)**	**$ 3,130**	**$ 7,183**	**$ 4,463**	**$ 6,450**	**$ 5,781**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CAPITAL (unaudited, continued)

NINE MONTHS ENDED SEPTEMBER 30, 2023 AND 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Balance, December 31, 2022	**$ 3,384**	**$ 7,465**	**$ 8,751**	**$ 6,001**	**$ 3,678**	**$ 7,723**
Comprehensive income (loss)	273	469	617	655	238	393
Proceeds from issuance of capital stock	304	3,249	8,705	4,931	2,510	2,768
Repurchases/redemptions of capital stock	(200)	(2,690)	(8,143)	(3,916)	(1,886)	(2,789)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	—	(4)	(1)	(2)	(647)	(1,252)
Dividends of capital stock	—	—	—	207	164	—
Dividends						
Cash	(91)	(173)	(319)	—	(1)	(191)
Stock	—	—	—	(207)	(164)	—
Balance, September 30, 2023	**$ 3,670**	**$ 8,316**	**$ 9,610**	**$ 7,669**	**$ 3,892**	**$ 6,652**
Balance, December 31, 2021	**$ 3,556**	**$ 6,752**	**$ 5,838**	**$ 3,934**	**$ 2,715**	**$ 6,224**
Comprehensive income (loss)	(27)	(138)	108	266	43	(113)
Proceeds from issuance of capital stock	241	1,621	6,012	2,387	2,551	5,385
Repurchases/redemptions of capital stock	(161)	(1,034)	(4,285)	(1,576)	(1,410)	(4,088)
Net shares reclassified (to)/ from mandatorily redeemable capital stock	—	(57)	(5)	(9)	(603)	(36)
Dividends of capital stock	—	—	—	18	83	—
Dividends						
Cash	(45)	(75)	(136)	—	—	(108)
Stock	—	—	—	(18)	(83)	—
Balance, September 30, 2022	**$ 3,564**	**$ 7,069**	**$ 7,532**	**$ 5,002**	**$ 3,296**	**$ 7,264**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES
STATEMENTS OF CASH FLOWS (unaudited)

NINE MONTHS ENDED SEPTEMBER 30, 2023

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Operating activities							
Net cash provided by (used in) operating activities	**$ 12,335**	**$ (2)**	**$ 481**	**$ 1,174**	**$ 752**	**$ 640**	**$ 1,151**
Investing activities							
Net change/net proceeds and payments in							
Loans to FHLBanks	—	300	—	—	—	—	—
Investments	(49,023)	(105)	(826)	(682)	(2,853)	(12,481)	(7,275)
Advances	(10,462)	—	1,415	13,707	(7,468)	1,230	(2,998)
Mortgage loans held for portfolio	(3,831)	—	(186)	(64)	(80)	13	71
Other investing activities	(58)	1	(8)	(7)	(2)	(6)	(5)
Net cash provided by (used in) investing activities	**(63,374)**	**196**	**395**	**12,954**	**(10,403)**	**(11,244)**	**(10,207)**
Financing activities							
Net change in deposits and pass-through reserves, and other financing activities	3,567	(1)	507	1,694	326	291	423
Net change in loans from FHLBanks	—	(300)	—	—	—	—	—
Net proceeds (payments) on derivative contracts with financing element	135	—	36	(2)	—	—	—
Net proceeds from issuance of consolidated obligations							
Discount notes	4,461,405	(2)	109,089	206,274	473,218	207,168	145,979
Bonds	847,639	—	25,246	89,931	76,646	154,363	106,197
Consolidated obligation discount notes transferred from other FHLBanks	—	(11,157)	—	5,943	—	—	—
Consolidated obligation bonds transferred from other FHLBanks	—	(1,250)	—	—	—	—	250
Payments for maturing and retiring consolidated obligations							
Discount notes	(4,623,084)	2	(115,784)	(237,692)	(494,402)	(201,321)	(162,510)
Bonds	(637,799)	106	(19,514)	(79,250)	(46,333)	(139,051)	(80,371)
Consolidated obligation discount notes transferred to other FHLBanks	—	11,158	—	—	—	(11,158)	—
Consolidated obligation bonds transferred to other FHLBanks	—	1,250	—	—	—	(250)	—
Proceeds from issuance of capital stock	53,283	2	4,129	7,804	4,314	10,398	4,169
Payments for repurchases/ redemptions of capital stock	(49,891)	(2)	(4,151)	(8,387)	(3,888)	(9,628)	(4,211)
Payments for repurchases/ redemptions of mandatorily redeemable capital stock	(1,857)	1	(6)	(52)	(13)	(2)	(572)
Cash dividends paid	(2,074)	—	(117)	(371)	(210)	(304)	(297)
Net cash provided by (used in) financing activities	**51,324**	**(193)**	**(565)**	**(14,108)**	**9,658**	**10,506**	**9,057**
Net increase (decrease) in cash and due from banks	285	1	311	20	7	(98)	1
Cash and due from banks at beginning of the period	417	—	8	27	13	141	20
Cash and due from banks at end of the period	**$ 702**	**$ 1**	**$ 319**	**$ 47**	**$ 20**	**$ 43**	**$ 21**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CASH FLOWS (unaudited, continued)

NINE MONTHS ENDED SEPTEMBER 30, 2023

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Operating activities						
Net cash provided by (used in) operating activities	**$ 741**	**$ 1,975**	**$ 2,190**	**$ 1,432**	**$ 657**	**$ 1,144**
Investing activities						
Net change/net proceeds and payments in						
Loans to FHLBanks	—	—	(300)	—	—	—
Investments	146	(768)	(13,925)	(9,856)	(741)	343
Advances	1,663	(8,881)	(11,509)	(22,991)	(190)	25,560
Mortgage loans held for portfolio	(585)	(922)	(1,213)	(595)	(314)	44
Other investing activities	(3)	(9)	(10)	(4)	(3)	(2)
Net cash provided by (used in) investing activities	**1,221**	**(10,580)**	**(26,957)**	**(33,446)**	**(1,248)**	**25,945**
Financing activities						
Net change in deposits and pass-through reserves, and other financing activities	13	119	162	125	32	(124)
Net change in loans from FHLBanks	—	—	—	—	—	300
Net proceeds (payments) on derivative contracts with financing element	7	—	—	63	17	14
Net proceeds from issuance of consolidated obligations						
Discount notes	585,952	607,418	1,328,205	375,539	316,687	105,878
Bonds	18,411	40,556	106,001	117,110	39,928	73,250
Consolidated obligation discount notes transferred from other FHLBanks	948	4,266	—	—	—	—
Consolidated obligation bonds transferred from other FHLBanks	—	—	—	1,000	—	—
Payments for maturing and retiring consolidated obligations						
Discount notes	(596,814)	(629,156)	(1,333,297)	(400,979)	(323,661)	(127,470)
Bonds	(10,452)	(14,914)	(76,548)	(61,842)	(31,387)	(78,243)
Consolidated obligation discount notes transferred to other FHLBanks	—	—	—	—	—	—
Consolidated obligation bonds transferred to other FHLBanks	—	—	—	—	(1,000)	—
Proceeds from issuance of capital stock	304	3,249	8,705	4,931	2,510	2,768
Payments for repurchases/ redemptions of capital stock	(200)	(2,690)	(8,143)	(3,916)	(1,886)	(2,789)
Payments for repurchases/ redemptions of mandatorily redeemable capital stock	(5)	(67)	(4)	(9)	(647)	(481)
Cash dividends paid	(91)	(173)	(319)	—	(1)	(191)
Net cash provided by (used in) financing activities	**(1,927)**	**8,608**	**24,762**	**32,022**	**592**	**(27,088)**
Net increase (decrease) in cash and due from banks	35	3	(5)	8	1	1
Cash and due from banks at beginning of the period	21	35	89	28	26	9
Cash and due from banks at end of the period	**$ 56**	**$ 38**	**$ 84**	**$ 36**	**$ 27**	**$ 10**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CASH FLOWS (unaudited)

NINE MONTHS ENDED SEPTEMBER 30, 2022

(dollars in millions)	Combined	Combining Adjustments	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Operating activities							
Net cash provided by (used in) operating activities	**$ 17,766**	**$ —**	**$ 1,720**	**$ 2,125**	**$ 1,066**	**$ 1,329**	**$ 1,958**
Investing activities							
Net change/net proceeds and payments in							
Loans to FHLBanks	—	2,320	—	—	—	(1,300)	—
Investments	(91,848)	4	(8,426)	(6,895)	(6,183)	(15,232)	(15,999)
Advances	(314,071)	(1)	(21,562)	(22,376)	(44,704)	(48,971)	(37,226)
Mortgage loans held for portfolio	(731)	—	291	178	63	25	259
Other investing activities	(43)	(1)	—	(6)	1	(9)	(1)
Net cash provided by (used in) investing activities	**(406,693)**	**2,322**	**(29,697)**	**(29,099)**	**(50,823)**	**(65,487)**	**(52,967)**
Financing activities							
Net change in deposits and pass-through reserves, and other financing activities	(1,784)	—	54	(231)	(416)	308	(166)
Net change in loans from FHLBanks	—	(2,320)	—	—	—	—	—
Net proceeds (payments) on derivative contracts with financing element	334	—	125	—	—	(3)	—
Net proceeds from issuance of consolidated obligations							
Discount notes	4,249,048	1	159,723	583,950	237,077	649,147	216,828
Bonds	370,027	—	16,291	42,859	34,278	55,627	60,565
Payments for maturing and retiring consolidated obligations							
Discount notes	(4,011,769)	(1)	(140,343)	(577,235)	(216,132)	(619,021)	(195,790)
Bonds	(231,661)	(2)	(8,781)	(23,044)	(7,235)	(24,489)	(32,645)
Proceeds from issuance of capital stock	40,821	2	3,005	5,051	4,043	5,977	4,546
Payments for repurchases/ redemptions of capital stock	(25,263)	(1)	(2,232)	(3,959)	(2,214)	(4,095)	(208)
Payments for repurchases/ redemptions of mandatorily redeemable capital stock	(3,204)	—	(13)	(253)	—	(25)	(2,188)
Cash dividends paid	(757)	—	(21)	(165)	(49)	(78)	(80)
Net cash provided by (used in) financing activities	**385,792**	**(2,321)**	**27,808**	**26,973**	**49,352**	**63,348**	**50,862**
Net increase (decrease) in cash and due from banks	(3,135)	1	(169)	(1)	(405)	(810)	(147)
Cash and due from banks at beginning of the period	3,532	(2)	205	22	428	879	168
Cash and due from banks at end of the period	**$ 397**	**$ (1)**	**$ 36**	**$ 21**	**$ 23**	**$ 69**	**$ 21**

FEDERAL HOME LOAN BANKS CONDENSED COMBINING SCHEDULES STATEMENTS OF CASH FLOWS (unaudited, continued)

NINE MONTHS ENDED SEPTEMBER 30, 2022

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Operating activities						
Net cash provided by (used in) operating activities	**$ 1,405**	**$ 1,498**	**$ 1,971**	**$ 1,798**	**$ 1,087**	**$ 1,809**
Investing activities						
Net change/net proceeds and payments in						
Loans to FHLBanks	—	—	(1,020)	—	—	—
Investments	(5,041)	(3,154)	(7,837)	(10,450)	(4,803)	(7,832)
Advances	(4,533)	(13,148)	(39,295)	(20,409)	(12,305)	(49,541)
Mortgage loans held for portfolio	(102)	(262)	(695)	(759)	112	159
Other investing activities	(3)	(13)	(8)	(3)	2	(2)
Net cash provided by (used in) investing activities	**(9,679)**	**(16,577)**	**(48,855)**	**(31,621)**	**(16,994)**	**(57,216)**
Financing activities						
Net change in deposits and pass-through reserves, and other financing activities	(638)	(359)	(505)	149	(223)	243
Net change in loans from FHLBanks	—	—	—	—	—	2,320
Net proceeds (payments) on derivative contracts with financing element	(1)	—	—	235	(11)	(11)
Net proceeds from issuance of consolidated obligations						
Discount notes	642,682	610,091	643,483	86,403	245,269	174,394
Bonds	13,648	17,287	44,684	28,530	31,196	25,062
Payments for maturing and retiring consolidated obligations						
Discount notes	(633,562)	(594,286)	(601,751)	(67,902)	(229,225)	(136,521)
Bonds	(14,729)	(18,109)	(40,836)	(18,872)	(31,636)	(11,283)
Proceeds from issuance of capital stock	241	1,621	6,012	2,387	2,551	5,385
Payments for repurchases/ redemptions of capital stock	(161)	(1,034)	(4,285)	(1,576)	(1,410)	(4,088)
Payments for repurchases/ redemptions of mandatorily redeemable capital stock	(7)	(57)	(19)	(3)	(604)	(35)
Cash dividends paid	(45)	(75)	(136)	—	—	(108)
Net cash provided by (used in) financing activities	**7,428**	**15,079**	**46,647**	**29,351**	**15,907**	**55,358**
Net increase (decrease) in cash and due from banks	(846)	—	(237)	(472)	—	(49)
Cash and due from banks at beginning of the period	868	45	295	543	26	55
Cash and due from banks at end of the period	**$ 22**	**$ 45**	**$ 58**	**$ 71**	**$ 26**	**$ 6**

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SELECTED FINANCIAL DATA

(dollars in millions)	2023 September 30,	2023 June 30,	2023 March 31,	2022 December 31,	2022 September 30,
Selected Statement of Condition Data at					
Investments[1]	$ 412,306	$ 469,504	$ 450,254	$ 363,812	$ 377,331
Advances	826,945	882,057	1,044,614	819,121	655,032
Mortgage loans held for portfolio	59,783	57,607	56,228	56,048	56,012
Total assets	**1,309,489**	**1,421,817**	**1,564,170**	**1,247,247**	**1,094,921**
Deposits	13,256	13,314	15,129	10,365	11,990
Consolidated obligations					
Discount notes	304,971	365,472	515,041	466,049	449,250
Bonds	906,531	955,516	944,074	695,381	562,769
Total consolidated obligations	**1,211,502**	**1,320,988**	**1,459,115**	**1,161,430**	**1,012,019**
Mandatorily redeemable capital stock	1,402	1,538	798	708	571
Capital					
Total capital stock[2]	**45,219**	**47,570**	**53,362**	**44,006**	**37,347**
Retained earnings	27,192	26,427	25,388	24,554	23,928
Accumulated other comprehensive income (loss)	(1,034)	(557)	(1,175)	(753)	(544)
Total capital	**71,377**	**73,440**	**77,575**	**67,807**	**60,731**
Selected Statement of Income Data for the quarter ended					
Net interest income	$ 2,330	$ 2,372	$ 2,019	$ 1,720	$ 1,379
Provision (reversal) for credit losses	8	8	—	8	13
Net interest income after provision (reversal) for credit losses	**2,322**	**2,364**	**2,019**	**1,712**	**1,366**
Non-interest income (loss)	38	106	68	(39)	10
Non-interest expense	429	426	408	406	356
Affordable Housing Program assessments	196	205	169	127	103
Net income	**$ 1,735**	**$ 1,839**	**$ 1,510**	**$ 1,140**	**$ 917**
Selected Other Data for the quarter ended					
Cash and stock dividends	$ 970	$ 800	$ 676	$ 514	$ 362
Dividend payout ratio[3]	55.91 %	43.50 %	44.77 %	45.09 %	39.48 %
Return on average equity (annualized)[4][5]	9.62 %	9.54 %	8.61 %	7.03 %	6.28 %
Return on average assets (annualized)	0.51 %	0.47 %	0.45 %	0.38 %	0.36 %
Average equity to average assets[5]	5.29 %	4.92 %	5.18 %	5.34 %	5.66 %
Net interest margin (annualized)[6]	0.69 %	0.61 %	0.60 %	0.57 %	0.54 %
Selected Other Data at					
GAAP capital-to-asset ratio	5.45 %	5.17 %	4.96 %	5.44 %	5.55 %
Regulatory capital-to-assets ratio[7]	5.64 %	5.31 %	5.09 %	5.55 %	5.65 %

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(1) Investments consist of interest-bearing deposits, securities purchased under agreements to resell, federal funds sold, trading securities, available-for-sale securities (AFS), and held-to-maturity securities (HTM).

(2) FHLBank capital stock is redeemable at the request of a member subject to the statutory redemption periods and other conditions and limitations. (See *Note 9 - Capital* to the accompanying combined financial statements for additional information on the statutory redemption periods and other conditions and limitations.)

(3) Dividend payout ratio is equal to dividends declared in the period expressed as a percentage of net income in the period. This ratio may not be as relevant to the combined balances because there are no shareholders at the FHLBank System-wide level.

(4) Return on average equity is equal to net income expressed as a percentage of average total capital.

(5) Mandatorily redeemable capital stock is not included in the calculations of return on average equity or average equity to average assets.

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

(7) The regulatory capital-to-assets ratio is calculated based on the FHLBanks' combined regulatory capital as a percentage of total assets. (See *Note 9 - Capital* to the accompanying combined financial statements for a definition and discussion of regulatory capital.)

FINANCIAL DISCUSSION AND ANALYSIS OF COMBINED FINANCIAL CONDITION AND COMBINED RESULTS OF OPERATIONS

Investors should read this financial discussion and analysis of combined financial condition and combined results of operations together with the combined financial statements and the accompanying notes in this Combined Financial Report of the Federal Home Loan Banks (FHLBanks). Each FHLBank discusses its financial condition and results of operations in its periodic reports filed with the SEC. The results of operations for interim periods are not necessarily indicative of the results to be expected for the year ending December 31, 2023, or for any future period. The unaudited combined financial statements, included in this Combined Financial Report, should be read in conjunction with the audited combined financial statements for the year ended December 31, 2022, included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022.

Each FHLBank's Annual Report on SEC Form 10-K and Quarterly Reports on SEC Form 10-Q contain, as required by applicable SEC rules, a "Management's Discussion and Analysis of Financial Condition and Results of Operations," commonly called MD&A. The SEC notes that one of the principal objectives of MD&A is "to provide a narrative explanation of a company's financial statements that enables investors to see the company through the eyes of management." Because there is no centralized management of the FHLBanks that can provide a system-wide "eyes of management" view of the FHLBanks as a whole, this Combined Financial Report does not contain a conventional MD&A. Instead, a "Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations" is prepared by the Office of Finance using information provided by each FHLBank. This Financial Discussion and Analysis does not generally include a separate discussion of how each FHLBank's operations affect the combined financial condition and combined results of operations. That level of information about each FHLBank is addressed in each respective FHLBank's periodic reports filed with the SEC. (See *Explanatory Statement about Federal Home Loan Banks Combined Financial Report* and *Supplemental Information - Individual Federal Home Loan Bank Selected Financial Data and Financial Ratios*.)

The combined financial statements include the financial results of the FHLBanks. (See *Condensed Combining Schedules* to the accompanying combined financial statements for information regarding each FHLBank's results.) Transactions between the FHLBanks have been eliminated in accordance with combination accounting principles similar to consolidation under GAAP.

Unless otherwise stated, dollar amounts disclosed in this Combined Financial Report represent values rounded to the nearest million. Dollar amounts rounding to less than one million are not reflected in this Combined Financial Report.

Forward-Looking Information

Statements contained in this report, including statements describing the objectives, projections, estimates, or predictions of the future of the FHLBanks and the Office of Finance, may be "forward-looking statements." These statements may use forward-looking terminology, such as "anticipates," "believes," "could," "estimates," "expects," "intends," "projects," "plans," "may," "should," "will," "would," "likely," "possible," or their negatives or other variations on these terms. Investors should note that forward-looking statements, by their nature, involve risks or uncertainties, including those set forth in Risk Factors on pages 28 to 40 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022. Therefore, the actual results could differ materially from those expressed or implied in these forward-looking statements or could affect the extent to which a particular objective, projection, estimate, or prediction is realized.

These forward-looking statements involve risks and uncertainties including, but not limited to, the following:

- changes in the general economy, money and capital markets, the rate of inflation (or deflation), employment rates, housing market activity and housing prices, the size and volatility of the residential mortgage market, and uncertainty regarding the global economy;

- levels and volatility of market prices, interest rates, and indices, including those that could affect the value of investments or collateral held by the FHLBanks;

- changes in monetary and fiscal policies;

- changes in liquidity in the financial markets;

- natural disasters, pandemics or other widespread health emergencies, terrorist attacks, civil unrest, geopolitical instability or conflicts, trade disruptions, economic or other sanctions, or other unanticipated or catastrophic events;

- political events, including legislative, regulatory, judicial, or other developments that affect the FHLBanks, their members, counterparties, dealers of consolidated obligations, or investors in consolidated obligations, such as changes in the Federal Home Loan Bank Act of 1932, as amended (FHLBank Act), or in regulations that affect FHLBank operations, housing finance and government-sponsored enterprise (GSE) reform, and Federal Housing Finance Agency (FHFA) actions (including legislative, regulatory or other actions recommended, proposed or implemented as a result of the FHFA's comprehensive review of the FHLBank System);

- the FHLBanks' plans, intent, and ability to make or increase voluntary contributions to their Affordable Housing Program (AHP) or other community investment programs;

- competitive forces, including other sources of funding available to FHLBank members and other entities borrowing funds in the capital markets;

- disruptions in the credit and debt markets and the effect on the FHLBanks' funding costs, sources, and availability;

- demand for FHLBank advances resulting from changes in FHLBank members' deposit flows and credit demands, or from changes in liquidity in the financial markets;

- loss of members and repayment of advances made to those members due to institutional failures, consolidations, voluntary withdrawals, or involuntary terminations from FHLBank membership, and changes in the financial health of members;

- changes in domestic and foreign investor demand for consolidated obligations, including short-term funding, or the terms of derivative transactions and similar transactions, including changes in the relative attractiveness of consolidated obligations as compared to other investment opportunities, changes in the availability of other investment opportunities, changes in support from dealers of consolidated obligations, and changes resulting from any modification of the credit ratings of the U.S. government or the FHLBanks;

- the availability of acceptable institutional counterparties for business transactions, including derivative transactions used to manage interest-rate risk;

- the ability to introduce new products and services and successfully manage the risks associated with those products and services, including new types of collateral used to secure advances;

- the pace of technological change and the ability to develop, secure, and support technology and information systems to effectively manage the risks, including information security; and

- the effect of new accounting guidance, including the development of supporting systems and related internal controls.

Neither the FHLBanks nor the Office of Finance undertakes any obligation to publicly update or revise any forward-looking statements contained in this Combined Financial Report, whether as a result of new information, future events, changed circumstances, or any other reason.

Executive Summary

This executive summary highlights selected information and may not contain all of the information that is important to readers of this Combined Financial Report. For a more complete understanding of events, trends, and uncertainties, this executive summary should be read together with the Financial Discussion and Analysis section in its entirety and the FHLBanks' combined financial statements and related notes.

Overview

The FHLBanks are GSEs, federally-chartered, but privately capitalized and independently managed. The FHLBanks together with the Office of Finance, a joint office of the FHLBanks, comprise the FHLBank System. Each of the FHLBanks and the Office of Finance operates under the supervisory and regulatory framework of the FHFA.

The FHLBanks are cooperative institutions, whose stockholders are also the FHLBanks' primary customers. FHLBank capital stock is not publicly traded; it is purchased by members from, and redeemed or repurchased by, an FHLBank at the stated par value of $100 per share. Each FHLBank's primary business is to serve as a financial intermediary between the capital markets and its members. This intermediation process involves raising funds by issuing debt, known as consolidated obligations, in the capital markets and lending those proceeds to member institutions in the form of secured loans, known as advances. Each FHLBank's funding is principally obtained from consolidated obligations issued through the Office of Finance on behalf of the FHLBanks.

Consolidated obligations are joint and several obligations of all FHLBanks. FHLBank debt issuance is generally driven by members' needs for advances. As housing GSEs, the FHLBanks have served the public for more than 90 years, benefiting from their flexible debt issuance programs, fully-collateralized lending practices, highly-rated investment holdings, and scalable capital base that is designed to expand and contract in response to changing needs of their members.

The FHLBanks seek to maintain a balance between their public policy mission and their goal of providing adequate returns on member capital. The FHLBanks strive to achieve this balance by providing value to their members through advances, mortgage loan purchases, other services, and dividend payments. The FHLBanks' primary sources of earnings are the net interest spread between the yield on interest-earning assets and the average rate on interest-bearing liabilities, combined with earnings on invested capital. Due to the FHLBanks' cooperative structures, the FHLBanks generally earn a narrow net interest spread.

External Credit Ratings

The FHLBanks' ability to raise funds in the capital markets at narrow spreads to the U.S. Treasury yield curve is due largely to their status as GSEs, which is reflected in their consolidated obligations receiving the same credit rating as the government bond credit rating of the United States, even though the consolidated obligations are not obligations of the United States and are not guaranteed by the United States. S&P Global Ratings (S&P), Moody's Investors Service (Moody's), or other rating organizations could downgrade or upgrade the credit rating of the U.S. government and GSEs, including the FHLBanks and their consolidated obligations. In addition to ratings on the FHLBanks' consolidated obligations, each FHLBank is rated individually by S&P and Moody's. On November 10, 2023, Moody's changed the outlook on the ratings of the United States to negative from stable and affirmed the United States' long-term issuer and senior unsecured ratings at Aaa. On November 14, 2023, Moody's also affirmed the Aaa long-term senior unsecured debt ratings of the FHLBanks and changed the outlook on the ratings to negative from stable, consistent with its ratings action taken with respect to the United States. Investors should note that a rating issued by a nationally recognized statistical rating organization is not a recommendation to buy, sell, or hold securities, and that the ratings may be revised or withdrawn by the rating organization at any time. Investors should evaluate the rating of each nationally recognized statistical rating organization independently. Investors should not take the historical or current ratings of the FHLBanks or their consolidated obligations as an indication of future ratings for the FHLBanks and their consolidated obligations. (See *External Credit Ratings* for more information, including recent downgrades by Fitch Ratings.)

Business Environment

The primary external factors that affect the FHLBanks' combined financial condition and results of operations include: (1) the general state of the economy and financial markets, (2) conditions in the U.S. housing markets, (3) interest rate levels and volatility, and (4) the legislative and regulatory environment.

Economy and Financial Markets. The FHLBanks' results of operations are influenced by the economy and financial markets, and, in particular, by FHLBank members' demand for advances and the FHLBanks' ability to maintain sufficient access to diverse sources of funding at relatively favorable costs. The FHLBanks' flexibility in utilizing various funding tools, in combination with their diverse investor base and their status as GSEs, has helped ensure reliable market access and demand for consolidated obligations throughout fluctuating market environments and regulatory changes affecting dealers of and investors in consolidated obligations.

In October 2023, the Bureau of Labor Statistics reported that the U.S. unemployment rate was 3.8% in September 2023, up slightly from 3.5% in both December 2022 and September 2022. The Bureau of Labor Statistics also reported that the unadjusted U.S. consumer price index (CPI) increased 3.7% for the twelve months ended September 30, 2023, compared to an increase of 8.2% for the twelve months ended September 30, 2022.

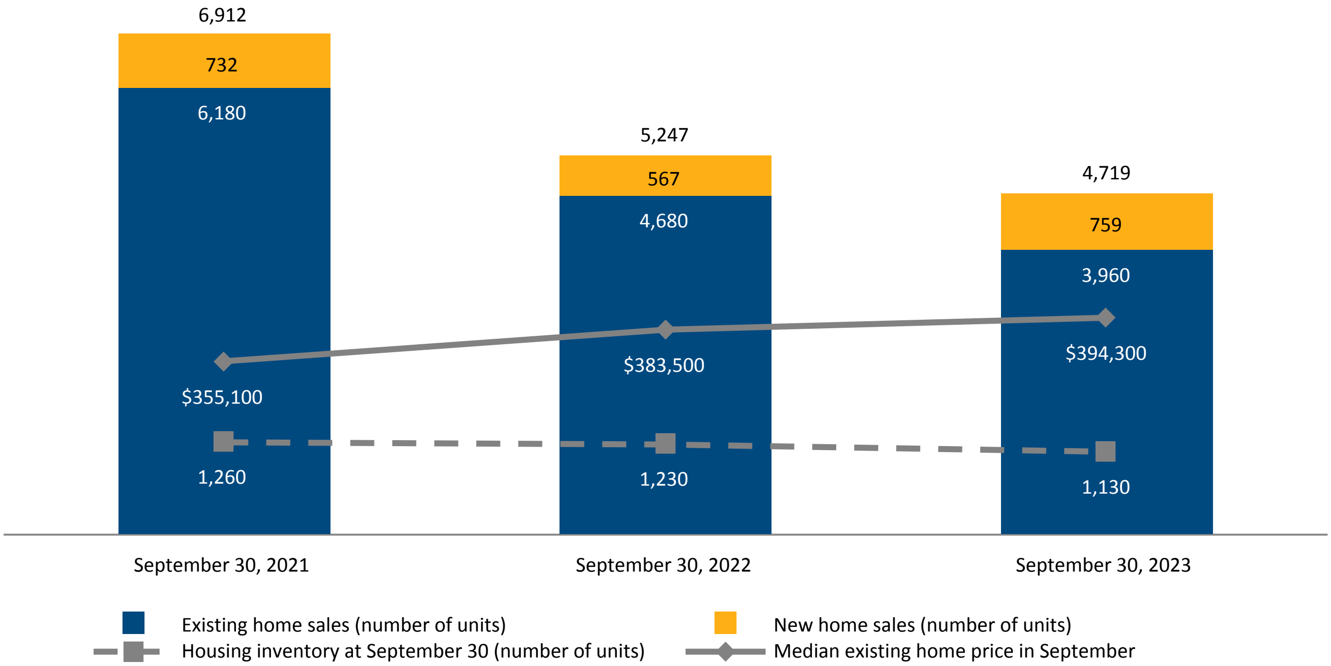
U.S. real gross domestic product (GDP) increased at an annual rate of 4.9% in the third quarter of 2023, according to the advance estimate reported by the Bureau of Economic Analysis, compared to an annualized increase of 2.7% in the third quarter of 2022, as revised by the Bureau of Economic Analysis.

In January 2023, the United States reached its statutory debt limit. Following the U.S. Treasury's extraordinary measures to prevent the United States from defaulting on its obligations, on June 3, 2023, the President of the United States signed legislation that, among other things, suspended the debt limit through January 1, 2025. The legislation also will increase the debt limit on January 2, 2025, to accommodate the obligations issued during the suspension period.

Beginning in March 2023, some U.S. banks, which were FHLBank members, experienced significant deposit outflows and financial difficulties, creating stress for the banking industry and the financial markets. On March 12, 2023, the Federal Reserve announced a plan to make available additional funding to eligible depository institutions to help ensure that they have the ability to meet the needs of all their depositors, through eased access to the discount window and the creation of a Bank Term Funding Program. During this time, the FHLBanks continued to execute their mission by serving as a reliable source of liquidity and funding for their members. The FHLBanks' assets and liabilities, primarily advances and consolidated obligations, increased significantly during the first quarter of 2023, driven by increased member demand. During the second and third quarters of 2023, member demand for advances moderated as market liquidity normalized and both advances and consolidated obligations declined, but remained marginally higher at September 30, 2023 than the levels at December 31, 2022. The FHLBanks are designed such that their assets and liabilities expand and contract as the needs of member financial institutions and their communities change over time. (See *Combined Financial Condition - Advances* for additional information.)

Conditions in U.S. Housing Markets. Conditions in the U.S. housing markets primarily affect the FHLBanks through the creation of demand for, and yield on, advances and mortgage loans, as well as the yield on investments in mortgage-backed-securities (MBS). Figure 1 presents U.S. home sales, inventory, and prices for the most recent three years. The seasonally adjusted annual rate of U.S. home sales declined in September 2023, compared to September 2022 and 2021, driven by significantly higher mortgage interest rates. The median existing home price increased in September 2023, compared to September 2022 and 2021, as the U.S. housing inventory remained low.

Figure 1 - U.S. Home Sales, Inventory, and Prices
(units in thousands and home prices in whole dollars)



Source: National Association of REALTORS® for existing home sales, housing inventory, and median existing home price.
Source: U.S. Census Bureau and the Department of Housing and Urban Development for new home sales.

Interest Rate Levels and Volatility. The level and volatility of interest rates affect FHLBank member demand for advances. In addition, credit spreads and the shape of the yield curve affect investor demand for consolidated obligations. These factors, driven in part by federal monetary and fiscal policies, also affect the FHLBanks' combined results of operations, primarily affecting net interest income and the valuation of certain assets and liabilities.

During 2022, the Federal Open Market Committee stated that inflation had remained elevated, reflecting supply and demand imbalances related to the pandemic, higher food and energy prices, and broader price pressures. In response, it raised the target range of the federal funds rate seven times, totaling 4.25% of increases in aggregate, to a target range of 4.25% to 4.50%. The Federal Open Market Committee further raised the target range of the federal funds rate by 0.25% four times in 2023, to a target range of 5.25% to 5.50%. At its meeting that concluded in early November 2023, the Federal Open Market Committee maintained its target range of the federal funds rate. The Federal Open Market Committee stated that, in determining the extent to which additional policy firming may be appropriate to return inflation to two percent over time, it will take into account the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments. In addition, the Federal Open Market Committee noted that tighter credit conditions for households and businesses are likely to weigh on economic activity, hiring, and inflation, although the extent of these effects remains uncertain. The Federal Open Market Committee also stated that it will continue reducing its holdings of Treasury securities, agency debt, and agency MBS, which began on June 1, 2022.

