

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

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

For the quarterly period ended September 30, 2019

OR

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

Commission File Number: 000-51404

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

(Exact name of registrant as specified in its charter)

Federally Chartered Corporation
(State or other jurisdiction of incorporation)

35-6001443
(IRS employer identification number)

8250 Woodfield Crossing Blvd. Indianapolis, IN
(Address of principal executive offices)

46240
(Zip code)

(317) 465-0200
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report.)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
None	None	None

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

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

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

- Large accelerated filer Accelerated filer Emerging growth company
 Non-accelerated filer Smaller reporting company

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

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

Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class B Stock, par value \$100

Shares outstanding
as of October 31, 2019

22,731,680

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As used in this Form 10-Q, unless the context otherwise requires, the terms "we," "us," "our," and the "Bank" refer to the Federal Home Loan Bank of Indianapolis or its management. We use acronyms and terms throughout that are defined herein or in the *Glossary of Terms* in Part I Item 1.

Special Note Regarding Forward-Looking Statements

Certain statements in this Form 10-Q, including statements describing our objectives, projections, estimates or predictions, may be considered to be "forward-looking statements." These statements may use forward-looking terminology, such as "anticipates," "believes," "could," "estimates," "may," "should," "expects," "will," or their negatives or other variations on these terms. We caution that, by their nature, forward-looking statements involve risk or uncertainty and that actual results either 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:

- economic and market conditions, including the timing and volume of market activity, inflation or deflation, changes in the value of global currencies, and changes in the financial condition of market participants;
- volatility of market prices, interest rates, and indices or other factors, resulting from the effects of, and changes in, various monetary or fiscal policies and regulations, including those determined by the FRB and the FDIC, or a decline in liquidity in the financial markets, that could affect the value of investments or collateral we hold as security for the obligations of our members and counterparties;
- changes in demand for our advances and purchases of mortgage loans resulting from:
 - changes in our members' deposit flows and credit demands;
 - federal or state regulatory developments impacting suitability or eligibility of membership classes;
 - membership changes, including, but not limited to, mergers, acquisitions and consolidations of charters;
 - changes in the general level of housing activity in the United States and particularly our district states of Michigan and Indiana, the level of refinancing activity and consumer product preferences; and
 - competitive forces, including, without limitation, other sources of funding available to our members;
- changes in mortgage asset prepayment patterns, delinquency rates and housing values or improper or inadequate mortgage originations and mortgage servicing;
- ability to introduce and successfully manage new products and services, including new types of collateral securing advances;
- political events, including federal government shutdowns, administrative, legislative, regulatory, or other developments, and judicial rulings that affect us, our status as a secured creditor, our members (or certain classes of members), prospective members, counterparties, GSEs generally, one or more of the FHLBanks and/or investors in the consolidated obligations of the FHLBanks;
- ability to access the capital markets and raise capital market funding on acceptable terms;
- changes in our credit ratings or the credit ratings of the other FHLBanks and the FHLBank System;
- changes in the level of government guarantees provided to other United States and international financial institutions;
- dealer commitment to supporting the issuance of our consolidated obligations;
- ability of one or more of the FHLBanks to repay its portion of the consolidated obligations, or otherwise meet its financial obligations;
- ability to attract and retain skilled personnel;
- ability to develop, implement and support technology and information systems sufficient to manage our business effectively;
- nonperformance of counterparties to uncleared and cleared derivative transactions;
- changes in terms of derivative agreements and similar agreements;
- loss arising from natural disasters, acts of war or acts of terrorism;
- changes in or differing interpretations of accounting guidance; and
- other risk factors identified in our filings with the SEC.

Although we undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise, additional disclosures may be made through reports filed with the SEC in the future, including our Forms 10-K, 10-Q and 8-K.

PART I. FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

Federal Home Loan Bank of Indianapolis
Statements of Condition
(Unaudited, \$ amounts in thousands, except par value)

	<u>September 30, 2019</u>	<u>December 31, 2018</u>
Assets:		
Cash and due from banks	\$ 49,845	\$ 100,735
Interest-bearing deposits	505,672	1,210,705
Securities purchased under agreements to resell	3,550,000	3,212,726
Federal funds sold	1,415,000	3,085,000
Trading securities (Note 3)	4,411,301	—
Available-for-sale securities (Note 3)	8,381,973	7,703,596
Held-to-maturity securities (estimated fair values of \$4,971,803 and \$5,676,145, respectively) (Note 3)	4,961,209	5,673,720
Advances (Note 4)	32,487,260	32,727,668
Mortgage loans held for portfolio, net of allowance for loan losses of \$(450) and \$(600), respectively (Notes 5 and 6)	11,104,279	11,384,978
Accrued interest receivable	132,566	124,611
Premises, software, and equipment, net	36,664	37,198
Derivative assets, net (Note 7)	186,871	116,764
Other assets	39,128	33,998
Total assets	<u>\$ 67,261,768</u>	<u>\$ 65,411,699</u>
Liabilities:		
Deposits	\$ 713,115	\$ 500,440
Consolidated obligations (Note 8):		
Discount notes	15,300,029	20,895,262
Bonds	47,168,731	40,265,465
Total consolidated obligations, net	<u>62,468,760</u>	<u>61,160,727</u>
Accrued interest payable	176,724	179,728
Affordable Housing Program payable (Note 9)	37,070	40,747
Derivative liabilities, net (Note 7)	4,720	21,067
Mandatorily redeemable capital stock (Note 10)	323,712	168,876
Other liabilities	451,991	289,665
Total liabilities	<u>64,176,092</u>	<u>62,361,250</u>
Commitments and contingencies (Note 14)		
Capital (Note 10):		
Capital stock (putable at par value of \$100 per share):		
Class B-1 issued and outstanding shares: 19,391,457 and 19,306,333, respectively	1,939,146	1,930,633
Class B-2 issued and outstanding shares: 3,028 and 3,192, respectively	303	319
Total capital stock	<u>1,939,449</u>	<u>1,930,952</u>
Retained earnings:		
Unrestricted	849,264	855,311
Restricted	241,316	222,499
Total retained earnings	<u>1,090,580</u>	<u>1,077,810</u>
Total accumulated other comprehensive income (Note 11)	<u>55,647</u>	<u>41,687</u>
Total capital	<u>3,085,676</u>	<u>3,050,449</u>
Total liabilities and capital	<u>\$ 67,261,768</u>	<u>\$ 65,411,699</u>

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

Federal Home Loan Bank of Indianapolis
Statements of Income
(Unaudited, \$ amounts in thousands)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2019	2018	2019	2018
Interest Income:				
Advances	\$ 207,226	\$ 197,263	\$ 641,126	\$ 518,802
Interest-bearing deposits	6,923	5,801	16,610	12,880
Securities purchased under agreements to resell	24,212	19,868	69,872	40,680
Federal funds sold	10,163	15,239	50,678	35,160
Trading securities	18,441	—	31,896	—
Available-for-sale securities	48,360	52,071	154,627	140,561
Held-to-maturity securities	36,388	39,258	116,245	111,298
Mortgage loans held for portfolio	87,741	90,561	277,440	259,690
Other interest income	—	—	—	17
Total interest income	<u>439,454</u>	<u>420,061</u>	<u>1,358,494</u>	<u>1,119,088</u>
Interest Expense:				
Consolidated obligation discount notes	110,286	113,705	368,799	274,162
Consolidated obligation bonds	271,639	228,610	803,497	617,906
Deposits	3,655	2,932	10,170	7,542
Mandatorily redeemable capital stock	3,514	1,927	8,585	6,557
Other interest expense	36	—	36	—
Total interest expense	<u>389,130</u>	<u>347,174</u>	<u>1,191,087</u>	<u>906,167</u>
Net interest income	50,324	72,887	167,407	212,921
Provision for (reversal of) credit losses	(180)	102	(166)	(359)
Net interest income after provision for credit losses	<u>50,504</u>	<u>72,785</u>	<u>167,573</u>	<u>213,280</u>
Other Income:				
Net realized gains from sale of available-for-sale securities	—	—	—	32,407
Net realized losses from sale of held-to-maturity securities	—	—	—	(45)
Net gains on trading securities	5,601	—	26,257	—
Net losses on derivatives and hedging activities	(3,612)	(8,160)	(21,399)	(5,216)
Service fees	186	278	581	783
Standby letters of credit fees	201	123	503	414
Other, net	410	931	3,328	1,324
Total other income (loss)	<u>2,786</u>	<u>(6,828)</u>	<u>9,270</u>	<u>29,667</u>
Other Expenses:				
Compensation and benefits	12,698	12,306	40,255	38,164
Other operating expenses	7,925	7,216	21,045	20,566
Federal Housing Finance Agency	1,012	853	3,009	2,616
Office of Finance	1,370	1,078	3,515	3,509
Other	1,154	975	3,526	3,859
Total other expenses	<u>24,159</u>	<u>22,428</u>	<u>71,350</u>	<u>68,714</u>
Income before assessments	29,131	43,529	105,493	174,233
Affordable Housing Program assessments	3,265	4,546	11,408	18,079
Net income	<u>\$ 25,866</u>	<u>\$ 38,983</u>	<u>\$ 94,085</u>	<u>\$ 156,154</u>

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

Federal Home Loan Bank of Indianapolis
Statements of Comprehensive Income
(Unaudited, \$ amounts in thousands)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2019	2018	2019	2018
Net income	\$ 25,866	\$ 38,983	\$ 94,085	\$ 156,154
Other Comprehensive Income:				
Net change in unrealized gains (losses) on available-for-sale securities	(2,139)	9,043	16,842	19,015
Net non-credit portion of other-than-temporary impairment losses	—	—	—	(29,271)
Pension benefits, net	486	636	(2,882)	(5,580)
Total other comprehensive income (loss)	(1,653)	9,679	13,960	(15,836)
Total comprehensive income	\$ 24,213	\$ 48,662	\$ 108,045	\$ 140,318

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

Federal Home Loan Bank of Indianapolis
Statements of Capital
Three Months Ended September 30, 2018 and 2019
(Unaudited, \$ amounts and shares in thousands)

	Capital Stock		Retained Earnings			Accumulated Other Comprehensive Income	Total Capital
	Shares	Par Value	Unrestricted	Restricted	Total		
Balance, June 30, 2018	18,922	\$ 1,892,194	\$ 835,888	\$ 206,986	\$ 1,042,874	\$ 85,891	\$ 3,020,959
Total comprehensive income			31,187	7,796	38,983	9,679	48,662
Proceeds from issuance of capital stock	120	12,095					12,095
Redemption/repurchase of capital stock	—	(32)					(32)
Shares reclassified to mandatorily redeemable capital stock, net	(35)	(3,560)					(3,560)
Distributions on mandatorily redeemable capital stock			(33)	—	(33)		(33)
Cash dividends on capital stock (4.50% annualized)			(21,120)	—	(21,120)		(21,120)
Balance, September 30, 2018	<u>19,007</u>	<u>\$ 1,900,697</u>	<u>\$ 845,922</u>	<u>\$ 214,782</u>	<u>\$ 1,060,704</u>	<u>\$ 95,570</u>	<u>\$ 3,056,971</u>
Balance, June 30, 2019	20,485	\$ 2,048,523	\$ 856,911	\$ 236,142	\$ 1,093,053	\$ 57,300	\$ 3,198,876
Total comprehensive income			20,692	5,174	25,866	(1,653)	24,213
Proceeds from issuance of capital stock	398	39,796					39,796
Shares reclassified to mandatorily redeemable capital stock, net	(1,489)	(148,870)					(148,870)
Distributions on mandatorily redeemable capital stock			(692)	—	(692)		(692)
Cash dividends on capital stock (5.50% annualized)			(27,647)	—	(27,647)		(27,647)
Balance, September 30, 2019	<u>19,394</u>	<u>\$ 1,939,449</u>	<u>\$ 849,264</u>	<u>\$ 241,316</u>	<u>\$ 1,090,580</u>	<u>\$ 55,647</u>	<u>\$ 3,085,676</u>

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

Federal Home Loan Bank of Indianapolis
Statements of Capital
Nine Months Ended September 30, 2018 and 2019
(Unaudited, \$ amounts and shares in thousands)

	Capital Stock		Retained Earnings			Accumulated Other Comprehensive Income	Total Capital
	Shares	Par Value	Unrestricted	Restricted	Total		
Balance, December 31, 2017	18,578	\$ 1,857,766	\$ 792,783	\$ 183,551	\$ 976,334	\$ 111,406	\$ 2,945,506
Total comprehensive income			124,923	31,231	156,154	(15,836)	140,318
Proceeds from issuance of capital stock	696	69,686					69,686
Redemption/repurchase of capital stock	—	(32)					(32)
Shares reclassified to mandatorily redeemable capital stock, net	(267)	(26,723)					(26,723)
Distributions on mandatorily redeemable capital stock			(38)	—	(38)		(38)
Cash dividends on capital stock (5.16% annualized)			(71,746)	—	(71,746)		(71,746)
Balance, September 30, 2018	<u>19,007</u>	<u>\$ 1,900,697</u>	<u>\$ 845,922</u>	<u>\$ 214,782</u>	<u>\$ 1,060,704</u>	<u>\$ 95,570</u>	<u>\$ 3,056,971</u>
Balance, December 31, 2018	19,310	\$ 1,930,952	\$ 855,311	\$ 222,499	\$ 1,077,810	\$ 41,687	\$ 3,050,449
Total comprehensive income			75,268	18,817	94,085	13,960	108,045
Proceeds from issuance of capital stock	1,594	159,476					159,476
Shares reclassified to mandatorily redeemable capital stock, net	(1,510)	(150,979)					(150,979)
Distributions on mandatorily redeemable capital stock			(693)	—	(693)		(693)
Cash dividends on capital stock (5.50% annualized)			(80,622)	—	(80,622)		(80,622)
Balance, September 30, 2019	<u>19,394</u>	<u>\$ 1,939,449</u>	<u>\$ 849,264</u>	<u>\$ 241,316</u>	<u>\$ 1,090,580</u>	<u>\$ 55,647</u>	<u>\$ 3,085,676</u>

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

Federal Home Loan Bank of Indianapolis
Statements of Cash Flows
(Unaudited, \$ amounts in thousands)

	Nine Months Ended September 30,	
	2019	2018
Operating Activities:		
Net income	\$ 94,085	\$ 156,154
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Amortization and depreciation	61,251	50,484
Changes in net derivative and hedging activities	(348,291)	188,223
Provision for (reversal of) credit losses	(166)	(359)
Net gains on trading securities	(26,257)	—
Net realized gains from sale of available-for-sale securities	—	(32,407)
Net realized losses from sale of held-to-maturity securities	—	45
Changes in:		
Accrued interest receivable	(8,667)	(17,242)
Other assets	(736)	1,290
Accrued interest payable	(3,243)	31,439
Other liabilities	16,652	49,796
Total adjustments, net	<u>(309,457)</u>	<u>271,269</u>
Net cash provided by (used in) operating activities	<u>(215,372)</u>	<u>427,423</u>
Investing Activities:		
Net change in:		
Interest-bearing deposits	221,363	(704,317)
Securities purchased under agreements to resell	(337,274)	(565,888)
Federal funds sold	1,670,000	(2,118,000)
Trading securities:		
Purchases	(4,385,044)	—
Available-for-sale securities:		
Proceeds from maturities	510,500	80,172
Proceeds from sales	—	203,841
Purchases	(610,415)	(773,346)
Held-to-maturity securities:		
Proceeds from maturities	813,026	755,770
Proceeds from sales	—	41,226
Purchases	(109,369)	(712,272)
Advances:		
Principal repayments	289,850,757	250,517,838
Disbursements to members	(289,182,302)	(250,185,035)
Mortgage loans held for portfolio:		
Principal collections	1,211,661	910,622
Purchases from members	(876,635)	(1,874,800)
Purchases of premises, software, and equipment	(4,596)	(3,989)
Loans to other Federal Home Loan Banks:		
Principal repayments	—	400,000
Disbursements	—	(400,000)
Net cash used in investing activities	<u>(1,228,328)</u>	<u>(4,428,178)</u>

(continued)

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

Federal Home Loan Bank of Indianapolis
Statements of Cash Flows, continued
(Unaudited, \$ amounts in thousands)

	Nine Months Ended September 30,	
	2019	2018
Financing Activities:		
Changes in deposits	128,515	38,839
Net payments on derivative contracts with financing elements	185	(2,242)
Net proceeds from issuance of consolidated obligations:		
Discount notes	245,285,750	254,190,275
Bonds	28,145,595	13,074,648
Payments for matured and retired consolidated obligations:		
Discount notes	(250,889,998)	(251,909,384)
Bonds	(21,359,255)	(11,302,290)
Loans from Other Federal Home Loan Banks:		
Proceeds from borrowings	250,000	—
Principal payments	(250,000)	—
Proceeds from issuance of capital stock	159,476	69,686
Proceeds from issuance of mandatorily redeemable capital stock	3,704	—
Payments for redemption/repurchase of capital stock	—	(32)
Payments for redemption/repurchase of mandatorily redeemable capital stock	(540)	(26,649)
Dividend payments on capital stock	(80,622)	(71,746)
Net cash provided by financing activities	<u>1,392,810</u>	<u>4,061,105</u>
Net increase (decrease) in cash and due from banks	(50,890)	60,350
Cash and due from banks at beginning of period	<u>100,735</u>	<u>55,269</u>
Cash and due from banks at end of period	<u>\$ 49,845</u>	<u>\$ 115,619</u>
Supplemental Disclosures:		
Interest payments	\$ 1,158,294	\$ 841,065
Affordable Housing Program payments	15,085	12,770
Purchases of AFS securities, traded but not yet settled	54,609	44,583
Capitalized interest on certain held-to-maturity securities	3,900	3,480
Par value of shares reclassified to mandatorily redeemable capital stock, net	150,979	26,723

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

Federal Home Loan Bank of Indianapolis
Notes to Financial Statements
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 1 - Summary of Significant Accounting Policies

Unless the context otherwise requires, the terms "we," "us," "our," and "Bank" refer to the Federal Home Loan Bank of Indianapolis or its management. We use acronyms and terms throughout these Notes to Financial Statements that are defined herein or in the *Glossary of Terms*.

Basis of Presentation. The accompanying interim financial statements have been prepared in accordance with GAAP and SEC requirements for interim financial information. Accordingly, they do not include all of the information and disclosures required by GAAP for complete financial statements. Certain disclosures that would have substantially duplicated the disclosures in the financial statements, and notes thereto, included in our 2018 Form 10-K have been omitted unless the information contained in those disclosures materially changed. Therefore, these interim financial statements should be read in conjunction with our audited financial statements, and notes thereto, included in our 2018 Form 10-K.

The financial statements contain all adjustments that are, in the opinion of management, necessary for a fair statement of our financial position, results of operations and cash flows for the interim periods presented. All such adjustments were of a normal recurring nature. The results of operations for the periods presented are not necessarily indicative of the results to be expected for the full calendar year or any other interim period.

Our significant accounting policies and certain other disclosures are set forth in our 2018 Form 10-K in *Note 1 - Summary of Significant Accounting Policies*. See *Note 2 - Recently Adopted and Issued Accounting Guidance* for the changes effective January 1, 2019.

Use of Estimates. When preparing financial statements in accordance with GAAP, we are required 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 estimates pertain to derivatives and hedging activities, fair value and provision for credit losses. Although the reported amounts and disclosures reflect our best estimates, actual results could differ significantly from these estimates.

Note 2 - Recently Adopted and Issued Accounting Guidance

Recently Adopted Accounting Guidance.

Leases (ASU 2016-02). On February 25, 2016, the FASB issued guidance that requires a lessee, in an operating or finance lease, to recognize on the statement of condition a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term. However, for a lease with a term of 12 months or less, a lessee is permitted to make an accounting policy election not to recognize a lease asset and lease liability. Under previous guidance, a lessee was not required to recognize a lease asset and lease liability arising from an operating lease on the statement of condition. While this guidance does not fundamentally change lessor accounting, some changes have been made to align that guidance with the lessee guidance and other areas within GAAP.

This guidance was effective for the interim and annual periods beginning on January 1, 2019. Upon adoption, we reported higher assets and liabilities as a result of including right-of-use assets and lease liabilities on the statement of condition, but its effect on our financial condition, results of operations, and cash flows was not material.

Premium Amortization on Purchased Callable Debt Securities (ASU 2017-08). On March 30, 2017, the FASB issued guidance to shorten the amortization period for certain callable debt securities purchased at a premium. Specifically, the guidance requires the premium to be amortized to the earliest call date. No change is required for securities purchased at a discount, which continue to be amortized to their contractual maturities.

This guidance was effective for the interim and annual periods beginning on January 1, 2019. The adoption of this guidance had no effect on our financial condition, results of operations, or cash flows.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Targeted Improvements to Accounting for Hedging Activities (ASU 2017-12). On August 28, 2017, the FASB issued amended guidance to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. This guidance requires that, for fair-value hedges, the entire change in the fair value of the hedging instrument included in the assessment of hedge effectiveness be presented in the same income statement line that is used to present the earnings effect of the hedged item.

This guidance was effective for the interim and annual periods beginning on January 1, 2019. The adoption of this guidance had no effect on our financial condition, net income, or cash flows. However, the adoption resulted in a prospective change in the statement of income in which the net losses resulting from the changes in the fair value of the hedging instruments and the changes in the fair value of the associated hedged items attributable to the hedged risk for qualifying fair-value hedging relationships for the three and nine months ended September 30, 2019 of \$9,058 and \$31,509, respectively, are presented in interest income instead of other income.

Inclusion of SOFR OIS Rate as a Benchmark Interest Rate for Hedge Accounting Purposes (ASU 2018-16). On October 25, 2018, to facilitate the LIBOR to SOFR transition, the FASB issued guidance permitting the use of the OIS rate based on SOFR as an eligible U.S. benchmark interest rate for hedge accounting purposes.

This guidance was effective for the interim and annual periods beginning on January 1, 2019, concurrent with the adoption of ASU 2017-12. The adoption of this guidance had no effect on our financial condition, results of operations, or cash flows.

Recently Issued Accounting Guidance.

Measurement of Credit Losses on Financial Instruments (ASU 2016-13). On June 16, 2016, the FASB issued guidance replacing the current incurred loss model. The guidance requires entities to measure expected credit losses based on consideration of a broad range of relevant information, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount of the financial instrument.

This guidance is effective for the interim and annual periods beginning on January 1, 2020. Early adoption is permitted; however, we plan to adopt this guidance on the effective date. This guidance should be applied using a modified-retrospective approach whereby a cumulative-effect adjustment is recorded to retained earnings as of the beginning of the first reporting period in which the guidance is adopted.

The adoption of this guidance is expected to have no effect on our allowance for credit losses for advances, investment securities, securities purchased under agreements to resell, or federal funds sold. The adoption may increase the allowance for loan losses for mortgage loans, primarily due to the requirement to measure expected credit losses for the entire estimated life of the loans, but the effect on our financial condition, results of operations and cash flows is not expected to be material.

Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13). On August 28, 2018, the FASB issued guidance to update the disclosure requirements for fair value measurement. This guidance was issued as part of the FASB's disclosure framework project and is intended to improve disclosure effectiveness.

The guidance is effective for the interim and annual periods beginning on January 1, 2020. Early adoption is permitted; however, we plan to adopt this guidance on the effective date. The adoption will have an effect on our disclosures, but will have no effect on our financial condition, results of operations or cash flows.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract (ASU 2018-15). On August 29, 2018, the FASB issued guidance on implementation costs incurred in a hosting arrangement that is a service contract. The guidance aligns the requirements for capitalizing such costs with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software and hosting arrangements that include an internal-use software license.

This guidance is effective for the interim and annual periods beginning on January 1, 2020. Early adoption is permitted; however, we plan to adopt this guidance on the effective date. The adoption may increase the amount of capitalized costs, but the effect of this guidance on our financial condition, results of operations, and cash flows is not expected to be material.

Note 3 - Investment Securities

Trading Securities.

In January 2019, the Bank began purchasing U.S. Treasury securities to enhance its liquidity.

Net Gains (Losses) on Trading Securities. The following table presents net gains (losses) on trading securities, excluding any offsetting effect of gains (losses) on the associated derivatives.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net gains on trading securities held at period end	\$ 5,601	\$ —	\$ 26,257	\$ —
Net gains (losses) on trading securities that sold/matured during the period	—	—	—	—
Net gains on trading securities	<u>\$ 5,601</u>	<u>\$ —</u>	<u>\$ 26,257</u>	<u>\$ —</u>

Available-for-Sale Securities.

Major Security Types. The following table presents our AFS securities by type of security.

	Amortized Cost ⁽¹⁾	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
September 30, 2019				
GSE and TVA debentures	\$ 3,919,035	\$ 29,729	\$ —	\$ 3,948,764
GSE MBS	4,393,110	45,511	(5,412)	4,433,209
Total AFS securities	<u>\$ 8,312,145</u>	<u>\$ 75,240</u>	<u>\$ (5,412)</u>	<u>\$ 8,381,973</u>
December 31, 2018				
GSE and TVA debentures	\$ 4,239,622	\$ 37,458	\$ —	\$ 4,277,080
GSE MBS	3,410,988	27,797	(12,269)	3,426,516
Total AFS securities	<u>\$ 7,650,610</u>	<u>\$ 65,255</u>	<u>\$ (12,269)</u>	<u>\$ 7,703,596</u>

⁽¹⁾ Includes adjustments made to the cost basis of an investment for accretion, amortization, collection of principal and, if applicable, fair-value hedging adjustments.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Unrealized Loss Positions. The following table presents impaired AFS securities (i.e., in an unrealized loss position), aggregated by major security type and length of time that individual securities have been in a continuous unrealized loss position.

	Less than 12 months		12 months or More		Total	
	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses
September 30, 2019						
GSE MBS	\$ 591,562	\$ (3,419)	\$ 341,999	\$ (1,993)	\$ 933,561	\$ (5,412)
Total impaired AFS securities	\$ 591,562	\$ (3,419)	\$ 341,999	\$ (1,993)	\$ 933,561	\$ (5,412)
December 31, 2018						
GSE MBS	\$ 1,256,816	\$ (12,269)	\$ —	\$ —	\$ 1,256,816	\$ (12,269)
Total impaired AFS securities	\$ 1,256,816	\$ (12,269)	\$ —	\$ —	\$ 1,256,816	\$ (12,269)

Realized Gains and Losses. There were no sales of AFS securities during the three or nine months ended September 30, 2019. As of September 30, 2019, we had no intention of selling any AFS securities in an unrealized loss position nor did we consider it more likely than not that we will be required to sell these securities before our anticipated recovery of each security's remaining amortized cost basis.

During the nine months ended September 30, 2018, for strategic, economic and operational reasons, we sold all of our AFS and HTM investments in private-label RMBS and ABS. Of the OTTI AFS securities sold in 2018, none were in an unrealized loss position. Proceeds from the AFS sales totaled \$203,841, resulting in realized gains of \$32,407 determined by the specific identification method.

Held-to-Maturity Securities.

Major Security Types. The following table presents our HTM securities by type of security.

	Amortized Cost ⁽¹⁾	Gross Unrecognized Holding Gains	Gross Unrecognized Holding Losses	Estimated Fair Value
September 30, 2019				
MBS:				
Other U.S. obligations - guaranteed MBS	\$ 3,172,634	\$ 7,422	\$ (8,945)	\$ 3,171,111
GSE MBS	1,788,575	14,276	(2,159)	1,800,692
Total HTM securities	\$ 4,961,209	\$ 21,698	\$ (11,104)	\$ 4,971,803
December 31, 2018				
MBS:				
Other U.S. obligations - guaranteed MBS	\$ 3,468,882	\$ 11,034	\$ (1,552)	\$ 3,478,364
GSE MBS	2,204,838	7,673	(14,730)	2,197,781
Total HTM securities	\$ 5,673,720	\$ 18,707	\$ (16,282)	\$ 5,676,145

⁽¹⁾ Carrying value equals amortized cost. Includes adjustments made to the cost basis of an investment for accretion, amortization and collection of principal.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Unrealized Loss Positions. The following table presents impaired HTM securities (i.e., in an unrealized loss position), aggregated by major security type and length of time that individual securities have been in a continuous unrealized loss position.