Investor demand for the FHLBanks' consolidated obligations remained strong in the first nine months of 2023, with market participants generally favoring short-term consolidated obligations, primarily variable-rate consolidated bonds, fixed-rate callable bonds, and consolidated discount notes. The FHLBanks continued to meet their funding needs during the nine months ended September 30, 2023.

Table 1 presents the three-month and nine-month averages and period-end rates for certain key interest rates. The averages of key interest rates were significantly higher during the three and nine months ended September 30, 2023, compared to the three and nine months ended September 30, 2022, affecting the FHLBanks' combined results of operations, primarily by increasing both interest income and interest expense. At September 30, 2023, key interest rates were higher, compared to interest rates at December 31, 2022, which affected the fair values of certain assets and liabilities. The level and volatility of interest rates will likely remain a significant factor driving the FHLBanks' results of operations and financial condition.

Table 1 - Key Interest Rates

	Three-Month Average		Nine-Month Average		Period End	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022	September 30, 2023	December 31, 2022
Federal Funds Effective	5.26 %	2.20 %	4.93 %	1.04 %	5.33 %	4.33 %
SOFR	5.24 %	2.15 %	4.90 %	0.99 %	5.31 %	4.30 %
1-week Overnight Indexed Swap	5.28 %	2.31 %	4.95 %	1.10 %	5.33 %	4.34 %
3-month U.S. Treasury yield	5.43 %	2.67 %	5.11 %	1.36 %	5.45 %	4.37 %
2-year U.S. Treasury yield	4.94 %	3.38 %	4.53 %	2.53 %	5.05 %	4.43 %
10-year U.S. Treasury yield	4.14 %	3.10 %	3.80 %	2.66 %	4.57 %	3.88 %

Source: Bloomberg

Table 2 presents the three-month and nine-month average funding spreads of newly-issued consolidated obligations relative to Treasury and Secured Overnight Financing Rate (SOFR) indices, as well as the ending spread at each period end. The cost of newly-issued consolidated obligations were little changed for the three months ended September 30, 2023, as measured by the average indicative spreads to Treasury indices (other than the 3-month Treasury index), compared to the three months ended September 30, 2022. The cost of newly-issued consolidated obligations increased for the three months ended September 30, 2023, as measured by the average indicative spreads to SOFR indices (other than the 5-year SOFR index), compared to the three months ended September 30, 2022. The cost of newly-issued consolidated obligations increased for the nine months ended September 30, 2023, as measured by the average indicative spreads to Treasury and SOFR indices (other than the 3-month Treasury index), compared to the nine months ended September 30, 2022.

Table 2 - Funding Spreads to Treasury and SOFR Indices
(in basis points)

	Three-Month Average		Nine-Month Average		Ending Spread	
Borrowing Term	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022	September 30, 2023	December 31, 2022
Treasury						
3-months	2.0	15.1	4.6	10.5	3.6	23.1
2-years	9.8	11.1	14.9	6.7	11.0	18.0
5-years	10.0	9.9	12.9	8.2	8.0	12.0
10-years	50.4	48.7	55.6	41.0	47.0	65.0
SOFR						
3-months	1.0	(3.3)	0.6	(5.1)	4.6	(3.6)
2-years	16.7	6.3	16.1	4.8	14.7	9.6
5-years	28.9	31.6	31.8	27.5	29.1	33.5
10-years	74.7	67.3	80.3	59.1	74.4	92.0

Source: Funding spreads are derived using Office of Finance indications compared to Treasury and SOFR indices.

Legislative and Regulatory Environment. Potential legislative and regulatory changes, as well as other rules and regulations issued by the FHFA, could adversely affect the FHLBanks, FHLBank members, counterparties, and dealers of and investors in consolidated obligations. The FHLBanks' business operations, funding costs, rights, obligations, and the environment in which the FHLBanks carry out their mission could be significantly affected by these changes. In particular, on November 7, 2023, the FHFA issued its written report relating to its review and analysis of the FHLBank System, summarizing its recommended legislative, regulatory, and other actions. (See *Legislative and Regulatory Developments* for more information.)

Supporting Housing and Community Investment. The FHLBanks are required to set aside a portion of their profits to support affordable housing each year. These funds assist members in serving very low- and low-, or moderate-income households. The FHLBanks' combined net income for the three and nine months ended September 30, 2023, resulted in statutory AHP assessments of $196 million and $570 million. In addition to the statutory AHP assessments under the FHLBank Act, an FHLBank's board of directors may elect to make voluntary contributions to its AHP or other community investment programs. In connection with that, and in recognition that additional funding would be beneficial in meeting community needs in affordable housing as well as business and community development, the FHLBanks are either already making additional voluntary contributions or are in the process of increasing their voluntary contribution levels. The FHLBanks expensed voluntary contributions to housing and community investment programs, which totaled $38 million and $89 million during the three and nine months ended September 30, 2023. These voluntary contribution expenses are included in non-interest expense on the Combined Statements of Income.

FHLBanks' Financial Highlights

Combined Financial Condition. The FHLBanks' assets and liabilities expand and contract as the needs of member financial institutions and their communities change over time. Total assets were $1,309.5 billion at September 30, 2023, an increase of 5% from $1,247.2 billion at December 31, 2022.

- Advance balances totaled $826.9 billion at September 30, 2023, an increase of 1% from $819.1 billion at December 31, 2022, resulting primarily from an increase in long-term advances, partially offset by a decrease in short-term advances. In March 2023, member demand for advances accelerated at times in response to the stress placed on the banking industry and financial markets resulting from the financial difficulties experienced by some depository institutions. During the second and third quarters of 2023, member demand for advances moderated as market liquidity normalized. Commercial banks represented the largest segment of borrowers, with 55% of the total principal amount of advances outstanding at September 30, 2023, compared to 58% at December 31, 2022. The top 10 advance holding borrowers by holding company represented 30% and 27% of the total principal amount of advances outstanding at September 30, 2023 and December 31, 2022. The FHLBanks protect against credit risk on advances by collateralizing all advances. At September 30, 2023, each FHLBank had rights to collateral with an estimated value greater than the related outstanding advances.

- Investments were $412.3 billion at September 30, 2023, an increase of 13% from $363.8 billion at December 31, 2022, as the FHLBanks grew their investment portfolios largely to maintain liquidity to continue to meet the credit needs of members. The FHLBanks maintain investment portfolios to provide funds to meet the credit needs of their members, maintain liquidity, and earn interest income.

- Mortgage loans held for portfolio were $59.8 billion at September 30, 2023, an increase of 7% from $56.0 billion at December 31, 2022, as mortgage loan purchase volume outpaced repayments. An FHLBank may purchase mortgage loans to support its housing mission, provide an additional source of liquidity to its members, diversify its investments, and generate additional earnings.

Total liabilities were $1,238.1 billion at September 30, 2023, an increase of 5% compared to $1,179.4 billion at December 31, 2022.

- Consolidated obligations totaled $1,211.5 billion at September 30, 2023, an increase of 4% from $1,161.4 billion at December 31, 2022, in line with the increase in total assets and consisting of a 30% increase in consolidated bonds, partially offset by a 35% decrease in consolidated discount notes. Consolidated obligations are the principal funding source used by the FHLBanks to make advances and to purchase mortgage loans and investments. The future amounts and types of consolidated obligations issued depend primarily on the demand for the FHLBanks' advances.

Total GAAP capital was $71.4 billion at September 30, 2023, an increase of 5% from $67.8 billion at December 31, 2022. The GAAP capital-to-assets ratio was 5.45% and the regulatory capital-to-assets ratio was 5.64% at September 30, 2023, compared to 5.44% and 5.55% at December 31, 2022. Each FHLBank was in compliance with FHFA regulatory capital requirements at September 30, 2023.

- Capital stock was $45.2 billion at September 30, 2023, an increase of 3% from $44.0 billion at December 31, 2022, due principally to the net issuance of activity-based capital stock.

- Retained earnings grew to $27.2 billion at September 30, 2023, an increase of 11% from $24.6 billion at December 31, 2022, resulting principally from net income of $5,084 million, partially offset by dividends of $2,446 million.

Combined Results of Operations. Net income was $1,735 million and $5,084 million for the three and nine months ended September 30, 2023, increases of 89% and 151%, compared to the three and nine months ended September 30, 2022, resulting primarily from higher net interest income.

Net interest income was $2,330 million for the three months ended September 30, 2023, an increase of $951 million, or 69%, compared to the three months ended September 30, 2022. Net interest margin was 0.69% and 0.54% for the three months ended September 30, 2023 and 2022. Net interest income was $6,721 million for the nine months ended September 30, 2023, an increase of $3,292 million, or 96%, compared to the nine months ended September 30, 2022. Net interest margin was 0.63% and 0.52% for the nine months ended September 30, 2023 and 2022.

- Interest income was $18,463 million and $54,503 million for the three and nine months ended September 30, 2023, increases of $12,136 million and $43,708 million, compared to the three and nine months ended September 30, 2022, driven primarily by increases in the average yields on interest-earning assets. Although significantly higher interest rates were the primary factor affecting interest income, the higher average balances of advances were also a contributing factor.

- Interest expense was $16,133 million and $47,782 million for the three and nine months ended September 30, 2023, increases of $11,185 million and $40,416 million, compared to the three and nine months ended September 30, 2022, driven primarily by the higher average rates on consolidated obligations. Although significantly higher interest rates were the primary factor affecting interest expense, the higher average balances of consolidated obligations were also a contributing factor.

The future level of net interest income of the FHLBanks will depend, in part, upon the level and volatility of interest rates, demand for advances, cost of consolidated obligations, changes in fiscal or monetary policies, as well as the state of the U.S. economy and financial markets.

Non-interest income was a net gain of $38 million and a net gain of $212 million for the three and nine months ended September 30, 2023, resulting primarily from changes in the fair value of derivatives, financial instruments held under fair value option, and investment securities driven by changes in interest rates. Non-interest income was a net gain of $10 million and a net loss of $85 million for the three and nine months ended September 30, 2022.

Non-interest expense was $429 million and $1,263 million for the three and nine months ended September 30, 2023, increases of $73 million and $192 million, or 21% and 18%, compared to the three and nine months ended September 30, 2022, due primarily to higher compensation and benefits, higher other operating expenses, and higher other expenses.

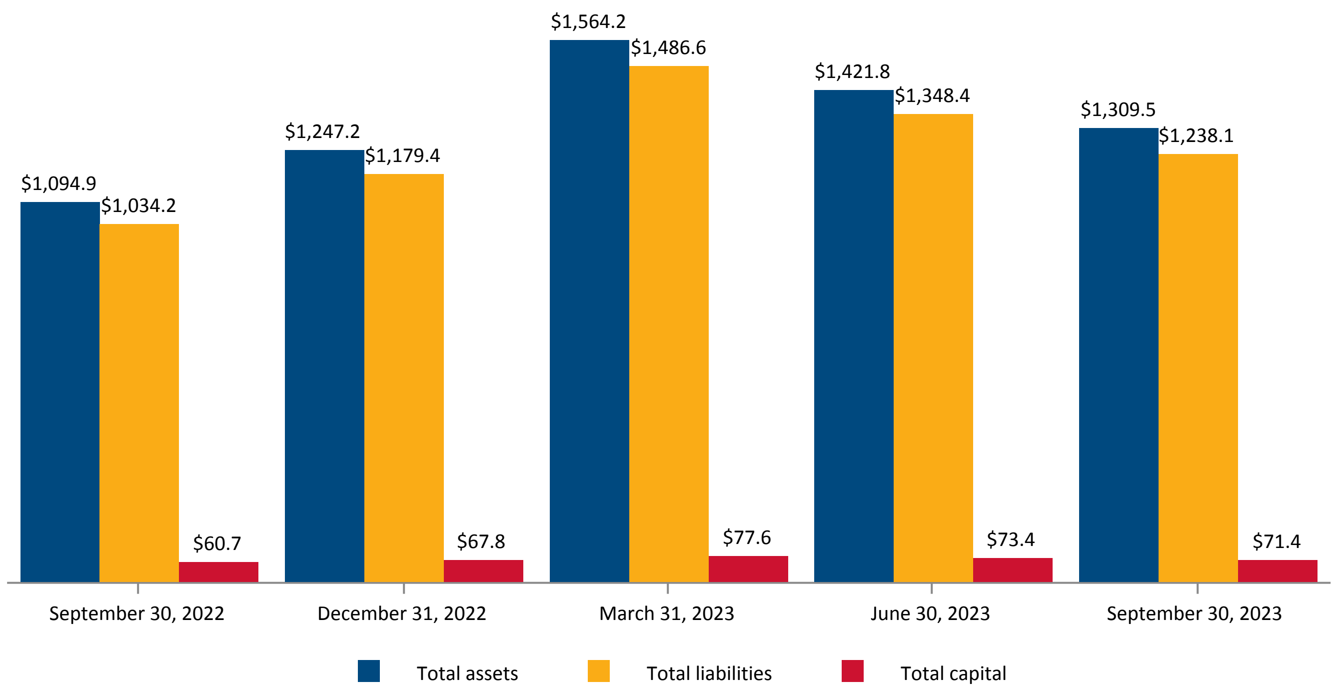
Affordable Housing Program assessments result from individual FHLBank income subject to assessment. AHP assessments were $196 million and $570 million for the three and nine months ended September 30, 2023, increases of $93 million and $342 million, or 90% and 150%, compared to the three and nine months ended September 30, 2022.

See *Combined Financial Condition* and *Combined Results of Operations* for further information.

Combined Financial Condition

The FHLBanks' asset composition includes cash and due from banks, investments, advances, mortgage loans held for portfolio, and other assets. The FHLBanks' liability composition includes deposits, consolidated discount notes, consolidated bonds, mandatorily redeemable capital stock, and other liabilities. The FHLBanks' capital composition includes capital stock, retained earnings, and accumulated other comprehensive income (loss) (AOCI). The FHLBanks' assets and liabilities expand and contract as the needs of member financial institutions and their communities change over time. As of September 30, 2023, total assets increased 5%, total liabilities increased 5%, and total GAAP capital increased 5%, compared to December 31, 2022. Figure 2 presents the total assets, liabilities, and capital for the most recent five quarters.

Figure 2 - Total Assets, Liabilities, and Capital
(dollars in billions)



Figures 3 and 4 present the total assets and total liabilities and capital composition at September 30, 2023.

Figure 3 - Total Assets (dollars in billions)

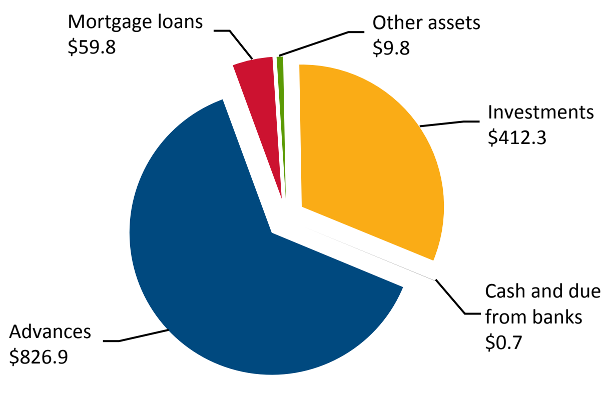
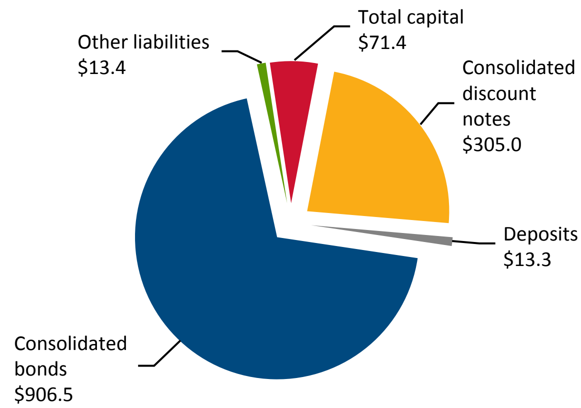


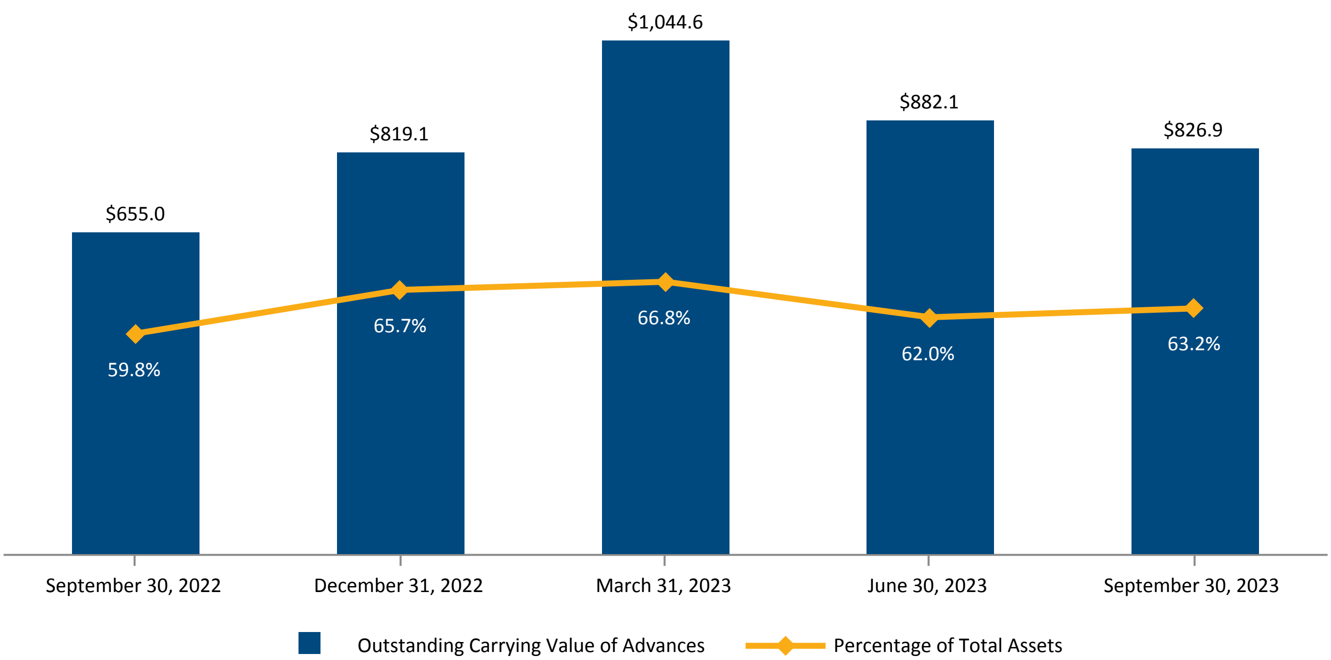
Figure 4 - Total Liabilities and Capital (dollars in billions)



Advances

The FHLBanks provide funding to members and housing associates through secured loans (advances), which may be used for, among other things, residential mortgages, community investments, and other services for housing and community development. Each FHLBank makes advances based on the security of mortgage loans and other types of eligible collateral pledged by, and the creditworthiness and financial condition of, the borrowing institutions. Figure 5 presents advances for the most recent five quarters.

Figure 5 - Advances Outstanding (Carrying Value) (dollars in billions)



The outstanding carrying value of advances totaled $826.9 billion at September 30, 2023, an increase of $7.8 billion, or 1%, from $819.1 billion at December 31, 2022, resulting primarily from an increase in long-term advances, partially offset by a decrease in short-term advances. The increase in advances to the top 25 advance holders at each FHLBank, in aggregate, represented over 80% of the total increase in the principal amount of advances outstanding at September 30, 2023, compared to December 31, 2022. The FHLBanks' assets and liabilities expand and contract as the needs of member financial institutions and their communities change over time. The future demand for advances will depend on many factors including, but not limited to, changes in interest rates, government liquidity programs, changes in fiscal and monetary policies, as well as the state of the U.S. economy and financial markets. During March 2023, member demand for advances accelerated in response to the stress placed on the banking industry and financial markets resulting from the financial difficulties experienced by some depository institutions. During the second and third quarters of 2023, member demand for advances moderated as market liquidity normalized, and as of September 30, 2023, outstanding advances decreased $217.7 billion compared to March 31, 2023, but remained marginally higher than the levels at December 31, 2022.

The percentage of members with outstanding advances was 58% at September 30, 2023, compared to 56% at December 31, 2022. Figures 6 and 7 present the principal amount of advances by product type and by redemption term for the most recent five quarters.

Figure 6 - Advances by Product Type (dollars in billions)

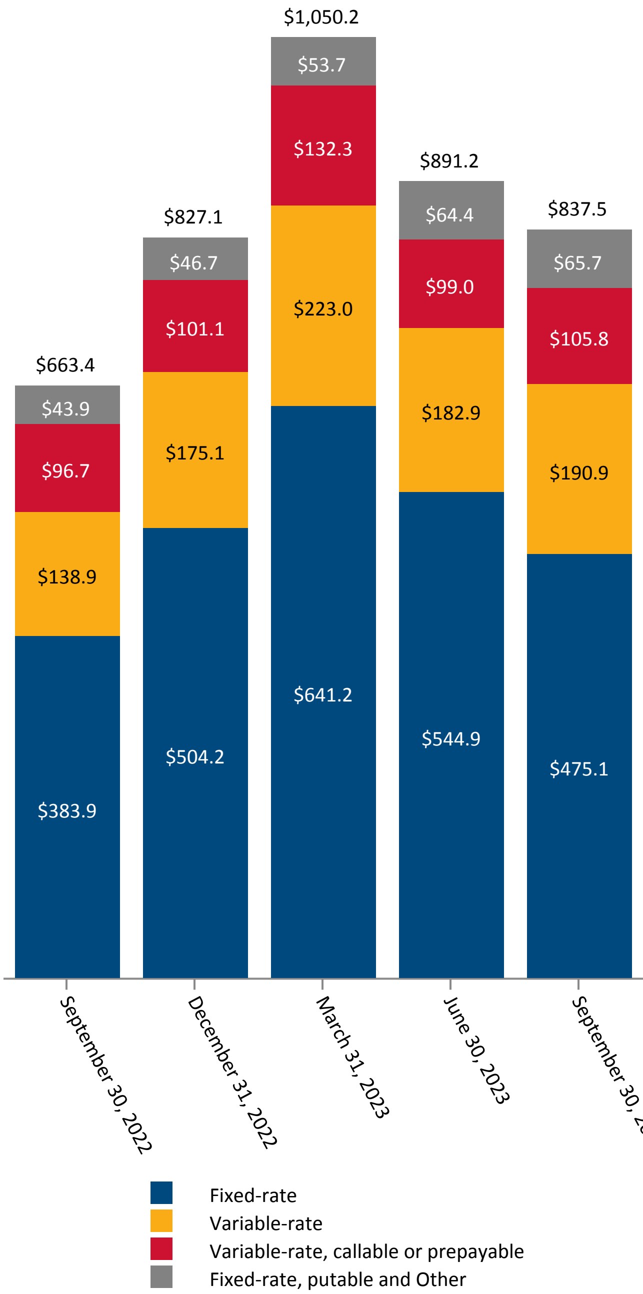


Figure 7 - Advances by Redemption Term (dollars in billions)

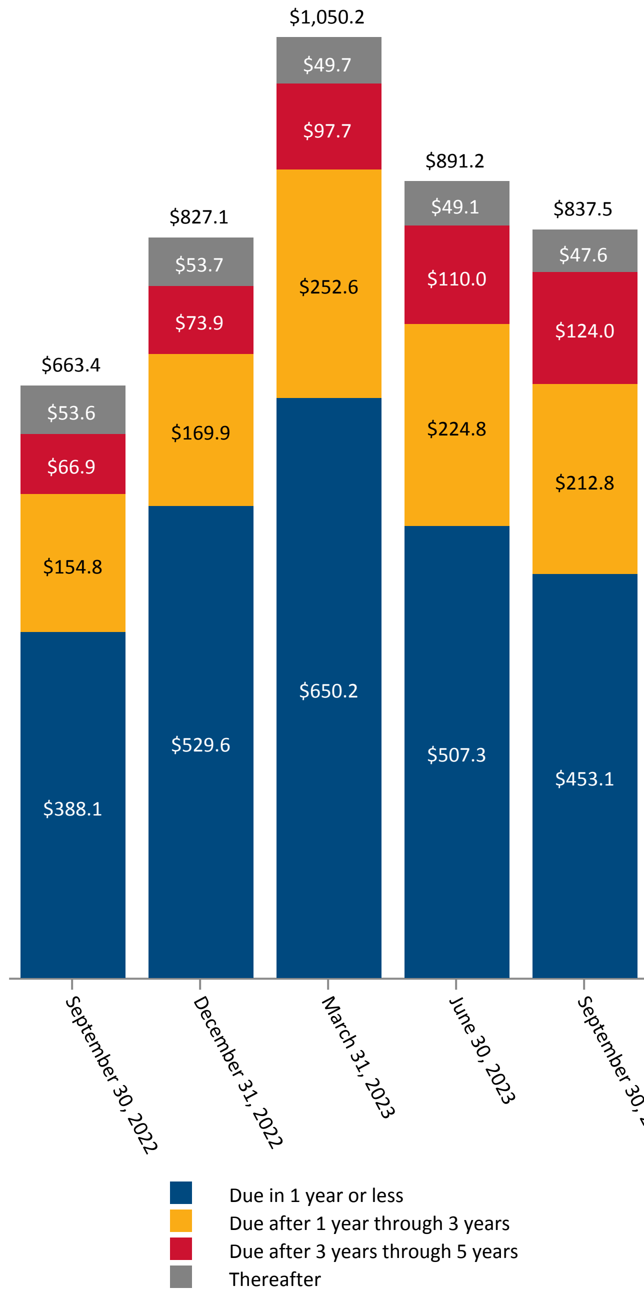


Table 3 presents advances outstanding by product type and redemption term, some of which include advances that contain embedded put or call options. A member can either sell an embedded option to an FHLBank or purchase an embedded option from an FHLBank. (See *Note 4 - Advances* to the accompanying combined financial statements for additional information on putable and callable advances and their potential effects on advance redemptions.)

Table 3 - Types of Advances by Redemption Term
(dollars in millions)

	September 30, 2023		December 31, 2022		Change	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
Fixed-rate						
Due in 1 year or less	$ 272,115	32.5 %	$ 379,581	45.9 %	$ (107,466)	(28.3)%
Due after 1 year through 3 years	109,141	13.0 %	61,871	7.5 %	47,270	76.4 %
Due after 3 years through 5 years	73,550	8.8 %	42,527	5.1 %	31,023	72.9 %
Due after 5 years through 15 years	19,695	2.4 %	19,625	2.4 %	70	0.4 %
Thereafter	630	0.1 %	639	0.1 %	(9)	(1.4)%
Total principal amount	**475,131**	**56.8 %**	**504,243**	**61.0 %**	**(29,112)**	(5.8)%
Fixed-rate, putable						
Due in 1 year or less	195	—	28	—	167	596.4 %
Due after 1 year through 3 years	6,017	0.7 %	1,769	0.2 %	4,248	240.1 %
Due after 3 years through 5 years	9,564	1.1 %	4,090	0.5 %	5,474	133.8 %
Due after 5 years through 15 years	18,396	2.2 %	20,149	2.4 %	(1,753)	(8.7)%
Thereafter	—	—	—	—	—	—
Total principal amount	**34,172**	**4.0 %**	**26,036**	**3.1 %**	**8,136**	31.2 %
Variable-rate						
Due in 1 year or less	140,085	16.7 %	103,267	12.5 %	36,818	35.7 %
Due after 1 year through 3 years	47,020	5.6 %	63,400	7.7 %	(16,380)	(25.8)%
Due after 3 years through 5 years	1,688	0.2 %	6,253	0.8 %	(4,565)	(73.0)%
Due after 5 years through 15 years	2,137	0.3 %	2,209	0.3 %	(72)	(3.3)%
Thereafter	—	—	—	—	—	—
Total principal amount	**190,930**	**22.8 %**	**175,129**	**21.3 %**	**15,801**	9.0 %
Variable-rate, callable or prepayable[1]						
Due in 1 year or less	33,569	4.0 %	43,036	5.2 %	(9,467)	(22.0)%
Due after 1 year through 3 years	40,573	4.8 %	35,191	4.3 %	5,382	15.3 %
Due after 3 years through 5 years	29,073	3.5 %	16,325	2.0 %	12,748	78.1 %
Due after 5 years through 15 years	2,300	0.3 %	6,179	0.7 %	(3,879)	(62.8)%
Thereafter	319	—	357	—	(38)	(10.6)%
Total principal amount	**105,834**	**12.6 %**	**101,088**	**12.2 %**	**4,746**	4.7 %
Other[2]						
Due in 1 year or less	7,063	0.9 %	3,694	0.4 %	3,369	91.2 %
Due after 1 year through 3 years	10,048	1.2 %	7,623	0.9 %	2,425	31.8 %
Due after 3 years through 5 years	10,169	1.2 %	4,676	0.6 %	5,493	117.5 %
Due after 5 years through 15 years	3,942	0.5 %	4,418	0.5 %	(476)	(10.8)%
Thereafter	130	—	131	—	(1)	(0.8)%
Total principal amount	**31,352**	**3.8 %**	**20,542**	**2.4 %**	**10,810**	52.6 %
Overdrawn and overnight deposit accounts	90	—	20	—	70	350.0 %
Total principal amount advances	**837,509**	**100.0 %**	**827,058**	**100.0 %**	**$ 10,451**	1.3 %
Other adjustments, net[3]	(10,564)		(7,937)			
Total advances	**$ 826,945**		**$ 819,121**			

(1) Prepayable advances are those advances that may be contractually prepaid by the borrower on specified dates without incurring prepayment or termination fees.
(2) Includes hybrid, fixed-rate amortizing/mortgage matched, convertible, fixed-rate callable or prepayable, and other advances.
(3) Consists of hedging and fair value option valuation adjustments and unamortized premiums, discounts, and commitment fees.

Table 4 presents the principal amount of advances indexed to a variable interest rate at September 30, 2023 and December 31, 2022. (See *Quantitative and Qualitative Disclosures about Market Risk* for more information on the transition from London Interbank Offered Rate (LIBOR) and the use of SOFR as an alternative market benchmark.)

Table 4 - Advances Indexed to a Variable Interest Rate[1]

	September 30, 2023	December 31, 2022
SOFR	$ 206,496	$ 173,994
Consolidated obligation yields	28,674	39,641
LIBOR	—	6,495
Other[2]	61,627	56,465
Total principal amount of advances indexed to a variable interest rate	**$ 296,797**	**$ 276,595**

(1) Includes fixed-rate advances that have cap/floor optionality linked to an interest-rate Index.
(2) Includes advances with floating rates that are not indexed to a single rate, but may be determined using a formula incorporating multiple indices.

Table 5 presents cash flows related to advance originations and advance repayments. During the three months ended September 30, 2023, advance repayments exceeded originations, resulting in lower advances outstanding compared to June 30, 2023. During the nine months ended September 30, 2023, advance originations exceeded repayments, resulting in growth in advances outstanding compared to December 31, 2022. Both advance originations and advance repayments increased during the nine months ended September 30, 2023, compared to the nine months ended September 30, 2022, resulting primarily from an increase in short-term advance activity.

Table 5 - Advance Originations and Repayments
(dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2023	2022	Change	2023	2022	Change
Advances originated	$ 2,416,375	$ 3,071,349	$ (654,974)	$ 9,783,232	$ 6,110,486	$ 3,672,746
Advances repaid	2,470,081	2,931,587	(461,506)	9,772,770	5,796,415	3,976,355
Net change	**$ (53,706)**	**$ 139,762**		**$ 10,462**	**$ 314,071**	

The FHLBanks make advances primarily to their members. Table 6 presents the principal amount of advances by type of borrower and member.

Table 6 - Advances by Type of Borrower and Member
(dollars in millions)

	September 30, 2023		December 31, 2022	
	Principal Amount	Number of Members	Principal Amount	Number of Members
Commercial bank members	$ 457,118	2,293	$ 480,565	2,165
Insurance company members	141,931	225	137,112	233
Savings institution members	108,671	415	94,545	399
Credit union members	89,323	830	96,676	820
Community development financial institution members	311	30	273	30
Total	**797,354**	**3,793**	**809,171**	**3,647**
Non-members[1]	39,063		16,991	
Housing associates	1,092		896	
Total principal amount	**$ 837,509**		**$ 827,058**	
Total members		**6,494**		**6,502**

(1) Includes advances outstanding to former members of certain FHLBanks that were acquired by members of other FHLBanks. Also includes $8.0 billion and $11.2 billion of principal amount of advances outstanding to captive insurance companies at September 30, 2023 and December 31, 2022, which had their memberships terminated no later than February 19, 2021.

Figures 8 and 9 present the percentage of principal amount of advances by type of borrower and percentage of member borrowers by type of member at September 30, 2023. Commercial banks represented the largest segment of borrowers, with 55% of the total principal amount of advances outstanding at September 30, 2023, compared to 58% at December 31, 2022.