	Less than 12 months		12 months or More		Total	
	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses
September 30, 2019						
MBS:						
Other U.S. obligations - guaranteed MBS	\$ 1,007,929	\$ (5,522)	\$ 749,836	\$ (3,423)	\$ 1,757,765	\$ (8,945)
GSE MBS	259,853	(375)	305,097	(1,784)	564,950	(2,159)
Total impaired HTM securities	<u>\$ 1,267,782</u>	<u>\$ (5,897)</u>	<u>\$ 1,054,933</u>	<u>\$ (5,207)</u>	<u>\$ 2,322,715</u>	<u>\$ (11,104)</u>
December 31, 2018						
MBS:						
Other U.S. obligations - guaranteed MBS	\$ 829,121	\$ (873)	\$ 417,952	\$ (679)	\$ 1,247,073	\$ (1,552)
GSE MBS	435,756	(890)	716,647	(13,840)	1,152,403	(14,730)
Total impaired HTM securities	<u>\$ 1,264,877</u>	<u>\$ (1,763)</u>	<u>\$ 1,134,599</u>	<u>\$ (14,519)</u>	<u>\$ 2,399,476</u>	<u>\$ (16,282)</u>

Realized Gains and Losses. There were no sales of HTM securities during the three or nine months ended September 30, 2019. As of September 30, 2019, we had no intention of selling any HTM securities in an unrealized loss position nor did we consider it more likely than not that we will be required to sell these securities before our anticipated recovery of each security's remaining amortized cost basis.

During the nine months ended September 30, 2018, for strategic, economic and operational reasons, we sold all of our AFS and HTM investments in private-label RMBS and ABS. The amortized cost of the HTM securities sold totaled \$41,271. Proceeds from the HTM sales totaled \$41,226, resulting in realized losses of \$45 determined by the specific identification method. For each of these HTM securities, we had previously collected at least 85% of the principal outstanding at the time of acquisition due to prepayments or scheduled payments over the term. As such, the sales were considered maturities for purposes of security classification.

Other-Than-Temporary Impairment.

Evaluation Process and Results - AFS and HTM Securities.

Other U.S. and GSE Obligations and TVA Debentures. For other U.S. obligations, GSE obligations, and TVA debentures, we determined that, based on current expectations, the strength of the issuers' guarantees through direct obligations of or support from the United States government is sufficient to protect us from any losses. As a result, all of the gross unrealized losses as of September 30, 2019 are considered temporary.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 4 - Advances

The following table presents advances outstanding by redemption term.

Redemption Term	September 30, 2019		December 31, 2018	
	Amount	WAIR %	Amount	WAIR %
Overdrawn demand and overnight deposit accounts	\$ 247	4.33	\$ —	—
Due in 1 year or less	11,821,848	2.21	15,595,985	2.47
Due after 1 year through 2 years	2,616,817	2.17	2,957,861	2.19
Due after 2 years through 3 years	2,150,675	2.13	2,444,486	2.46
Due after 3 years through 4 years	2,632,466	2.47	2,139,695	2.36
Due after 4 years through 5 years	4,246,300	2.28	1,977,925	2.76
Thereafter	8,692,553	2.10	7,713,409	2.41
Total advances, par value	32,160,906	2.20	32,829,361	2.44
Fair-value hedging adjustments, net	324,581		(106,499)	
Unamortized swap termination fees associated with modified advances, net of deferred prepayment fees	1,773		4,806	
Total advances	<u>\$ 32,487,260</u>		<u>\$ 32,727,668</u>	

The following table presents advances outstanding by the earlier of the redemption date or the next call date and next put date.

Redemption Term	Earlier of Redemption or Next Call Date		Earlier of Redemption or Next Put Date	
	September 30, 2019	December 31, 2018	September 30, 2019	December 31, 2018
	Overdrawn demand and overnight deposit accounts	\$ 247	\$ —	\$ 247
Due in 1 year or less	18,513,769	22,574,897	14,243,948	15,595,985
Due after 1 year through 2 years	2,091,893	2,061,411	3,601,317	3,682,461
Due after 2 years through 3 years	1,936,975	1,356,186	2,952,475	3,660,486
Due after 3 years through 4 years	1,901,276	1,581,905	2,832,571	2,547,995
Due after 4 years through 5 years	2,628,800	1,425,525	4,034,300	2,633,030
Thereafter	5,087,946	3,829,437	4,496,048	4,709,404
Total advances, par value	<u>\$ 32,160,906</u>	<u>\$ 32,829,361</u>	<u>\$ 32,160,906</u>	<u>\$ 32,829,361</u>

Credit Risk Exposure and Security Terms. At September 30, 2019 and December 31, 2018, our top five borrowers held 39% and 40%, respectively, of total advances outstanding, at par. As security for the advances to these and our other borrowers, we held, or had access to, collateral with an estimated fair value at September 30, 2019 and December 31, 2018 that was well in excess of the advances outstanding on those dates, respectively. For information related to our credit risk on advances and allowance methodology for credit losses, see *Note 7 - Allowance for Credit Losses* in our 2018 Form 10-K.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 5 - Mortgage Loans Held for Portfolio

The following tables present information on mortgage loans held for portfolio by term, type and product.

Term	September 30, 2019	December 31, 2018
Fixed-rate long-term mortgages	\$ 9,958,205	\$ 10,145,476
Fixed-rate medium-term ⁽¹⁾ mortgages	907,741	992,059
Total mortgage loans held for portfolio, UPB	10,865,946	11,137,535
Unamortized premiums	240,803	251,778
Unamortized discounts	(2,254)	(2,415)
Fair-value hedging adjustments, net	234	(1,320)
Allowance for loan losses	(450)	(600)
Total mortgage loans held for portfolio, net	\$ 11,104,279	\$ 11,384,978

⁽¹⁾ Defined as a term of 15 years or less at origination.

Type	September 30, 2019	December 31, 2018
Conventional	\$ 10,530,469	\$ 10,769,980
Government-guaranteed or -insured	335,477	367,555
Total mortgage loans held for portfolio, UPB	\$ 10,865,946	\$ 11,137,535

Product	September 30, 2019	December 31, 2018
MPP	\$ 10,631,563	\$ 10,875,079
MPF Program	234,383	262,456
Total mortgage loans held for portfolio, UPB	\$ 10,865,946	\$ 11,137,535

For information related to our credit risk on mortgage loans and allowance methodology for loan losses, see *Note 6 - Allowance for Credit Losses*.

Note 6 - Allowance for Credit Losses

A description of the allowance methodologies for our portfolio segments as well as our policy for impairing financing receivables and charging them off when necessary is disclosed in *Note 1 - Summary of Significant Accounting Policies* and *Note 7 - Allowance for Credit Losses* in our 2018 Form 10-K.

Conventional Mortgage Loans.

Conventional MPP. The following table presents the activity in the LRA, which is reported in other liabilities.

LRA Activity	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Liability, beginning of period	\$ 180,074	\$ 161,339	\$ 174,096	\$ 148,715
Additions	3,402	8,667	10,392	22,138
Claims paid	(64)	(61)	(206)	(310)
Distributions to PFIs	(823)	(98)	(1,693)	(696)
Liability, end of period	\$ 182,589	\$ 169,847	\$ 182,589	\$ 169,847

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Credit Quality Indicators. The tables below present the key credit quality indicators for our mortgage loans held for portfolio.

Delinquency Status as of September 30, 2019	Conventional	Government	Total
Past due:			
30-59 days	\$ 40,395	\$ 7,854	\$ 48,249
60-89 days	9,700	2,051	11,751
90 days or more	11,283	2,282	13,565
Total past due	61,378	12,187	73,565
Total current	10,751,347	328,801	11,080,148
Total mortgage loans, recorded investment ⁽¹⁾	<u>\$ 10,812,725</u>	<u>\$ 340,988</u>	<u>\$ 11,153,713</u>

Delinquency Status as of December 31, 2018			
Past due:			
30-59 days	\$ 36,594	\$ 9,352	\$ 45,946
60-89 days	7,904	2,870	10,774
90 days or more	13,764	1,697	15,461
Total past due	58,262	13,919	72,181
Total current	11,003,243	359,758	11,363,001
Total mortgage loans, recorded investment ⁽¹⁾	<u>\$ 11,061,505</u>	<u>\$ 373,677</u>	<u>\$ 11,435,182</u>

Other Delinquency Statistics as of September 30, 2019	Conventional	Government	Total
In process of foreclosure ⁽²⁾	\$ 2,942	\$ —	\$ 2,942
Serious delinquency rate ⁽³⁾	0.10%	0.67%	0.12%
Past due 90 days or more still accruing interest ⁽⁴⁾	\$ 10,352	\$ 2,282	\$ 12,634
On non-accrual status	\$ 1,383	\$ —	\$ 1,383

Other Delinquency Statistics as of December 31, 2018			
In process of foreclosure ⁽²⁾	\$ 6,836	\$ —	\$ 6,836
Serious delinquency rate ⁽³⁾	0.12%	0.45%	0.14%
Past due 90 days or more still accruing interest ⁽⁴⁾	\$ 12,849	\$ 1,697	\$ 14,546
On non-accrual status	\$ 1,762	\$ —	\$ 1,762

- ⁽¹⁾ The recorded investment in a loan is the UPB of the loan, adjusted for accrued interest, net of any deferred loan fees or costs, unamortized premiums or discounts (which may include the basis adjustment related to any gain or loss on a delivery commitment prior to being funded) and direct charge-offs. The recorded investment is not net of any valuation allowance.
- ⁽²⁾ Includes loans for which the decision of foreclosure or similar alternative, such as pursuit of deed-in-lieu of foreclosure, has been reported. Loans in process of foreclosure are included in past due categories depending on their delinquency status, but are not necessarily considered to be on non-accrual status.
- ⁽³⁾ Represents loans 90 days or more past due (including loans in process of foreclosure) expressed as a percentage of the total recorded investment in mortgage loans. The percentage excludes principal and interest amounts previously paid in full by the servicers on conventional loans that are pending resolution of potential loss claims. Our servicers repurchase seriously delinquent government loans, including FHA loans, when certain criteria are met.
- ⁽⁴⁾ Although our past due scheduled/scheduled MPP loans are classified as loans past due 90 days or more based on the loan's delinquency status, we do not consider these loans to be on non-accrual status.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Allowance for Loan Losses on Mortgage Loans. The following table presents the components of the allowance for loan losses, including the credit enhancement waterfall for MPP.

Components of Allowance for Loan Losses	September 30, 2019	December 31, 2018
MPP estimated incurred losses remaining after borrower's equity, before credit enhancements ⁽¹⁾	\$ 4,955	\$ 3,505
Portion of estimated incurred losses recoverable from credit enhancements:		
PMI	(861)	(627)
LRA ⁽²⁾	(2,770)	(1,137)
SMI	(939)	(1,256)
Total portion recoverable from credit enhancements	(4,570)	(3,020)
Allowance for unrecoverable PMI/SMI	15	15
Allowance for MPP loan losses	400	500
Allowance for MPF Program loan losses	50	100
Allowance for loan losses	<u>\$ 450</u>	<u>\$ 600</u>

⁽¹⁾ Based on a loss emergence period of 24 months.

⁽²⁾ Amounts recoverable are limited to (i) the estimated losses remaining after borrower's equity and PMI and (ii) the remaining balance in each pool's portion of the LRA. The remainder of the total LRA balance is available to cover any losses not yet incurred and to distribute any excess funds to the PFIs.

The tables below present a rollforward of our allowance for loan losses, the allowance for loan losses by impairment methodology, and the recorded investment in mortgage loans by impairment methodology.

Rollforward of Allowance for Loan Losses	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Balance, beginning of period	\$ 600	\$ 600	\$ 600	\$ 850
Charge-offs	(26)	(117)	(101)	(300)
Recoveries	56	15	117	409
Provision for (reversal of) loan losses	(180)	102	(166)	(359)
Balance, end of period	<u>\$ 450</u>	<u>\$ 600</u>	<u>\$ 450</u>	<u>\$ 600</u>

Allowance for Loan Losses by Impairment Methodology	September 30, 2019	December 31, 2018
Conventional loans collectively evaluated for impairment	\$ 383	\$ 563
Conventional loans individually evaluated for impairment ⁽¹⁾	67	37
Total allowance for loan losses	<u>\$ 450</u>	<u>\$ 600</u>

Recorded Investment by Impairment Methodology	September 30, 2019	December 31, 2018
Conventional loans collectively evaluated for impairment	\$ 10,798,449	\$ 11,048,075
Conventional loans individually evaluated for impairment ⁽¹⁾	14,276	13,430
Total recorded investment in conventional loans	<u>\$ 10,812,725</u>	<u>\$ 11,061,505</u>

⁽¹⁾ The recorded investment in our MPP conventional loans individually evaluated for impairment excludes principal previously paid in full by the servicers as of September 30, 2019 and December 31, 2018 of \$1,139 and \$1,552, respectively, that remains subject to potential claims by those servicers for any losses resulting from past or future liquidations of the underlying properties. However, the MPP allowance for loan losses as of September 30, 2019 and December 31, 2018 includes \$19 and \$16, respectively, for these potential claims.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 7 - Derivatives and Hedging Activities

Managing Credit Risk on Derivatives. We are subject to credit risk due to the risk of nonperformance by the counterparties to our derivative transactions.

Uncleared Derivatives. For certain of our uncleared derivatives, we have credit support agreements that contain provisions requiring us to post additional collateral with our counterparties if there is deterioration in our credit rating. If our credit rating is lowered by an NRSRO, we could be required to deliver additional collateral on uncleared derivative instruments in net liability positions. The aggregate estimated fair value of all uncleared derivative instruments with credit-risk-related contingent features that were in a net liability position (before cash collateral and related accrued interest on cash collateral) at September 30, 2019 was \$1,314, for which we have posted collateral in cash, including accrued interest, of \$995 in the normal course of business. If our credit rating had been lowered by an NRSRO (from an S&P equivalent of AA+ to AA), we would not have been required to deliver additional collateral to our uncleared derivative counterparties at September 30, 2019.

Cleared Derivatives. The clearinghouse determines margin requirements which are generally not based on credit ratings. However, clearing agents may require additional margin to be posted by us based on credit considerations, including but not limited to any credit rating downgrades. At September 30, 2019, we were not required by our clearing agents to post any additional margin.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Financial Statement Effect and Additional Financial Information.

Derivative Notional Amounts. We record derivative instruments, related cash collateral received or pledged/posted and associated accrued interest on a net basis, by clearing agent and/or by counterparty when the netting requirements have been met. The following table presents the notional amount and estimated fair value of derivative assets and liabilities.

September 30, 2019	Notional Amount	Estimated Fair Value of Derivative Assets	Estimated Fair Value of Derivative Liabilities
Derivatives designated as hedging instruments:			
Interest-rate swaps	\$ 39,847,680	\$ 32,322	\$ 462,001
Total derivatives designated as hedging instruments	39,847,680	32,322	462,001
Derivatives not designated as hedging instruments:			
Interest-rate swaps	5,947,750	454	319
Swaptions	1,350,000	33	—
Interest-rate caps/floors	668,500	198	—
Interest-rate forwards	87,400	70	15
MDCs	88,923	126	55
Total derivatives not designated as hedging instruments	8,142,573	881	389
Total derivatives before adjustments	\$ 47,990,253	33,203	462,390
Netting adjustments and cash collateral ⁽¹⁾		153,668	(457,670)
Total derivatives, net		\$ 186,871	\$ 4,720
December 31, 2018			
Derivatives designated as hedging instruments:			
Interest-rate swaps	\$ 35,135,617	\$ 174,990	\$ 123,331
Total derivatives designated as hedging instruments	35,135,617	174,990	123,331
Derivatives not designated as hedging instruments:			
Interest-rate swaps	965,930	562	106
Swaptions	950,000	105	—
Interest-rate caps/floors	679,500	999	—
Interest-rate forwards	44,100	—	202
MDCs	43,753	146	23
Total derivatives not designated as hedging instruments	2,683,283	1,812	331
Total derivatives before adjustments	\$ 37,818,900	176,802	123,662
Netting adjustments and cash collateral ⁽¹⁾		(60,038)	(102,595)
Total derivatives, net		\$ 116,764	\$ 21,067

⁽¹⁾ Represents the application of the netting requirements that allow us to settle (i) positive and negative positions and (ii) cash collateral and related accrued interest held or placed, with the same clearing agent and/or counterparty. Cash collateral pledged to counterparties at September 30, 2019 and December 31, 2018, including accrued interest, totaled \$612,334 and \$127,952, respectively. Cash collateral received from counterparties and held at September 30, 2019 and December 31, 2018, including accrued interest, totaled \$995 and \$85,395, respectively. At September 30, 2019 and December 31, 2018, no securities were pledged as collateral.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

The following table presents separately the estimated fair value of derivative instruments meeting and not meeting netting requirements, including the effect of the related collateral held or pledged.

	September 30, 2019		December 31, 2018	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
Derivative instruments meeting netting requirements:				
Gross recognized amount				
Uncleared	\$ 30,797	\$ 460,764	\$ 174,725	\$ 106,333
Cleared	2,210	1,556	1,931	17,104
Total gross recognized amount	<u>33,007</u>	<u>462,320</u>	<u>176,656</u>	<u>123,437</u>
Gross amounts of netting adjustments and cash collateral				
Uncleared	(27,869)	(456,114)	(168,426)	(85,491)
Cleared	181,537	(1,556)	108,388	(17,104)
Total gross amounts of netting adjustments and cash collateral	<u>153,668</u>	<u>(457,670)</u>	<u>(60,038)</u>	<u>(102,595)</u>
Net amounts after netting adjustments and cash collateral				
Uncleared	2,928	4,650	6,299	20,842
Cleared	183,747	—	110,319	—
Total net amounts after netting adjustments and cash collateral	<u>186,675</u>	<u>4,650</u>	<u>116,618</u>	<u>20,842</u>
Derivative instruments not meeting netting requirements ⁽¹⁾	196	70	146	225
Total derivatives, at estimated fair value	<u>\$ 186,871</u>	<u>\$ 4,720</u>	<u>\$ 116,764</u>	<u>\$ 21,067</u>

⁽¹⁾ Includes MDCs and certain interest-rate forwards.

The following table presents the components of net gains (losses) on derivatives and hedging activities reported in other income.

Type of Hedge	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net gain (loss) related to fair-value hedge ineffectiveness:				
Interest-rate swaps	\$ —	\$ (6,096)	\$ —	\$ 513
Total net gain (loss) related to fair-value hedge ineffectiveness	<u>—</u>	<u>(6,096)</u>	<u>—</u>	<u>513</u>
Net gain (loss) on derivatives not designated as hedging instruments:				
Economic hedges:				
Interest-rate swaps	(2,550)	2,518	(14,636)	4,103
Swaptions	(430)	(170)	(1,023)	(405)
Interest-rate caps/floors	(799)	(122)	(801)	43
Interest-rate forwards	(268)	560	(1,487)	1,521
Net interest settlements	127	(2,695)	(4,961)	(5,099)
MDCs	308	(669)	1,509	(2,339)
Total net gain (loss) on derivatives not designated as hedging instruments	<u>(3,612)</u>	<u>(578)</u>	<u>(21,399)</u>	<u>(2,176)</u>
Price alignment interest ⁽¹⁾	<u>—</u>	<u>(1,486)</u>	<u>—</u>	<u>(3,553)</u>
Net gains (losses) on derivatives and hedging activities in other income	<u>\$ (3,612)</u>	<u>\$ (8,160)</u>	<u>\$ (21,399)</u>	<u>\$ (5,216)</u>

⁽¹⁾ Relates to derivatives for which variation margin payments are characterized as daily settled contracts. For 2019, the portion related to derivatives not designated as hedging instruments is allocated to the applicable type of derivative.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Net gain (loss) related to fair-value hedge ineffectiveness previously presented in other income is presented in net interest income for the three and nine months ended September 30, 2019. Prior period amounts presented have not been reclassified. See *Note 2 - Recently Adopted and Issued Accounting Guidance* for more details.

The following table presents, by type of hedged item, the net gains (losses) on derivatives and the related hedged items in qualifying fair-value hedging relationships and the impact on net interest income.

Three Months Ended September 30, 2019	Advances	Investments	CO Bonds	Total
Changes in fair value:				
Hedged items	\$ 101,809	\$ 140,243	\$ (10,308)	\$ 231,744
Derivatives	(96,264)	(150,320)	5,782	(240,802)
Net changes in fair value before price alignment interest	5,545	(10,077)	(4,526)	(9,058)
Price alignment interest ⁽¹⁾	782	201	(147)	836
Net interest settlements on derivatives ⁽²⁾⁽³⁾	13,271	6,556	(3,967)	15,860
Amortization/accretion of gains (losses) on active hedging relationships	—	117	187	304
Net gains (losses) on qualifying fair-value hedging relationships	19,598	(3,203)	(8,453)	7,942
Amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	2	—	(514)	(512)
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 19,600</u>	<u>\$ (3,203)</u>	<u>\$ (8,967)</u>	<u>\$ 7,430</u>
Three Months Ended September 30, 2018				
Changes in fair value:				
Hedged items	\$ (25,144)	\$ (59,236)	\$ 7,399	\$ (76,981)
Derivatives	22,872	52,810	(4,797)	70,885
Net changes in fair value ⁽⁴⁾	(2,272)	(6,426)	2,602	(6,096)
Net interest settlements on derivatives ⁽²⁾⁽³⁾	16,512	7,398	(14,650)	9,260
Amortization/accretion of gains (losses) on active hedging relationships	—	60	78	138
Net gains (losses) on qualifying fair-value hedging relationships	14,240	1,032	(11,970)	3,302
Add: amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	(12)	—	(2,321)	(2,333)
Less: net changes in fair value ⁽⁴⁾	2,272	6,426	(2,602)	6,096
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 16,500</u>	<u>\$ 7,458</u>	<u>\$ (16,893)</u>	<u>\$ 7,065</u>

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Nine Months Ended September 30, 2019	Advances	Investments	CO Bonds	Total
Changes in fair value:				
Hedged items	\$ 432,419	\$ 507,397	\$ (109,183)	\$ 830,633
Derivatives	(431,365)	(535,526)	104,749	(862,142)
Net changes in fair value before price alignment interest	1,054	(28,129)	(4,434)	(31,509)
Price alignment interest ⁽¹⁾	477	(877)	(153)	(553)
Net interest settlements on derivatives ⁽²⁾⁽³⁾	56,729	32,167	(34,564)	54,332
Amortization/accretion of gains (losses) on active hedging relationships	—	293	372	665
Net gains (losses) on qualifying fair-value hedging relationships	58,260	3,454	(38,779)	22,935
Amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	—	—	(6,678)	(6,678)
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 58,260</u>	<u>\$ 3,454</u>	<u>\$ (45,457)</u>	<u>\$ 16,257</u>

Nine Months Ended September 30, 2018

Changes in fair value:				
Hedged items	\$ (147,659)	\$ (255,067)	\$ 106,237	\$ (296,489)
Derivatives	148,815	251,901	(103,714)	297,002
Net changes in fair value ⁽⁴⁾	1,156	(3,166)	2,523	513
Net interest settlements on derivatives ⁽²⁾⁽³⁾	31,416	8,575	(25,896)	14,095
Amortization/accretion of gains (losses) on active hedging relationships	—	200	259	459
Net gains (losses) on qualifying fair-value hedging relationships	32,572	5,609	(23,114)	15,067
Add: amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	(35)	—	(4,619)	(4,654)
Less: net changes in fair value ⁽⁴⁾	<u>(1,156)</u>	<u>3,166</u>	<u>(2,523)</u>	<u>(513)</u>
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 31,381</u>	<u>\$ 8,775</u>	<u>\$ (30,256)</u>	<u>\$ 9,900</u>

⁽¹⁾ Relates to derivatives for which variation margin payments are characterized as daily settled contracts.

⁽²⁾ Represents interest income/expense on derivatives in qualifying fair-value hedging relationships. Net interest settlements on derivatives that are not in qualifying fair-value hedging relationships are reported in other income.

⁽³⁾ Excludes the interest income/expense of the respective hedged items recorded in net interest income.

⁽⁴⁾ Net changes in fair value were not reported in net interest income in the prior year periods, but are presented herein to conform to the presentation of the current period amounts.

The following table presents the amortized cost of, and the related cumulative basis adjustments on, hedged items in qualifying fair-value hedging relationships.

September 30, 2019	Advances	Investments	CO Bonds
Amortized cost of hedged items ⁽¹⁾	<u>\$ 16,579,430</u>	<u>\$ 8,312,145</u>	<u>\$ 16,610,150</u>
Cumulative basis adjustments included in amortized cost:			
For active fair-value hedging relationships	\$ 324,581	\$ 271,947	\$ 13,131
For discontinued fair-value hedging relationships	—	—	(72)
Total cumulative fair-value hedging basis adjustments on hedged items ⁽²⁾	<u>\$ 324,581</u>	<u>\$ 271,947</u>	<u>\$ 13,059</u>

⁽¹⁾ Includes only the portion of the amortized cost of the hedged items in qualifying fair-value hedging relationships.

⁽²⁾ Excludes any offsetting effect of the net fair value of the associated derivatives.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 8 - Consolidated Obligations

In addition to being the primary obligor for all consolidated obligations issued on our behalf, we are jointly and severally liable with each of the other FHLBanks for the payment of the principal and interest on all of the FHLBanks' outstanding consolidated obligations. The par values of the FHLBanks' outstanding consolidated obligations totaled \$1.0 trillion at both September 30, 2019 and December 31, 2018. As provided by the Bank Act and Finance Agency regulations, consolidated obligations are backed only by the financial resources of all FHLBanks.

Discount Notes. The following table presents our discount notes outstanding, all of which are due within one year of issuance.

Discount Notes	September 30, 2019	December 31, 2018
Book value	\$ 15,300,029	\$ 20,895,262
Par value	\$ 15,332,360	\$ 20,952,650
Weighted average effective interest rate	2.10%	2.34%

CO Bonds. The following table presents our CO bonds outstanding by contractual maturity.

Year of Contractual Maturity	September 30, 2019		December 31, 2018	
	Amount	WAIR%	Amount	WAIR%
Due in 1 year or less	\$ 26,034,220	1.73	\$ 18,456,870	2.07
Due after 1 year through 2 years	7,741,800	1.72	8,823,285	2.30
Due after 2 years through 3 years	4,294,790	2.26	2,640,620	2.42
Due after 3 years through 4 years	1,985,775	2.30	3,024,000	2.33
Due after 4 years through 5 years	1,251,100	2.28	998,375	2.54
Thereafter	5,800,850	3.13	6,431,700	3.21
Total CO bonds, par value	47,108,535	1.99	40,374,850	2.36
Unamortized premiums	71,381		23,493	
Unamortized discounts	(13,658)		(15,992)	
Unamortized concessions	(10,586)		(14,085)	
Fair-value hedging adjustments, net	13,059		(102,801)	
Total CO bonds	<u>\$ 47,168,731</u>		<u>\$ 40,265,465</u>	

The following tables present our CO bonds outstanding by redemption feature and the earlier of the year of contractual maturity or next call date.

Redemption Feature	September 30, 2019	December 31, 2018
Non-callable / non-putable	\$ 30,911,035	\$ 27,462,850
Callable	16,197,500	12,912,000
Total CO bonds, par value	<u>\$ 47,108,535</u>	<u>\$ 40,374,850</u>

Year of Contractual Maturity or Next Call Date	September 30, 2019	December 31, 2018
Due in 1 year or less	\$ 39,063,220	\$ 30,331,870
Due after 1 year through 2 years	3,897,300	6,069,285
Due after 2 years through 3 years	668,790	1,043,620
Due after 3 years through 4 years	789,775	626,000
Due after 4 years through 5 years	360,600	503,375
Thereafter	2,328,850	1,800,700
Total CO bonds, par value	<u>\$ 47,108,535</u>	<u>\$ 40,374,850</u>

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 9 - Affordable Housing Program

The following table summarizes the activity in our AHP funding obligation.

AHP Activity	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Liability at beginning of period	\$ 40,247	\$ 35,634	\$ 40,747	\$ 32,166
Assessment (expense)	3,265	4,546	11,408	18,079
Subsidy usage, net ⁽¹⁾	(6,442)	(2,705)	(15,085)	(12,770)
Liability at end of period	<u>\$ 37,070</u>	<u>\$ 37,475</u>	<u>\$ 37,070</u>	<u>\$ 37,475</u>

⁽¹⁾ Subsidies disbursed are reported net of returns/recaptures of previously disbursed subsidies.