Figure 8 - Percentage of Principal Amount of Advances by Type of Borrower

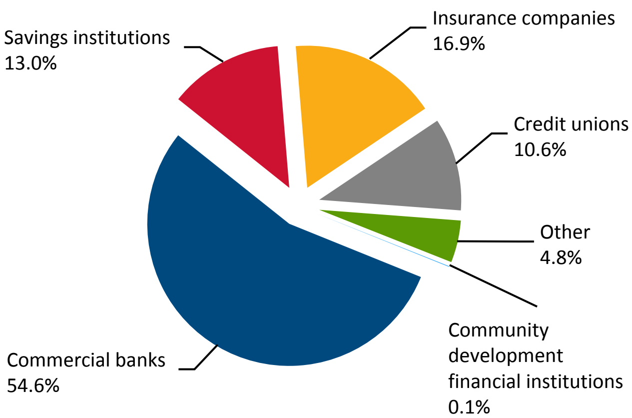
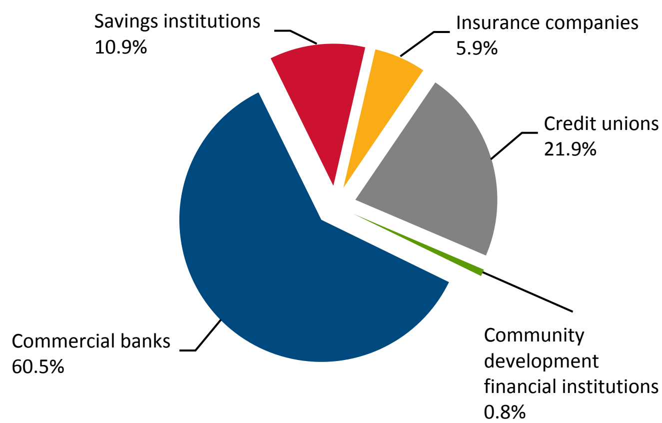


Figure 9 - Percentage of Member Borrowers by Type of Member



Beginning in March 2023, some U.S. banks experienced significant deposit outflows and financial difficulties, creating stress for the banking industry and the financial markets. Silvergate Bank, a member of the FHLBank of San Francisco, which had $4.3 billion in advances outstanding at December 31, 2022, went into voluntary liquidation. In addition, the FDIC was appointed as receiver for Silicon Valley Bank, a former member of the FHLBank of San Francisco, which had $15.0 billion in advances outstanding at December 31, 2022, and Signature Bank, a member of the FHLBank of New York, which had $11.3 billion in advances outstanding at December 31, 2022. As of March 31, 2023, no advances to Silvergate Bank and Silicon Valley Bank were outstanding and as of June 30, 2023, Silicon Valley Bank was no longer a member of the FHLBank of San Francisco. As of June 30, 2023, $4.7 billion in advances was outstanding to Signature Bridge Bank, N.A. (formerly Signature Bank). However, as of July 20, 2023, the remaining balance was paid back in full with no credit loss to the FHLBank of New York.

On March 12, 2023, the U.S. Treasury, the Federal Reserve, and the FDIC announced actions to enable the resolution of Silicon Valley Bank and Signature Bank in a manner that fully protects all of their depositors. On the same day, the Federal Reserve announced a plan to make available additional funding to eligible depository institutions to help assure that they have the ability to meet the needs of all of their depositors, through eased access to the discount window and a funding program offering collateralized loans for terms of up to one year. The U.S. Treasury, relying on the Exchange Stabilization Fund, will provide $25 billion in credit protection to the Federal Reserve in connection with this program.

On May 1, 2023, the FDIC was appointed as receiver for First Republic Bank, a member of the FHLBank of San Francisco. On the same day, the FDIC and JPMorgan Chase Bank, National Association entered into a purchase and assumption agreement and the FDIC transferred all of the deposits and substantially all of the assets of First Republic Bank, including $28.1 billion in advances outstanding from the FHLBank of San Francisco, to JPMorgan Chase Bank, National Association. As of September 30, 2023, JPMorgan Chase Bank, National Association, had $26.4 billion in advances outstanding and $179 million in letters of credit outstanding that were assumed from First Republic Bank. These advances and letters of credit are fully collateralized and are not expected to result in any credit loss to the FHLBank of San Francisco. Because recent events have changed the ownership structure of several of the FHLBank of San Francisco’s largest borrowers, the FHLBank of San Francisco may experience a reduction in total assets, capital, and net income if advances outstanding to these borrowers are prepaid or repaid and not replaced with business from members. (See the FHLBank of San Francisco's 2023 Third Quarter SEC Form 10-Q for additional information.)

Table 7 presents the FHLBanks' top 10 advance holding borrowers by holding company, on a combined basis, based on the principal amount of advances outstanding at September 30, 2023. The percentage of total advances for each holding company was computed by dividing the principal amount of advances by subsidiaries of that holding company by the principal amount of total combined advances. These percentage concentrations do not represent borrowing concentrations in an individual FHLBank. The top 10 advance holding borrowers by holding company represented 30% of the total principal amount of advances outstanding at September 30, 2023, compared to 27% at December 31, 2022.

Table 7 - Top 10 Advance Holding Borrowers by Holding Company at September 30, 2023

(dollars in millions)

Holding Company Name[1]	FHLBank Districts[2]	Principal Amount	Percentage of Total Principal Amount of Advances
JPMorgan Chase & Co.	San Francisco, Chicago, Cincinnati, Des Moines	$ 40,342	4.8 %
The PNC Financial Services Group, Inc.	Pittsburgh	36,000	4.3 %
Wells Fargo & Company	Des Moines, San Francisco	36,000	4.3 %
The Charles Schwab Corporation	Dallas	31,800	3.8 %
Truist Financial Corporation	Atlanta	26,502	3.2 %
Bank of America Corporation	Atlanta, San Francisco, Boston, Des Moines	24,527	2.9 %
Citigroup Inc.	New York	17,500	2.1 %
MetLife, Inc.	New York	15,090	1.8 %
U.S. Bancorp	Cincinnati, San Francisco, Des Moines	13,051	1.6 %
New York Community Bancorp, Inc.	New York, Indianapolis	13,023	1.6 %
		$ 253,835	**30.4 %**

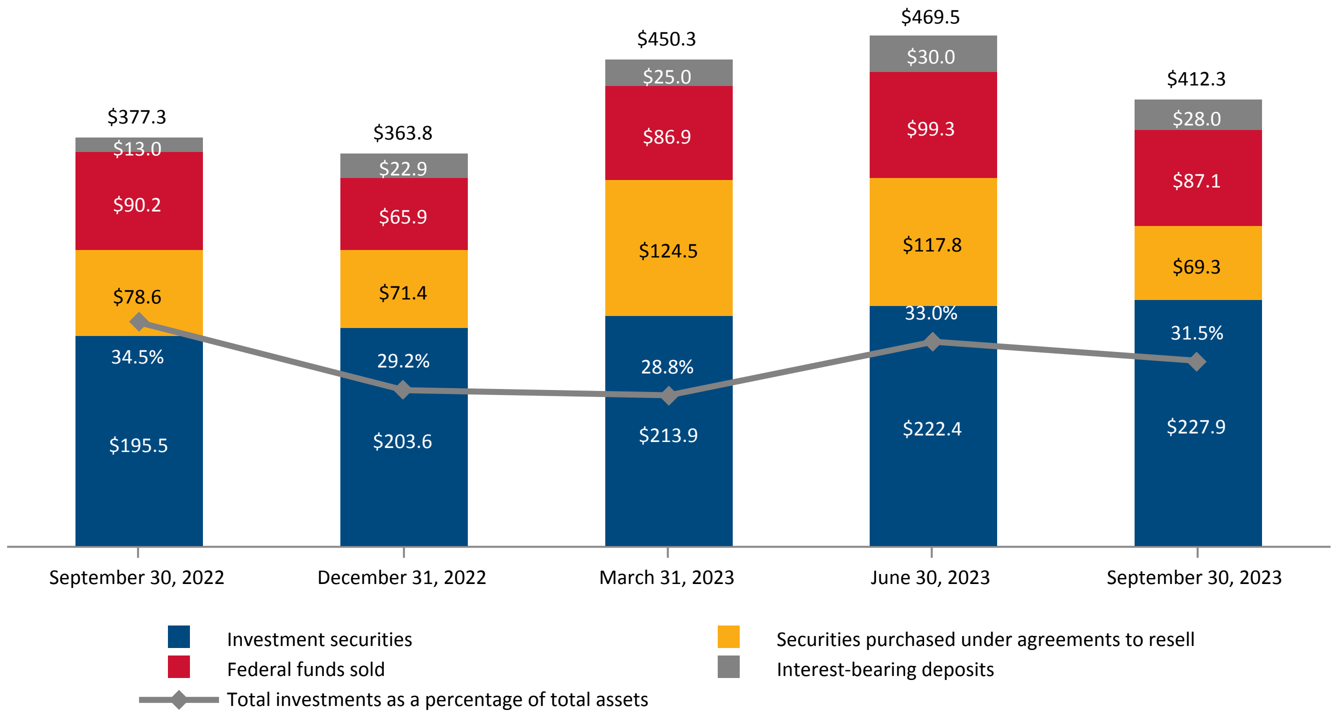
(1) Holding company information was obtained from the Federal Reserve System's website, the National Information Center (NIC), and SEC filings. The NIC is a central repository of data about banks and other institutions for which the Federal Reserve System has a supervisory, regulatory, or research interest, including both domestic and foreign banking organizations operating in the United States.

(2) At September 30, 2023, each holding company had subsidiaries with advance borrowings in these FHLBank districts.

Investments

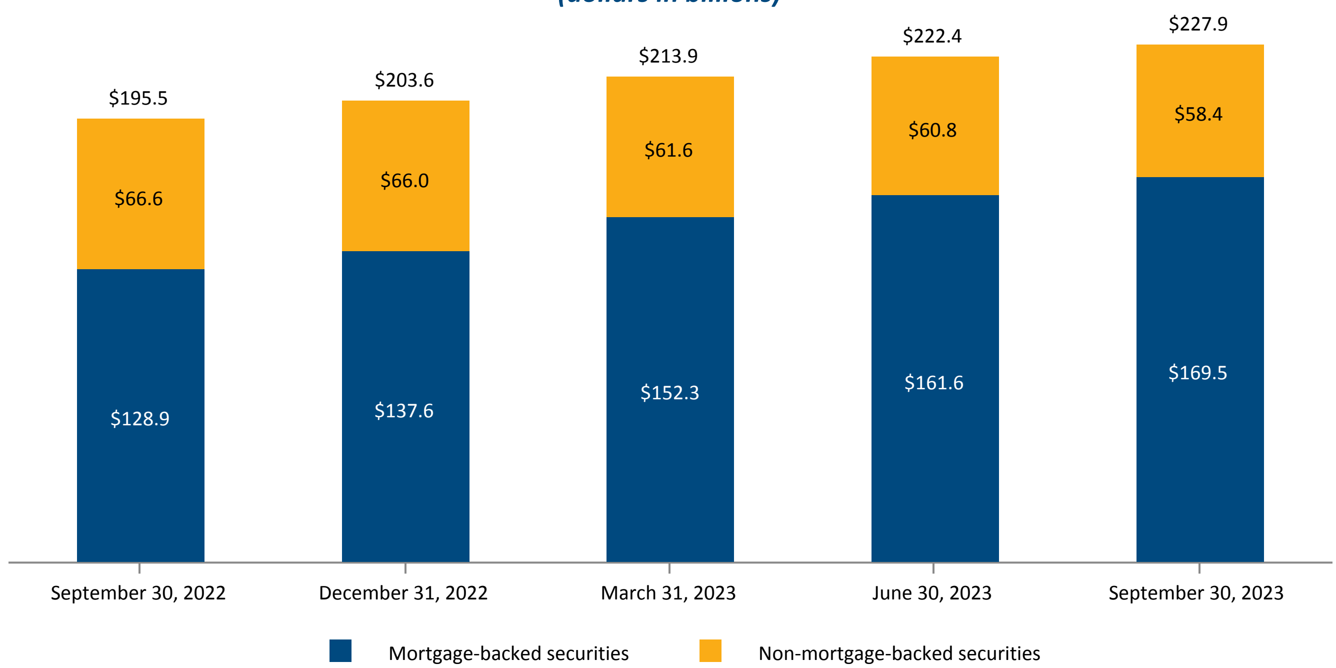
The FHLBanks maintain investment portfolios for liquidity purposes and to generate additional earnings. The income from these investment portfolios also bolsters the FHLBanks' capacity to support affordable housing and community investment. The FHLBanks invest in investment-quality securities to mitigate credit risk inherent in these portfolios. FHFA regulations prohibit the FHLBanks from investing in certain types of securities and limit the FHLBanks' investment in MBS and asset-backed securities (ABS). (See *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Risk Management - Credit Risk - Investments* on pages 107 to 108 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for additional information regarding the regulatory restrictions on investments.) Figure 10 presents total investments for the most recent five quarters.

Figure 10 - Total Investments (Carrying Value)
(dollars in billions)



Total investments, net was $412.3 billion at September 30, 2023, an increase of $48.5 billion, or 13%, from $363.8 billion at December 31, 2022, driven primarily by growth in GSE MBS and liquidity investments. The increase in GSE MBS was due to increased investment purchase opportunities and the increase in liquidity investments was concentrated in federal funds sold, which allowed the FHLBanks to maintain liquidity to continue to meet the credit needs of members. The FHLBanks classify investment securities as held-to-maturity (HTM), available-for-sale (AFS), or trading securities. Figure 11 presents the composition of investment securities by product type for the most recent five quarters.

Figure 11 - Investment Securities by Product Type (Carrying Value)
(dollars in billions)



The FHLBanks maintain short-term investment portfolios, the proceeds of which may provide funds to meet the credit needs of their members and to maintain liquidity. These portfolios may include:

- interest-bearing deposits;
- securities purchased under agreements to resell;
- federal funds sold;
- certificates of deposit;
- U.S. Treasury obligations;
- other U.S. obligations; and
- GSE obligations.

The yield earned on these short-term investments is highly correlated with short-term market interest rates. At September 30, 2023, the FHLBanks continued to maintain significant short-term investment balances as part of their ongoing investment strategy and to satisfy liquidity needs. (See *Liquidity and Capital Resources* for further discussion related to liquidity management.)

The FHLBanks maintain long-term investment portfolios as an additional source of liquidity and to earn interest income. These investments generally provide the FHLBanks with higher returns than those available on short-term investments. These portfolios may include:

- U.S. Treasury obligations;
- other U.S. obligations;
- GSE obligations;
- agency obligations; and
- other MBS and ABS.

Table 8 presents the composition of investments, including investment securities, at September 30, 2023 and December 31, 2022.

Table 8 - Total Investments

(dollars in millions)

Net Carrying Value	September 30, 2023	December 31, 2022	Change
Interest-bearing deposits	$ 28,083	$ 22,937	$ 5,146
Securities purchased under agreements to resell	69,265	71,405	(2,140)
Federal funds sold	87,057	65,920	21,137
Total Investment Securities by Major Security Type			
Investment securities non-mortgage-backed securities			
U.S. Treasury obligations	40,891	46,386	(5,495)
Other U.S. obligations	2,252	3,340	(1,088)
GSE and Tennessee Valley Authority obligations	10,594	11,128	(534)
State or local housing agency obligations	1,966	2,049	(83)
Federal Family Education Loan Program ABS	2,018	2,304	(286)
Other	687	739	(52)
Total investment securities non-mortgage-backed securities	58,408	65,946	(7,538)
Investment securities mortgage-backed securities			
U.S. obligations single-family	13,850	9,108	4,742
U.S. obligations multifamily	470	476	(6)
GSE single-family	21,507	14,873	6,634
GSE multifamily	132,239	111,528	20,711
Private-label	1,427	1,619	(192)
Total investment securities mortgage-backed securities	169,493	137,604	31,889
Total investment securities	227,901	203,550	24,351
Total investments	$ 412,306	$ 363,812	$ 48,494

The interest-rate and prepayment risks associated with investment securities are managed through a combination of debt issuance and derivatives. (See *Note 6 - Derivatives and Hedging Activities* to the accompanying combined financial statements for additional information.) Figure 12 summarizes the interest-rate payment terms of investment securities by product type for the most recent five quarters, with trading securities presented at fair value and AFS and HTM securities presented at amortized cost.

Figure 12 - Interest-Rate Payment Terms of Investment Securities by Product Type (dollars in billions)

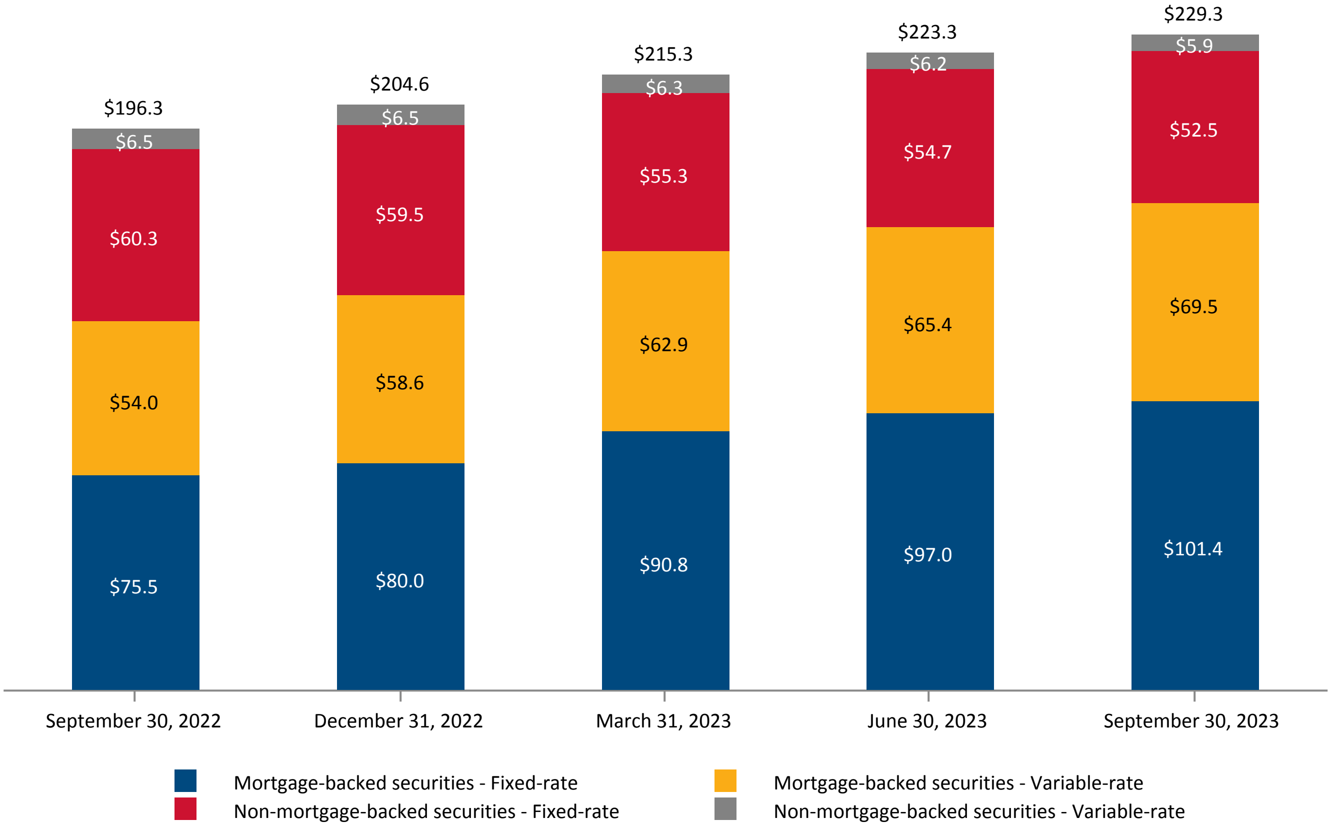


Table 9 presents the interest-rate payment terms of investment securities at September 30, 2023 and December 31, 2022.

Table 9 - Interest-Rate Payment Terms of Investment Securities
(dollars in millions)

	September 30, 2023	December 31, 2022
Trading Securities at Fair Value		
Trading non-mortgage-backed securities		
Fixed-rate	$ 11,158	$ 15,179
Variable-rate	—	—
Total trading non-mortgage-backed securities	**11,158**	**15,179**
Trading mortgage-backed securities		
Fixed-rate	647	668
Variable-rate	16	18
Total trading mortgage-backed securities	**663**	**686**
Total trading securities	**$ 11,821**	**$ 15,865**
Available-for-Sale Securities at Amortized Cost		
Available-for-sale non-mortgage-backed securities		
Fixed-rate	$ 39,783	$ 42,149
Variable-rate	4,768	5,268
Total available-for-sale non-mortgage-backed securities	**44,551**	**47,417**
Available-for-sale mortgage-backed securities		
Fixed-rate	84,754	65,876
Variable-rate	20,797	17,641
Total available-for-sale mortgage-backed securities	**105,551**	**83,517**
Total available-for-sale securities	**$ 150,102**	**$ 130,934**
Held-to-Maturity Securities at Amortized Cost		
Held-to-maturity non-mortgage-backed securities		
Fixed-rate	$ 1,570	$ 2,201
Variable-rate	1,218	1,257
Total held-to-maturity non-mortgage-backed securities	**2,788**	**3,458**
Held-to-maturity mortgage-backed securities		
Fixed-rate	15,991	13,447
Variable-rate	48,642	40,915
Total held-to-maturity mortgage-backed securities	**64,633**	**54,362**
Total held-to-maturity securities	**$ 67,421**	**$ 57,820**

Table 10 presents the principal amount of variable-rate investment securities by interest-rate index at September 30, 2023 and December 31, 2022. (See *Quantitative and Qualitative Disclosures about Market Risk* for more information on the transition from LIBOR and the use of SOFR as an alternative market benchmark.)

Table 10 - Variable-Rate Investment Securities by Interest-Rate Index
(dollars in millions)

	September 30, 2023[(1)]			December 31, 2022		
	Non-mortgage-backed securities	Mortgage-backed securities	Total	Non-mortgage-backed securities	Mortgage-backed securities	Total
SOFR	$ 4,767	$ 67,365	$ 72,132	$ 1,629	$ 28,539	$ 30,168
LIBOR	—	2,017	2,017	3,670	30,031	33,701
Other[(2)]	1,219	266	1,485	1,227	224	1,451
Total principal amount of variable-rate investment securities	**$ 5,986**	**$ 69,648**	**$ 75,634**	**$ 6,526**	**$ 58,794**	**$ 65,320**

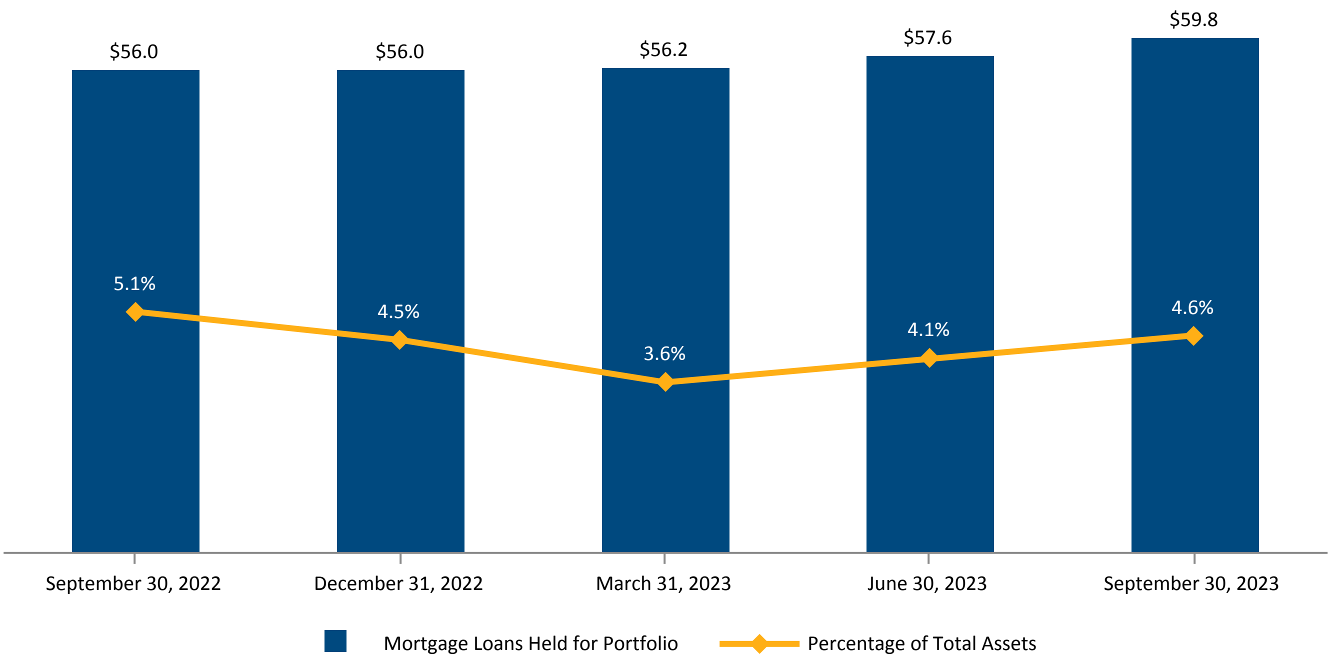
(1) Includes LIBOR-indexed investments as of September 30, 2023. The FHLBanks transitioned all of these investments such that, immediately following June 30, 2023, the U.S. dollar LIBOR rates referenced in these investments became static or will convert to SOFR at the beginning of the instruments' next reset period.
(2) Consists primarily of investments indexed to Treasury rates.

Limits on Certain Investments. FHFA regulations prohibit an FHLBank from purchasing MBS/ABS if its investment in these securities exceeds 300% of that FHLBank's previous month-end regulatory capital on the day it intends to purchase the securities. During the nine months ended September 30, 2023, each of the FHLBanks was in compliance with this regulatory requirement at the time of its respective securities purchases. However, at September 30, 2023, each of the FHLBanks of Atlanta, Cincinnati, and Indianapolis exceeded the 300% regulatory limit and was precluded from purchasing additional MBS/ABS investments until their MBS/ABS to total regulatory capital percentage declined below 300%. None of these FHLBanks was required by the FHFA to sell any previously purchased securities. On a combined basis, the FHLBanks' percentage of MBS/ABS (net of regulatory excluded MBS) was 245% of combined regulatory capital at September 30, 2023.

Mortgage Loans Held for Portfolio

An FHLBank may purchase fixed-rate mortgage loans to support the FHLBank's housing mission, provide an additional source of liquidity to FHLBank members, diversify its investments, and generate additional earnings. The mortgage loan programs consist of the Mortgage Purchase Program (MPP), the Mortgage Partnership Finance® (MPF®) Program, and the Mortgage Asset Program (MAP®). Figure 13 presents mortgage loans held for portfolio (designated as held for investment for accounting purposes) for the most recent five quarters.

Figure 13 - Mortgage Loans Held for Portfolio (Carrying Value) (dollars in billions)



Mortgage loans, excluding the allowance for credit losses, were $59.8 billion at September 30, 2023, an increase of $3.7 billion, or 7%, from $56.1 billion at December 31, 2022, as mortgage loan purchase volume outpaced repayments. Mortgage loan purchases increased in 2023 due to more competitive pricing by certain FHLBanks while prepayments slowed significantly due to the higher interest-rate environment in 2023. The allowance for credit losses on mortgage loans was $35 million at September 30, 2023, an increase of $5 million, or 17%, from $30 million at December 31, 2022. The FHLBanks utilize credit enhancements on conventional mortgage loans held for portfolio, which help to mitigate expected credit losses.

Table 11 presents mortgage loans held for portfolio at September 30, 2023 and December 31, 2022.

Table 11 - Mortgage Loans Held for Portfolio

(dollars in millions)

	September 30, 2023	December 31, 2022
Mortgage loans held for portfolio	$ 59,818	$ 56,078
Allowance for credit losses on mortgage loans	(35)	(30)
Mortgage loans held for portfolio, net	**$ 59,783**	**$ 56,048**

Table 12 presents metrics and ratios of mortgage loans held for portfolio. Periodically, each FHLBank evaluates the allowance for credit losses for its mortgage loans based on its policies and procedures to determine if an allowance for credit losses is necessary.

Table 12 - Mortgage Loans Held for Portfolio - Metrics and Ratios

(dollars in millions)

	September 30, 2023	September 30, 2022
Average loans outstanding during the period (unpaid principal balance, or UPB)(1)	$ 56,684	$ 54,938
Mortgage loans held for portfolio (UPB)	58,988	55,164
Non-accrual loans (UPB)	148	211
Allowance for credit losses on mortgage loans held for portfolio	35	27
(Charge-offs), net of recoveries(1)	—	—
Ratio of charge-offs, net of recoveries to average loans outstanding during the period(1)	— %	— %
Ratio of allowance for credit losses to mortgage loans held for portfolio	0.06 %	0.05 %
Ratio of non-accrual loans to mortgage loans held for portfolio	0.25 %	0.38 %
Ratio of allowance for credit losses to non-accrual loans	23.65 %	12.80 %

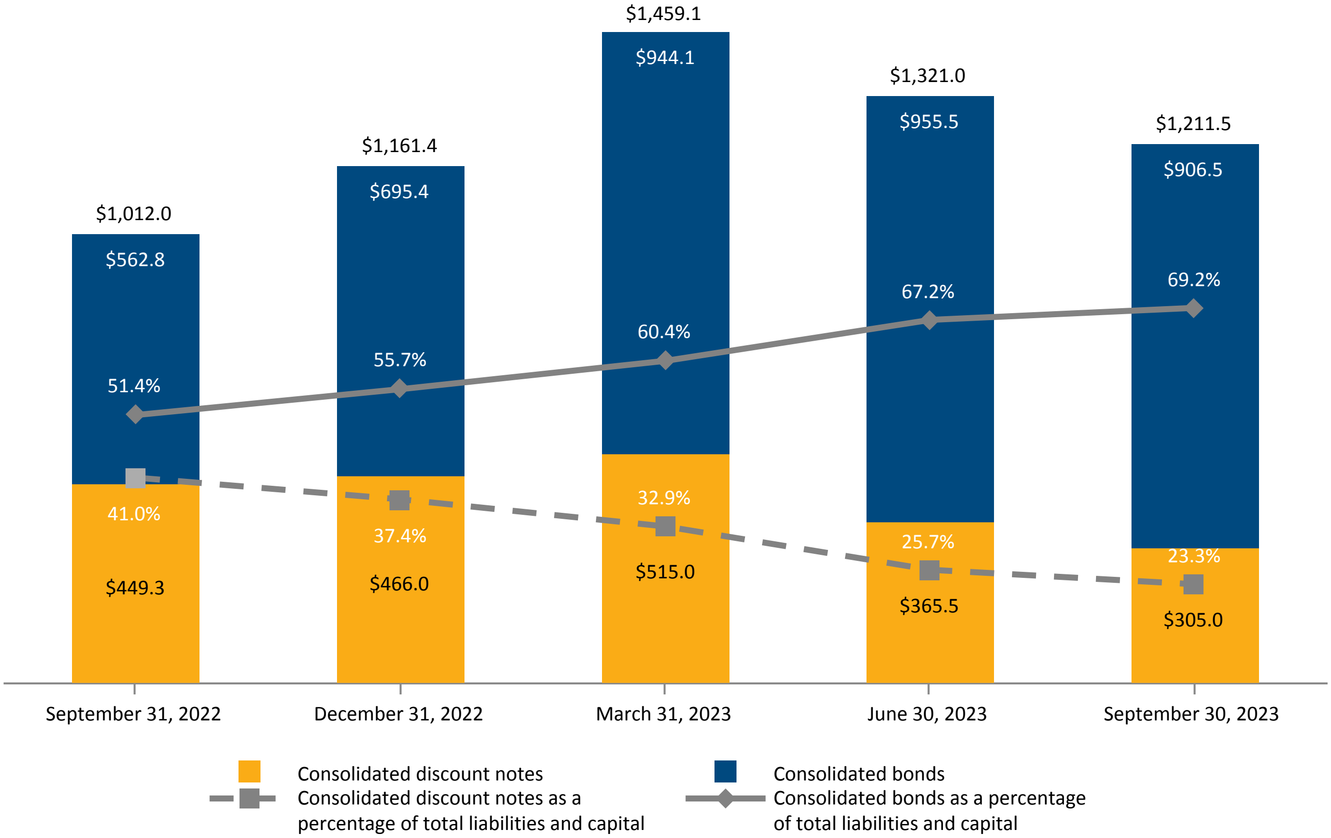
(1) Represents the nine months ended September 30, 2023 and 2022.

MPF Xtra® Conventional Mortgage Loans. In addition to mortgage loans purchased by the FHLBanks and held for portfolio, the FHLBank of Chicago also purchases eligible conventional loans from participating financial institutions (PFIs) located in its district, and in other MPF FHLBank districts under the MPF Xtra® product. Upon purchase from the PFIs, the FHLBank of Chicago concurrently sells the mortgage loans to Fannie Mae. During the nine months ended September 30, 2023 and 2022, the FHLBank of Chicago purchased and concurrently delivered $0.5 billion and $1.2 billion in UPB of these loans to Fannie Mae. (See *Business - Mortgage Loans* on page 11 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for more information about MPF Xtra® mortgage loans.)