Note 10 - Capital

Mandatorily Redeemable Capital Stock. The following table presents the activity in our MRCS.

MRCS Activity	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Liability at beginning of period	\$ 174,193	\$ 180,913	\$ 168,876	\$ 164,322
Reclassification from capital stock	148,870	3,560	150,979	26,723
Proceeds from issuance ⁽¹⁾	—	—	3,704	—
Redemptions/repurchases	(43)	(20,072)	(540)	(26,649)
Accrued distributions	692	33	693	38
Liability at end of period	<u>\$ 323,712</u>	<u>\$ 164,434</u>	<u>\$ 323,712</u>	<u>\$ 164,434</u>

⁽¹⁾ Represents a purchase of capital stock by a captive insurance company member, which is considered mandatorily redeemable as a result of the Final Membership Rule.

The following table presents MRCS by contractual year of redemption. The year of redemption is the later of (i) the final year of the five-year redemption period, or (ii) the first year in which a non-member no longer has an activity-based stock requirement.

MRCS Contractual Year of Redemption	September 30, 2019	December 31, 2018
Year 1 ⁽¹⁾	\$ 1,490	\$ 1,316
Year 2	8,649	—
Year 3	—	8,649
Year 4	26,723	—
Year 5	150,958	26,723
Thereafter ⁽²⁾	135,892	132,188
Total MRCS	<u>\$ 323,712</u>	<u>\$ 168,876</u>

⁽¹⁾ Balances at September 30, 2019 and December 31, 2018 include \$798 and \$1,304, respectively, of Class B stock that had reached the end of the five-year redemption period but will not be redeemed until the associated credit products and other obligations are no longer outstanding.

⁽²⁾ Represents the five-year redemption period of Class B stock held by certain captive insurance companies which begins immediately upon their respective terminations of membership no later than February 19, 2021, in accordance with the Final Membership Rule. However, upon their respective terminations, we currently intend to repurchase their excess stock (if any) in accordance with our capital plan, the balances of which at September 30, 2019 and December 31, 2018 totaled \$61,642 and \$57,938, respectively.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

The following table presents the distributions related to MRCS.

MRCS Distributions	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Recorded as interest expense	\$ 3,514	\$ 1,927	\$ 8,585	\$ 6,557
Recorded as distributions from retained earnings	692	33	693	38
Total	\$ 4,206	\$ 1,960	\$ 9,278	\$ 6,595

Capital Requirements. We are subject to three capital requirements under our capital plan and Finance Agency regulations as disclosed in *Note 13 - Capital* in our 2018 Form 10-K. As presented in the following table, we were in compliance with those requirements at September 30, 2019 and December 31, 2018.

Regulatory Capital Requirements	September 30, 2019		December 31, 2018	
	Required	Actual	Required	Actual
Risk-based capital	\$ 652,463	\$ 3,353,741	\$ 786,925	\$ 3,177,638
Total regulatory capital	\$ 2,690,471	\$ 3,353,741	\$ 2,616,468	\$ 3,177,638
Total regulatory capital-to-asset ratio	4.00%	4.99%	4.00%	4.86%
Leverage capital	\$ 3,363,088	\$ 5,030,612	\$ 3,270,585	\$ 4,766,457
Leverage ratio	5.00%	7.48%	5.00%	7.29%

Note 11 - Accumulated Other Comprehensive Income

The following tables present a summary of the changes in the components of AOCI.

AOCI Rollforward	Unrealized Gains (Losses) on AFS Securities	Non-Credit OTTI on AFS Securities	Non-Credit OTTI on HTM Securities	Pension Benefits	Total AOCI
Balance, June 30, 2018	\$ 102,491	\$ —	\$ —	\$ (16,600)	\$ 85,891
OCI before reclassifications:					
Net change in unrealized gains (losses)	9,043	—	—	—	9,043
Reclassifications from OCI to net income:					
Pension benefits, net	—	—	—	636	636
Total other comprehensive income (loss)	9,043	—	—	636	9,679
Balance, September 30, 2018	\$ 111,534	\$ —	\$ —	\$ (15,964)	\$ 95,570
Balance, June 30, 2019	\$ 71,967	\$ —	\$ —	\$ (14,667)	\$ 57,300
OCI before reclassifications:					
Net change in unrealized gains (losses)	(2,139)	—	—	—	(2,139)
Reclassifications from OCI to net income:					
Pension benefits, net	—	—	—	486	486
Total other comprehensive income (loss)	(2,139)	—	—	486	(1,653)
Balance, September 30, 2019	\$ 69,828	\$ —	\$ —	\$ (14,181)	\$ 55,647

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

AOCI Rollforward	Unrealized Gains (Losses) on AFS Securities	Non-Credit OTTI on AFS Securities	Non-Credit OTTI on HTM Securities	Pension Benefits	Total AOCI
Balance, December 31, 2017	\$ 92,519	\$ 29,322	\$ (51)	\$ (10,384)	\$ 111,406
OCI before reclassifications:					
Net change in unrealized gains (losses)	19,015	392	—	—	19,407
Net change in fair value	—	2,693	—	—	2,693
Accretion of non-credit losses	—	—	51	—	51
Reclassifications from OCI to net income:					
Net realized gains from sale of AFS securities	—	(32,407)	—	—	(32,407)
Pension benefits, net	—	—	—	(5,580)	(5,580)
Total other comprehensive income (loss)	19,015	(29,322)	51	(5,580)	(15,836)
Balance, September 30, 2018	<u>\$ 111,534</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (15,964)</u>	<u>\$ 95,570</u>
Balance, December 31, 2018	\$ 52,986	\$ —	\$ —	\$ (11,299)	\$ 41,687
OCI before reclassifications:					
Net change in unrealized gains (losses)	16,842	—	—	—	16,842
Reclassifications from OCI to net income:					
Pension benefits, net	—	—	—	(2,882)	(2,882)
Total other comprehensive income (loss)	16,842	—	—	(2,882)	13,960
Balance, September 30, 2019	<u>\$ 69,828</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (14,181)</u>	<u>\$ 55,647</u>

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 12 - Segment Information

The following table presents our financial performance by operating segment.

	Three Months Ended September 30, 2019			Three Months Ended September 30, 2018		
	Traditional	Mortgage Loans	Total	Traditional	Mortgage Loans	Total
Net interest income	\$ 38,149	\$ 12,175	\$ 50,324	\$ 56,700	\$ 16,187	\$ 72,887
Provision for (reversal of) credit losses	—	(180)	(180)	—	102	102
Other income (loss)	2,678	108	2,786	(6,571)	(257)	(6,828)
Other expenses	20,636	3,523	24,159	18,979	3,449	22,428
Income before assessments	20,191	8,940	29,131	31,150	12,379	43,529
Affordable Housing Program assessments	2,371	894	3,265	3,308	1,238	4,546
Net income	<u>\$ 17,820</u>	<u>\$ 8,046</u>	<u>\$ 25,866</u>	<u>\$ 27,842</u>	<u>\$ 11,141</u>	<u>\$ 38,983</u>

	Nine Months Ended September 30, 2019			Nine Months Ended September 30, 2018		
	Traditional	Mortgage Loans	Total	Traditional	Mortgage Loans	Total
Net interest income	\$ 121,594	\$ 45,813	\$ 167,407	\$ 162,696	\$ 50,225	\$ 212,921
Provision for (reversal of) credit losses	—	(166)	(166)	—	(359)	(359)
Other income (loss)	9,078	192	9,270	30,829	(1,162)	29,667
Other expenses	61,012	10,338	71,350	58,228	10,486	68,714
Income before assessments	69,660	35,833	105,493	135,297	38,936	174,233
Affordable Housing Program assessments	7,825	3,583	11,408	14,185	3,894	18,079
Net income	<u>\$ 61,835</u>	<u>\$ 32,250</u>	<u>\$ 94,085</u>	<u>\$ 121,112</u>	<u>\$ 35,042</u>	<u>\$ 156,154</u>

The following table presents the asset balances by operating segment.

By Date	Traditional	Mortgage Loans	Total
September 30, 2019	\$ 56,157,489	\$ 11,104,279	\$ 67,261,768
December 31, 2018	54,026,721	11,384,978	65,411,699

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 13 - Estimated Fair Values

The following tables present the carrying value and estimated fair value of each of our financial instruments. The total of the estimated fair values does not represent an estimate of our overall market value as a going concern, which would take into account, among other considerations, future business opportunities and the net profitability of assets and liabilities.

Financial Instruments	September 30, 2019					
	Carrying Value	Estimated Fair Value				Netting Adjustments ⁽¹⁾
		Total	Level 1	Level 2	Level 3	
Assets:						
Cash and due from banks	\$ 49,845	\$ 49,845	\$ 49,845	\$ —	\$ —	\$ —
Interest-bearing deposits	505,672	505,672	505,475	197	—	—
Securities purchased under agreements to resell	3,550,000	3,550,000	—	3,550,000	—	—
Federal funds sold	1,415,000	1,415,000	—	1,415,000	—	—
Trading securities	4,411,301	4,411,301	—	4,411,301	—	—
AFS securities	8,381,973	8,381,973	—	8,381,973	—	—
HTM securities	4,961,209	4,971,803	—	4,971,803	—	—
Advances	32,487,260	32,406,173	—	32,406,173	—	—
Mortgage loans held for portfolio, net	11,104,279	11,225,212	—	11,218,454	6,758	—
Accrued interest receivable	132,566	132,566	—	132,566	—	—
Derivative assets, net	186,871	186,871	—	33,203	—	153,668
Grantor trust assets ⁽²⁾	24,595	24,595	24,595	—	—	—
Liabilities:						
Deposits	713,115	713,115	—	713,115	—	—
Consolidated obligations:						
Discount notes	15,300,029	15,302,483	—	15,302,483	—	—
Bonds	47,168,731	47,562,928	—	47,562,928	—	—
Accrued interest payable	176,724	176,724	—	176,724	—	—
Derivative liabilities, net	4,720	4,720	—	462,390	—	(457,670)
MRCS	323,712	323,712	323,712	—	—	—

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Financial Instruments	December 31, 2018					
	Carrying Value	Estimated Fair Value				Netting Adjustments ⁽¹⁾
		Total	Level 1	Level 2	Level 3	
Assets:						
Cash and due from banks	\$ 100,735	\$ 100,735	\$ 100,735	\$ —	\$ —	\$ —
Interest-bearing deposits	1,210,705	1,210,705	1,210,039	666	—	—
Securities purchased under agreements to resell	3,212,726	3,212,728	—	3,212,728	—	—
Federal funds sold	3,085,000	3,085,000	—	3,085,000	—	—
AFS securities	7,703,596	7,703,596	—	7,703,596	—	—
HTM securities	5,673,720	5,676,145	—	5,676,145	—	—
Advances	32,727,668	32,669,145	—	32,669,145	—	—
Mortgage loans held for portfolio, net	11,384,978	11,212,978	—	11,202,984	9,994	—
Accrued interest receivable	124,611	124,611	—	124,611	—	—
Derivative assets, net	116,764	116,764	—	176,802	—	(60,038)
Grantor trust assets ⁽²⁾	21,122	21,122	21,122	—	—	—
Liabilities:						
Deposits	500,440	500,440	—	500,440	—	—
Consolidated obligations:						
Discount notes	20,895,262	20,895,446	—	20,895,446	—	—
Bonds	40,265,465	40,137,791	—	40,137,791	—	—
Accrued interest payable	179,728	179,728	—	179,728	—	—
Derivative liabilities, net	21,067	21,067	—	123,662	—	(102,595)
MRCS	168,876	168,876	168,876	—	—	—

⁽¹⁾ Represents the application of the netting requirements that allow the settlement of (i) positive and negative positions and (ii) cash collateral and related accrued interest held or placed, with the same clearing agent and/or counterparty.

⁽²⁾ Included in other assets on the statement of condition.

Summary of Valuation Techniques and Significant Inputs. A description of the valuation techniques, significant inputs, and levels of fair value hierarchy is disclosed in *Note 17 - Estimated Fair Values* in our 2018 Form 10-K. No changes have been made in the current year.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Estimated Fair Value Measurements. The following tables present, by level within the fair value hierarchy, the estimated fair value of our financial assets and liabilities that are recorded at estimated fair value on a recurring or non-recurring basis on our statement of condition.

September 30, 2019	Total	Level 1	Level 2	Level 3	Netting Adjustments ⁽¹⁾
Trading securities:					
U.S. Treasury securities	\$ 4,411,301	\$ —	\$ 4,411,301	\$ —	\$ —
Total trading securities	4,411,301	—	4,411,301	—	—
AFS securities:					
GSE and TVA debentures	3,948,764	—	3,948,764	—	—
GSE MBS	4,433,209	—	4,433,209	—	—
Total AFS securities	8,381,973	—	8,381,973	—	—
Derivative assets:					
Interest-rate related	186,675	—	33,007	—	153,668
Interest-rate forwards	70	—	70	—	—
MDCs	126	—	126	—	—
Total derivative assets, net	186,871	—	33,203	—	153,668
Grantor trust assets ⁽²⁾	24,595	24,595	—	—	—
Total assets at recurring estimated fair value	\$13,004,740	\$ 24,595	\$12,826,477	\$ —	\$ 153,668
Derivative liabilities:					
Interest-rate related	\$ 4,650	\$ —	\$ 462,320	\$ —	\$ (457,670)
Interest-rate forwards	15	—	15	—	—
MDCs	55	—	55	—	—
Total derivative liabilities, net	4,720	—	462,390	—	(457,670)
Total liabilities at recurring estimated fair value	\$ 4,720	\$ —	\$ 462,390	\$ —	\$ (457,670)
Mortgage loans held for portfolio ⁽³⁾	\$ 1,706	\$ —	\$ —	\$ 1,706	\$ —
Total assets at non-recurring estimated fair value	\$ 1,706	\$ —	\$ —	\$ 1,706	\$ —
December 31, 2018					
AFS securities:					
GSE and TVA debentures	\$ 4,277,080	\$ —	\$ 4,277,080	\$ —	\$ —
GSE MBS	3,426,516	—	3,426,516	—	—
Total AFS securities	7,703,596	—	7,703,596	—	—
Derivative assets:					
Interest-rate related	116,618	—	176,656	—	(60,038)
MDCs	146	—	146	—	—
Total derivative assets, net	116,764	—	176,802	—	(60,038)
Grantor trust assets ⁽²⁾	21,122	21,122	—	—	—
Total assets at recurring estimated fair value	\$ 7,841,482	\$ 21,122	\$ 7,880,398	\$ —	\$ (60,038)
Derivative liabilities:					
Interest-rate related	\$ 20,842	\$ —	\$ 123,437	\$ —	\$ (102,595)
Interest-rate forwards	202	—	202	—	—
MDCs	23	—	23	—	—
Total derivative liabilities, net	21,067	—	123,662	—	(102,595)
Total liabilities at recurring estimated fair value	\$ 21,067	\$ —	\$ 123,662	\$ —	\$ (102,595)
Mortgage loans held for portfolio ⁽⁴⁾	\$ 1,734	\$ —	\$ —	\$ 1,734	\$ —
Total assets at non-recurring estimated fair value	\$ 1,734	\$ —	\$ —	\$ 1,734	\$ —

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

- (1) Represents the application of the netting requirements that allow us to settle (i) positive and negative positions and (ii) cash collateral and related accrued interest held or placed with the same clearing agent and/or counterparty.
- (2) Included in other assets on the statement of condition.
- (3) Amounts are as of the date the fair value adjustment was recorded during the nine months ended September 30, 2019.
- (4) Amounts are as of the date the fair value adjustment was recorded during the year ended December 31, 2018.

Note 14 - Commitments and Contingencies

The following table presents our off-balance-sheet commitments at their notional amounts.

Type of Commitment	September 30, 2019		
	Expire within one year	Expire after one year	Total
Letters of credit outstanding	\$ 292,631	\$ 116,101	\$ 408,732
Unused lines of credit ⁽¹⁾	1,003,342	—	1,003,342
Commitments to fund additional advances ⁽²⁾	71,350	—	71,350
Commitments to fund or purchase mortgage loans, net ⁽³⁾	88,923	—	88,923
Unsettled CO bonds, at par	550,000	—	550,000

- (1) Maximum line of credit amount per member is \$50,000.
- (2) Generally for periods up to six months.
- (3) Generally for periods up to 91 days.

Legal Proceedings. We are subject to legal proceedings arising in the normal course of business. We record an accrual for a loss contingency when it is probable that a loss for which we could be liable has been incurred and the amount can be reasonably estimated. After consultation with legal counsel, management does not anticipate that the ultimate liability, if any, arising out of these proceedings could have a material effect on our financial condition, results of operations or cash flows.

Additional discussion of other commitments and contingencies is provided in *Note 4 - Advances*; *Note 5 - Mortgage Loans Held for Portfolio*; *Note 7 - Derivatives and Hedging Activities*; *Note 8 - Consolidated Obligations*; *Note 10 - Capital*; and *Note 13 - Estimated Fair Values*.

Notes to Financial Statements, continued
(Unaudited, \$ amounts in thousands unless otherwise indicated)

Note 15 - Related Party and Other Transactions

Transactions with Related Parties. The following table presents the aggregate outstanding balances of capital stock and advances for directors' financial institutions and their balances as a percent of the total balances on our statement of condition.

Balances with Directors' Financial Institutions	September 30, 2019		December 31, 2018	
	Par value	% of Total	Par value	% of Total
Capital stock	\$ 44,912	2%	\$ 43,315	2%
Advances	703,563	2%	600,869	2%

The par values at September 30, 2019 reflect changes in the composition of directors' financial institutions effective January 1, 2019, due to changes in board membership resulting from the 2018 director election, and a change in a director's affiliation.

The following table presents transactions with directors' financial institutions, taking into account the beginning and ending dates of the directors' terms, merger activity and other changes in the composition of directors' financial institutions.

Transactions with Directors' Financial Institutions	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net capital stock issuances (redemptions and repurchases)	\$ 268	\$ 532	\$ 4,836	\$ 1,378
Net advances (repayments)	57,019	46,150	142,464	(46,750)
Mortgage loan purchases	7,954	11,289	19,282	28,078

Transactions with Other FHLBanks. Occasionally, we loan or borrow short-term funds to/from other FHLBanks. The following table presents the loans to/borrowings from other FHLBanks.

Loans to other FHLBanks	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Disbursements	\$ —	\$ —	\$ —	\$ (400,000)
Principal repayments	—	—	—	400,000
Borrowings from other FHLBanks				
Proceeds from borrowings	\$ 250,000	\$ —	\$ 250,000	\$ —
Principal repayments	(250,000)	—	(250,000)	—

There were no loans to or borrowings from other FHLBanks outstanding at September 30, 2019 or December 31, 2018.

GLOSSARY OF TERMS

ABS: Asset-Backed Securities

Advance: Secured loan to members, former members or Housing Associates

AFS: Available-for-Sale

Agency: GSE and Ginnie Mae

AHP: Affordable Housing Program

AMA: Acquired Member Assets

AOCI: Accumulated Other Comprehensive Income (Loss)

Bank Act: Federal Home Loan Bank Act of 1932, as amended

bps: basis points

CDFI: Community Development Financial Institution

CE: Credit Enhancement

CFI: Community Financial Institution, an FDIC-insured depository institution with average total assets below an annually-adjusted limit established by the Director based on the Consumer Price Index

CFPB: Bureau of Consumer Financial Protection

CFTC: United States Commodity Futures Trading Commission

Clearinghouse: A United States Commodity Futures Trading Commission-registered derivatives clearing organization

CME: CME Clearing

CMO: Collateralized Mortgage Obligation

CO bond: Consolidated Obligation bond

DB Plan: Pentegra Defined Benefit Pension Plan for Financial Institutions, as amended

DC Plan: Pentegra Defined Contribution Retirement Savings Plan for Financial Institutions, as amended

DDCP: Directors' Deferred Compensation Plan

Director: Director of the Federal Housing Finance Agency

Dodd-Frank Act: Dodd-Frank Wall Street Reform and Consumer Protection Act, as amended

Exchange Act: Securities Exchange Act of 1934, as amended

Fannie Mae: Federal National Mortgage Association

FASB: Financial Accounting Standards Board

FDIC: Federal Deposit Insurance Corporation

FHA: Federal Housing Administration

FHLBank: A Federal Home Loan Bank

FHLBanks: The 11 Federal Home Loan Banks or a subset thereof

FHLBank System: The 11 Federal Home Loan Banks and the Office of Finance

FICO®: Fair Isaac Corporation, the creators of the FICO credit score

Final Membership Rule: Final Rule on FHLBank Membership issued by the Federal Housing Finance Agency effective February 19, 2016

Finance Agency: Federal Housing Finance Agency, successor to Finance Board

Finance Board: Federal Housing Finance Board, predecessor to Finance Agency

FLA: First Loss Account

FOMC: Federal Open Market Committee

Form 8-K: Current Report on Form 8-K as filed with the SEC under the Exchange Act

Form 10-K: Annual Report on Form 10-K as filed with the SEC under the Exchange Act

Form 10-Q: Quarterly Report on Form 10-Q as filed with the SEC under the Exchange Act

FRB: Federal Reserve Board

Freddie Mac: Federal Home Loan Mortgage Corporation

GAAP: Generally Accepted Accounting Principles in the United States of America

Ginnie Mae: Government National Mortgage Association

GLB Act: Gramm-Leach-Bliley Act of 1999, as amended

GSE: United States Government-Sponsored Enterprise

HERA: Housing and Economic Recovery Act of 2008, as amended

Housing Associate: Approved lender under Title II of the National Housing Act of 1934 that is either a government agency or is chartered under federal or state law with rights and powers similar to those of a corporation

HTM: Held-to-Maturity

HUD: United States Department of Housing and Urban Development

JCE Agreement: Joint Capital Enhancement Agreement, as amended, among the 11 FHLBanks

LCH: LCH.Clearnet LLC

LIBOR: London Interbank Offered Rate

LRA: Lender Risk Account

LTV: Loan-to-Value
MAP-21: Moving Ahead for Progress in the 21st Century Act, enacted on July 6, 2012
MBS: Mortgage-Backed Securities
MCC: Master Commitment Contract
MDC: Mandatory Delivery Commitment
Moody's: Moody's Investor Services
MPF: Mortgage Partnership Finance®
MPP: Mortgage Purchase Program, including Original and Advantage unless indicated otherwise
MRCS: Mandatorily Redeemable Capital Stock
MVE: Market Value of Equity
NRSRO: Nationally Recognized Statistical Rating Organization
OCC: Office of the Comptroller of the Currency
OCI: Other Comprehensive Income (Loss)
OIS: Overnight-Indexed Swap
ORERC: Other Real Estate-Related Collateral
OTTI: Other-Than-Temporary Impairment or -Temporarily Impaired (as the context indicates)
PFI: Participating Financial Institution
PMI: Primary Mortgage Insurance
REMIC: Real Estate Mortgage Investment Conduit
REO: Real Estate Owned
RMBS: Residential Mortgage-Backed Securities
S&P: Standard & Poor's Rating Service
Safety and Soundness Act: Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended
SEC: Securities and Exchange Commission
Securities Act: Securities Act of 1933, as amended
SERP: Federal Home Loan Bank of Indianapolis 2005 Supplemental Executive Retirement Plan and/or a similar frozen plan
SETP: Federal Home Loan Bank of Indianapolis 2016 Supplemental Executive Thrift Plan, as amended
SMI: Supplemental Mortgage Insurance
SOFR: Secured Overnight Financing Rate
TBA: To Be Announced, a forward contract for the purchase or sale of MBS at a future agreed-upon date for an established price
TDR: Troubled Debt Restructuring
TVA: Tennessee Valley Authority
UPB: Unpaid Principal Balance
VaR: Value at Risk
VIE: Variable Interest Entity
WAIR: Weighted-Average Interest Rate

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Presentation

This discussion and analysis by management of the Bank's financial condition and results of operations should be read in conjunction with our 2018 Form 10-K and the interim *Financial Statements* and related *Notes to Financial Statements* contained in *Item 1. Financial Statements*.

Unless otherwise stated, amounts disclosed in this Item are rounded to the nearest million; therefore, dollar amounts of less than one million may not be reflected or, due to rounding, may not appear to agree to the amounts presented in thousands in the *Financial Statements* and related *Notes to Financial Statements*. Amounts used to calculate dollar and percentage changes are based on numbers in the thousands. Accordingly, calculations based upon the disclosed amounts (millions) may not produce the same results.

Executive Summary

Overview. We are a regional wholesale bank that serves as a financial intermediary between the capital markets and our members. We primarily make secured loans in the form of advances to our members and purchase whole mortgage loans from our members. Additionally, we purchase other investments and provide other financial services to our members. As an FHLBank, we are generally designed to expand and contract in asset size as the needs of our members and their communities change over time.

Our principal source of funding is the proceeds from the sale to the public of FHLBank debt instruments, called consolidated obligations, which are the joint and several obligation of all FHLBanks. We obtain additional funds from deposits, other borrowings, and the issuance of capital stock to our members.

Our primary source of revenue is interest earned on advances, mortgage loans, and long- and short-term investments.

Our net interest income is primarily determined by the spread between the interest rate earned on our assets and the interest rate paid on our share of consolidated obligations. We use funding and hedging strategies to manage the related interest-rate risk.

Due to our cooperative structure and wholesale nature, we typically earn a narrow interest spread. Accordingly, our net income is relatively low compared to our total assets and capital.

We group our products and services within two operating segments: traditional and mortgage loans.

Economic Environment. The Bank's financial performance is influenced by a number of regional and national economic and market factors, including the level and volatility of market interest rates, inflation or deflation, monetary policies, and the strength of housing markets.

The U.S. economy continued to grow through the end of the third quarter of 2019. The current economic expansion remains at a record length at 123 months of growth, compared to the average expansion of 48 months since 1900. As of September 30, 2019, the Federal Funds target was set at a range of 1.75%-2.00% after the 25 bps cut at the FOMC meeting in September. This was the second rate cut after nine increases from December 2015 - December 2018. On October 30, 2019, the FOMC reduced the target range by an additional 25 bps, with a statement indicating this may be the final mid-cycle cut. Monetary stimulus has been introduced to combat some indications of slowing economic growth. Central Banks globally have shifted to a more accommodative stance through the first three quarters of the year.

Yields on U.S. Treasuries decreased during the third quarter of 2019 relative to the prevailing yields at the end of the first and second quarters. Additionally, spreads between the two-year and ten-year U.S. Treasuries have been quite low throughout the year, even going negative during one point in the third quarter, indicating a flat (and a short-term inverted) yield curve. This is often a leading indicator that economic growth is deteriorating.

During the second quarter of 2019, the U.S. Gross Domestic Product (GDP) increased at an annualized rate of 2.0%, down from 3.1% in the first quarter of 2019. According to the U.S. Department of Commerce, slowing growth in GDP can be primarily attributed to a deceleration in inventory investment, exports, and nonresidential fixed investment. The advance GDP figure for the third quarter of 2019 showed a continued marginal decline in growth. According to the Department of Commerce, third quarter GDP increased at an annualized rate of 1.9%, driven by inventory accumulation and a rebound in the housing market.

Labor markets remained very strong, with unemployment rates near record lows, though the decline appears to be leveling off. In September 2019, the Bureau of Labor Statistics reported an unemployment rate of 3.5%. Employment growth, as measured by increases in non-farm payrolls, has generally been lower in the second and third quarters of 2019 than growth throughout 2018. The unemployment rate has generally declined consistently since peaking at 10% in October 2009.

Both the manufacturing and service sectors have expanded domestically for several quarters, though both are beginning to show signs of deceleration. The September 2019 Manufacturing ISM Survey showed new orders, production, and employment contracting. The index was 47.8, down from 49.1 in August. A reading above 50 indicates manufacturing expansion, while a reading below 50 indicates contraction. The ISM Service Index grew for the 116th consecutive month in September 2019, with a reading of 52.6, down from 56.4 in August. Though the Index remains above 50, it has trended downward throughout 2019.

Led by accommodative monetary and fiscal policy, low interest rates, and strong consumer demand, global economic growth and corporate earnings remained solid. Tempering the strong labor and economic reports of prior months is the potential of a continued and expanded global trade war, tight labor markets and other supply costs and constraints, along with the repricing of assets and debt.