Consolidated Obligations

Consolidated obligations consist of consolidated bonds and consolidated discount notes, which are joint and several obligations of all FHLBanks. The FHLBanks issue consolidated obligations through the Office of Finance as their agent. Consolidated obligations are the principal funding source used by the FHLBanks to make advances and to purchase mortgage loans and investments. The outstanding balance and types of consolidated obligations issued will fluctuate based on the funding requirements of the FHLBanks. The future amounts and types of consolidated obligations issued depend primarily on the demand for advances and could also be affected by changes in fiscal and monetary policies, as well as the state of the U.S. economy and financial markets. Figure 14 presents consolidated bonds and consolidated discount notes for the most recent five quarters.

Figure 14 - Consolidated Obligations Outstanding (Carrying Value)
(dollars in billions)



The carrying value of consolidated obligations totaled $1,211.5 billion at September 30, 2023, an increase of $50.1 billion, or 4%, from $1,161.4 billion at December 31, 2022, in line with the increase in total assets. The increase in consolidated obligations was comprised of a 30% increase in consolidated bonds, partially offset by a 35% decrease in consolidated discount notes, driven by a shift in issuance from consolidated discount notes to short-term fixed-rate callable consolidated bonds.

Consolidated bonds may be issued to raise short-, intermediate-, or long-term funds. Consolidated bonds are issued with either fixed-rate coupon payment terms or variable-rate coupon payment terms that are indexed to specified indices, such as SOFR, and have maturities typically ranging from three months to 30 years. The carrying value of consolidated bonds was $906.5 billion at September 30, 2023, an increase of $211.2 billion, or 30%, from $695.4 billion at December 31, 2022. Consolidated bonds represented 75% and 60% of total consolidated obligations outstanding at September 30, 2023 and December 31, 2022.

Consolidated discount notes are issued to provide short-term funding and have a maturity range of one day to one year. They are generally issued below face value and mature at face value. A significant portion of consolidated discount note activity typically results from the refinancing of maturing discount notes. The carrying value of consolidated discount notes was $305.0 billion at September 30, 2023, a decrease of $161.1 billion, or 35%, from $466.0 billion at December 31, 2022. Consolidated discount notes represented 25% and 40% of total consolidated obligations outstanding at September 30, 2023 and December 31, 2022.

Figures 15 and 16 present the principal amount of consolidated obligations by product type and by contractual maturity for the most recent five quarters.

Figure 15 - Consolidated Obligations by Product Type (dollars in billions)

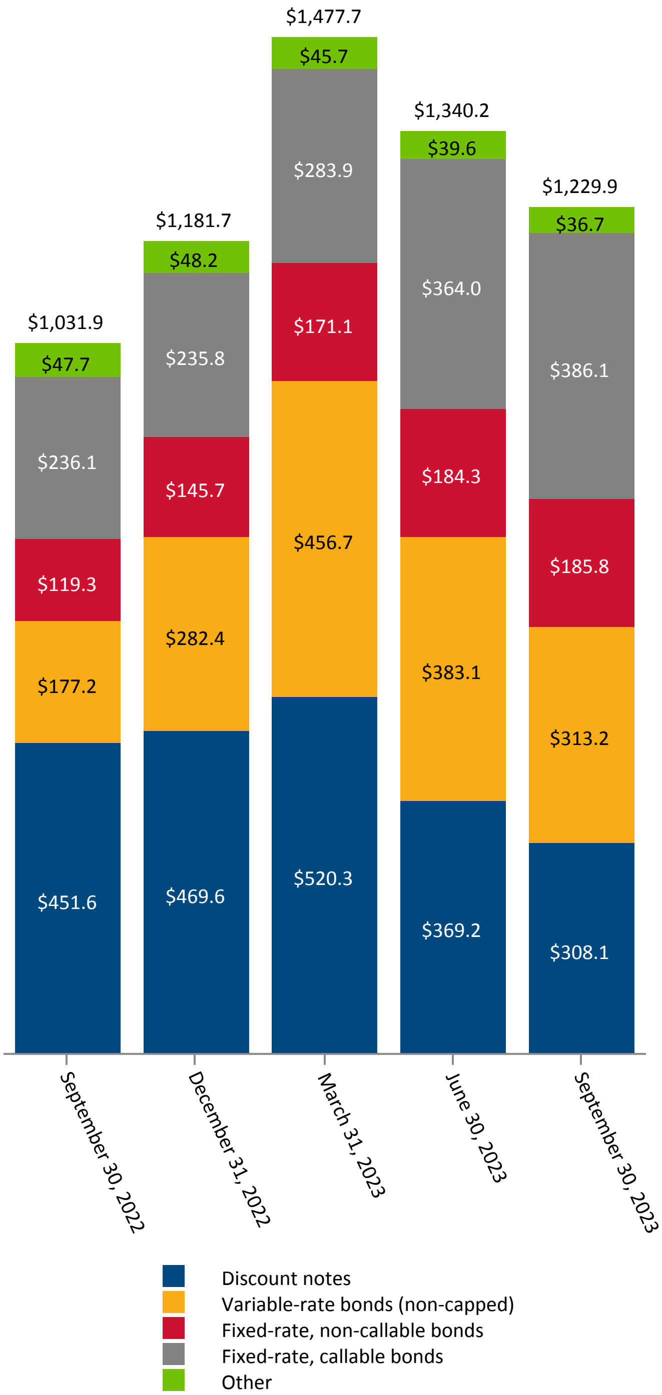


Figure 16 - Consolidated Obligations by Contractual Maturity (dollars in billions)

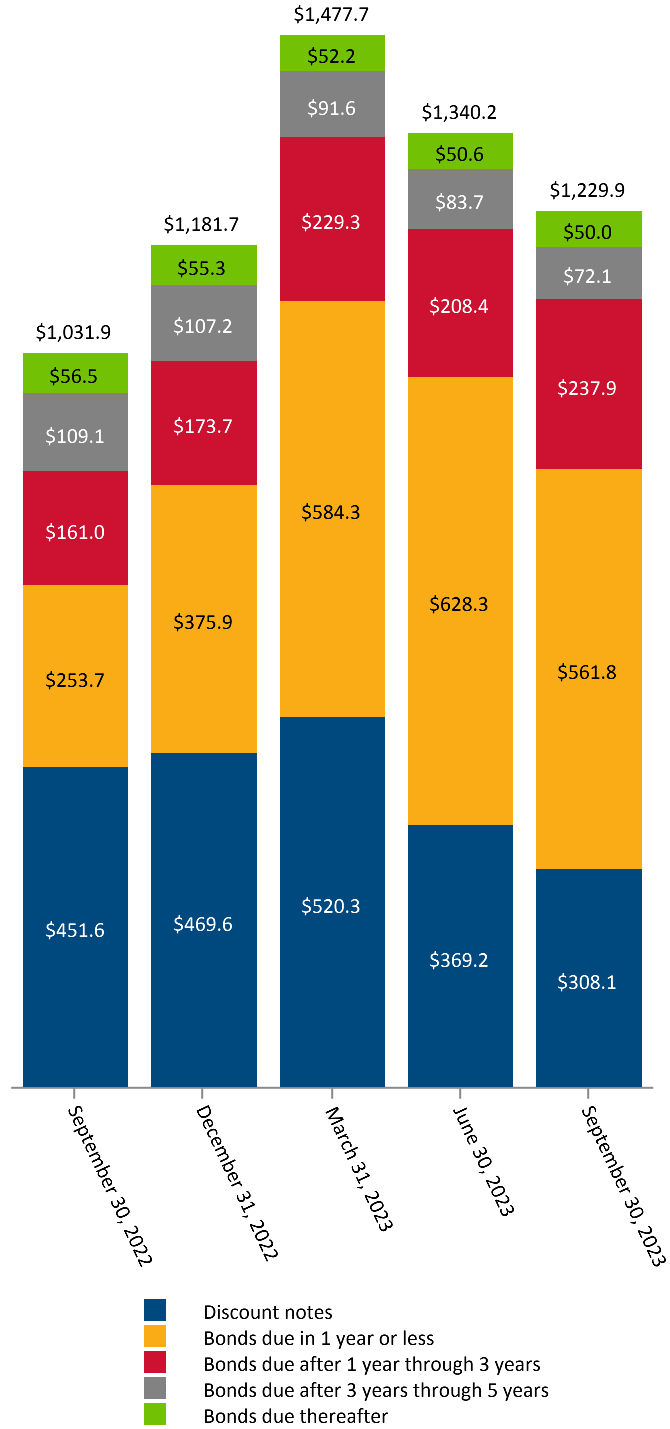


Table 13 presents the composition of consolidated obligations by product type and by contractual maturity at September 30, 2023 and December 31, 2022. At both September 30, 2023 and December 31, 2022, all outstanding variable-rate consolidated bonds were indexed to SOFR.

Table 13 - Types of Consolidated Obligations by Contractual Maturity

(dollars in millions)

	September 30, 2023		December 31, 2022		Change	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
Consolidated Discount Notes						
Overnight	$ 15,972	1.3 %	$ 5,789	0.4 %	$ 10,183	175.9 %
Due after 1 day through 30 days	84,188	6.8 %	139,764	11.8 %	(55,576)	(39.8)%
Due after 30 days through 90 days	123,261	10.0 %	244,705	20.7 %	(121,444)	(49.6)%
Due after 90 days through 1 year	84,693	6.9 %	79,307	6.7 %	5,386	6.8 %
Total principal amount	**308,114**	**25.0 %**	**469,565**	**39.6 %**	**(161,451)**	(34.4)%
Consolidated Bonds						
Fixed-rate, non-callable						
Due in 1 year or less	105,807	8.6 %	68,188	5.8 %	37,619	55.2 %
Due after 1 year through 3 years	48,981	4.0 %	48,825	4.1 %	156	0.3 %
Due after 3 years through 5 years	17,218	1.5 %	13,982	1.2 %	3,236	23.1 %
Due after 5 years through 15 years	13,198	1.1 %	14,043	1.2 %	(845)	(6.0)%
Thereafter	559	—	670	0.1 %	(111)	(16.6)%
Total principal amount	**185,763**	**15.2 %**	**145,708**	**12.4 %**	**40,055**	27.5 %
Fixed-rate, callable						
Due in 1 year or less	198,198	16.1 %	33,439	2.8 %	164,759	492.7 %
Due after 1 year through 3 years	111,566	9.1 %	94,479	8.0 %	17,087	18.1 %
Due after 3 years through 5 years	45,586	3.7 %	74,229	6.3 %	(28,643)	(38.6)%
Due after 5 years through 15 years	27,290	2.2 %	30,363	2.6 %	(3,073)	(10.1)%
Thereafter	3,459	0.3 %	3,278	0.3 %	181	5.5 %
Total principal amount	**386,099**	**31.4 %**	**235,788**	**20.0 %**	**150,311**	63.7 %
Variable-rate (non-capped)						
Due in 1 year or less	254,325	20.7 %	261,879	22.2 %	(7,554)	(2.9)%
Due after 1 year through 3 years	58,346	4.7 %	19,605	1.7 %	38,741	197.6 %
Due after 3 years through 5 years	535	—	778	0.1 %	(243)	(31.2)%
Due after 5 years through 15 years	—	—	100	—	(100)	(100.0)%
Thereafter	—	—	—	—	—	—
Total principal amount	**313,206**	**25.4 %**	**282,362**	**24.0 %**	**30,844**	10.9 %
Step-up/step-down, callable						
Due in 1 year or less	1,338	0.1 %	7,276	0.6 %	(5,938)	(81.6)%
Due after 1 year through 3 years	11,622	0.9 %	9,507	0.8 %	2,115	22.2 %
Due after 3 years through 5 years	7,119	0.6 %	14,271	1.2 %	(7,152)	(50.1)%
Due after 5 years through 15 years	5,346	0.5 %	6,698	0.6 %	(1,352)	(20.2)%
Thereafter	—	—	—	—	—	—
Total principal amount	**25,425**	**2.1 %**	**37,752**	**3.2 %**	**(12,327)**	(32.7)%
Other						
Due in 1 year or less	2,123	0.2 %	5,145	0.4 %	(3,022)	(58.7)%
Due after 1 year through 3 years	7,365	0.6 %	1,244	0.1 %	6,121	492.0 %
Due after 3 years through 5 years	1,684	0.1 %	3,963	0.3 %	(2,279)	(57.5)%
Due after 5 years through 15 years	95	—	215	—	(120)	(55.8)%
Thereafter	—	—	—	—	—	—
Total principal amount	**11,267**	0.9 %	**10,567**	**0.8 %**	**700**	6.6 %
Total principal amount consolidated bonds	**921,760**	**75.0 %**	**712,177**	**60.4 %**	**209,583**	29.4 %
Total principal amount	**1,229,874**	**100.0 %**	**1,181,742**	**100.0 %**	**$ 48,132**	4.1 %
Other adjustments, net[(1)]	(18,372)		(20,312)			
Total consolidated obligations	**$ 1,211,502**		**$ 1,161,430**			

(1) Consists of hedging and fair value option valuation adjustments, unamortized premiums and discounts, and combining adjustments.

Table 14 presents cash flows related to consolidated obligations. During the three months ended September 30, 2023, payments exceeded proceeds, resulting in lower consolidated obligations outstanding compared to June 30, 2023. During the nine months ended September 30, 2023, proceeds slightly exceeded payments, resulting in marginally higher consolidated obligations outstanding compared to December 31, 2022. During March 2023, member demand for advances accelerated in response to the stress placed on the banking industry and financial markets resulting from the financial difficulties experienced by some depository institutions. During the second and third quarters of 2023, member demand for advances moderated as market liquidity normalized, and as of September 30, 2023, outstanding advances and consolidated obligations both decreased compared to March 31, 2023, but remained marginally higher than the levels at December 31, 2022.

Table 14 - Net Proceeds and Payments for Consolidated Obligations

(dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2023	2022	Change	2023	2022	Change
Net proceeds from issuance of consolidated obligations						
Discount notes	$ 1,521,255	$ 1,684,820	$ (163,565)	$ 4,461,405	$ 4,249,048	$ 212,357
Bonds	170,657	186,962	(16,305)	847,639	370,027	477,612
Net proceeds	**1,691,912**	**1,871,782**	**$ (179,870)**	**5,309,044**	**4,619,075**	**$ 689,969**
Payments for maturing and retiring consolidated obligations						
Discount notes	1,580,829	1,648,830	$ (68,001)	4,623,084	4,011,769	$ 611,315
Bonds	219,932	75,400	144,532	637,799	231,661	406,138
Total payments	**1,800,761**	**1,724,230**	**$ 76,531**	**5,260,883**	**4,243,430**	**$ 1,017,453**
Net change	**$ (108,849)**	**$ 147,552**		**$ 48,161**	**$ 375,645**	

Consolidated bonds often have investor-determined features. The decision to issue a consolidated bond using a particular structure is based on the desired amount of funding and the ability of the FHLBank(s) receiving the proceeds of the consolidated bond issued to hedge the risks. This strategy of issuing consolidated obligations while simultaneously entering into derivative transactions enables an FHLBank to offer a wider range of attractively-priced advances to its members and may allow an FHLBank to reduce its funding costs. The continued attractiveness of this strategy depends on yield relationships between the FHLBanks' consolidated obligations and the derivatives markets. If conditions change, an FHLBank may alter the types or terms of the consolidated obligations that it issues. The increase in funding alternatives available to the FHLBanks through negotiated debt/ swap transactions is beneficial to the FHLBanks because it may diversify the investor base, reduce funding costs, and/or provide additional asset/liability management tools.

Table 15 presents the bond types the FHLBanks issued for their bond funding needs. The types of consolidated bonds issued can fluctuate based on comparative changes in their cost levels, supply and demand conditions, advance demand, and the FHLBanks' individual balance sheet management strategies. During the nine months ended September 30, 2023, the total issuance of consolidated bonds increased compared to the nine months ended September 30, 2022, driven by a shift in issuance from consolidated discount notes to consolidated bonds, and was in line with the increase in demand for advances. In addition, during the three and nine months ended September 30, 2023, investors preferred short-term fixed-rate callable consolidated bonds or short-term variable-rate consolidated bonds.

Table 15 - Percentage of Total Consolidated Bonds Issued by Bond Type

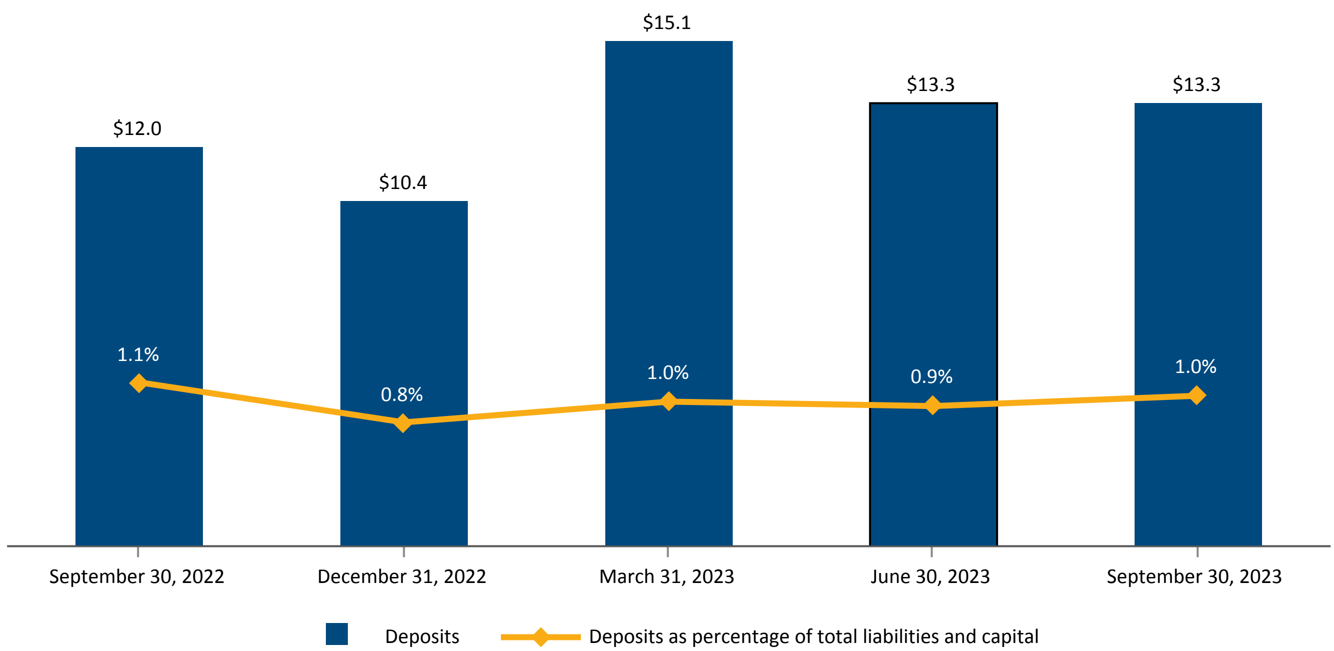
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Single-index, variable-rate	68.5 %	75.5 %	67.6 %	59.2 %
Fixed-rate, callable	21.6 %	10.0 %	23.9 %	23.1 %
Fixed-rate, non-callable	9.9 %	12.5 %	8.4 %	11.5 %
Step-up/step-down[1]	—	2.0 %	0.1 %	6.2 %
Total	**100.0 %**	**100.0 %**	**100.0 %**	**100.0 %**

(1) Primarily consists of callable step-up bonds.

Deposits

The FHLBanks offer demand and overnight deposit programs to members and to qualifying non-members. In addition, certain FHLBanks offer short-term interest-bearing deposit programs to members, and in certain cases, to qualifying non-members. Figure 17 presents deposits for the most recent five quarters.

Figure 17 - Deposits
(dollars in billions)



Deposits represent a relatively small portion of the FHLBanks' funding, totaling $13.3 billion at September 30, 2023, an increase of $2.9 billion, or 28%, from $10.4 billion at December 31, 2022. All FHLBank deposits are uninsured and deposit balances vary depending on market factors, such as the attractiveness of the FHLBanks' deposit pricing relative to the rates available on alternative money market instruments, FHLBank members' investment preferences with respect to the maturity of their investments, and FHLBank members' liquidity. Interest-bearing demand and overnight deposits represented 96% of deposits at both September 30, 2023 and December 31, 2022, with the remaining deposits primarily being term deposits and non-interest-bearing deposits. Interest-bearing demand and overnight deposits pay interest based on a daily interest rate. Term deposits pay interest based on a fixed rate determined at the issuance of the deposit.

Capital

GAAP capital consists of capital stock, retained earnings, and accumulated other comprehensive income (loss). Figure 18 presents GAAP capital and the GAAP capital-to-assets ratio for the most recent five quarters.

Figure 18 - GAAP Capital (dollars in billions)

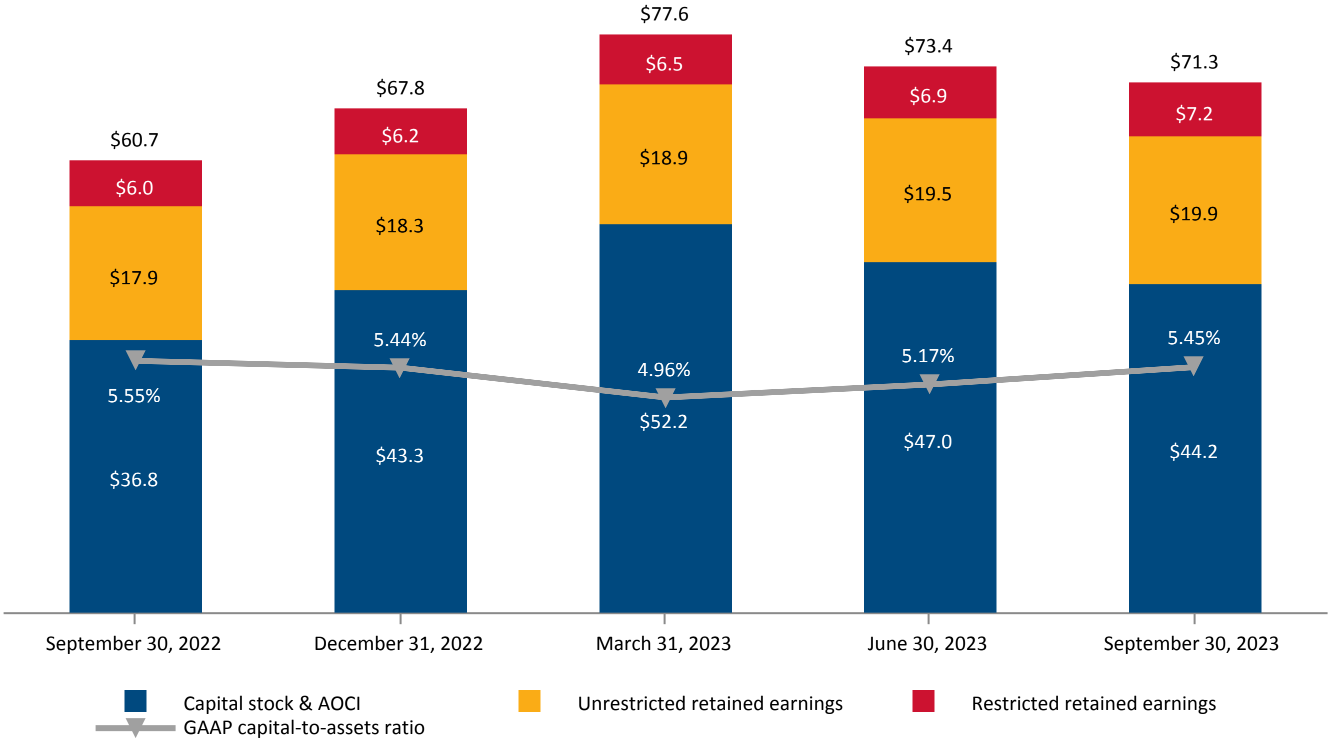


Table 16 - Total Capital and Capital-to-Assets Ratios

(dollars in millions)

	September 30, 2023	December 31, 2022	Change
Capital stock	$ 45,219	$ 44,006	$ 1,213
Retained earnings:			
Unrestricted	19,942	18,322	1,620
Restricted[(1)]	7,250	6,232	1,018
Total retained earnings	**27,192**	**24,554**	**2,638**
AOCI	(1,034)	(753)	(281)
Total GAAP capital	**71,377**	**67,807**	**3,570**
Exclude: AOCI	1,034	753	281
Add: Mandatorily redeemable capital stock	1,402	708	694
Combined regulatory capital[(2)]	**$ 73,813**	**$ 69,268**	**$ 4,545**
Total assets	**$ 1,309,489**	**$ 1,247,247**	**$ 62,242**
GAAP capital-to-assets ratio	5.45 %	5.44 %	0.01 %
Regulatory capital-to-assets ratio[(3)]	5.64 %	5.55 %	0.09 %

(1) Restricted retained earnings was established through the Capital Agreement, as amended, and is intended to enhance the capital position of each FHLBank. (See *Note 9 - Capital* to the accompanying combined financial statements for additional information about the Capital Agreement and restricted retained earnings.)
(2) Regulatory capital requirements apply to individual FHLBanks, and the combined amounts are for analysis only. The sum of the individual FHLBank regulatory capital amounts does not agree to the combined regulatory capital due to combining adjustments.
(3) The regulatory capital-to-assets ratio is calculated based on the FHLBanks' combined regulatory capital as a percentage of combined total assets. (See *Note 9 - Capital* to the accompanying combined financial statements for a definition and discussion of regulatory capital.)

GAAP Capital. Total GAAP capital was $71.4 billion at September 30, 2023, an increase of $3.6 billion, or 5%, from $67.8 billion at December 31, 2022, due primarily to the growth in retained earnings and an increase in capital stock. The GAAP capital-to-assets ratio was 5.45% at September 30, 2023, an increase of 1 basis point from 5.44% at December 31, 2022.

Capital Stock. Capital stock was $45.2 billion at September 30, 2023, an increase of $1.2 billion, or 3%, from $44.0 billion at December 31, 2022, due principally to the net issuance of activity-based capital stock.

Retained Earnings. Retained earnings grew to $27.2 billion at September 30, 2023, an increase of $2.6 billion, or 11%, from $24.6 billion at December 31, 2022, resulting principally from net income of $5.1 billion, partially offset by dividends of $2.4 billion. Unrestricted retained earnings were $19.9 billion at September 30, 2023, an increase of $1.6 billion, or 9%, from $18.3 billion at December 31, 2022. Restricted retained earnings were $7.3 billion at September 30, 2023, an increase of $1.0 billion, or 16%, from $6.2 billion at December 31, 2022.

Accumulated Other Comprehensive Income (Loss). AOCI was a loss of $1.0 billion at September 30, 2023, compared to a loss of $0.8 billion at December 31, 2022, primarily consisting of net unrealized losses on MBS classified as AFS securities.

Figures 19 and 20 present the components of capital as a percentage of total GAAP capital at September 30, 2023 and December 31, 2022.

Figure 19 - Capital Components as a Percentage of Total GAAP Capital at September 30, 2023

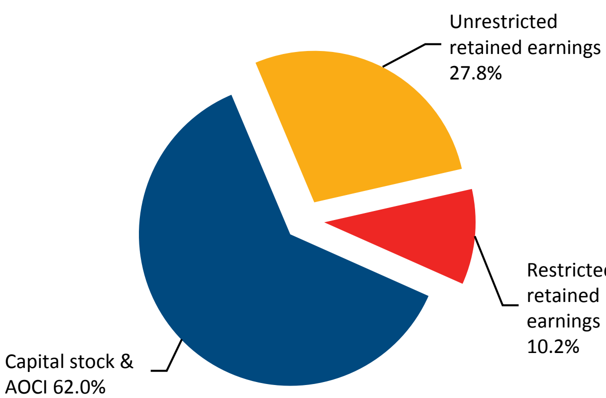
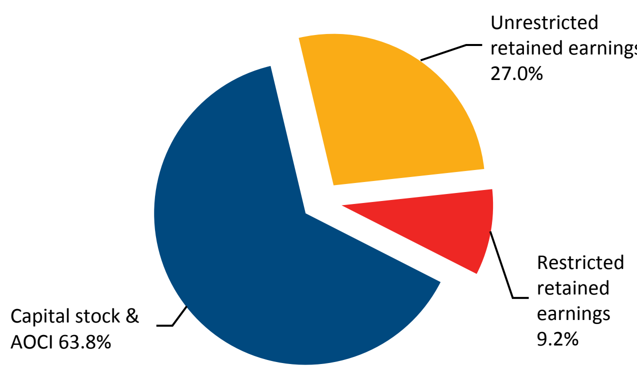


Figure 20 - Capital Components as a Percentage of Total GAAP Capital at December 31, 2022



Regulatory Capital. Combined regulatory capital was $73.8 billion at September 30, 2023, an increase of $4.5 billion, or 7%, from $69.3 billion at December 31, 2022, due primarily to the growth in retained earnings and an increase in capital stock. The regulatory capital-to-assets ratio was 5.64% at September 30, 2023, an increase of 9 basis points from 5.55% at December 31, 2022.

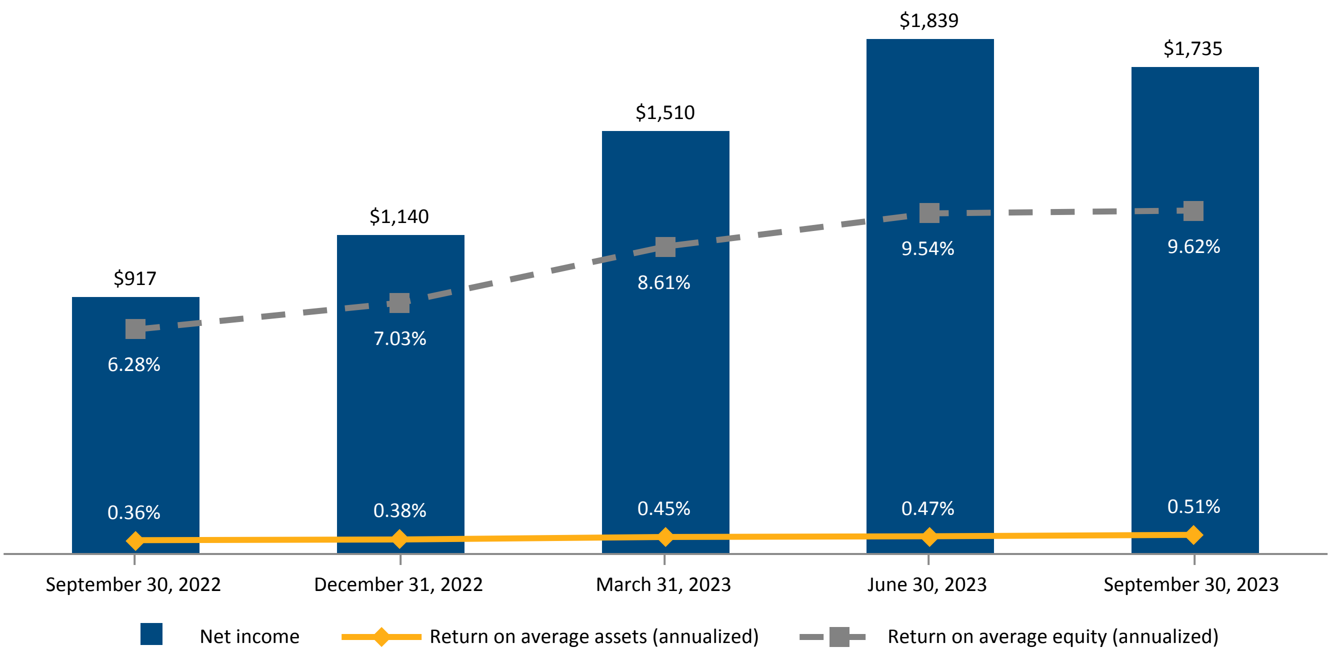
Combined Results of Operations

Net Income

The primary source of each FHLBank's earnings is net interest income, which is the interest income on advances, mortgage loans, and investments, less the interest expense on consolidated obligations, deposits, and mandatorily redeemable capital stock. The expenses of the FHLBanks, other than interest expense, primarily consist of employee compensation and benefits, other operating expenses, and Affordable Housing Program assessments.

The FHLBanks may also recognize non-interest gains and losses, such as gains and losses on derivatives and hedging activities and gains and losses on investment securities. Due to the FHLBanks' cooperative structure, the FHLBanks generally earn a narrow net interest spread. Accordingly, the FHLBanks' net income is relatively low compared to total assets and total liabilities. Figure 21 presents net income, return on average assets, and return on average equity for the most recent five quarters.

Figure 21 - Net Income
(dollars in millions)



Net income was $1,735 million and $5,084 million for the three and nine months ended September 30, 2023, increases of 89% and 151% compared to the three and nine months ended September 30, 2022, resulting primarily from higher net interest income.

Table 17 - Changes in Net Income
(dollars in millions)

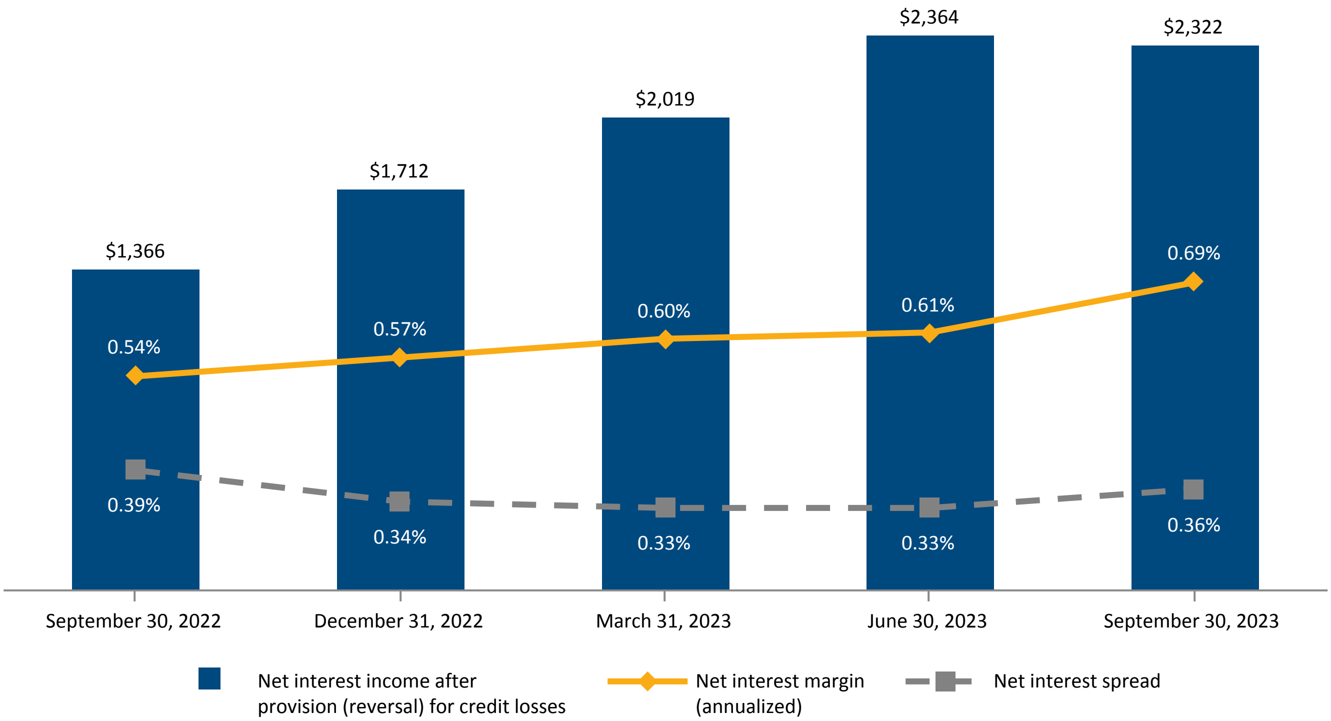
	Three Months Ended September 30,		Change	Nine Months Ended September 30,		Change
	2023	2022	2023 vs. 2022	2023	2022	2023 vs. 2022
Net interest income after provision (reversal) for credit losses	$ 2,322	$ 1,366	$ 956	$ 6,705	$ 3,410	$ 3,295
Non-interest income (loss)	38	10	28	212	(85)	297
Non-interest expense	429	356	73	1,263	1,071	192
Affordable Housing Program assessments	196	103	93	570	228	342
Net income	**$ 1,735**	**$ 917**	**$ 818**	**$ 5,084**	**$ 2,026**	**$ 3,058**

Net Interest Income after Provision (Reversal) for Credit Losses

The primary source of each FHLBank's earnings is net interest income, which is the interest income on advances, mortgage loans, and investments, less the interest expense on consolidated obligations, deposits, and mandatorily redeemable capital stock. The net interest income of the FHLBanks is affected by several external factors, including changes in interest rates, liquidity levels and demand for advances from member institutions, the general state of the economy, and fiscal and monetary policies. The future level of net interest income of the FHLBanks will depend, in part, upon the level and volatility of interest rates, demand for advances, cost of consolidated obligations, changes in fiscal and monetary policies, as well as the state of the U.S. economy and financial markets.

Figure 22 presents net interest income after provision (reversal) for credit losses, net interest margin, and net interest spread for the most recent five quarters.

Figure 22 - Net Interest Income after Provision (Reversal) for Credit Losses (dollars in millions)



Net interest income after provision (reversal) for credit losses was $2,322 million and $6,705 million for the three and nine months ended September 30, 2023, increases of 70% and 97% compared to the three and nine months ended September 30, 2022.

Table 18 - Net Interest Income after Provision (Reversal) for Credit Losses

(dollars in millions)

	Three Months Ended September 30,		Change	Nine Months Ended September 30,		Change
	2023	2022	2023 vs. 2022	2023	2022	2023 vs. 2022
Interest income						
Advances	$ 12,067	$ 3,705	$ 8,362	$ 36,538	$ 5,750	$ 30,788
Investments and other	5,902	2,211	3,691	16,577	3,855	12,722
Mortgage loans held for portfolio	494	411	83	1,388	1,190	198
Total interest income	**18,463**	**6,327**	**12,136**	**54,503**	**10,795**	**43,708**
Interest expense						
Consolidated obligations - Discount notes	4,157	2,164	1,993	15,140	2,880	12,260
Consolidated obligations - Bonds	11,766	2,720	9,046	32,123	4,390	27,733
Total consolidated obligations	**15,923**	**4,884**	**11,039**	**47,263**	**7,270**	**39,993**
Deposits and mandatorily redeemable capital stock	210	64	146	519	96	423
Total interest expense	**16,133**	**4,948**	**11,185**	**47,782**	**7,366**	**40,416**
Net interest income	**2,330**	**1,379**	**951**	**6,721**	**3,429**	**3,292**
Provision (reversal) for credit losses	8	13	(5)	16	19	(3)
Net interest income after provision (reversal) for credit losses	**$ 2,322**	**$ 1,366**	**$ 956**	**$ 6,705**	**$ 3,410**	**$ 3,295**

Table 19 presents average balances of and annualized average yields/rates on the major categories of interest-earning assets and interest-bearing liabilities, net interest spread, and net interest margin. Due to the FHLBanks' cooperative structure, the FHLBanks generally earn a narrow net interest spread.

Table 19 - Analysis of Interest Income/Expense and Average Yield/Rate

(dollars in millions)

	Three Months Ended September 30,					
	2023			2022		
	Average Balance	Interest Income/ Expense	Average Yield/Rate	Average Balance	Interest Income/ Expense	Average Yield/Rate
Assets						
Interest-bearing deposits and other	$ 40,379	$ 567	5.57 %	$ 22,464	$ 133	2.35 %
Securities purchased under agreements to resell	52,913	709	5.32 %	42,442	235	2.20 %
Federal funds sold	107,601	1,443	5.32 %	95,496	534	2.22 %
Investment securities[(1)(2)]	225,753	3,183	5.59 %	195,477	1,309	2.66 %
Advances[(3)]	853,070	12,067	5.61 %	605,848	3,705	2.43 %
Mortgage loans[(4)]	58,776	494	3.33 %	55,885	411	2.92 %
Total interest-earning assets	**1,338,492**	**18,463**	**5.47 %**	**1,017,612**	**6,327**	**2.47 %**
Other non-interest-earning assets	16,116			8,122		
Fair-value adjustment on investment securities[(2)]	(1,036)			(1,427)		
Total assets	**$ 1,353,572**			**$ 1,024,307**		
Liabilities and Capital						
Consolidated obligations - Discount notes	$ 319,847	4,157	5.16 %	$ 437,540	2,164	1.96 %
Consolidated obligations - Bonds	916,376	11,766	5.09 %	496,098	2,720	2.18 %
Deposits and mandatorily redeemable capital stock	15,875	210	5.25 %	12,145	64	2.09 %
Total interest-bearing liabilities	**1,252,098**	**16,133**	**5.11 %**	**945,783**	**4,948**	**2.08 %**
Non-interest-bearing liabilities	29,921			20,597		
Total liabilities	**1,282,019**			**966,380**		
Capital	71,553			57,927		
Total liabilities and capital	**$ 1,353,572**			**$ 1,024,307**		
Net interest income		**$ 2,330**			**$ 1,379**	
Net interest spread			0.36 %			0.39 %
Net interest margin (annualized)			0.69 %			0.54 %
Total interest-earning assets to total interest-bearing liabilities	106.90 %			107.59 %		

	Nine Months Ended September 30,					
	2023			2022		
	Average Balance	Interest Income/ Expense	Average Yield/Rate	Average Balance	Interest Income/ Expense	Average Yield/Rate
Assets						
Interest-bearing deposits and other	$ 40,082	$ 1,569	5.23 %	$ 17,450	$ 176	1.35 %
Securities purchased under agreements to resell	60,551	2,262	4.99 %	33,299	314	1.26 %
Federal funds sold	112,736	4,213	5.00 %	82,793	715	1.15 %
Investment securities[(1)(2)]	217,547	8,533	5.24 %	191,593	2,650	1.85 %
Advances[(3)]	930,194	36,538	5.25 %	496,277	5,750	1.55 %
Mortgage loans[(4)]	57,231	1,388	3.24 %	55,701	1,190	2.86 %
Total interest-earning assets	**1,418,341**	**54,503**	**5.14 %**	**877,113**	**10,795**	**1.65 %**
Other non-interest-earning assets	15,513			7,708		
Fair-value adjustment on investment securities[(2)]	(939)			(121)		
Total assets	**$ 1,432,915**			**$ 884,700**		
Liabilities and Capital						
Consolidated obligations - Discount notes	$ 422,578	15,140	4.79 %	$ 337,363	2,880	1.14 %
Consolidated obligations - Bonds	894,075	32,123	4.80 %	463,039	4,390	1.27 %
Deposits and mandatorily redeemable capital stock	14,941	519	4.64 %	14,074	96	0.91 %
Total interest-bearing liabilities	**1,331,594**	**47,782**	**4.80 %**	**814,476**	**7,366**	**1.21 %**
Non-interest-bearing liabilities	27,983			16,332		
Total liabilities	**1,359,577**			**830,808**		
Capital	73,338			53,892		
Total liabilities and capital	**$ 1,432,915**			**$ 884,700**		
Net interest income		**$ 6,721**			**$ 3,429**	
Net interest spread			0.34 %			0.44 %
Net interest margin (annualized)			0.63 %			0.52 %
Total interest-earning assets to total interest-bearing liabilities	106.51 %			107.69 %		

(1) Investment securities consist of Trading, AFS, and HTM securities.
(2) The average balances of AFS securities and HTM securities are reflected at amortized cost. (See *Note 3 - Investments* to the accompanying combined financial statements for additional information.)
(3) Interest income includes prepayment fees on advances, net of $36 million and $139 million for the three and nine months ended September 30, 2023, and $1 million and $42 million for the three and nine months ended September 30, 2022.
(4) Non-accrual loans are included in the average balances used to determine average yield/rate.

Changes in both average interest rates and average balances of interest-earning assets and interest-bearing liabilities have a direct influence on changes in net interest income, net interest margin, and net interest spread. Table 20 presents changes in interest income and interest expense due to rate-related and volume-related factors. Changes in interest income and interest expense not identifiable as either rate-related or volume-related, but rather attributable to both rate and volume changes, have been allocated to the rate and volume categories based on the proportion of the absolute value of the rate and volume changes.

Table 20 - Rate and Volume Analysis

(dollars in millions)

	Three Months Ended September 30, 2023 vs. 2022			Nine Months Ended September 30, 2023 vs. 2022		
	Volume	Rate	Total	Volume	Rate	Total
Interest Income						
Interest-bearing deposits and other	$ 160	$ 274	$ 434	$ 434	$ 959	$ 1,393
Securities purchased under agreements to resell	70	404	474	422	1,526	1,948
Federal funds sold	76	833	909	342	3,156	3,498
Investment securities[1]	231	1,643	1,874	405	5,478	5,883
Advances	1,987	6,375	8,362	8,253	22,535	30,788
Mortgage loans	22	61	83	34	164	198
Total interest income	**2,546**	**9,590**	**12,136**	**9,890**	**33,818**	**43,708**
Interest Expense						
Consolidated obligations - Discount notes	(716)	2,709	1,993	897	11,363	12,260
Consolidated obligations - Bonds	3,512	5,534	9,046	6,957	20,776	27,733
Deposits and mandatorily redeemable capital stock	25	121	146	6	417	423
Total interest expense	**2,821**	**8,364**	**11,185**	**7,860**	**32,556**	**40,416**
Changes in net interest income	**$ (275)**	**$ 1,226**	**$ 951**	**$ 2,030**	**$ 1,262**	**$ 3,292**

(1) Investment securities consist of Trading, AFS, and HTM securities.

Net interest income was $2,330 million and $6,721 million for the three and nine months ended September 30, 2023, increases of 69% and 96% compared to the three and nine months ended September 30, 2022. Net interest margin was 0.69% and 0.63% for the three and nine months ended September 30, 2023, increases of 15 and 11 basis points compared to the three and nine months ended September 30, 2022. However, net interest spread was 0.36% and 0.34% for the three and nine months ended September 30, 2023, decreases of 3 and 10 basis points compared to the three and nine months ended September 30, 2022, due primarily to the average rates on interest-bearing liabilities rising more quickly than the increase in the average yields on interest-earning assets in the higher interest-rate environment and the effect of higher concentrations of advances as a percentage of total assets as advances tend to have lower spreads to funding costs than other FHLBank assets.

- Interest income was $18,463 million and $54,503 million for the three and nine months ended September 30, 2023, increases of $12,136 million and $43,708 million compared to the three and nine months ended September 30, 2022, driven primarily by increases in the average yields on interest-earning assets. The average yields on interest-earning assets were 5.47% and 5.14% for the three and nine months ended September 30, 2023, increases of 300 and 349 basis points from 2.47% and 1.65% for the three and nine months ended September 30, 2022. Although significantly higher interest rates were the primary factor affecting interest income, the higher average balances of advances were also a contributing factor. The average balances of advances were $853.1 billion and $930.2 billion for the three and nine months ended September 30, 2023, increases of 41% and 87% compared to the three and nine months ended September 30, 2022.

- Interest expense was $16,133 million and $47,782 million for the three and nine months ended September 30, 2023, increases of $11,185 million and $40,416 million compared to the three and nine months ended September 30, 2022, driven primarily by the higher average rates on consolidated obligations. The average rates on consolidated obligations were 5.11% and 4.80% for the three and nine months ended September 30, 2023, increases of 303 and 359 basis points from 2.08% and 1.21% for the three and nine months ended September 30, 2022. Although significantly higher interest rates were the primary factor affecting interest expense, the higher average balances of consolidated obligations were also a contributing factor. The average balances of consolidated obligations were $1,236.2 billion and $1,316.7 billion for the three and nine months ended September 30, 2023, increases of 32% and 64% compared to the three and nine months ended September 30, 2022.

Factors Affecting Net Interest Income.

Advances. Interest income on advances was $12,067 million and $36,538 million for the three and nine months ended September 30, 2023, increases of $8,362 million and $30,788 million compared to the three and nine months ended September 30, 2022, resulting from increases in both the average yields on, and the average balances of, advances. The average yields on advances were 5.61% and 5.25% for the three and nine months ended September 30, 2023, increases of 318 and 370 basis points from 2.43% and 1.55% for the three and nine months ended September 30, 2022. The increases in the average yields on advances were the result of higher interest rates on advances and the effect of derivatives and hedging activities on interest income from advances, driven by the higher interest-rate environment. (See *Table 21* for additional information regarding the effect of derivatives and hedging activities on net interest income.) The average balances of advances were $853.1 billion and $930.2 billion for the three and nine months ended September 30, 2023, increases of 41% and 87% compared to the three and nine months ended September 30, 2022, resulting primarily from an increase in long-term advances, partially offset by a decrease in short-term advances. In March 2023, member demand for advances accelerated in response to the stress placed on the banking industry and financial markets resulting from the financial difficulties experienced by some depository institutions. During the second and third quarters of 2023, member demand for advances moderated as market liquidity normalized.

Mortgage Loans. Interest income on mortgage loans was $494 million and $1,388 million for the three and nine months ended September 30, 2023, increases of 20% and 17% compared to the three and nine months ended September 30, 2022, resulting primarily from increases in the average yields on mortgage loans. The average yields on mortgage loans were 3.33% and 3.24% for the three and nine months ended September 30, 2023, increases of 41 and 38 basis points from 2.92% and 2.86% for the three and nine months ended September 30, 2022, resulting primarily from higher interest rates on mortgage loans and lower premium amortization due to lower loan prepayment activity in the higher interest-rate environment.

Total Investments. Interest income on total investments was $5,902 million and $16,577 million for the three and nine months ended September 30, 2023, increases of $3,691 million and $12,722 million compared to the three and nine months ended September 30, 2022, resulting primarily from increases in the average yields on total investments. The average yields on total investments were 5.49% and 5.14%, increases of 303 and 355 basis points from 2.46% and 1.59% for the three and nine months ended September 30, 2022. The increases in the average yields on total investments were the result of higher interest rates on investments, in part driven by higher yields on investments funded by member capital and the effect of derivatives and hedging activities on interest income from investment securities in the higher interest-rate environment, as well as the reduction in amortization of premiums on MBS due to lower prepayments. (See *Table 21* for additional information regarding the effect of derivatives and hedging activities on net interest income and *Liquidity and Capital Resources* for more discussion regarding the FHLBanks' liquidity requirements.)

Consolidated Obligations. Interest expense on consolidated obligations was $15,923 million and $47,263 million for the three and nine months ended September 30, 2023, increases of $11,039 million and $39,993 million compared to the three and nine months ended September 30, 2022, driven primarily by the higher average rates on consolidated obligations. The average rates on consolidated obligations were 5.11% and 4.80% for the three and nine months ended September 30, 2023, increases of 303 and 359 basis points from 2.08% and 1.21% for the three and nine months ended September 30, 2022. The increases in the average rates on consolidated obligations were due primarily to higher interest rates on consolidated bonds and consolidated discount notes and the effect of derivatives and hedging activities on interest expense from consolidated bonds in the higher interest-rate environment. (See *Table 21* for additional information regarding the effect of derivatives and hedging activities on net interest income.) Although significantly higher interest rates were the primary factor affecting interest expense, the higher average balances of consolidated obligations were also a contributing factor. The average balances of consolidated obligations were $1,236.2 billion and $1,316.7 billion for the three and nine months ended September 30, 2023, increases of 32% and 64% compared to the three and nine months ended September 30, 2022, principally resulting from increases in the average balances of advances.

Effect of Derivatives and Hedging Activities on Net Interest Income.

Net interest income includes components related to the effect of derivatives and hedging activities resulting from the FHLBanks' hedging strategies. If a hedging relationship is designated and qualifies for hedge accounting treatment, the net interest settlements of interest receivables or payables related to derivatives designated in fair value or cash flow hedge relationships are recognized as adjustments to interest income or expense of the designated hedged item. When fair value hedge accounting is discontinued, the cumulative basis adjustment on the hedged item is amortized or accreted into net interest income over the remaining life of the hedged item using a level-yield methodology. In addition, changes in fair value of the derivative and the hedged item for designated fair value hedges are recorded in net interest income in the same line as the hedged item. (See *Note 6 - Derivatives and Hedging Activities* to the accompanying combined financial statements for additional information on the effect of derivatives and hedging activities.) Table 21 presents the effect of derivatives and hedging activities on net interest income.

Table 21 - Effect of Derivatives and Hedging Activities on Net Interest Income
(dollars in millions)

	Three Months Ended September 30, 2023					
	Advances	Investment Securities	Mortgage Loans[1]	Consolidated Bonds	Consolidated Discount Notes	Total
Net interest income						
Amortization and accretion of hedging activities in net interest income	$ 43	$ (26)	$ 1	$ (139)	$ —	$ (121)
Net gains (losses) on derivatives and hedged items	17	26	—	138	(6)	175
Net interest settlements on derivatives	1,639	889	—	(2,294)	11	245
Total effect on net interest income	**$ 1,699**	**$ 889**	**$ 1**	**$ (2,295)**	**$ 5**	**$ 299**

	Three Months Ended September 30, 2022					
	Advances	Investment Securities	Mortgage Loans[1]	Consolidated Bonds	Consolidated Discount Notes	Total
Net interest income						
Amortization and accretion of hedging activities in net interest income	$ 53	$ (50)	$ (1)	$ (2)	$ —	$ —
Net gains (losses) on derivatives and hedged items	(4)	36	—	(26)	5	11
Net interest settlements on derivatives	237	108	—	(469)	(35)	(159)
Total effect on net interest income	**$ 286**	**$ 94**	**$ (1)**	**$ (497)**	**$ (30)**	**$ (148)**

	Nine Months Ended September 30, 2023					
	Advances	Investment Securities	Mortgage Loans[1]	Consolidated Bonds	Consolidated Discount Notes	Total
Net interest income						
Amortization and accretion of hedging activities in net interest income	$ 76	$ (106)	$ 1	$ (334)	$ (2)	$ (365)
Net gains (losses) on derivatives and hedged items	(260)	43	—	287	(1)	69
Net interest settlements on derivatives	4,213	2,411	—	(6,217)	16	423
Total effect on net interest income	**$ 4,029**	**$ 2,348**	**$ 1**	**$ (6,264)**	**$ 13**	**$ 127**

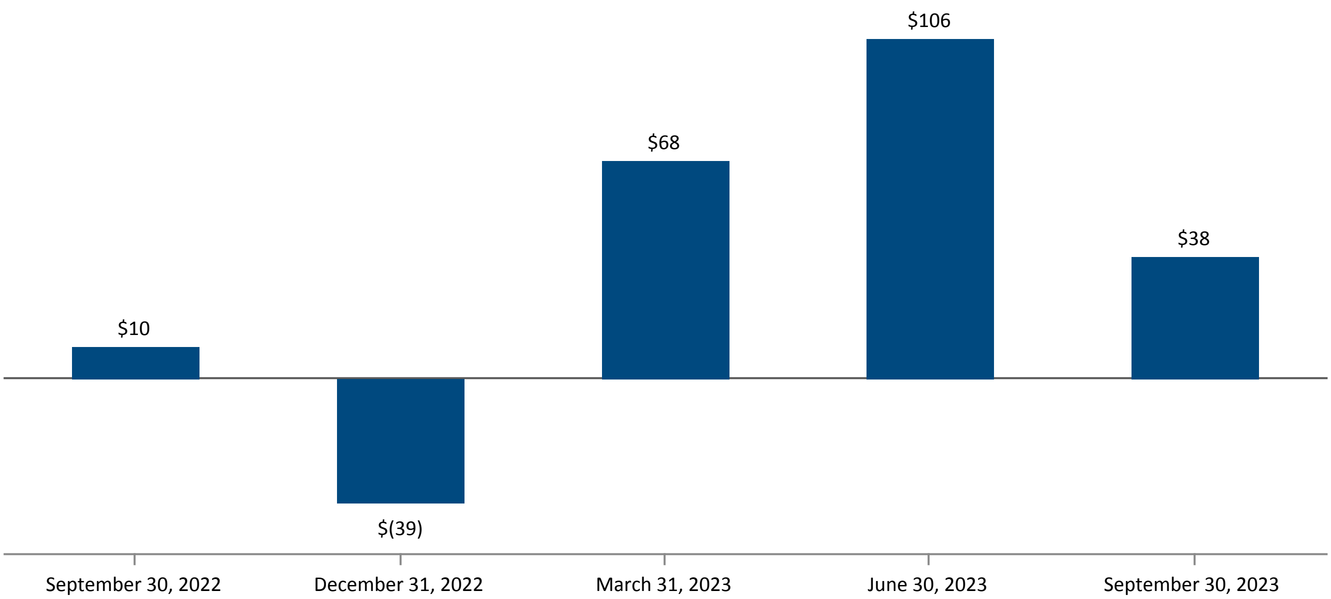
	Nine Months Ended September 30, 2022					
	Advances	Investment Securities	Mortgage Loans[1]	Consolidated Bonds	Consolidated Discount Notes	Total
Net interest income						
Amortization and accretion of hedging activities in net interest income	$ (182)	$ (171)	$ (5)	$ (5)	$ —	$ (363)
Net gains (losses) on derivatives and hedged items	247	133	—	(3)	13	390
Net interest settlements on derivatives	(321)	(372)	—	176	(34)	(551)
Total effect on net interest income	**$ (256)**	**$ (410)**	**$ (5)**	**$ 168**	**$ (21)**	**$ (524)**

(1) Includes standalone mortgage delivery commitments.

Non-Interest Income

Non-interest income consists of realized and unrealized gains (losses) on investment securities, derivatives activities, financial instruments held under fair value option, and other non-interest-earning activities. Figure 23 presents non-interest income for the most recent five quarters.

Figure 23 - Non-Interest Income (dollars in millions)



Non-interest income was a net gain of $38 million and a net gain of $212 million for the three and nine months ended September 30, 2023, resulting primarily from changes in the fair value of derivatives, financial instruments held under fair value option, and investment securities driven by changes in interest rates. Non-interest income was a net gain of $10 million and a net loss of $85 million for the three and nine months ended September 30, 2022.

Table 22 - Changes in Non-Interest Income
(dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2023	2022	Change	2023	2022	Change
Net gains (losses) on investment securities	$ (90)	$ (327)	$ 237	$ (46)	$ (1,060)	$ 1,014
Net gains (losses) on financial instruments held under fair value option	(75)	162	(237)	(144)	378	(522)
Net gains (losses) on derivatives	162	141	21	201	486	(285)
Other, net	41	34	7	201	111	90
Total non-interest income (loss)	**$ 38**	**$ 10**	**$ 28**	**$ 212**	**$ (85)**	**$ 297**

Gains (Losses) on Investment Securities. The FHLBanks classify investment securities as AFS, HTM, or trading securities. The realized gains (losses) from the sale of AFS and HTM securities are recognized in current period earnings. Trading securities are recorded at fair value, with changes in fair value reflected in non-interest income. A number of factors affect the fair value of investment securities, such as the current and projected levels of interest rates, credit spreads, and volatility, as well as the passage of time. The net losses on investment securities were $90 million and $46 million for the three and nine months ended September 30, 2023, compared to net losses of $327 million and $1,060 million for the three and nine months ended September 30, 2022, due primarily to changes in the fair value of U.S. Treasury obligations classified as trading securities, driven by changes in interest rates.

Gains (Losses) on Financial Instruments Held under Fair Value Option. Certain FHLBanks elect the fair value option for certain financial assets and certain financial liabilities, and these FHLBanks recognize the changes in fair value on these assets and liabilities as unrealized gains and losses in current period earnings. The use of the fair value option allows these FHLBanks to mitigate potential income statement volatility that can arise when an economic derivative is adjusted for changes in fair value, but the related hedged item is not. The net losses on financial instruments held under fair value options were $75 million and $144 million for the three and nine months ended September 30, 2023, compared to net gains of $162 million and $378 million for the three and nine months ended September 30, 2022. The net losses for the three and nine months ended September 30, 2023, resulted primarily from changes in the fair value of consolidated obligations held under the fair value option. (See *Table 23* and *Note 11 - Fair Value* to the accompanying combined financial statements for additional information regarding the gains (losses) on financial instruments held under fair value option.)

Gains (Losses) on Derivatives. Gains (losses) on derivatives are primarily comprised of the change in fair value of economic hedges, which are derivatives hedging specific or non-specific underlying assets, liabilities, or firm commitments that do not qualify, or were not designated, for fair value or cash flow hedge accounting. Gains (losses) on derivatives fluctuate with changes in market conditions and are based on a wide range of factors, including current and projected levels of interest rates, credit spreads, and volatility, as well as the passage of time.

The net gains on derivatives were $162 million and $201 million for the three and nine months ended September 30, 2023, compared to net gains of $141 million and $486 million for the three and nine months ended September 30, 2022. The net gains for the three and nine months ended September 30, 2023, were due primarily to fair value gains on economic hedges which hedge investment securities and advances, partially offset by fair value losses on economic hedges which hedge consolidated obligations. Table 23 presents the effect of derivatives on non-interest income.

Table 23 - Effect of Derivatives on Non-Interest Income
(dollars in millions)

	Three Months Ended September 30, 2023							
	Advances	Investment Securities	Mortgage Loans	Consolidated Bonds	Consolidated Discount Notes	Balance Sheet	Intermediary Positions and Other	Total
Net gains (losses) on derivatives								
Gains (losses) related to derivatives not designated as hedging instruments	$ 41	$ 173	$ 27	$ (35)	$ (4)	$ —	$ (6)	$ 196
Price alignment amount	—	—	—	—	—	—	(34)	(34)
Total net gains (losses) on derivatives	**41**	**173**	**27**	**(35)**	**(4)**	**—**	**(40)**	**162**
Net gains (losses) on trading securities[1]	—	(84)	—	—	—	—	—	(84)
Net gains (losses) on financial instruments under fair value option	(14)	—	(1)	(43)	(17)	—	—	(75)
Total effect on non-interest income	**$ 27**	**$ 89**	**$ 26**	**$ (78)**	**$ (21)**	**$ —**	**$ (40)**	**$ 3**

	Three Months Ended September 30, 2022							
	Advances	Investment Securities	Mortgage Loans	Consolidated Bonds	Consolidated Discount Notes	Balance Sheet	Intermediary Positions and Other	Total
Net gains (losses) on derivatives								
Gains (losses) related to derivatives not designated as hedging instruments	$ 74	$ 370	$ 27	$ (201)	$ (108)	$ 5	$ (16)	$ 151
Price alignment amount	—	—	—	—	—	—	(10)	(10)
Total net gains (losses) on derivatives	**74**	**370**	**27**	**(201)**	**(108)**	**5**	**(26)**	**141**
Net gains (losses) on trading securities[1]	—	(322)	—	—	—	—	—	(322)
Net gains (losses) on financial instruments under fair value option	(51)	—	(2)	167	48	—	—	162
Total effect on non-interest income	**$ 23**	**$ 48**	**$ 25**	**$ (34)**	**$ (60)**	**$ 5**	**$ (26)**	**$ (19)**

	Nine Months Ended September 30, 2023							
	Advances	Investment Securities	Mortgage Loans	Consolidated Bonds	Consolidated Discount Notes	Balance Sheet	Intermediary Positions and Other	Total
Net gains (losses) on derivatives								
Gains (losses) related to derivatives not designated as hedging instruments	$ 88	$ 348	$ 32	$ (131)	$ (47)	$ (1)	$ (10)	$ 279
Price alignment amount	—	—	—	—	—	—	(78)	(78)
Total net gains (losses) on derivatives	**88**	**348**	**32**	**(131)**	**(47)**	**(1)**	**(88)**	**201**
Net gains (losses) on trading securities[1]	—	(41)	—	—	—	—	—	(41)
Net gains (losses) on financial instruments under fair value option	(9)	—	(1)	(63)	(71)	—	—	(144)
Total effect on non-interest income	**$ 79**	**$ 307**	**$ 31**	**$ (194)**	**$ (118)**	**$ (1)**	**$ (88)**	**$ 16**

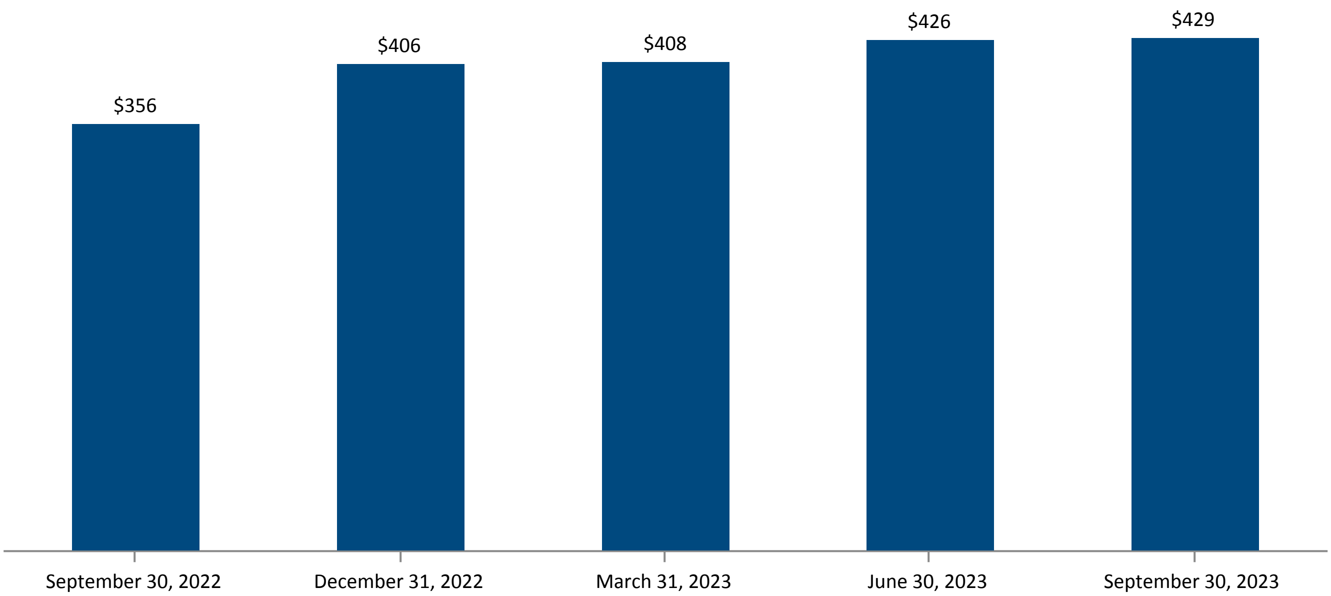
	Nine Months Ended September 30, 2022							
	Advances	Investment Securities	Mortgage Loans	Consolidated Bonds	Consolidated Discount Notes	Balance Sheet	Intermediary Positions and Other	Total
Net gains (losses) on derivatives								
Gains (losses) related to derivatives not designated as hedging instruments	$ 214	$ 969	$ 45	$ (453)	$ (245)	$ 13	$ (44)	$ 499
Price alignment amount	—	—	—	—	—	—	(13)	(13)
Total net gains (losses) on derivatives	**214**	**969**	**45**	**(453)**	**(245)**	**13**	**(57)**	**486**
Net gains (losses) on trading securities[1]	—	(1,036)	—	—	—	—	—	(1,036)
Net gains (losses) on financial instruments under fair value option	(191)	—	(9)	389	189	—	—	378
Total effect on non-interest income	**$ 23**	**$ (67)**	**$ 36**	**$ (64)**	**$ (56)**	**$ 13**	**$ (57)**	**$ (172)**

(1) Includes only those gains (losses) on trading securities that have been economically hedged.