The housing market remains positive, but higher home prices have begun to impact overall sales despite the strength in the overall economy. The Mortgage Bankers Association (MBA) expects housing demand to remain strong, combined with wage growth and home price growth moderation, leading to favorable housing conditions. In the second quarter of 2019, refinance applications increased 30% from the first quarter and, in the first two weeks of August, refinance applications surged another 50%, which is expected to lead to higher than anticipated origination volume for the third and fourth quarters of 2019. The MBA has revised its full year forecast for refinance originations to an increase of 38%. The MBA also expects moderate growth in home purchase mortgage originations in the coming years, with dollar volume increasing approximately 5%.

In other developments, a series of overnight rates in the financial markets spiked during the week of Monday, September 16, 2019. Overnight repo rates surged to as high as 10.0% while the Federal Funds benchmark rate traded above the top end of the range that the Federal Reserve had set as the target. The Federal Reserve has responded by repurchasing securities through persistent open market operations, which has provided liquidity and stabilized lending conditions in the overnight markets. We routinely lend in the overnight federal funds and repurchase markets, and also borrow overnight funds in the FHLBank discount bond market. The short-lived disruption did not impact our operations or our liquidity targets.

Impact on Operating Results. Market interest rates and trends affect yields and margins on earning assets, including advances, purchased mortgage loans, and our investment portfolio, which contribute to our overall profitability. Additionally, market interest rates drive mortgage origination and prepayment activity, which can lead to both favorable and unfavorable net interest margin volatility in our MPP and MBS portfolios. A flat or inverted yield curve, in which the difference between short-term interest rates and long-term interest rates is low, or negative, respectively, can have an unfavorable impact on our net interest margins.

Lending and investing activity by our member institutions is a key driver for our balance sheet and income growth. Such activity is a function of both prevailing interest rates and economic activity, including local economic factors, particularly relating to the housing and mortgage markets. Positive economic trends could drive interest rates higher, which could impair growth of the mortgage market. A less active mortgage market could affect demand for advances and activity levels in our Advantage MPP. However, borrowing patterns between our insurance company and depository members tend to differ during various economic and market conditions, thereby easing the potential magnitude of core business fluctuations during business cycles. Member demand for liquidity during stressed market conditions can lead to advances growth.

Selected Financial Data

The following table presents a summary of selected financial information (\$ amounts in millions).

	As of and for the Three Months Ended				
	September 30, 2019	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018
Statement of Condition:					
Advances	\$ 32,487	\$ 33,891	\$ 32,830	\$ 32,728	\$ 33,567
Mortgage loans held for portfolio, net	11,104	11,364	11,398	11,385	11,294
Cash and short-term investments	5,521	7,840	6,787	7,610	8,056
Investment securities	17,754	16,677	14,985	13,378	13,240
Total assets	67,262	70,150	66,383	65,412	66,472
Discount notes	15,300	22,645	21,254	20,895	22,650
CO bonds	47,169	42,727	40,376	40,266	39,564
Total consolidated obligations	62,469	65,372	61,630	61,161	62,214
MRCS	324	174	174	169	164
Capital stock	1,939	2,049	1,985	1,931	1,901
Retained earnings	1,091	1,093	1,084	1,078	1,061
AOCI	56	57	70	42	95
Total capital	3,086	3,199	3,139	3,051	3,057
Statement of Income:					
Net interest income	\$ 50	\$ 60	\$ 57	\$ 75	\$ 73
Provision for (reversal of) credit losses	—	—	—	—	—
Other income (loss)	3	3	3	(9)	(7)
Other expenses	24	24	23	23	23
AHP assessments	3	4	4	4	4
Net income	<u>\$ 26</u>	<u>\$ 35</u>	<u>\$ 33</u>	<u>\$ 39</u>	<u>\$ 39</u>
Selected Financial Ratios:					
Net interest margin ⁽¹⁾	0.29%	0.35%	0.36%	0.46%	0.44%
Return on average equity ⁽²⁾	3.31%	4.45%	4.37%	5.01%	5.05%
Return on average assets ⁽²⁾	0.15%	0.20%	0.21%	0.24%	0.23%
Weighted average dividend rate ⁽³⁾	5.50%	5.50%	5.50%	4.50%	4.50%
Dividend payout ratio ⁽⁴⁾	106.89%	75.44%	79.99%	55.66%	54.18%
Total capital ratio ⁽⁵⁾	4.59%	4.56%	4.73%	4.66%	4.60%
Total regulatory capital ratio ⁽⁶⁾	4.99%	4.73%	4.89%	4.86%	4.70%
Average equity to average assets	4.55%	4.59%	4.75%	4.70%	4.62%

(1) Annualized net interest income expressed as a percentage of average interest-earning assets.

(2) Annualized, as appropriate.

(3) Annualized dividends paid in cash during the period divided by the average amount of Class B capital stock eligible for dividends under our capital plan, excluding MRCS.

(4) Dividends paid in cash during the period divided by net income for the period. By dividing dividends paid in cash during the period by the net income for the prior period, the dividend payout ratios for each of the three months ended September 30, 2019, June 30, 2019, March 31, 2019, December 31, 2018 and September 30, 2018 would be 79%, 80%, 69%, 55% and 31%, respectively.

(5) Capital stock plus retained earnings and AOCI expressed as a percentage of total assets.

(6) Capital stock plus retained earnings and MRCS expressed as a percentage of total assets.

Results of Operations and Changes in Financial Condition

Results of Operations for the Three and Nine Months Ended September 30, 2019 and 2018. The following table presents the comparative highlights of our results of operations (\$ amounts in millions).

Condensed Statements of Comprehensive Income	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019	2018	\$ Change	% Change	2019	2018	\$ Change	% Change
Net interest income	\$ 50	\$ 73	\$ (23)	(31%)	\$ 167	\$ 213	\$ (46)	(21%)
Provision for (reversal of) credit losses	—	—	—		—	—	—	
Net interest income after provision for credit losses	50	73	(23)	(31%)	167	213	(46)	(21%)
Other income (loss)	3	(7)	10		9	30	(21)	
Other expenses	24	23	1		71	69	2	
Income before assessments	29	43	(14)	(33%)	105	174	(69)	(39%)
AHP assessments	3	4	(1)		11	18	(7)	
Net income	26	39	(13)	(34%)	94	156	(62)	(40%)
Total other comprehensive income (loss)	(2)	10	(12)		14	(16)	30	
Total comprehensive income	\$ 24	\$ 49	\$ (25)	(50%)	\$ 108	\$ 140	\$ (32)	(23%)

The decrease in net income for the three months ended September 30, 2019 compared to the corresponding period in the prior year was substantially due to lower spreads on the Bank's interest-earnings assets.

The decrease in net income for the nine months ended September 30, 2019 compared to the corresponding period in the prior year was primarily due to the non-recurring net realized gain in 2018 on the sale of all of the Bank's private-label MBS and higher net losses resulting from derivatives and hedging activities. In general, we hold the derivatives and associated hedged items to the maturity, call, or put date. As a result, we expect to recover nearly all of the net losses on these financial instruments over the remaining contractual terms of the hedged items.

Changes in Financial Condition for the Nine Months Ended September 30, 2019. The following table presents the comparative highlights of our changes in financial condition (\$ amounts in millions).

Condensed Statements of Condition	September 30, 2019	December 31, 2018	\$ Change	% Change
Advances	\$ 32,487	\$ 32,728	\$ (241)	(1%)
Mortgage loans held for portfolio, net	11,104	11,385	(281)	(2%)
Cash and short-term investments ⁽¹⁾	5,521	7,610	(2,089)	(27%)
Investment securities and other assets ⁽²⁾	18,150	13,689	4,461	33%
Total assets	\$ 67,262	\$ 65,412	\$ 1,850	3%
Consolidated obligations	\$ 62,469	\$ 61,161	\$ 1,308	2%
MRCS	324	169	155	92%
Other liabilities	1,383	1,031	352	34%
Total liabilities	64,176	62,361	1,815	3%
Capital stock	1,939	1,931	8	—%
Retained earnings ⁽³⁾	1,091	1,078	13	1%
AOCI	56	42	14	33%
Total capital	3,086	3,051	35	1%
Total liabilities and capital	\$ 67,262	\$ 65,412	\$ 1,850	3%
Total regulatory capital ⁽⁴⁾	\$ 3,354	\$ 3,178	\$ 176	6%

(1) Includes cash, interest-bearing deposits, securities purchased under agreements to resell, and federal funds sold.

(2) Includes trading, AFS and HTM securities.

(3) Includes restricted retained earnings at September 30, 2019 and December 31, 2018 of \$242 million and \$222 million, respectively.

(4) Total capital less AOCI plus MRCS.

The increase in total assets at September 30, 2019 compared to December 31, 2018 was primarily driven by additions to our liquidity portfolio, which includes trading securities.

The increase in total liabilities at September 30, 2019 compared to December 31, 2018 was attributable to a net increase in consolidated obligations to support the Bank's growth in assets.

The increase in total capital at September 30, 2019 compared to December 31, 2018 was primarily due to additional capital stock issued and net income, substantially offset by capital stock reclassified to MRCS and dividends paid to shareholders, respectively.

Analysis of Results of Operations for the Three and Nine Months Ended September 30, 2019 and 2018.

Net Interest Income. The decrease in net interest income for the three and nine months ended September 30, 2019 compared to the corresponding periods in 2018 was primarily due to hedging losses resulting from derivatives in a fair-value relationship as well as lower spreads. In accordance with an amendment to accounting guidance effective January 1, 2019, hedging gains (losses) on qualifying fair-value hedging relationships are reported prospectively in net interest income instead of other income. As a result, net interest income after provision for credit losses for the three and nine months ended September 30, 2019 was reduced by \$9 million and \$31 million, respectively. In general, we hold the derivatives and associated hedged items to the maturity, call, or put date. As a result, we expect to recover nearly all of the net losses on these financial instruments over the remaining contractual terms of the hedged items.

The following table presents average daily balances, interest income/expense, and average yields of our major categories of interest-earning assets and their funding sources (\$ amounts in millions).

	Three Months Ended September 30,					
	2019			2018		
	Average Balance	Interest Income/Expense ⁽⁶⁾	Average Yield ⁽¹⁾⁽⁶⁾	Average Balance	Interest Income/Expense	Average Yield ⁽¹⁾
Assets:						
Federal funds sold and securities purchased under agreements to resell	\$ 5,944	\$ 34	2.29%	\$ 7,119	\$ 35	1.96%
Investment securities ⁽²⁾	17,430	104	2.35%	13,079	91	2.77%
Advances ⁽³⁾	32,100	207	2.56%	32,943	198	2.38%
Mortgage loans held for portfolio ⁽³⁾	11,275	87	3.09%	11,143	90	3.22%
Other assets (interest-earning) ⁽⁴⁾	1,298	7	2.12%	1,238	6	1.86%
Total interest-earning assets	68,047	439	2.56%	65,522	420	2.54%
Other assets ⁽⁵⁾	(6)			458		
Total assets	<u>\$ 68,041</u>			<u>\$ 65,980</u>		
Liabilities and Capital:						
Interest-bearing deposits	\$ 743	4	1.95%	\$ 650	3	1.79%
Discount notes	19,185	110	2.28%	22,916	114	1.97%
CO bonds ⁽³⁾	43,996	271	2.45%	38,574	229	2.35%
MRCS	273	4	5.10%	163	1	4.70%
Other borrowings	6	—	2.28%	—	—	—%
Total interest-bearing liabilities	64,203	389	2.40%	62,303	347	2.21%
Other liabilities	740			632		
Total capital	3,098			3,045		
Total liabilities and capital	<u>\$ 68,041</u>			<u>\$ 65,980</u>		
Net interest income		<u>\$ 50</u>			<u>\$ 73</u>	
Net spread on interest-earning assets less interest-bearing liabilities ⁽⁶⁾			0.16%			0.33%
Net interest margin ⁽⁶⁾⁽⁷⁾			0.29%			0.44%
Average interest-earning assets to interest-bearing liabilities	1.06			1.05		

Nine Months Ended September 30,

	2019			2018		
	Average Balance	Interest Income/Expense ⁽⁶⁾	Average Yield ⁽¹⁾⁽⁶⁾	Average Balance	Interest Income/Expense	Average Yield ⁽¹⁾
Assets:						
Federal funds sold and securities purchased under agreements to resell	\$ 6,697	\$ 120	2.41%	\$ 5,708	\$ 76	1.78%
Investment securities ⁽²⁾	15,848	303	2.55%	12,985	252	2.59%
Advances ⁽³⁾	32,077	641	2.67%	32,962	519	2.10%
Mortgage loans held for portfolio ⁽³⁾	11,355	277	3.27%	10,745	259	3.23%
Other assets (interest-earning) ⁽⁴⁾	1,011	17	2.20%	1,044	13	1.65%
Total interest-earning assets	66,988	1,358	2.71%	63,444	1,119	2.36%
Other assets ⁽⁵⁾	218			460		
Total assets	<u>\$ 67,206</u>			<u>\$ 63,904</u>		
Liabilities and Capital:						
Interest-bearing deposits	\$ 647	10	2.10%	\$ 640	8	1.58%
Discount notes	20,586	369	2.40%	21,425	274	1.71%
CO bonds ⁽³⁾	41,870	803	2.57%	38,113	618	2.17%
MRCS	207	9	5.54%	169	6	5.18%
Other borrowings	2	—	2.31%	—	—	—%
Total interest-bearing liabilities	63,312	1,191	2.51%	60,347	906	2.01%
Other liabilities	783			535		
Total capital	3,111			3,022		
Total liabilities and capital	<u>\$ 67,206</u>			<u>\$ 63,904</u>		
Net interest income		<u>\$ 167</u>			<u>\$ 213</u>	
Net spread on interest-earning assets less interest-bearing liabilities ⁽⁶⁾			0.20%			0.35%
Net interest margin ⁽⁶⁾⁽⁷⁾			0.33%			0.45%
Average interest-earning assets to interest-bearing liabilities	1.06			1.05		

(1) Annualized.

(2) Consists of trading, AFS and HTM securities. The average balances of AFS securities are based on amortized cost; therefore, the resulting yields do not reflect changes in the estimated fair value that are a component of OCI. Interest income/expense includes the effects of associated derivative transactions.