Non-Interest Expense

Non-interest expense consists of compensation and benefits, other operating expenses, FHFA expenses, Office of Finance expenses, and other expenses. Figure 24 presents non-interest expense for the most recent five quarters.

Figure 24 - Non-Interest Expense (dollars in millions)



Non-interest expense was $429 million and $1,263 million for the three and nine months ended September 30, 2023, increases of 21% and 18% compared to the three and nine months ended September 30, 2022. The increase in non-interest expense resulted primarily from higher compensation and benefits, including an increase in post-retirement plan costs and higher headcounts at certain FHLBanks; higher other operating expenses, resulting primarily from an increase in professional services costs at certain FHLBanks; and higher other expenses, driven by higher levels of voluntary contributions to housing and community investment programs at most FHLBanks. (See *Affordable Housing Program (AHP) Assessments* for additional information on voluntary contributions.)

Table 24 - Changes in Non-Interest Expense
(dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2023	2022	Change	2023	2022	Change
Compensation and benefits	$ 202	$ 181	$ 21	$ 617	$ 547	$ 70
Other operating expenses	140	128	12	406	361	45
Federal Housing Finance Agency	26	21	5	76	64	12
Office of Finance	16	16	—	53	49	4
Other expenses	45	10	35	111	50	61
Total non-interest expense	**$ 429**	**$ 356**	**$ 73**	**$ 1,263**	**$ 1,071**	**$ 192**

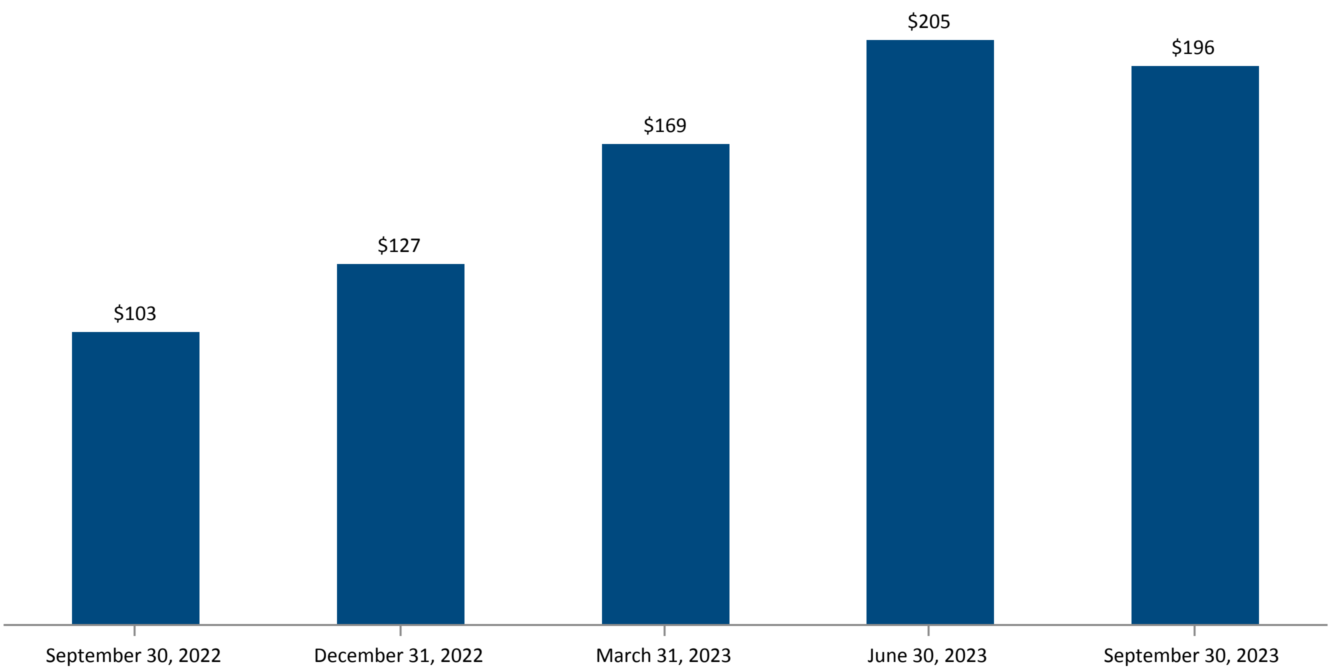
Affordable Housing Program (AHP) Assessments

Each FHLBank recognizes AHP assessment expense equal to the greater of 10% 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, each FHLBank's income subject to assessment is defined as the individual FHLBank's net income before assessments, plus interest expense related to mandatorily redeemable capital stock. (See *Legislative and Regulatory Developments - FHFA's Review and Analysis of the FHLBank System* for information about potential changes that may affect the FHLBanks' Affordable Housing and Community Investment Cash Advance Programs.)

In addition to the statutory AHP assessments under the FHLBank Act, an FHLBank's board of directors may elect to make voluntary contributions to its AHP or other community investment programs. In connection with that, and in recognition that additional funding would be beneficial in meeting community needs in affordable housing as well as business and community development, the FHLBanks are either already making additional voluntary contributions, or are in the process of increasing their voluntary contribution levels. The FHLBanks expensed voluntary contributions to housing and community investment programs, which totaled $38 million and $89 million during the three and nine months ended September 30, 2023. These voluntary contribution expenses are included in non-interest expense on the Combined Statements of Income.

Figure 25 presents AHP assessments for the most recent five quarters.

Figure 25 - Affordable Housing Program Assessments (dollars in millions)



Comprehensive Income

Comprehensive income is comprised of net income and other comprehensive income. Other comprehensive income is reported on the Combined Statements of Comprehensive Income and presents the net change in the accumulated other comprehensive income (loss) balances.

Other comprehensive income was net losses of $477 million and $281 million for the three and nine months ended September 30, 2023, compared to net losses of $392 million and $1,841 million for the three and nine months ended September 30, 2022. The net losses in other comprehensive income for the three and nine months ended September 30, 2023, primarily consisted of net unrealized losses on MBS classified as AFS securities.

Table 25 - Comprehensive Income

(dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2023	2022	Change	2023	2022	Change
Net income	$ 1,735	$ 917	$ 818	$ 5,084	$ 2,026	$ 3,058
Other comprehensive income						
Changes in fair value of AFS securities						
Net unrealized gains (losses) on AFS securities	(533)	(579)	46	(368)	(2,379)	2,011
Changes in non-credit other-than-temporary impairment losses						
Accretion of non-credit portion on HTM securities	—	—	—	—	1	(1)
Non-credit losses included in basis of HTM securities sold	—	—	—	3	—	3
Net unrealized gains (losses) relating to hedging activities	58	184	(126)	63	537	(474)
Other	(2)	3	(5)	21	—	21
Total other comprehensive income (loss)	**(477)**	**(392)**	**(85)**	**(281)**	**(1,841)**	**1,560**
Comprehensive income (loss)	**$ 1,258**	**$ 525**	**$ 733**	**$ 4,803**	**$ 185**	**$ 4,618**

Changes in Fair Value of AFS Securities. For AFS securities in hedging relationships that qualify as fair value hedges, the FHLBanks record the portion of the change in the fair value of the investment related to the risk being hedged in interest income on AFS securities together with the related change in the fair value of the derivative, and record the remainder of the change in the fair value of the investment in other comprehensive income as net unrealized gains (losses) on AFS securities. For AFS securities not designated in a fair value hedge relationship, the changes in the fair value of AFS securities are recorded in other comprehensive income. The net change in unrealized gains (losses) on AFS securities is due primarily to changes in interest rates, credit spreads, the passage of time, and volatility.

Net Unrealized Gains (Losses) Relating to Hedging Activities. Net unrealized gains (losses) relating to hedging activities is comprised of changes in the fair value of a derivative that is designated and qualifies as a cash flow hedge until earnings are affected by the variability of the cash flows of the hedged transaction and the amounts are reclassified to interest income or interest expense. The FHLBanks' gains (losses) on hedging activities fluctuate with volatility in the overall interest-rate environment and with the positions taken by the FHLBanks to hedge their risk exposure using cash flow hedges.

Liquidity and Capital Resources

Liquidity

Each FHLBank is required to maintain liquidity in accordance with the FHLBank Act, FHFA regulations and guidance, and policies established by its management and board of directors. Each FHLBank seeks to be in a position to meet the credit and liquidity needs of its members and to meet all current and future financial commitments of the FHLBank. Each FHLBank seeks to achieve this objective 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 the assets and liabilities of the FHLBank.

The FHLBanks may not be able to predict future trends in member credit needs because member credit needs are driven by complex interactions among a number of factors, including members' mortgage loan originations, other loan portfolio activity, deposit levels, and the attractiveness of advances compared to other wholesale borrowing alternatives. Each FHLBank monitors current trends and anticipates future debt issuance needs to fund its members' credit needs and investment opportunities of the FHLBank. An FHLBank's ability to expand its balance sheet and corresponding liquidity requirements in response to its members' increased credit needs is correlated to its members' requirements for advances and mortgage loans. Alternatively, in response to reduced member credit needs, an FHLBank may allow its consolidated obligations to mature without replacement, or repurchase and retire outstanding consolidated obligations, allowing its balance sheet to shrink. Over time, the FHLBanks historically have had comparatively stable access to funding through a diverse investor base.

Sources of Liquidity. The FHLBanks' primary sources of liquidity are proceeds from the issuance of consolidated obligations, as well as cash and investment holdings that are primarily high-quality, short-, and intermediate-term financial instruments. The FHLBanks' consolidated obligations are not obligations of the United States and are not guaranteed by the United States, but have historically received the same credit rating as the government bond credit rating of the United States. S&P, Moody's, or other rating organizations could downgrade or upgrade the credit ratings of the U.S. government and GSEs, including the FHLBanks and their consolidated obligations. Investors should note that a rating issued by a nationally recognized statistical rating organization is not a recommendation to buy, sell, or hold securities, and that the ratings may be revised or withdrawn at any time. Investors should evaluate the rating of each nationally recognized statistical rating organization independently. As of November 14, 2023, the FHLBanks' consolidated obligations were rated AA+/A-1+ (with outlook stable) by S&P, and Aaa/P-1 (with outlook negative) by Moody's. Investors should not take the historical or current ratings of the FHLBanks and their consolidated obligations as an indication of future ratings for the FHLBanks or their consolidated obligations.

Other sources of liquidity include advance repayments, payments collected on mortgage loans, proceeds from the issuance of capital stock, and deposits from members. In addition, by law, the Secretary of the Treasury is authorized to purchase up to $4 billion aggregate principal amount of consolidated obligations of the FHLBanks. This authority may be exercised only if alternative means cannot be effectively employed to permit the FHLBanks to continue to supply reasonable amounts of funds to the mortgage market, and the ability to supply such funds is substantially impaired because of monetary stringency and a high level of interest rates. Any funds borrowed from the U.S. Treasury shall be repaid by the FHLBanks at the earliest practicable date.

Uses of Liquidity. The FHLBanks' primary uses of liquidity are advance originations and consolidated obligation payments. Other uses of liquidity are mortgage loan and investment purchases, dividend payments, and other contractual payments. An FHLBank also maintains liquidity to redeem or repurchase excess capital stock, at its discretion, upon the request of a member or under an FHLBank's capital plan.

See *Combined Financial Condition - Advances* for advance originations and repayments and *Combined Financial Condition - Consolidated Obligations* for net proceeds and payments for consolidated obligations.

FHLBank Funding and Debt Issuance. Changes or disruptions in the capital markets could limit the FHLBanks' ability to issue consolidated obligations. During the nine months ended September 30, 2023, the FHLBanks maintained continual access to funding. The FHLBanks' funding was generally driven by member demand for advances and was achieved primarily through the issuance of short-term consolidated obligations, primarily variable-rate consolidated bonds, fixed-rate callable consolidated bonds, and consolidated discount notes during the nine months ended September 30, 2023. Average funding spreads of newly-issued consolidated obligations relative to benchmark Treasury and SOFR indices (except for spreads relative to the three-month Treasury index) increased during the nine months ended September 30, 2023, compared to the nine months ended September 30, 2022.

Refinancing Risk and Investor Concentration Risk. There are inherent risks in utilizing short-term funding to support longer-dated assets and the FHLBanks may be exposed to refinancing risk and investor concentration risk. Refinancing risk includes the risk that the FHLBanks could have difficulty rolling over short-term obligations when market conditions change or investor confidence in short-term consolidated obligations declines. In managing and monitoring the amounts of financial assets that require refinancing, the FHLBanks consider their contractual maturities, as well as certain assumptions regarding expected cash flows (i.e., estimated prepayments, embedded call optionality, and scheduled amortizations). Investor concentration risk includes the risk that a market-driven or regulatory disruption to certain investor classes could lead to significant investor outflows causing unfavorable market conditions for consolidated obligations. As the FHLBanks' balance sheets have expanded over the last year due to member demands and market conditions, the inherent refinancing and investor concentration risks have also increased. For example, as of September 30, 2023, the holding of the FHLBanks' consolidated obligations by taxable money market funds, as a percentage of the total outstanding consolidated obligations, was 45%, compared to 38% at December 31, 2022, based on data from SEC filings by registered money market funds. The holdings of the FHLBanks' consolidated obligations by taxable money market funds represented 9% of these funds' assets under management at both September 30, 2023 and December 31, 2022, based on data from SEC filings by registered money market funds. While demand from this investor class has benefited the FHLBanks' ability to access short-term funding at attractive costs, this demand could change over time. (See the notes to the accompanying combined financial statements for additional information regarding contractual maturities of certain financial assets and financial liabilities and *Risk Factors - Liquidity Risk* on pages 36 to 37 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for more information on refinancing risk and investor concentration risk.)

Interest-Rate Risk. The FHLBanks may use a portion of the short-term consolidated obligations issued to fund both short- and long-term variable-rate assets. However, funding longer-term variable-rate assets with shorter-term liabilities generally does not expose the FHLBanks to interest-rate risk because the rates on the variable-rate assets reset similarly to the liabilities (either through rate resets or re-issuance of the obligations). The FHLBanks measure and monitor interest-rate risk with commonly used methods and metrics, which include the calculations of market value of equity, duration of equity, and duration gap. (See *Quantitative and Qualitative Disclosures about Market Risk* for additional discussion and analysis regarding the FHLBanks' sensitivity to interest rate changes and the use of derivatives to manage their exposure to interest-rate risk.)

Asset/Liability Maturity Profile. Each FHLBank is focused on maintaining an adequate amount of liquidity, and the FHLBanks work collectively to manage FHLBank System-wide liquidity and funding needs. The FHLBanks are committed to prudent risk management practices and jointly monitor certain FHLBank System risks, including by tracking the funding gap, which is a measure of the difference in the projected cash flows from their financial assets and financial liabilities. External factors, including FHLBank member borrowing needs, supply and demand in the debt markets, and other factors may affect the amount of liquidity and the balance between the cash flows for financial assets and financial liabilities. However, due to the FHLBanks' status as GSEs, they have traditionally had ready access to funding at relatively favorable rates.

Regulatory Liquidity Requirements. To protect the FHLBanks against temporary disruptions in access to the debt markets in response to a rise in capital markets volatility, the FHFA requires each FHLBank to:

- have available at all times an amount greater than or equal to its members' current deposits invested in advances with maturities not to exceed five years, deposits in banks or trust companies, and obligations of the U.S. Treasury;
- maintain, in the aggregate, unpledged qualifying assets in an amount at least equal to the amount of its participation in total consolidated obligations outstanding; and
- maintain a base case amount of liquidity.

Each FHLBank also maintains a contingency funding plan designed to enable it to address liquidity shortfalls in times of need, such as operational disruptions at an FHLBank and/or the Office of Finance, or short-term capital market disruptions.

During the nine months ended September 30, 2023, each of the FHLBanks was in compliance with the FHFA's liquidity requirements, including the FHFA's Advisory Bulletin on liquidity and the FHFA's funding gap guidance for three-month and one-year maturity horizons, except for during the first quarter of 2023: three FHLBanks that were each below the specified number of days of liquidity reserves for one day, one FHLBank that was below the specified number of days of liquidity reserves for two days, one FHLBank that was below the specified number of days of liquidity reserves for three days, and one FHLBank that was below the specified number of days of liquidity reserves for four days, due to unusually large and unforeseen advance demand. Each of these shortfalls was corrected on a timely basis.

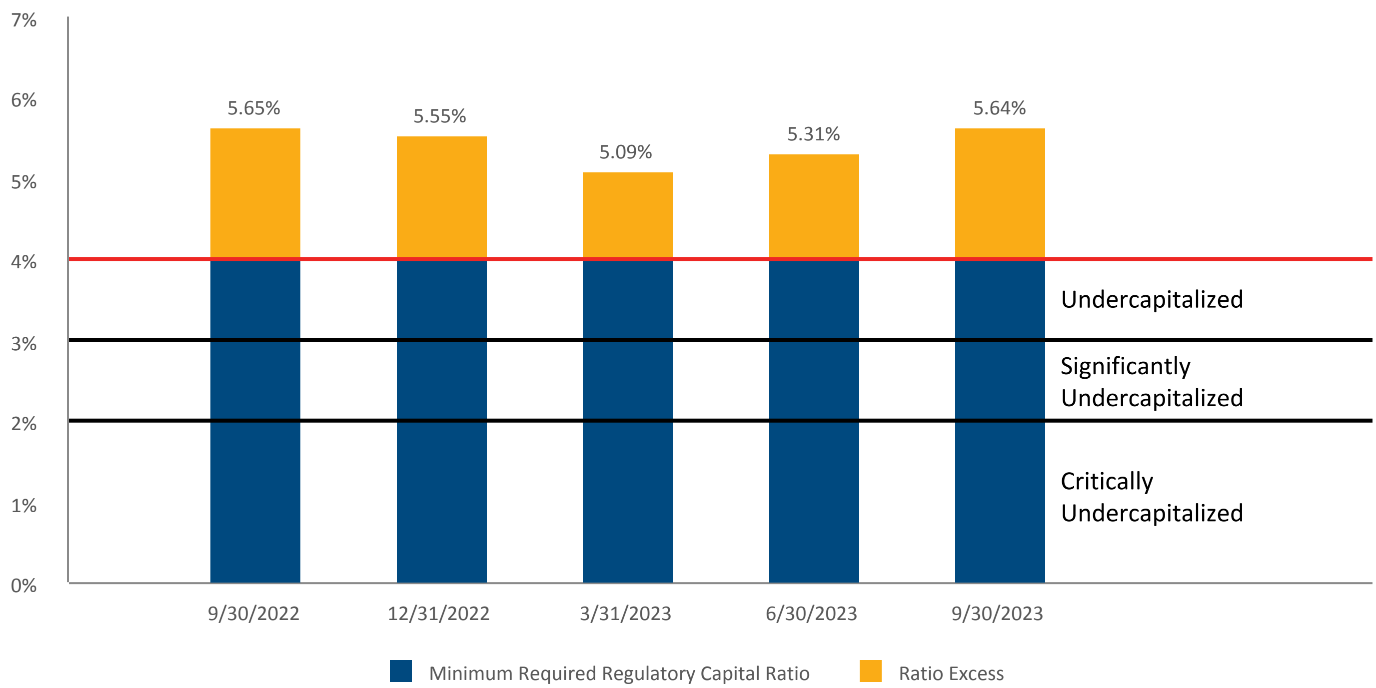
Capital Resources

The FHLBanks' ability to expand their balance sheets as member credit needs increase is based, in part, on the capital stock requirements for advances. In addition, FHFA regulations stipulate that each FHLBank must comply with three limits on capital. Although each FHLBank's minimum regulatory capital-to-assets ratio requirement is 4.0%, each FHLBank strives to maintain a level of retained earnings to support its regulatory capital compliance, stable dividend payments to members, and business growth. At September 30, 2023, each FHLBank was in compliance with its statutory minimum capital requirements. In addition, the FHFA issued an Advisory Bulletin to state its supervisory expectations that each FHLBank maintains a ratio of at least two percent of capital stock to total assets. At September 30, 2023, each FHLBank was in compliance with this guidance. (See *Note 9 - Capital* to the accompanying combined financial statements for additional information regarding minimum regulatory capital requirements.)

Management and the board of directors of each FHLBank review the capital structure of that FHLBank on a periodic basis to ensure the capital structure supports the risk associated with its assets and addresses applicable regulatory and supervisory matters. In addition, an individual FHLBank may, at its discretion, institute a higher capital requirement to meet internally-established thresholds or to address supervisory matters, limit dividend payments, or restrict excess capital stock repurchases as part of its retained earnings policies.

Figure 26 presents the combined regulatory capital ratio and related regulatory classifications applicable to the FHLBanks for each of the last five quarters.

Figure 26 - Combined Regulatory Capital Ratio[1] and Excess



(1) Based on FHFA rules and regulations, regulatory capital requirements apply to individual FHLBanks, and there are no minimum regulatory capital requirements or classifications at a combined level. The combined regulatory capital ratio and related regulatory classifications are for analysis only. The combined regulatory capital ratio is calculated based on the sum of the individual FHLBanks' risk-based capital amounts as a percentage of combined total assets.

Joint Capital Enhancement Agreement. The Joint Capital Enhancement Agreement, as amended (Capital Agreement), is intended to enhance the capital position of each FHLBank. The Capital Agreement provides that each FHLBank will, on a quarterly basis, allocate 20% of its net income to a separate restricted retained earnings account until the balance of that account, calculated as of the last day of each calendar quarter, equals at least one percent of that FHLBank's average balance of outstanding consolidated obligations for the calendar quarter. These restricted retained earnings are not available to pay dividends. Additionally, the Capital Agreement provides that amounts in restricted retained earnings in excess of 150% of an FHLBank's restricted retained earnings minimum (i.e., one percent of that FHLBank's average balance of outstanding consolidated obligations calculated as of the last day of each calendar quarter) may be released from restricted retained earnings. As of September 30, 2023, none of the FHLBanks had restricted retained earnings that exceeded one percent of its average balance of outstanding consolidated obligations.

Critical Accounting Estimates

The preparation of financial statements in accordance with GAAP requires each FHLBank's management to make a number of judgments, estimates, and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities (if applicable), and the reported amounts of income and expense during the reported periods. Although each FHLBank's management believes that its judgments, estimates, and assumptions are reasonable, actual results may differ from these estimates.

In the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, certain accounting estimates and assumptions were identified as critical because they are generally considered by each FHLBank's management to be the most critical to an understanding of its financial statements and the financial data it provides to the Office of Finance for preparing the Combined Financial Reports. These estimates and assumptions consist of those used in conjunction with fair value estimates and derivatives and hedging activities. For a description of accounting policies related to these estimates and assumptions, see *Note 1 - Summary of Significant Accounting Policies* on pages F-15 to F-26 of the audited combined financial statements included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022.

There have been no significant changes to the critical accounting estimates disclosed in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022. For a detailed discussion of Critical Accounting Estimates, see *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Critical Accounting Estimates* on pages 96 to 99 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022. Each FHLBank describes its critical accounting estimates in its periodic reports filed with the SEC.

Recent Accounting Developments

See *Note 2 - Recently Issued and Adopted Accounting Guidance* to the accompanying combined financial statements for a discussion regarding the effect of recently issued accounting guidance on the FHLBanks' combined financial condition, combined results of operations, or combined cash flows.

Legislative and Regulatory Developments

Certain legislative and regulatory actions and developments are summarized in this section. (See *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Legislative and Regulatory Developments* in the Federal Home Loan Banks Combined Financial Reports for the year ended December 31, 2022 (pages 100 to 101) and the quarterly periods ended March 31, 2023 (pages 45 to 46) and June 30, 2023 (pages 45 to 46), for a description of certain legislative and regulatory developments that occurred prior to the publication of those reports.)

FHFA's Review and Analysis of the FHLBank System. Beginning in the fall of 2022, and over a period of several months, the FHFA undertook a review and analysis of the FHLBank System, in part through a series of public listening sessions, regional roundtable discussions, and receipt of comments from stakeholders. This review covered such areas as the FHLBanks' mission and purpose in a changing marketplace; their organization, operational efficiency, and effectiveness; their role in promoting affordable, sustainable, equitable, and resilient housing and community investment; their role in addressing the unique needs of rural and financially vulnerable communities; member products, services, and collateral requirements; and membership eligibility and requirements.

On November 7, 2023, the FHFA issued its written report relating to its review and analysis of the FHLBank System. The report is focused on four broad themes: (1) mission of the FHLBank System; (2) stable and reliable source of liquidity; (3) housing and community development; and (4) FHLBank System operational efficiency, structure, and governance. Among other things, the FHFA has indicated that it plans to:

- update and clarify its regulatory statement of the FHLBanks' mission to explicitly incorporate the core objectives of providing liquidity to members and supporting housing and community development;
- clarify the FHLBanks' liquidity role and take steps to better position the FHLBanks to perform their liquidity function;
- expand the FHLBanks' housing and community development focus, including proposing to recommend that Congress consider amending the FHLBank Act to at least double the minimum required annual AHP contributions by the FHLBanks; and
- promote the FHLBanks' operational efficiency through collaboration among the FHLBanks, harmonized membership eligibility requirements and optimized board governance, and consider whether realignment and consolidation of the FHLBanks are necessary.

According to the report, the FHFA seeks to position the FHLBank System to continue serving as a source of stable and reliable liquidity, while increasing support for housing and community development, in a safe and sound manner. The FHFA expects its initiative to continue as a multi-year, collaborative effort with stakeholders to address the recommended actions in the report, including through ongoing supervision, guidance, or rulemaking within its existing statutory authority as well as specific requests for Congressional action.

The FHLBanks are continuing to evaluate the report and are not able to predict what actions will ultimately result from the FHFA's recommendations in the report, the extent of any changes to individual FHLBanks or the FHLBank System, or the ultimate effect on individual FHLBanks or the FHLBank System in the future. For a further discussion of related risks, see *Risk Factors* on pages 28 to 40 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022.

Banking Regulatory Proposals. Subsequent to the bank failures and banking industry volatility that occurred in March 2023, the following rules affecting FHLBank members have been proposed by federal banking regulators:

- On September 18, 2023, the Office of the Comptroller of the Currency (OCC), the Federal Reserve Board, and the FDIC published a joint notice of proposed rulemaking that would amend the capital requirements applicable to certain large banking organizations and banking organizations with significant trading activity, by amending the calculation of risk-based capital requirements to better reflect the risks of these banking organizations' exposures; reducing the complexity of the framework; enhancing the consistency of requirements across these banking organizations; and facilitating more effective supervisory and market assessments of capital adequacy (Proposed Capital Rule). This proposed rule is open to public comment through January 16, 2024.

- On September 19, 2023, the OCC, the Federal Reserve Board, and the FDIC published a joint notice of proposed rulemaking that would require certain large banking organizations to issue and maintain outstanding a minimum amount of long-term debt in order to promote more orderly resolutions in the event of such organizations' failure; reduce costs to the Deposit Insurance Fund; and mitigate financial stability and contagion risks by reducing the risk of loss to uninsured depositors (Proposed Long-Term Debt Rule). This proposed rule is open to public comment through November 30, 2023.

- On September 19, 2023, the FDIC published proposed amendments to its existing resolution plan requirements for insured depository institutions with $50 billion or more in total assets, which would require additional detail on covered insured depository institutions' strategies for their orderly and efficient resolutions and enhance the FDIC's expectations for resolution plan testing. For resolutions involving a bridge depository institution, the proposed rule provides that a resolution strategy may assume continuation of FHLBank advances, provided the strategy contemplates timely repayment of those advances. This proposed rule is open to public comment through November 30, 2023.

The FHLBanks are evaluating the extent to which these proposed rules, if adopted as proposed, may affect FHLBank members' business activities with the FHLBanks. Specifically, the Proposed Capital Rule may affect certain FHLBank members' collateral capacity and the Proposed Long-Term Debt Rule may affect member demand for advances for some of the FHLBanks.

External Credit Ratings

Since September 30, 2023, no changes to external credit ratings by S&P or Moody's have occurred with regard to the FHLBanks or their consolidated obligations, except as noted below. At November 14, 2023, consolidated obligations were rated AA+/A-1+ by S&P with outlook stable, and Aaa/P-1 by Moody's, with outlook negative. S&P, Moody's, or other rating organizations could downgrade or upgrade the credit ratings of the U.S. government and GSEs, including the FHLBanks and their consolidated obligations. In August 2023, Fitch Ratings downgraded the long-term credit rating of the United

States and in turn, certain GSEs (including two FHLBanks that are individually rated by Fitch Ratings) from AAA to AA+. Fitch Ratings does not rate the other FHLBanks or the consolidated obligations of the FHLBanks. On November 10, 2023, Moody's changed the outlook on the ratings of the United States to negative from stable and affirmed the United States' long-term issuer and senior unsecured ratings at Aaa. On November 14, 2023, Moody's also affirmed the Aaa long-term senior unsecured debt ratings of the FHLBanks and changed the outlook on the ratings to negative from stable, consistent with its ratings action taken with respect to the United States. Investors should note that a rating issued by a nationally recognized statistical rating organization is not a recommendation to buy, sell, or hold securities, and that the ratings may be revised or withdrawn at any time. Investors should evaluate the rating of each nationally recognized statistical rating organization independently. Investors should not take the historical or current ratings of the FHLBanks and their consolidated obligations as an indication of future ratings for the FHLBanks or their consolidated obligations. Table 26 presents each FHLBank's long-term credit rating, short-term credit rating, and outlook at November 14, 2023.

Table 26 - FHLBanks' Long-Term Credit Ratings, Short-Term Credit Ratings, and Outlook at November 14, 2023

	S&P		Moody's	
FHLBank	Long-Term/ Short-Term Rating	Outlook	Long-Term/ Short-Term Rating	Outlook
Boston	AA+/A-1+	Stable	Aaa/P-1	Negative
New York	AA+/A-1+	Stable	Aaa/P-1	Negative
Pittsburgh	AA+/A-1+	Stable	Aaa/P-1	Negative
Atlanta	AA+/A-1+	Stable	Aaa/P-1	Negative
Cincinnati	AA+/A-1+	Stable	Aaa/P-1	Negative
Indianapolis	AA+/A-1+	Stable	Aaa/P-1	Negative
Chicago	AA+/A-1+	Stable	Aaa/P-1	Negative
Des Moines	AA+/A-1+	Stable	Aaa/P-1	Negative
Dallas	AA+/A-1+	Stable	Aaa/P-1	Negative
Topeka	AA+/A-1+	Stable	Aaa/P-1	Negative
San Francisco	AA+/A-1+	Stable	Aaa/P-1	Negative

Risk Management

The fundamental business of each FHLBank is to provide a readily available, competitively-priced source of funds, in a wide range of maturities, to meet the borrowing demands of its members and housing associates. The principal sources of funds for these activities are the proceeds from the issuance of consolidated obligations and, to a lesser extent, capital and deposits from members. Lending and investing funds, and engaging in derivative transactions, can potentially expose the FHLBanks to a number of risks, including market risk and credit risk. (See *Quantitative and Qualitative Disclosures about Market Risk* for a discussion of market risk.) The FHLBanks are also subject to liquidity, operational, and business risks. (See *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Risk Management* on pages 118 to 120, and *Risk Factors* on pages 28 to 40, of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for more information on these risks.)

Credit Risk

Advances. Each FHLBank manages its credit exposure to advances through an integrated approach that provides for the ongoing review of the financial condition of its borrowers coupled with collateral and lending policies and procedures designed to limit its risk of loss while balancing its borrowers' needs for a reliable source of funding. Each FHLBank uses a methodology to evaluate its borrowers, based on financial, regulatory, and other qualitative information, including examination reports. Each FHLBank reviews its borrowers' financial condition on an ongoing basis using current information and makes changes to its collateral guidelines to mitigate the credit risk on advances. During the three and nine months ended September 30, 2023, no FHLBank incurred any credit loss on any of its advances, including advances to failed borrowers, and the management of each FHLBank believed it had adequate policies and procedures in place to manage its credit risk on advances effectively. (See *Combined Financial Condition - Advances* for additional information about advances to certain failed depository members.)

The FHLBanks protect against credit risk on advances by collateralizing all advances. Advances and other credit product obligations to an FHLBank are fully secured with eligible collateral, the value of which is discounted to account for liquidation and other risks, if applicable, and to protect the FHLBanks from credit loss. Collateral that is determined to contain a low level of risk, such as U.S government obligations, is discounted at a lower rate than collateral that carries a higher level of risk, such as commercial real estate mortgage loans. Eligible collateral values are determined by the market value for securities collateral, and the market value or unpaid principal balance for all loan collateral. For collateral which market prices are not readily available, the FHLBanks may use internal or external valuation models or methodologies to determine the fair value of the collateral. These valuation models incorporate assumptions related to factors that may affect collateral values, such as market liquidity, discount rates, potential prepayments, and liquidation and servicing costs in the event of default, among others, which may be adjusted in response to changes in economic and market conditions in order to produce reliable results. The FHLBanks also have policies and procedures for validating the reasonableness of their collateral valuations. In addition, collateral verifications and on-site reviews are performed by the FHLBanks based on the risk profile of the borrower. At September 30, 2023, each FHLBank had rights to collateral with an estimated value greater than the related outstanding advances. (See *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Risk Management - Credit Risk - Advances* on pages 102 to 107 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for information on eligible collateral and effective lending values, and *Note 4 - Advances* to the accompanying combined financial statements for more information about advances.)

Residential mortgage loans are the principal form of collateral for advances. Collateral eligible to secure new or renewed advances includes:

- one-to-four family and multifamily mortgage loans (delinquent for no more than 90 days) and securities representing such mortgages;
- loans and securities issued, 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 FHLBank;
- certain other collateral that is real estate-related, such as commercial real estate loans, provided it meets certain eligibility requirements; and
- certain qualifying securities representing undivided equity interests in eligible advance collateral.

As of September 30, 2023, there were 134 individual FHLBank borrowers (130 FHLBank members and 4 non-members) that each held advances of at least $1.0 billion. When a non-member financial institution acquires some or all of the assets and liabilities of an FHLBank member, including outstanding advances and FHLBank capital stock, an FHLBank may allow those advances to remain outstanding to that non-member financial institution. In addition, members that voluntarily withdraw from membership or members whose membership has been terminated involuntarily, such as captive insurers, can be non-members with advances outstanding. Non-members would be required to meet all of that FHLBank's credit and collateral requirements, including requirements regarding creditworthiness and collateral borrowing capacity.

A borrower's total credit obligation to an FHLBank could include outstanding advances, notional amount of letters of credit, collateralized derivative contracts, and credit enhanced obligations on mortgage loans sold to the

FHLBank. Eligible collateral values include market values for securities and the unpaid principal balance for all other collateral pledged by the blanket lien, listing, or delivery method. The collateralization ratio for borrowers with at least $1.0 billion in advances outstanding was 3.0 at September 30, 2023, which represented the total of these 134 individual FHLBank borrowers' eligible collateral divided by these borrowers' advances and other credit products outstanding. The collateralization ratio for all borrowers was 3.5 at September 30, 2023. However, individual borrower credit obligations to the FHLBanks are not cross-collateralized between borrowers.

Table 27 presents advances, other credit products (which primarily includes notional amount of letters of credit), and collateral outstanding for borrowers with at least $1.0 billion of advances outstanding as compared to all borrowers.

Table 27 - Advances, Other Credit Products, and Collateral Outstanding at September 30, 2023

(dollars in millions)

	Borrowers with at Least $1.0 Billion of Advances Outstanding	All Borrowers	Percentage
Advances outstanding, principal amount	$ 598,003	$ 837,509	71.4 %
Other credit products	$ 108,666	$ 178,978	60.7 %
Collateral outstanding	$ 2,128,515	$ 3,591,921	59.3 %

Based on the financial condition of the borrower, each FHLBank classifies each borrower by the method of pledging collateral into one of three collateral categories: (1) blanket lien status; (2) listing (specific identification) status; or (3) delivery (possession) status.

The blanket lien status is the least restrictive collateral status, and is generally assigned to lower risk institutions pledging collateral. Under the blanket lien status, an individual FHLBank allows a borrower to retain possession of eligible collateral pledged to that FHLBank, provided the borrower executes a written security agreement and agrees to hold the collateral for the benefit of that FHLBank. Origination of new advances or renewal of advances must only be supported by certain eligible collateral categories. A blanket lien is typically accepted by the FHLBanks only for loan collateral; most securities collateral must be delivered to an FHLBank, or an FHLBank-approved third-party custodian, and pledged for the benefit of that FHLBank.

An FHLBank may require borrowers to provide a detailed listing of eligible advance collateral being pledged to the FHLBank due to their high usage of FHLBank credit products, the type of assets being pledged, or the credit condition of the borrower. Under the listing status, the borrower retains physical possession of specific collateral pledged to an FHLBank, but the borrower provides listings of loans pledged to its FHLBank with detailed loan information, such as loan amount, payment status, maturity date, interest rate, loan-to-value, collateral type, and FICO® scores. From a borrower's perspective, the benefit of listing collateral relative to a blanket lien security agreement is that, in some cases, the discount or haircut applicable to that collateral may be lower than that for blanket lien collateral. From an FHLBank's perspective, the benefit of listing collateral is that it provides more detailed loan information to arrive at a more precise valuation.

Under the delivery status, an FHLBank requires the borrower to place physical possession of eligible collateral with the FHLBank or a third-party custodian to sufficiently secure all outstanding obligations. Typically, an FHLBank would take physical possession or control of collateral if the financial condition of the borrower was deteriorating or if the borrower exceeded certain credit product usage triggers. However, an FHLBank may require insurance company borrowers, and certain other borrowers, to place physical possession of all pledged eligible collateral with the FHLBank or deposit it with a custodian or control agent in order to establish control over the pledged collateral. Delivery of collateral may also be required if there is a regulatory action against the borrower by its regulator that would indicate inadequate controls or other conditions that would be of concern to that FHLBank.

Table 28 presents information on a combined basis regarding the type of collateral securing advances and other credit products outstanding.

Table 28 - Type of Collateral Securing Advances and Other Credit Products Outstanding at September 30, 2023

(dollars in millions)

	Blanket Lien		Listing		Delivery		Total	
Collateral Type	**Amount**	**Percentage**	**Amount**	**Percentage**	**Amount**	**Percentage**	**Amount**	**Percentage**
Single-family mortgage loans(1)	$ 771,472	21.5%	$ 992,112	27.6%	$ 10,677	0.3%	$ 1,774,261	49.4%
Commercial real estate loans	468,884	13.1%	191,861	5.3%	54,967	1.5%	715,712	19.9%
Multifamily mortgage loans	106,077	2.9%	220,667	6.1%	34,470	1.0%	361,214	10.0%
U.S. agency MBS and CMOs	n/a	n/a	n/a	n/a	281,979	7.9%	281,979	7.9%
Home equity loans and lines of credit	71,526	1.9%	76,114	2.1%	68	—	147,708	4.0%
Other real estate loans	87,526	2.4%	24,569	0.7%	5,431	0.2%	117,526	3.3%
CFI loans	42,109	1.2%	2,090	0.1%	28	—	44,227	1.3%
Commercial MBS	n/a	n/a	n/a	n/a	42,131	1.2%	42,131	1.2%
U.S. obligations	n/a	n/a	n/a	n/a	41,493	1.2%	41,493	1.2%
U.S. agency securities (excluding MBS)	n/a	n/a	n/a	n/a	21,105	0.6%	21,105	0.6%
Private-label MBS and CMOs	n/a	n/a	n/a	n/a	18,827	0.5%	18,827	0.5%
Other	477	—	1	—	25,260	0.7%	25,738	0.7%
Total collateral	**$ 1,548,071**	**43.0%**	**$ 1,507,414**	**41.9%**	**$ 536,436**	**15.1%**	**$ 3,591,921**	**100.0%**

(1) Includes Federal Housing Administration and Department of Veterans Affairs loans.
n/a Collateral is not pledged using this pledging method.

Figures 27 and 28 present the percentage of collateral securing advances and other credit products by type and the percentage of collateral securing advances and other credit products by pledging method at September 30, 2023.

Figure 27 - Percentage of Collateral Securing Advances and Other Credit Products by Type

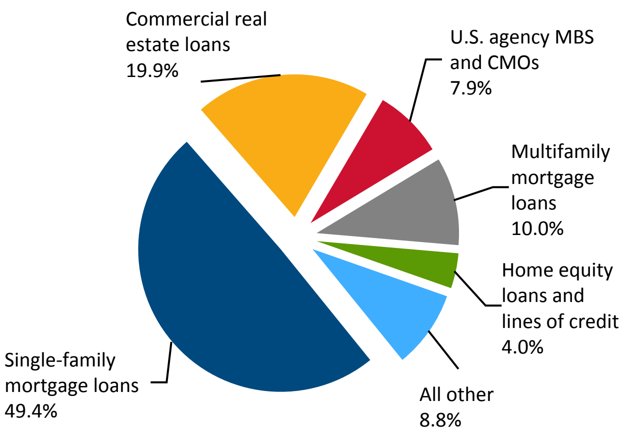
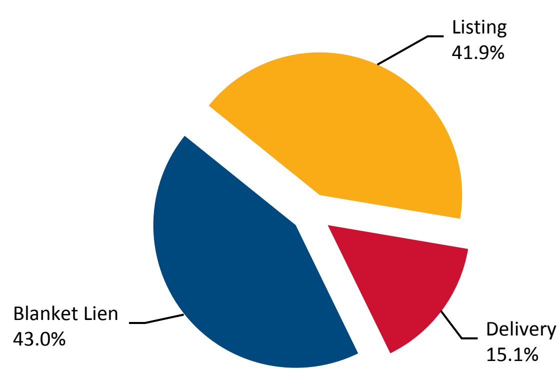


Figure 28 - Percentage of Collateral Securing Advances and Other Credit Products by Pledging Method



Investments. The FHLBanks are subject to credit risk on investments consisting of investment securities, interest-bearing deposits, securities purchased under agreements to resell, and federal funds sold. These investments are generally transacted with government agencies and large financial institutions that are considered by an individual FHLBank to be of investment quality. FHFA regulation defines investment quality as a determination by an FHLBank, with respect to a security, that there is adequate financial backing so that full and timely payment of principal and interest on such a security is expected, and the FHLBank determines that there is minimal risk that the timely payment of principal and interest would not occur because of adverse changes in economic and financial conditions during the projected life of the security.

The FHLBanks maintain short-term investment portfolios, the proceeds of which may provide funds to meet the credit needs of their members and to maintain liquidity. Within this portfolio of short-term investments, the FHLBanks may have unsecured credit exposure on certain investments.

The FHLBanks maintain long-term investment portfolios as an additional source of liquidity and to earn interest income. These investments generally provide the FHLBanks with higher returns than those available on short-term investments. Within this portfolio of long-term investments, the FHLBanks are subject to credit risk related to private-label mortgage-backed securities that are either directly or indirectly supported by underlying mortgage loans. Each private-label mortgage-backed security may contain one or more forms of credit protection/ enhancements, including, but not limited to, (1) guarantee of principal and interest, (2) subordination, (3) over-collateralization and excess interest, and (4) third-party insurance. Credit enhancement achieved through subordination features results in the subordination of payments to junior classes to support cash flows received by senior classes held by investors such as the FHLBanks.

Regulatory Restrictions on Investments. To minimize credit risk on investments, the FHLBanks are prohibited by FHFA regulations from investing in certain types of investments. (See *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Risk Management - Credit Risk - Investments* on pages 107 to 108 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for additional information about regulatory restrictions on the FHLBanks' investments.)

Investment Quality and Ratings. The FHLBanks seek to reduce the credit risk by investing in investment-quality securities. The FHLBanks consider a variety of credit quality factors when analyzing potential investments, including collateral performance, marketability, asset class or sector considerations, local and regional economic conditions, credit ratings based on the nationally recognized statistical rating organization(s), or the financial health of the underlying issuer. Although the FHLBanks invested in private-label mortgage-backed securities that at the date of purchase were substantially all rated triple-A, many of these securities have incurred credit losses based on economic conditions and housing market trends since the FHLBanks originally purchased them. Figure 29 presents the composition of total investments by credit rating at September 30, 2023.

Figure 29 - Total Investments by Credit Rating at September 30, 2023

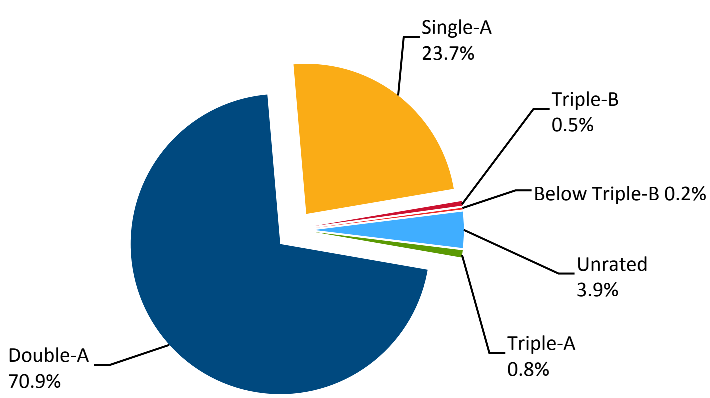


Table 29 presents the credit ratings of investments held by the FHLBanks as of September 30, 2023, using the lowest long-term credit rating for each security owned by an individual FHLBank based on the nationally recognized statistical rating organization(s) used by that FHLBank. The internal ratings of an individual FHLBank may differ from those obtained from the nationally recognized statistical rating organization(s) and other FHLBank internal ratings. Investors should not take the historical or current ratings displayed in this table as an indication of future ratings.

Table 29 - Investment Ratings

(dollars in millions)

	September 30, 2023[1][2]						
Carrying Value, Net	**Triple-A**	**Double-A**	**Single-A**	**Triple-B**	**Below Triple-B**	**Unrated**	**Total**
Interest-bearing deposits	$ —	$ —	$ 27,658	$ 425	$ —	$ —	$ 28,083
Securities purchased under agreements to resell[3]	1,300	33,215	18,130	1,100	—	15,520	69,265
Federal funds sold	—	34,500	51,987	495	—	75	87,057
Investment securities by major security type							
Non-mortgage backed securities							
U.S. Treasury obligations	—	40,891	—	—	—	—	40,891
Other U.S. obligations	—	2,252	—	—	—	—	2,252
GSE and Tennessee Valley Authority obligations	—	10,594	—	—	—	—	10,594
State or local housing agency obligations	497	1,469	—	—	—	—	1,966
Federal Family Education Loan Program ABS	—	2,018	—	—	—	—	2,018
Other	667	18	—	—	—	2	687
Total non-mortgage-backed securities	**1,164**	**57,242**	**—**	**—**	**—**	**2**	**58,408**
Mortgage-backed securities							
U.S. obligations single-family	—	13,850	—	—	—	—	13,850
U.S. obligations multifamily	—	470	—	—	—	—	470
GSE single-family	4	21,500	2	—	1	—	21,507
GSE multifamily	623	131,616	—	—	—	—	132,239
Private-label	5	21	72	62	645	622	1,427
Total mortgage-backed securities	**632**	**167,457**	**74**	**62**	**646**	**622**	**169,493**
Total investment securities	**1,796**	**224,699**	**74**	**62**	**646**	**624**	**227,901**
Total investments	**$ 3,096**	**$ 292,414**	**$ 97,849**	**$ 2,082**	**$ 646**	**$ 16,219**	**$ 412,306**

(1) Does not reflect any changes in ratings, outlook, or watch status occurring after September 30, 2023.
(2) Net carrying values do not include related accrued interest and are presented after any allowance for credit losses.
(3) Based on the rating of the counterparty to the agreements, which in some cases were not rated; however, all the collateral of unrated counterparties was rated single-A or above at September 30, 2023.

Short-term Investments. The FHLBanks maintain short-term investment portfolios, the proceeds of which may provide funds to meet the credit needs of their members and to maintain liquidity. The FHLBank Act and FHFA regulations set liquidity requirements for the FHLBanks, and an individual FHLBank's board of directors may also adopt additional liquidity policies. In addition, each FHLBank maintains a contingency funding plan in the event of operational disruptions at either the FHLBanks or the Office of Finance. (See *Liquidity and Capital Resources* for a discussion of the FHLBanks' liquidity management.)

Within the portfolio of short-term investments, the FHLBanks are subject to credit risk from unsecured credit exposures with private counterparties. Each FHLBank manages its own credit risk independently. The FHLBanks' unsecured credit investments may have maturities ranging between overnight and nine months, and generally include the following types:

- Interest-bearing deposits. Primarily consists of unsecured deposits that earn interest.
- Federal funds sold. Unsecured loans of reserve balances at the Federal Reserve Banks between financial institutions that are made on an overnight and term basis.
- Certificates of deposit. Unsecured negotiable promissory notes issued by banks and payable to the bearer on demand.

Table 30 presents the FHLBanks' unsecured credit exposure with private counterparties by investment type. At September 30, 2023, the FHLBanks had aggregate unsecured credit exposure from investments of $1 billion or more to each of 24 private counterparties. The aggregate unsecured credit exposure to these counterparties represented 97% of the FHLBanks' total unsecured investment credit exposure to private counterparties. The unsecured investment credit exposure presented in Table 30 does not reflect the average or maximum exposure during the period, as the balances presented reflect the balances at period end.

Table 30 - Unsecured Credit Exposure by Investment Type
(dollars in millions)

Carrying Value(1)(2)	September 30, 2023	December 31, 2022
Interest-bearing deposits	$ 28,083	$ 22,937
Federal funds sold	87,057	65,920
Total	**$ 115,140**	**$ 88,857**

(1) Excludes unsecured investment credit exposure to U.S. government, U.S. government agencies, government instrumentalities, government-sponsored enterprises, and supranational entities, and does not include related accrued interest.
(2) May include unsecured investment credit exposure to members.

Each FHLBank actively monitors its credit exposures and the credit quality of its counterparties, including an assessment of each counterparty's financial performance, capital adequacy, sovereign support, and the current market perceptions of the counterparties. General macroeconomic, political, and market conditions may also be considered when deciding on unsecured exposure. As a result, the FHLBanks may limit or suspend existing exposures.

FHFA regulations include limits on the amount of unsecured credit an individual FHLBank may extend to a counterparty or to a group of affiliated counterparties. The limit on the amount of unsecured credit extended to a counterparty is calculated by multiplying the eligible capital by the maximum capital exposure limit applicable to the counterparty. Under these regulations, the level of eligible capital is determined as the lesser of an individual FHLBank's regulatory capital or the eligible amount of Tier 1 capital or regulatory capital of the counterparty. The maximum capital exposure limit is based on the counterparty's overall FHFA credit rating and ranges from 1% to 15%. Extensions of unsecured credit by an individual FHLBank to a counterparty arise from on-balance sheet transactions, off-balance sheet commitments, and derivative transactions. (See *Credit Risk - Derivative Counterparties* for additional information related to derivatives exposure.)

FHFA regulations also permit the FHLBanks to extend additional unsecured credit for sales of federal funds with a maturity of one day or less and sales of federal funds subject to a continuing contract that renews automatically. An FHLBank's total unsecured exposure to a counterparty may not exceed twice the regulatory limit for term exposures, or a total of 2% to 30% of the eligible amount of capital, based on the counterparty's credit rating. As of September 30, 2023, each of the FHLBanks was in compliance with the regulatory limits established for unsecured credit.

The FHLBanks are prohibited by FHFA regulations from investing in financial instruments issued by non-U.S. entities, other than those issued by U.S. branches and agency offices of foreign commercial banks. The FHLBanks' unsecured credit exposures to U.S. branches and agency offices of foreign commercial banks include the risk that, as a result of political or economic conditions in a country, the counterparty may be unable to meet its contractual repayment obligations. The FHLBanks' unsecured credit exposures to domestic counterparties, U.S. subsidiaries of foreign commercial banks, and U.S. branches and agency offices of foreign commercial banks include the risk that these counterparties have extended credit to foreign counterparties. As of September 30, 2023, an FHLBank held full faith and credit U.S. guaranteed securities with foreign issuers totaling $275 million. Other than these investments, the FHLBanks were in compliance with the FHFA regulation as of September 30, 2023.

As of September 30, 2023, the FHLBanks' unsecured investment credit exposure to U.S. branches and agency offices of foreign commercial banks was comprised of federal funds sold. As of September 30, 2023, 91% of the FHLBanks' unsecured investments in federal funds sold were to U.S. branches and agency offices of foreign commercial banks.

Figure 30 presents total unsecured investment credit exposure by credit rating at September 30, 2023.

Figure 30 - Total Unsecured Investment Credit Exposure by Credit Rating

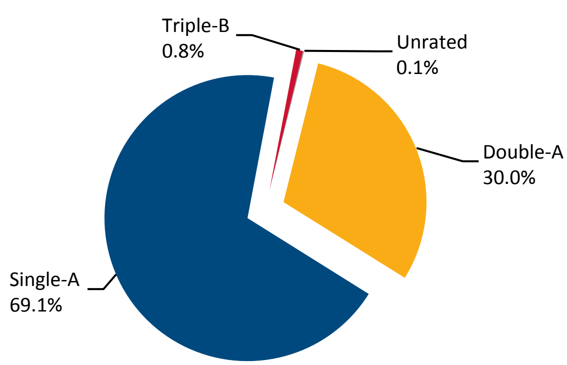


Table 31 presents the lowest long-term credit ratings of the unsecured investment credit exposures presented by the domicile of the counterparty or the domicile of the counterparty's immediate parent for U.S. branches and agency offices of foreign commercial banks based on the nationally recognized statistical rating organization(s) used by the individual FHLBank holding the investment. This table does not reflect the foreign sovereign government's credit rating. The internal ratings of an individual FHLBank may differ from those obtained from the nationally recognized statistical rating organization(s) and other FHLBank internal ratings. Investors should not take the historical or current ratings displayed in this table as an indication of future ratings.

Table 31 - Ratings of Unsecured Investment Credit Exposure by Domicile of Counterparty at September 30, 2023[(1)]

(dollars in millions)

	Investment Grade				
Carrying Value[(2)]	**Double-A**	**Single-A**	**Triple-B**	**Unrated**	**Total**
Domestic	$ 3,231	$ 29,908	$ 920	$ 75	$ 34,134
U.S. subsidiaries of foreign commercial banks	—	1,457	—	—	1,457
Total domestic and U.S. subsidiaries of foreign commercial banks	**3,231**	**31,365**	**920**	**75**	**35,591**
U.S. branches and agency offices of foreign commercial banks					
Canada	8,640	13,710	—	—	22,350
Australia	6,070	5,545	—	—	11,615
Germany	2,750	7,375	—	—	10,125
Finland	9,434	—	—	—	9,434
Netherlands	—	8,795	—	—	8,795
United Kingdom	—	4,560	—	—	4,560
Norway	4,225	—	—	—	4,225
France	—	3,650	—	—	3,650
Sweden	150	3,445	—	—	3,595
Chile	—	1,000	—	—	1,000
Belgium	—	200	—	—	200
Total U.S. branches and agency offices of foreign commercial banks	**31,269**	**48,280**	**—**	**—**	**79,549**
Total unsecured investment credit exposure	**$ 34,500**	**$ 79,645**	**$ 920**	**$ 75**	**$ 115,140**

(1) Does not reflect any changes in ratings, outlook, or watch status occurring after September 30, 2023.
(2) Excludes unsecured investment credit exposure to U.S. government, U.S. government agencies, government instrumentalities, government-sponsored enterprises, and supranational entities, and does not include related accrued interest.

The FHLBanks also reduce the credit risk on investments by generally investing in investments that have short-term maturities. At September 30, 2023, all unsecured investments held by the FHLBanks had overnight maturities.

Mortgage Loans Held for Portfolio. The FHFA's Acquired Member Asset (AMA) regulation permits the FHLBanks to purchase and hold specified mortgage loans from their members. Each FHLBank has established or participated in the Acquired Member Asset programs such as the MPF Program, MPP, and MAP as services to their members. Members and eligible housing associates may apply to become a participating financial institution (PFI) of their respective FHLBank. The mortgage loans purchased under these programs may carry more credit risk than advances, even though the respective member or housing associate provides fully secured credit enhancement and bears a portion of the credit risk.

The FHFA's AMA regulation on credit risk sharing allows an FHLBank to utilize its choice of model and methodology to determine the credit enhancement for AMA loan assets and pool loans. The assets delivered must be credit enhanced by the members up to an FHLBank determined "AMA investment-grade" instead of a specific nationally recognized statistical rating organization's ratings.

Management at each FHLBank believes that it has adequate policies and procedures in place to manage credit risk on mortgage loans appropriately. (See *Note 5 - Mortgage Loans* to the accompanying combined financial statements for additional information about mortgage loan payment status, allowance for credit losses, and other delinquency statistics.)

See *Financial Discussion and Analysis of Combined Financial Condition and Combined Results of Operations - Risk Management - Credit Risk - Mortgage Loans Held for Portfolio* on pages 112 to 116 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for additional information on credit risk of conventional mortgage loans held for portfolio, including loss allocation structures, mortgage insurance, and state concentrations of MPF Program, MPP, and MAP loans.

Derivative Counterparties. Each FHLBank transacts most of its derivatives with counterparties that are large banks and major broker-dealers. Derivative transactions may be either executed 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.

Each FHLBank is subject to credit risk due to the risk of non-performance by counterparties to its derivative transactions. The amount of credit risk on derivatives depends on the extent to which netting procedures, collateral requirements, and other credit enhancements are used and are effective in mitigating the risk. Each FHLBank manages credit risk through credit analysis, collateral management, and other credit enhancements. The FHLBanks are also required to follow the requirements set forth by applicable regulation.

The contractual or notional amount of derivative transactions reflects the involvement of an FHLBank in the various classes of financial instruments. The maximum credit risk of an FHLBank with respect to derivative transactions is the estimated cost of replacing the derivative transactions if there is a default, minus the value of any related collateral. In determining maximum credit risk, each FHLBank considers accrued interest receivables and payables, as well as the netting requirements to net assets and liabilities.

Uncleared Derivatives. Each FHLBank is subject to the risk of non-performance by the counterparties to its uncleared derivative transactions. An FHLBank generally requires collateral on uncleared derivative transactions. Unless the collateral delivery threshold is set to zero, the amount of net unsecured credit exposure that is permissible with respect to each counterparty may depend on the credit rating of that counterparty. A counterparty generally must deliver collateral if the total market value of the FHLBank's exposure to that counterparty rises above a specific threshold.

Uncleared derivative transactions executed on or after the dates specified in applicable regulations are subject to two-way initial margin requirements as mandated by the Wall Street Reform and Consumer Protection Act, or Dodd-Frank Act, if an FHLBank's aggregate uncleared derivative transactions exposure to a counterparty exceeds a specified threshold. The initial margin is required to be held at a third-party custodian and does not change ownership. Rather, the party in respect of which the initial margin has been posted to the third-party custodian will have a security interest in the amount of initial margin required under the uncleared margin rules and can only take ownership upon the occurrence of certain events, including an event of default due to bankruptcy, insolvency, or similar proceeding.

For all uncleared transactions entered into on or after March 1, 2017, the derivative agreements are fully collateralized with a zero unsecured threshold in accordance with variation margin requirements issued by the U.S. federal bank regulatory agencies and the Commodity Futures Trading Commission.

As a result of these risk mitigation initiatives, the management of each FHLBank did not anticipate any credit losses on its uncleared derivative transactions as of September 30, 2023.

Cleared Derivatives. Each FHLBank is subject to the risk of non-performance by the Derivative Clearing Organization(s) (Clearinghouse) and the clearing agents. The requirement that an FHLBank posts initial and variation margin through the clearing agent, to the Clearinghouse, exposes an FHLBank to credit risk in the event that the clearing agent or the Clearinghouse fails to meet its obligations. However, the use of cleared derivatives is intended to mitigate an FHLBank's overall credit risk exposure because a central counterparty is substituted for individual counterparties and collateral/payment is posted daily for changes in the value of cleared derivatives through a clearing agent. The management of each FHLBank did not anticipate any credit losses on its cleared derivatives as of September 30, 2023.

Table 32 presents the derivative positions with non-member counterparties and member institutions to which the FHLBanks had credit exposure at September 30, 2023. The ratings presented in this table represent the lowest long-term counterparty credit rating available for each counterparty of an individual FHLBank, based on the nationally recognized statistical rating organization(s) used by that FHLBank. Investors should not take the historical or current ratings displayed in this table as an indication of future ratings.

Table 32 - Derivative Counterparty Credit Exposure at September 30, 2023

(dollars in millions)

Credit Rating[1]	Notional Amount	Net Derivatives Fair Value Before Collateral	Cash Collateral Pledged To (From) Counterparties	Non-cash Collateral Pledged To (From) Counterparties	Net Credit Exposure to Counterparties
Non-member counterparties					
Asset positions with credit exposure					
Uncleared derivatives					
Double-A	$ 26	$ —	$ —	$ —	$ —
Single-A	57,497	520	(493)	14	41
Triple-B	16,479	180	(175)	—	5
Cleared derivatives[2]	11,892	2	28	32	62
Liability positions with credit exposure					
Uncleared derivatives					
Single-A	251,491	(6,240)	6,424	(78)	106
Triple-B	55,354	(1,684)	1,703	—	19
Below investment grade	13,610	(451)	462	—	11
Cleared derivatives[2]	662,523	(262)	3,665	3,577	6,980
Total derivative positions with credit exposure to non-member counterparties	**1,068,872**	**(7,935)**	**11,614**	**3,545**	**7,224**
Member institutions[3]	176	1	—	—	1
Consolidated obligation bond firm commitment	50	—	—	—	—
Total	**$ 1,069,098**	**$ (7,934)**	**$ 11,614**	**$ 3,545**	**$ 7,225**

(1) This table does not reflect any changes in rating, outlook, or watch status occurring after September 30, 2023.

(2) Represents derivative transactions cleared with LCH Ltd. and CME Clearing, the FHLBanks' clearinghouses. LCH Ltd. is rated AA- by S&P and CME Clearing is not rated, but its parent company, CME Group Inc., is rated Aa3 by Moody's and AA- by S&P.

(3) Member institutions include mortgage delivery commitments and derivatives with members where an FHLBank is acting as an intermediary. Collateral held with respect to derivatives with member institutions where an FHLBank is acting as an intermediary represents the amount of eligible collateral physically held by or on behalf of the FHLBank or collateral assigned to the FHLBank, as evidenced by a written security agreement, and held by the member institution for the benefit of that FHLBank.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Each FHLBank is responsible for establishing its own risk management philosophies, practices, and policies. Each FHLBank describes its risk management policies for its business, including quantitative and qualitative disclosures about its market risk, in its periodic reports filed with the SEC. (See *Explanatory Statement about Federal Home Loan Banks Combined Financial Report*.)

Each FHLBank has established policies and procedures to evaluate, manage, and mitigate market risks. The FHFA has established regulations governing the risk management practices of the FHLBanks. The FHLBanks must file periodic compliance reports with the FHFA. The FHFA conducts annual on-site examinations, interim on-site visits, and off-site analyses of each of the FHLBanks and the Office of Finance.

Interest-Rate Risk

Interest-rate risk is the risk that relative and absolute changes in interest rates may adversely affect an institution's financial condition and results of operations. The primary sources of interest rate risk are yield curve risk, basis risk, repricing risk, and options risk. The goal of an interest-rate risk management strategy is not necessarily to eliminate interest-rate risk, but to manage it by setting, and operating within, an appropriate framework and limits. The FHLBanks generally manage interest-rate risk by acquiring and maintaining a portfolio of assets and liabilities and entering into related derivative transactions to limit the expected mismatches in duration and market value of equity sensitivity. The FHLBanks measure and monitor interest-rate risk with commonly used methods, which generally include, but are not limited to, the calculations of market value of equity's sensitivity in various interest rate scenarios, duration of equity, and duration gap, convexity of equity, and key rate durations. (See *Quantitative and Qualitative Disclosures about Market Risk* on pages 121 to 130 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for additional information.)

Transition from LIBOR to an Alternative Reference Rate

In response to the announcement by the United Kingdom's Financial Conduct Authority in July 2017 that it would no longer persuade or compel banks to submit rates for the calculation of LIBOR after 2021, the Federal Reserve Board and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee, which identified and recommended SOFR as its preferred alternative to U.S. dollar LIBOR, and the Federal Reserve Bank of New York began publishing SOFR rates in the second quarter of 2018. The FHLBanks selected SOFR as the primary replacement rate for U.S. dollar LIBOR. In March 2021, the Financial Conduct Authority announced that LIBOR would either cease to be provided by any administrator or no longer be representative immediately after December 31, 2021 (or, in the case of some more frequently used U.S. dollar LIBOR settings, immediately after June 30, 2023).

As of September 30, 2023, the FHLBanks had $2.0 billion in investments, $27 million in notional for the pay leg of derivatives, and $1.8 billion in notional for the receive leg of derivatives all of which were LIBOR-indexed. The FHLBanks transitioned all outstanding LIBOR-indexed instruments, such that, immediately following June 30, 2023, the U.S. dollar LIBOR rates referenced in those instruments became static, converted to SOFR, or will convert to SOFR at the beginning of the instruments' next reset period. As a result, the FHLBanks have no further variable-rate LIBOR exposure after June 30, 2023. The last of the FHLBanks' consolidated obligations indexed to LIBOR matured during January 2022, and as of September 30, 2023, the FHLBanks had no LIBOR-indexed advances outstanding.

For detailed discussion regarding the FHLBanks' transition from LIBOR, see *Quantitative and Qualitative Disclosures about Market Risk - Interest Rate Risk - Transition from LIBOR to an Alternative Reference Rate* on pages 122 to 124 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022.

Market Value of Equity and Duration of Equity

Each FHLBank has an internal modeling system for measuring its duration of equity; therefore, individual FHLBank measurements may not be directly comparable. Generally, duration of equity equals the market value-weighted duration of assets minus the market value-weighted duration of liabilities (factoring in the effect of derivatives), divided by the market value of equity. Each FHLBank reports the results of its duration of equity calculations to the FHFA each quarter. Most of the FHLBanks have risk limits on duration of equity and thus they manage to the duration of equity risk measure. The capital adequacy rules of the FHFA require each FHLBank to hold permanent capital in an amount sufficient to cover the sum of its credit, market, and operational risk-based capital requirements, which are defined by applicable regulations. (See *Note 9 - Capital* to the accompanying combined financial statements for additional information.) Each FHLBank has implemented a market-risk model that calculates the market-risk component of this requirement.

Table 33 presents each FHLBank that includes quantitative market value of equity and duration of equity information in its individual 2023 Third Quarter SEC Form 10-Q.

Table 33 - Individual FHLBank's Market Value of Equity and Duration of Equity Disclosures

FHLBank	Market Value of Equity	Duration of Equity
Boston	(1)	(1)
New York	✓	✓
Pittsburgh	(2)	✓
Atlanta	✓	✓
Cincinnati	✓	✓
Indianapolis	✓	✓
Chicago	(3)	✓
Des Moines	✓	(4)
Dallas	✓	(5)
Topeka	(6)	✓
San Francisco	✓	(7)

(1) The FHLBank of Boston monitors and measures market value of equity, duration of equity, and duration gap, as described in its 2023 Third Quarter SEC Form 10-Q. In addition, the FHLBank of Boston also monitors adjusted market value of equity, adjusted duration of equity, and adjusted duration gap. See the FHLBank of Boston's 2023 Third Quarter SEC Form 10-Q for additional information.
(2) The FHLBank of Pittsburgh monitors and measures market value of equity to par value of capital stock, as described in its 2023 Third Quarter SEC Form 10-Q. In addition, the FHLBank of Pittsburgh also monitors return on equity spread volatility relative to a return on equity spread volatility limit, established and approved by its board of directors.
(3) The FHLBank of Chicago disclosed the dollar loss limits on changes in market value of equity under parallel interest rate shocks in its 2023 Third Quarter SEC Form 10-Q.
(4) Although the FHLBank of Des Moines measures and monitors duration of equity, it disclosed in its 2023 Third Quarter SEC Form 10-Q projected 24 month income as a key interest-rate risk measure.
(5) The FHLBank of Dallas monitors and measures duration of equity and duration gap, as described in its 2023 Third Quarter SEC Form 10-Q.
(6) The FHLBank of Topeka measures and monitors market value of equity (MVE); however, the FHLBank of Topeka measures market value risk in terms of its MVE in relation to its regulatory capital stock outstanding instead of to its book value of equity. As described in its 2023 Third Quarter SEC Form 10-Q, the FHLBank of Topeka believes this is a reasonable metric because, as a cooperative, the metric reflects the market value of the FHLBank of Topeka relative to the book value of its capital stock.
(7) The FHLBank of San Francisco does not disclose duration of equity, rather it discloses a comparable metric, "Market Value of Capital Sensitivity" as a key market risk measure.

Table 34 presents the duration of equity reported by each FHLBank to the FHFA in accordance with the FHFA's guidance, which prescribes that down and up interest-rate shocks equal 200 basis points. However, the applicable guidance restricts the down rate from assuming a negative interest rate. Therefore, each FHLBank adjusts the down rate accordingly in periods of very low levels of interest rates.

Table 34 - Duration of Equity

(in years)

	September 30, 2023			December 31, 2022		
FHLBank	**Down**	**Base**	**Up**	**Down**	**Base**	**Up**
Boston	0.4	1.2	2.0	0.8	2.2	2.8
New York	(0.1)	0.4	1.0	(0.8)	(0.2)	0.3
Pittsburgh	1.0	0.9	1.2	0.7	1.0	1.3
Atlanta	1.5	2.4	3.6	0.2	0.6	1.4
Cincinnati	1.7	1.8	1.6	2.0	2.1	1.8
Indianapolis	(0.5)	0.5	1.4	(0.6)	(0.1)	0.2
Chicago	(0.8)	(0.2)	0.2	(1.8)	(0.5)	—
Des Moines	1.6	1.6	1.8	0.6	1.0	1.0
Dallas	(0.2)	(0.3)	0.3	(3.4)	(1.5)	(0.2)
Topeka	1.9	2.2	3.2	2.1	1.7	1.7
San Francisco	1.0	1.4	1.5	1.0	1.3	1.5

Duration Gap

A related measure of interest-rate risk is duration gap, which is the difference between the estimated durations (market value sensitivity) of assets and liabilities, and reflects the extent to which estimated maturity and repricing cash flows for assets and liabilities are matched. Duration gap determines the sensitivity of assets and liabilities to interest-rate changes. Each FHLBank has an internal modeling system for measuring its duration gap; therefore, individual FHLBank measurements may not be directly comparable. Duration generally indicates the expected change in an instrument's market value resulting from an increase or a decrease in interest rates. Higher duration numbers, whether positive or negative, indicate greater volatility in the market value of equity in response to changing interest rates. Duration gap numbers in Table 35 include the effect of derivative transactions.

Table 35 - Duration Gap

(in months)

FHLBank	**September 30, 2023**	**December 31, 2022**
Boston	0.8	1.4
New York	—	(0.4)
Pittsburgh	0.4	0.4
Atlanta	1.3	0.2
Cincinnati	0.1	0.1
Indianapolis	—	(0.4)
Chicago	(0.2)	(0.4)
Des Moines	1.0	0.6
Dallas	(0.3)	(1.2)
Topeka	1.4	1.1
San Francisco	1.2	0.9

Use of Derivatives to Manage Interest-Rate Risk

An FHLBank enters into derivatives to manage interest-rate risk, prepayment risk, and other exposure inherent in otherwise unhedged assets and funding positions. An FHLBank attempts to use derivatives to reduce interest-rate exposure in the most cost-efficient manner. Derivatives are also used to manage the effective maturity, repricing frequency, or option characteristics of financial instruments to achieve risk-management objectives. (See *Note 6 - Derivatives and Hedging Activities* to the accompanying combined financial statements for a discussion of managing interest-rate risk exposure and *Financial Discussion and Analysis - Combined Results of Operations* for the effect of derivatives and hedging activities on net interest income and non-interest income resulting from the FHLBanks' hedging strategies.)

Table 36 presents the notional amount of the pay and receive leg of interest-rate swaps by interest-rate index at September 30, 2023 and December 31, 2022. The pay and receive legs are equal as both sides of the derivative transaction are being presented.

Table 36 - Notional Amount of Interest-Rate Swaps by Interest-Rate Index

(dollars in millions)

	September 30, 2023[1]		December 31, 2022	
	Pay Leg	Receive Leg	Pay Leg	Receive Leg
Interest-Rate Index				
SOFR OIS	$ 612,128	$ 433,140	$ 494,900	$ 273,883
Fixed	516,914	662,056	380,059	565,799
Federal Funds OIS	49,901	82,014	65,659	62,475
LIBOR	27	1,760	8,012	46,473
Total notional amount of interest-rate swaps	**$ 1,178,970**	**$ 1,178,970**	**$ 948,630**	**$ 948,630**

(1) Includes LIBOR-indexed derivatives as of September 30, 2023. The FHLBanks transitioned all of these derivatives such that, immediately following June 30, 2023, the U.S. dollar LIBOR rates referenced in these derivatives became static or will convert to SOFR at the beginning of the instruments' next reset period.

In addition to the interest-rate swaps included in Table 36, the FHLBanks have other derivatives at September 30, 2023 and December 31, 2022. Table 37 presents the notional amount of other derivatives at September 30, 2023 and December 31, 2022.

Table 37 - Notional Amount of Other Derivatives

(dollars in millions)

	September 30, 2023	December 31, 2022
Interest-rate caps or floors	$ 6,340	$ 6,730
Interest-rate swaptions	2,125	1,505
Mortgage delivery commitments	812	299
Interest-rate futures or forwards	319	76
Other	161	153
Total notional amount of other derivatives	**$ 9,757**	**$ 8,763**

CONTROLS AND PROCEDURES

FHLBanks

The management of each FHLBank is required under applicable laws and regulations to establish and maintain effective disclosure controls and procedures as well as effective internal control over financial reporting, as such disclosure controls and procedures and internal control over financial reporting relate to that FHLBank only. Each FHLBank's management assessed the effectiveness of its individual internal control over financial reporting as of December 31, 2022, based on the criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management of each FHLBank concluded, as of December 31, 2022, that its individual internal control over financial reporting was effective based on the criteria established in *Internal Control-Integrated Framework.* Additionally, the independent registered public accounting firm of each FHLBank opined that the individual FHLBank maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022. (See *Part II. Item 8 - Financial Statements and Supplementary Data* or *Item 9A - Controls and Procedures* of each FHLBank's 2022 SEC Form 10-K for its *Management's Report on Internal Control over Financial Reporting*.)

The management of each FHLBank concluded that its disclosure controls and procedures were effective at a reasonable assurance level as of the end of the period covered by its 2023 Third Quarter SEC Form 10-Q. Additionally, each FHLBank indicated that there were no changes to its internal control over financial reporting during the quarter ended September 30, 2023, that materially affected, or are reasonably likely to materially affect, its internal control over financial reporting. (See *Part I. Item 4 - Controls and Procedures* of each FHLBank's 2023 Third Quarter SEC Form 10-Q.)

Office of Finance Controls and Procedures over the Combined Financial Reporting Combining Process

The Office of Finance is not responsible for the preparation, accuracy, or adequacy of the information or financial data provided by the FHLBanks to the Office of Finance for use in preparing the combined financial reports, or for the quality or effectiveness of the disclosure controls and procedures or internal control over financial reporting of the FHLBanks as they relate to that information and financial data. Each FHLBank is responsible for establishing and maintaining disclosure controls and procedures and internal control over financial reporting with respect to the information and financial data provided to the Office of Finance. Although the Office of Finance is not an SEC registrant, FHFA regulations require that the combined financial report form and content generally be consistent with SEC Regulations S-K and S-X, as interpreted by the FHFA. The Office of Finance is not required to establish and maintain, and in light of the nature of its role has not established and maintained, disclosure controls and procedures and internal control over financial reporting in the same manner as those maintained by each FHLBank. The Office of Finance has established controls and procedures concerning the FHLBanks' submission of information and financial data to the Office of Finance, the process of combining the financial statements and other financial information of the individual FHLBanks, and the review of that information.

The Office of Finance does not independently verify the financial information submitted by each FHLBank that comprise the combined financial statements, the condensed combining schedules, and other disclosures included in this Combined Financial Report. Instead, the Office of Finance relies on each FHLBank management's certification and representation regarding the accuracy and completeness, in all material respects, of its data submitted to the Office of Finance for use in preparing this Combined Financial Report.

Audit Committee Charter

The charter of the audit committee of the Office of Finance's board of directors is available on the Office of Finance's website at fhlb-of.com. This website address is provided as a matter of convenience only, and its contents are not made part of or incorporated by reference into this report.

LEGAL PROCEEDINGS

The FHLBanks are subject to various pending legal proceedings arising in the normal course of business. The FHLBanks and the Office of Finance do not believe they are a party to, or subject to, any pending legal proceedings where the ultimate liability of the FHLBanks, if any, arising out of these proceedings is likely to have a material effect on the results of operations, financial condition, or liquidity of the FHLBanks on a combined basis or that are otherwise material to the FHLBanks on a combined basis.

See each FHLBank's 2023 Third Quarter SEC Form 10-Q under *Part II. Item 1 - Legal Proceedings* for additional information.

RISK FACTORS

There were no material changes to the risk factors disclosed on pages 28 to 40 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022. (See each FHLBank's 2023 SEC Form 10-Qs for any updates to the risk factors included in the FHLBank's 2022 SEC Form 10-K under *Part I. Item 1A - Risk Factors*.)

MARKET FOR CAPITAL STOCK AND RELATED STOCKHOLDER MATTERS

As a cooperative, each FHLBank conducts its advances business and mortgage loan programs almost exclusively with its members. Members and certain former members own all of the FHLBanks' capital stock. There is no established marketplace for the FHLBanks' stock and it is not publicly traded. FHLBank stock is purchased by members at the stated par value of $100 per share and may be redeemed/repurchased at its stated par value of $100 per share, subject to applicable redemption periods and certain conditions and limitations. (See *Business - Capital, Capital Rules, and Dividends* on pages 15 to 19 of the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for more information on the restrictions on capital stock redemptions and repurchases.)

At September 30, 2023, the FHLBanks had 466 million shares of capital stock outstanding, including mandatorily redeemable capital stock. The FHLBanks are not required to register their securities under the Securities Act of 1933, as amended; however, each FHLBank is required to register a class of its stock under the Securities Exchange Act of 1934, as amended. (See *Note 9 - Capital* to the accompanying combined financial statements for additional information on regulatory capital stock and mandatorily redeemable capital stock.)

Table 38 presents combined regulatory capital stock, which includes mandatorily redeemable capital stock, held by type of member and FHLBank membership by type of member.

Table 38 - Regulatory Capital Stock Held and Membership by Type of Member
(dollars in millions)

	September 30, 2023		December 31, 2022	
	Regulatory Capital Stock Amount	Number of Members	Regulatory Capital Stock Amount	Number of Members
Commercial banks	$ 25,631	3,684	$ 25,411	3,726
Insurance companies	7,568	574	7,408	565
Credit unions	6,536	1,604	6,367	1,572
Savings institutions	5,462	561	4,802	569
Community development financial institutions	22	71	18	70
Total	**45,219**	**6,494**	**44,006**	**6,502**
Mandatorily redeemable capital stock	1,402		708	
Combined regulatory capital stock	**$ 46,621**		**$ 44,714**	

Figures 31 and 32 present the percentage of regulatory capital stock held, and membership, by type of member at September 30, 2023.

Figure 31 - Percentage of Regulatory Capital Stock Held by Type of Member

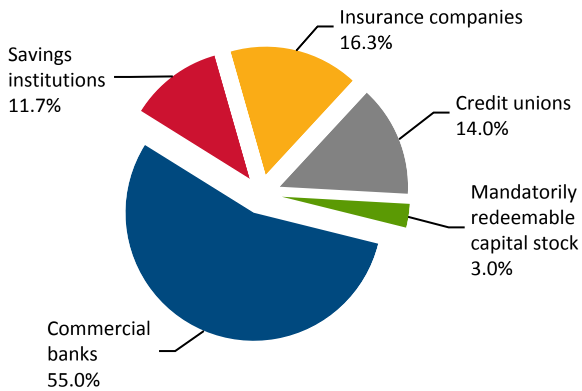
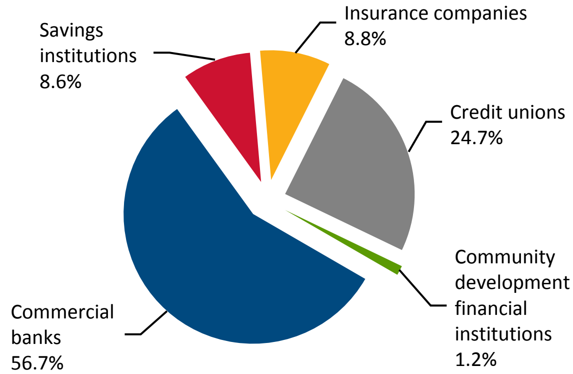


Figure 32 - Percentage of Membership by Type of Member



The information on regulatory capital stock presented in Table 39 is accumulated at the holding-company level. The percentage of combined regulatory capital stock identified in Table 39 for each holding company was computed by dividing all regulatory capital stock owned by subsidiaries of that holding company by combined regulatory capital stock. These percentage concentrations do not represent ownership concentrations in an individual FHLBank.

Table 39 - Top 10 Regulatory Capital Stockholders by Holding Company at September 30, 2023

(dollars in millions)

Holding Company Name[(1)]	FHLBank Districts(2)	Regulatory Capital Stock[(3)]	Percentage of Combined Regulatory Capital Stock	Mandatorily Redeemable Capital Stock
The PNC Financial Services Group, Inc.	Pittsburgh, Cincinnati	$ 1,470	3.2 %	$ 5
Wells Fargo & Company	Des Moines, San Francisco, Dallas, Topeka	1,448	3.1 %	6
The Charles Schwab Corporation	Dallas	1,353	2.9 %	—
Truist Financial Corporation	Atlanta, Pittsburgh	1,284	2.8 %	1
JPMorgan Chase & Co.	San Francisco, Cincinnati, Chicago, Des Moines	1,213	2.6 %	901
Bank of America Corporation	Atlanta, San Francisco, Boston, Des Moines	1,154	2.5 %	3
New York Community Bancorp, Inc.	New York, Indianapolis	907	1.9 %	329
Citigroup Inc.	New York	838	1.8 %	—
U.S. Bancorp	Cincinnati, San Francisco, Des Moines	762	1.6 %	56
MetLife, Inc.	New York	737	1.6 %	—
		$ 11,166	**24.0 %**	**$ 1,301**

(1) Holding company information was obtained from the Federal Reserve System's website, the National Information Center (NIC), and SEC filings. The NIC is a central repository of data about banks and other institutions for which the Federal Reserve System has a supervisory, regulatory, or research interest, including both domestic and foreign banking organizations operating in the United States.
(2) At September 30, 2023, each holding company had subsidiaries with regulatory capital stock holdings in these FHLBank districts.
(3) Includes FHLBank capital stock that is considered to be mandatorily redeemable, which is classified as a liability under GAAP.

SUPPLEMENTAL INFORMATION

Individual Federal Home Loan Bank Selected Financial Data and Financial Ratios

The following individual Federal Home Loan Bank (FHLBank) selected financial data and financial ratios are unaudited, and provided as a convenience to the reader. Please refer to *Explanatory Statement about Federal Home Loan Banks Combined Financial Report*, which discusses the independent management and operation of the FHLBanks; identifies the availability of other information about the FHLBanks; and describes where to find the periodic reports and other information filed by each FHLBank with the SEC.

Individual FHLBank Selected Financial Data and Financial Ratios (Unaudited)

(dollars in millions)	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Selected Statement of Condition Data[1]					
At September 30, 2023					
Assets					
Investments[2][3]	$ 18,736	$ 39,870	$ 25,066	$ 53,839	$ 40,813
Advances	40,131	101,488	76,202	108,091	69,786
Mortgage loans held for portfolio	2,940	2,165	4,664	107	7,076
Total assets	**62,747**	**144,421**	**106,937**	**163,381**	**118,588**
Deposits	1,151	2,721	856	2,106	1,220
Consolidated obligations[3]					
Discount notes	20,337	36,397	12,520	34,443	24,297
Bonds	37,364	96,374	86,843	117,092	86,058
Total consolidated obligations	**57,701**	**132,771**	**99,363**	**151,535**	**110,355**
Mandatorily redeemable capital stock	6	7	28	—	19
Total capital					
Capital stock[4]	2,007	5,750	3,841	6,165	4,535
Retained earnings	1,779	2,321	1,781	2,454	1,619
Accumulated other comprehensive income (loss)	(327)	(189)	(116)	—	(50)
Total capital	**3,459**	**7,882**	**5,506**	**8,619**	**6,104**
Asset composition (as a percentage of the individual FHLBank's total assets)					
Investments[2][3]	29.9 %	27.6 %	23.4 %	33.0 %	34.4 %
Advances	64.0 %	70.3 %	71.3 %	66.2 %	58.8 %
Mortgage loans held for portfolio, net	4.7 %	1.5 %	4.4 %	0.1 %	6.0 %
Retained earnings as a percentage of FHLBank's total assets	2.8 %	1.6 %	1.7 %	1.5 %	1.4 %
FHLBank's total assets as a percentage of FHLBank System	4.8 %	11.0 %	8.2 %	12.5 %	9.1 %
At September 30, 2022					
Assets					
Investments[2][3]	$ 21,749	$ 35,438	$ 22,756	$ 45,172	$ 44,610
Advances	33,665	91,871	58,402	93,071	59,748
Mortgage loans held for portfolio	2,821	2,136	4,599	124	7,295
Total assets	**58,870**	**130,130**	**86,279**	**140,298**	**112,423**
Deposits	939	1,115	669	2,360	1,243
Consolidated obligations[3]					
Discount notes	21,685	49,030	31,504	55,794	51,023
Bonds	32,818	72,174	49,107	74,994	52,427
Total consolidated obligations	**54,503**	**121,204**	**80,611**	**130,788**	**103,450**
Mandatorily redeemable capital stock	10	11	28	—	198
Total capital					
Capital stock[4]	1,718	5,331	3,050	4,241	4,463
Retained earnings	1,656	2,029	1,480	2,260	1,361
Accumulated other comprehensive income (loss)	(244)	(177)	(67)	(51)	(43)
Total capital	**3,130**	**7,183**	**4,463**	**6,450**	**5,781**
Asset composition (as a percentage of the individual FHLBank's total assets)					
Investments[2][3]	36.9 %	27.2 %	26.4 %	32.2 %	39.7 %
Advances	57.2 %	70.6 %	67.7 %	66.3 %	53.1 %
Mortgage loans held for portfolio, net	4.8 %	1.6 %	5.3 %	0.1 %	6.5 %
Retained earnings as a percentage of individual FHLBank's total assets	2.8 %	1.6 %	1.7 %	1.6 %	1.2 %
FHLBank's total assets as a percentage of FHLBank System	5.4 %	11.9 %	7.9 %	12.8 %	10.3 %

(1) The sum or recalculation of individual FHLBank amounts may not agree or may not be recalculated from the Combined Statements of Condition amounts due to combining adjustments.

(2) Investments consist of interest-bearing deposits, deposits with other FHLBanks, securities purchased under agreements to resell, federal funds sold, trading securities, available-for-sale securities, and held-to-maturity securities.

(3) See *Note 1 - Summary of Significant Accounting Policies - Basis of Presentation* on page F-15 in the audited combined financial statements included in the Federal Home Loan Banks Combined Financial Report for the year ended December 31, 2022, for information about the elimination of interbank transactions in the combined financial statements of the FHLBanks.

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Selected Statement of Condition Data[1]						
At September 30, 2023						
Assets						
Investments[2][3]	$ 27,122	$ 49,294	$ 56,667	$ 50,708	$ 19,967	$ 30,235
Advances	34,782	74,963	122,258	91,338	44,322	63,584
Mortgage loans held for portfolio	8,261	11,064	9,546	4,982	8,207	770
Total assets	**71,041**	**136,245**	**190,668**	**147,614**	**73,136**	**95,021**
Deposits	603	690	1,140	1,258	752	768
Consolidated obligations[3]						
Discount notes	17,458	42,088	64,315	20,931	17,893	14,293
Bonds	47,895	83,830	113,766	116,303	50,098	70,907
Total consolidated obligations	**65,353**	**125,918**	**178,081**	**137,234**	**67,991**	**85,200**
Mandatorily redeemable capital stock	368	185	12	1	—	776
Total capital						
Capital stock[4]	2,227	3,544	6,811	5,204	2,649	2,485
Retained earnings	1,470	4,884	3,005	2,289	1,372	4,222
Accumulated other comprehensive income (loss)	(27)	(112)	(206)	176	(129)	(55)
Total capital	**3,670**	**8,316**	**9,610**	**7,669**	**3,892**	**6,652**
Asset composition (as a percentage of the individual FHLBank's total assets)						
Investments[2][3]	38.2 %	36.2 %	29.7 %	34.4 %	27.3 %	31.8 %
Advances	49.0 %	55.0 %	64.1 %	61.9 %	60.6 %	66.9 %
Mortgage loans held for portfolio, net	11.6 %	8.1 %	5.0 %	3.4 %	11.2 %	0.8 %
Retained earnings as a percentage of FHLBank's total assets	2.1 %	3.6 %	1.6 %	1.6 %	1.9 %	4.4 %
FHLBank's total assets as a percentage of FHLBank System	5.4 %	10.4 %	14.6 %	11.3 %	5.6 %	7.3 %
At September 30, 2022						
Assets						
Investments[2][3]	$ 25,973	$ 38,888	$ 40,753	$ 40,729	$ 19,720	$ 41,661
Advances	31,196	59,667	82,196	44,238	35,319	65,658
Mortgage loans held for portfolio	7,649	10,071	8,243	4,240	7,999	834
Total assets	**65,395**	**109,251**	**133,155**	**89,551**	**63,500**	**108,507**
Deposits	538	675	1,234	1,746	668	814
Consolidated obligations[3]						
Discount notes	21,281	40,468	64,166	29,591	22,661	62,046
Bonds	39,260	59,529	58,708	51,838	36,575	35,446
Total consolidated obligations	**60,541**	**99,997**	**122,874**	**81,429**	**59,236**	**97,492**
Mandatorily redeemable capital stock	43	247	15	13	—	4
Total capital						
Capital stock[4]	2,326	2,679	5,086	3,013	2,120	3,322
Retained earnings	1,239	4,467	2,538	1,741	1,228	3,930
Accumulated other comprehensive income (loss)	(1)	(77)	(92)	248	(52)	12
Total capital	**3,564**	**7,069**	**7,532**	**5,002**	**3,296**	**7,264**
Asset composition (as a percentage of the individual FHLBank's total assets)						
Investments[2][3]	39.7 %	35.6 %	30.6 %	45.5 %	31.1 %	38.4 %
Advances	47.7 %	54.6 %	61.7 %	49.4 %	55.6 %	60.5 %
Mortgage loans held for portfolio, net	11.7 %	9.2 %	6.2 %	4.7 %	12.6 %	0.8 %
Retained earnings as a percentage of individual FHLBank's total assets	1.9 %	4.1 %	1.9 %	1.9 %	1.9 %	3.6 %
FHLBank's total assets as a percentage of FHLBank System	6.0 %	10.0 %	12.2 %	8.2 %	5.8 %	9.9 %

(4) FHLBank capital stock is redeemable at the request of a member subject to the statutory redemption periods and other conditions and limitations. (See *Note 9 - Capital* to the accompanying combined financial statements for additional information on the statutory redemption periods and other conditions and limitations.)

Individual FHLBank Selected Financial Data and Financial Ratios (Unaudited, continued)

(dollars in millions)	Boston	New York	Pittsburgh	Atlanta	Cincinnati
Selected Other Data					
September 30, 2023					
Advance concentrations - top five borrowers	34 %	55 %	79 %	60 %	56 %
Regulatory capital stock concentrations - top five stockholders	29 %	49 %	72 %	52 %	48 %
Regulatory capital-to-assets ratio(5)	6.04 %	5.59 %	5.28 %	5.28 %	5.21 %
Cash and stock dividends					
Quarter-to-date September 30, 2023	$ 47	$ 143	$ 81	$ 127	$ 133
Quarter-to-date September 30, 2022	11	64	25	33	44
Year-to-date September 30, 2023	117	371	210	304	297
Year-to-date September 30, 2022	21	165	49	78	80
Weighted average dividend rate (annualized)					
Quarter-to-date September 30, 2023	8.04 %	9.50 %	7.75 %	6.97 %	8.00 %
Quarter-to-date September 30, 2022	3.72 %	6.75 %	5.55 %	4.11 %	5.00 %
Year-to-date September 30, 2023	7.47 %	8.58 %	7.68 %	6.65 %	7.18 %
Year-to-date September 30, 2022	2.71 %	5.67 %	5.83 %	3.88 %	3.50 %
Return on average equity (annualized)(6)					
Quarter-to-date September 30, 2023	8.27 %	9.13 %	11.44 %	8.76 %	10.16 %
Quarter-to-date September 30, 2022	7.97 %	7.39 %	7.73 %	3.06 %	6.43 %
Year-to-date September 30, 2023	7.74 %	9.54 %	11.14 %	7.29 %	9.73 %
Year-to-date September 30, 2022	6.32 %	5.31 %	5.36 %	2.73 %	3.99 %
Return on average assets (annualized)					
Quarter-to-date September 30, 2023	0.43 %	0.48 %	0.56 %	0.43 %	0.52 %
Quarter-to-date September 30, 2022	0.41 %	0.40 %	0.42 %	0.15 %	0.32 %
Year-to-date September 30, 2023	0.39 %	0.48 %	0.54 %	0.34 %	0.49 %
Year-to-date September 30, 2022	0.38 %	0.30 %	0.32 %	0.14 %	0.21 %
Net interest margin (annualized)(7)					
Quarter-to-date September 30, 2023	0.65 %	0.64 %	0.69 %	0.59 %	0.69 %
Quarter-to-date September 30, 2022	0.58 %	0.52 %	0.60 %	0.26 %	0.50 %
Year-to-date September 30, 2023	0.57 %	0.60 %	0.66 %	0.47 %	0.63 %
Year-to-date September 30, 2022	0.63 %	0.50 %	0.53 %	0.28 %	0.43 %
Net interest spread (annualized)					
Quarter-to-date September 30, 2023	0.27 %	0.32 %	0.39 %	0.26 %	0.42 %
Quarter-to-date September 30, 2022	0.44 %	0.38 %	0.46 %	0.12 %	0.38 %
Year-to-date September 30, 2023	0.23 %	0.34 %	0.38 %	0.19 %	0.37 %
Year-to-date September 30, 2022	0.53 %	0.41 %	0.44 %	0.21 %	0.34 %

(5) The regulatory capital-to-assets ratio is calculated based on the FHLBank's regulatory capital as a percentage of total assets held at period-end. (See *Note 9 - Capital* to the accompanying combined financial statements for a definition and discussion of regulatory capital.)

(6) Return on average equity is net income expressed as a percentage of average total capital. Mandatorily redeemable capital stock is not included in the calculation of return on average equity.

(7) Net interest margin is equal to net interest income represented as a percentage of average interest-earning assets.

(dollars in millions)	Indianapolis	Chicago	Des Moines	Dallas	Topeka	San Francisco
Selected Other Data						
September 30, 2023						
Advance concentrations - top five borrowers	36 %	47 %	43 %	55 %	52 %	63 %
Regulatory capital stock concentrations - top five stockholders	35 %	40 %	32 %	42 %	44 %	35 %
Regulatory capital-to-assets ratio(5)	5.72 %	6.32 %	5.15 %	5.08 %	5.50 %	7.87 %
Cash and stock dividends						
Quarter-to-date September 30, 2023	$ 34	$ 70	$ 114	$ 98	$ 56	$ 63
Quarter-to-date September 30, 2022	18	29	51	10	37	40
Year-to-date September 30, 2023	91	173	319	207	165	191
Year-to-date September 30, 2022	45	75	136	18	83	108
Weighted average dividend rate (annualized)						
Quarter-to-date September 30, 2023	6.07 %	7.68 %	6.86 %	5.85 %	8.62 %	7.75 %
Quarter-to-date September 30, 2022	3.42 %	5.10 %	5.34 %	1.62 %	6.94 %	6.00 %
Year-to-date September 30, 2023	5.35 %	7.10 %	6.77 %	5.39 %	8.35 %	7.26 %
Year-to-date September 30, 2022	2.73 %	4.68 %	5.07 %	1.06 %	5.90 %	6.00 %
Return on average equity (annualized)(6)						
Quarter-to-date September 30, 2023	9.70 %	8.71 %	11.31 %	11.98 %	9.39 %	6.17 %
Quarter-to-date September 30, 2022	5.23 %	5.39 %	7.64 %	7.85 %	8.07 %	4.52 %
Year-to-date September 30, 2023	10.22 %	8.06 %	10.28 %	10.96 %	9.73 %	7.69 %
Year-to-date September 30, 2022	4.07 %	5.44 %	6.03 %	6.10 %	7.25 %	4.09 %
Return on average assets (annualized)						
Quarter-to-date September 30, 2023	0.51 %	0.51 %	0.56 %	0.62 %	0.49 %	0.41 %
Quarter-to-date September 30, 2022	0.28 %	0.34 %	0.46 %	0.49 %	0.42 %	0.32 %
Year-to-date September 30, 2023	0.51 %	0.46 %	0.51 %	0.55 %	0.50 %	0.46 %
Year-to-date September 30, 2022	0.23 %	0.36 %	0.38 %	0.39 %	0.39 %	0.36 %
Net interest margin (annualized)(7)						
Quarter-to-date September 30, 2023	0.71 %	0.84 %	0.74 %	0.72 %	0.61 %	0.68 %
Quarter-to-date September 30, 2022	0.43 %	0.52 %	0.69 %	0.72 %	0.60 %	0.63 %
Year-to-date September 30, 2023	0.65 %	0.74 %	0.71 %	0.64 %	0.60 %	0.70 %
Year-to-date September 30, 2022	0.43 %	0.58 %	0.58 %	0.63 %	0.61 %	0.68 %
Net interest spread (annualized)						
Quarter-to-date September 30, 2023	0.33 %	0.47 %	0.42 %	0.37 %	0.29 %	0.29 %
Quarter-to-date September 30, 2022	0.27 %	0.33 %	0.55 %	0.52 %	0.48 %	0.48 %
Year-to-date September 30, 2023	0.31 %	0.39 %	0.42 %	0.32 %	0.32 %	0.39 %
Year-to-date September 30, 2022	0.35 %	0.49 %	0.48 %	0.53 %	0.55 %	0.57 %

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