(3) Interest income/expense and average yield include all other components of interest, including the impact of net interest payments or receipts on derivatives in qualifying hedge relationships, amortization of hedge accounting adjustments, and prepayment fees on advances.

(4) Consists of interest-bearing deposits and loans to other FHLBanks (if applicable). Includes the rights or obligations to cash collateral, except for variation margin payments characterized as daily settled contracts.

(5) Includes changes in the estimated fair value of AFS securities, grantor trust assets, and in 2018, the effect of OTTI-related non-credit losses on AFS and HTM securities.

(6) In accordance with an amendment to accounting guidance effective January 1, 2019, hedging gains (losses) on qualifying fair-value hedging relationships are reported prospectively in net interest income instead of other income.

(7) Annualized net interest income expressed as a percentage of the average balance of interest-earning assets.

Yields. The average yield on total interest-earning assets for the three months ended September 30, 2019 was 2.56%, an increase of 2 bps compared to the corresponding period in 2018, resulting primarily from increases in market interest rates that led to higher yields on advances, federal funds sold, and securities purchased under agreements to resell. Including the hedging losses from derivatives in fair-value relationships prospectively in interest income caused a decrease in the average yield of 5 bps. The average cost of total interest-bearing liabilities was 2.40%, an increase of 19 bps due to higher funding costs on consolidated obligations. The net effect was a decrease in the net interest spread of 17 bps to 0.16% for the three months ended September 30, 2019 from 0.33% for the corresponding period in 2018.

The average yield on total interest-earning assets for the nine months ended September 30, 2019 was 2.71%, an increase of 35 bps compared to the corresponding period in 2018, resulting primarily from increases in market interest rates that led to higher yields on advances, federal funds sold, and securities purchased under agreements to resell. Including the hedging losses from derivatives in fair-value relationships prospectively in interest income caused a decrease in the average yield of 6 bps. The average cost of total interest-bearing liabilities was 2.51%, an increase of 50 bps due to higher funding costs on consolidated obligations. The net effect was a decrease in the net interest spread of 15 bps to 0.20% for the nine months ended September 30, 2019 from 0.35% for the corresponding period in 2018.

Average Balances. The average balances outstanding of interest-earning assets for the three months ended September 30, 2019 increased by 4% compared to the corresponding period in 2018. The average balance of investment securities increased by 33% due to purchases of trading securities to enhance liquidity and purchases of AFS securities. The increase in average interest-bearing liabilities was due to an increase in consolidated obligations outstanding to fund the increases in interest-earning assets.

The average balances outstanding of interest-earning assets for the nine months ended September 30, 2019 increased by 6% compared to the corresponding period in 2018. The average balance of short-term investments increased by 17% in light of new liquidity guidance from the Finance Agency. The average balance of investment securities increased by 22% due to purchases of trading securities to enhance liquidity and purchases of AFS securities. The average balance of mortgage loans held for portfolio increased by 6% in spite of higher principal prepayments due to demand by our members for Advantage MPP. These increases were partially offset by a decrease in the average balance of advances of 3%, generally driven by member funding needs. The increase in average interest-bearing liabilities was due to an increase in consolidated obligations outstanding to fund the increases in interest-earning assets.

Provision for Credit Losses. The change in the provision for (reversal of) credit losses for the three and nine months ended September 30, 2019 compared to the corresponding periods in 2018 was insignificant.

Other Income. The following table presents a comparison of the components of other income (\$ amounts in millions).

Components	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net realized gains from sale of available-for-sale securities	\$ —	\$ —	\$ —	\$ 32
Net realized losses from sale of held-to-maturity securities	—	—	—	—
Net gains on trading securities	6	—	26	—
Net gains (losses) on derivatives not designated as hedging instruments	(4)	(2)	(21)	(6)
Net gains (losses) related to fair-value hedge ineffectiveness	—	(6)	—	1
Other	1	1	4	3
Total other income (loss)	\$ 3	\$ (7)	\$ 9	\$ 30

The increase in total other income for the three months ended September 30, 2019 compared to the corresponding period in 2018 was due to net gains on trading securities and the prospective reporting of hedging gains (losses) on qualifying fair-value hedging relationships in net interest income in 2019 instead of other income in 2018. The decrease in total other income for the nine months ended September 30, 2019 was substantially due to the non-recurring net realized gain in the second quarter of 2018 on the sale of all of the Bank's private-label MBS. See *Notes to Financial Statements - Note 3 - Investment Securities* for more information. The net gains on trading securities for the three and nine months ended September 30, 2019 were substantially offset by net losses on the associated derivatives.

Net Gains (Losses) on Trading Securities. In January 2019, the Bank began purchasing fixed-rate U.S. Treasury securities to enhance liquidity. Those securities are classified as trading securities and are recorded at fair value, with changes in fair value reported in other income. There are a number of factors that affect the fair value of these securities, including changes in interest rates, the passage of time, and volatility. These trading securities are being economically hedged, so that over time the gains (losses) on these securities will be generally offset by the change in fair value of the associated derivatives.

Net Gains (Losses) on Derivatives and Hedging Activities. In prior periods, for qualifying fair-value hedging relationships, the differences between the change in the estimated fair value of the hedged items attributable to the hedged risk and the change in the estimated fair value of the associated interest-rate swaps, i.e., hedge ineffectiveness, were reported in other income. Beginning January 1, 2019, such differences are reported in net interest income. See *Notes to Financial Statements - Note 2 - Recently Adopted and Issued Accounting Guidance* for more information. As a result, the net gains (losses) on derivatives and hedging activities reported in other income in 2019 substantially consist of gains (losses) on derivatives not designated as hedging instruments.

The table below presents the effect of derivatives and hedging activities that are reported in either net interest income or other income (\$ amounts in millions).

Components	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net changes in fair value ⁽¹⁾	\$ (9)	\$ (6)	\$ (31)	\$ 1
Price alignment interest ⁽²⁾	1	(2)	—	(4)
Amortization/accretion of gains (losses) on hedging relationships	—	(2)	(6)	(4)
Net gains on trading securities, net of losses on associated derivatives	3	—	6	—
Other economic hedging gains (losses)	(1)	2	3	3
Total gains (losses) from derivatives and hedging activities before net interest settlements	(6)	(8)	(28)	(4)
Net interest settlements on derivatives ⁽³⁾	16	7	49	9
Total gains (losses) from derivatives and hedging activities	\$ 10	\$ (1)	\$ 21	\$ 5

⁽¹⁾ Relates to derivatives and hedged items in qualifying fair-value hedging relationships.

⁽²⁾ Relates to derivatives for which variation margin payments are characterized as daily settled contracts.

⁽³⁾ Represents interest income/expense on derivatives. Excludes interest income/expense on associated hedged items.

The changes in fair value for the three and nine months ended September 30, 2019 and 2018 were primarily due to marginal mismatches in durations on, and the increase in volume of, swapped GSE MBS, particularly Fannie Mae Delegated Underwriting and Servicing (DUS) MBS. As a result of issuing floating rate notes to fund these MBS purchases instead of swapped fixed-rate notes, the funding and operational costs have been reduced but there is less offsetting hedge impact, resulting in higher hedging gains or losses.

However, since we generally hold derivatives and hedged items to the maturity, call or put date, we expect to recover nearly all of the net hedging losses on our financial instruments over the remaining contractual terms of the hedged items.

Other Expenses. The following table presents a comparison of the components of other expenses (\$ amounts in millions).

Components	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Compensation and benefits	\$ 12	\$ 12	\$ 40	\$ 38
Other operating expenses	8	8	21	21
Finance Agency and Office of Finance	3	2	7	6
Other	1	1	3	4
Total other expenses	<u>\$ 24</u>	<u>\$ 23</u>	<u>\$ 71</u>	<u>\$ 69</u>

The increase in total other expenses for the nine months ended September 30, 2019 compared to the corresponding period in 2018 was due to increases in compensation, primarily driven by salary increases and higher head count.

Total Other Comprehensive Income (Loss). Total OCI for the three and nine months ended September 30, 2019 primarily consisted of unrealized losses and gains, respectively, on AFS securities. Total OCI for the three months ended September 30, 2018 consisted substantially of unrealized gains on AFS securities. Total OCI for the nine months ended September 30, 2018 consisted substantially of the reduction in AOCI as a result of the recognition of the gain on the sale of our private-label MBS, partially offset by unrealized gains on AFS securities.

Operating Segments

Our products and services are grouped within two operating segments: traditional and mortgage loans.

Traditional. The traditional segment consists of (i) credit products (including advances, letters of credit, and lines of credit), (ii) investments (including federal funds sold, securities purchased under agreements to resell, interest-bearing demand deposit accounts, and investment securities), and (iii) correspondent services and deposits. The following table presents the financial performance of our traditional segment (\$ amounts in millions).

Traditional	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net interest income	\$ 38	\$ 57	\$ 121	\$ 163
Provision for (reversal of) credit losses	—	—	—	—
Other income (loss)	3	(6)	9	31
Other expenses	21	20	61	59
Income before assessments	20	31	69	135
AHP assessments	2	3	7	14
Net income	<u>\$ 18</u>	<u>\$ 28</u>	<u>\$ 62</u>	<u>\$ 121</u>

The decrease in net income for the traditional segment for the three months ended September 30, 2019 compared to the corresponding period in 2018 was primarily due to lower net interest income due to lower spreads and net losses resulting from derivatives and hedging activities. The decrease in net income for the traditional segment for the nine months ended September 30, 2019 compared to the corresponding period in 2018 was primarily due to lower net interest income, due to lower spreads and net losses resulting from derivatives and hedging activities, and the non-recurring net realized gain on the sale of all of the Bank's private-label MBS in 2018. In general, we hold the derivatives and associated hedged items to the maturity, call, or put date. As a result, we expect to recover nearly all of the net losses on these financial instruments over the remaining contractual terms of the hedged items.

Mortgage Loans. The mortgage loans segment includes (i) mortgage loans purchased from our members through our MPP and (ii) participating interests purchased in 2012 - 2014 from the FHLBank of Topeka in mortgage loans originated by certain of its PFIs under the MPF Program. The following table presents the financial performance of our mortgage loans segment (\$ amounts in millions).

Mortgage Loans	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net interest income	\$ 12	\$ 16	\$ 46	\$ 50
Provision for (reversal of) credit losses	—	—	—	—
Other income (loss)	—	(1)	—	(1)
Other expenses	3	3	10	10
Income before assessments	9	12	36	39
AHP assessments	1	1	4	4
Net income	<u>\$ 8</u>	<u>\$ 11</u>	<u>\$ 32</u>	<u>\$ 35</u>

The decrease in net income for the mortgage loans segment for the three and nine months ended September 30, 2019 compared to the corresponding periods in 2018 was due to lower net interest income, due primarily to an increase in amortization of purchase premium resulting from higher prepayments and an increase in amortization of concession fees on called consolidated obligations.

Analysis of Financial Condition

Total Assets. The table below presents the comparative highlights of our major asset categories (\$ amounts in millions).

Major Asset Categories	September 30, 2019		December 31, 2018	
	Carrying Value	% of Total	Carrying Value	% of Total
Advances	\$ 32,487	48%	\$ 32,728	50%
Mortgage loans held for portfolio, net	11,104	17%	11,385	17%
Cash and short-term investments	5,521	8%	7,610	12%
Trading securities	4,411	7%	—	—%
Other investment securities	13,343	20%	13,378	21%
Other assets ⁽¹⁾	396	—%	311	—%
Total assets	<u>\$ 67,262</u>	<u>100%</u>	<u>\$ 65,412</u>	<u>100%</u>

⁽¹⁾ Includes accrued interest receivable, premises, software and equipment, derivative assets and other miscellaneous assets.

Total assets were \$67.3 billion as of September 30, 2019, a net increase of \$1.9 billion, or 3%, compared to December 31, 2018, primarily driven by additions to our liquidity portfolio. The liquidity portfolio comprised 15% of total assets at September 30, 2019, compared to 12% at December 31, 2018.

Advances. Advances at carrying value totaled \$32.5 billion at September 30, 2019, a net decrease of \$241 million, or 1%, compared to December 31, 2018.

The par value of advances to depository institutions, comprising commercial banks, savings institutions and credit unions, and insurance companies each decreased by 2%. Advances to depository institutions, as a percent of total advances outstanding at par value, were 53% at September 30, 2019, while advances to insurance companies were 47%.

The table below presents advances outstanding by type of financial institution (\$ amounts in millions).

Borrower Type	September 30, 2019		December 31, 2018	
	Par Value	% of Total	Par Value	% of Total
Depository institutions:				
Commercial banks and savings institutions	\$ 11,929	37%	\$ 14,019	43 %
Credit unions	2,854	9%	3,099	10 %
Former members - depositories	2,312	7%	268	— %
Total depository institutions	17,095	53%	17,386	53 %
Insurance companies:				
Captive insurance companies ⁽¹⁾	2,726	9%	2,936	9 %
Other insurance companies	12,334	38%	12,491	38 %
Former members - insurance	6	—%	16	— %
Total insurance companies	15,066	47%	15,443	47 %
Total advances	\$ 32,161	100%	\$ 32,829	100 %

⁽¹⁾ Memberships must terminate no later than February 19, 2021. See certain restrictions on and maturities of advances in *Notes to Financial Statements - Note 5 - Advances* in the 2018 Form 10-K.

Our advance portfolio is well-diversified with advances to commercial banks and savings institutions, credit unions, and insurance companies. Borrowing patterns between our insurance company and depository members tend to differ during various economic and market conditions, thereby easing the potential magnitude of core business fluctuations during business cycles.

Our advance portfolio includes fixed- and variable-rate advances, as well as callable or prepayable and puttable advances. Prepayable advances may be prepaid on specified dates without incurring repayment or termination fees. All other advances may only be prepaid by the borrower paying a fee that is sufficient to make us financially indifferent to the prepayment of the advance.

The following table presents the par value of advances outstanding by product type and redemption term, some of which contain call or put options (\$ amounts in millions).

Product Type and Redemption Term	September 30, 2019		December 31, 2018	
	Par Value	% of Total	Par Value	% of Total
Fixed-rate:				
Fixed-rate ⁽¹⁾				
Due in 1 year or less	\$ 11,101	35%	\$ 14,670	45%
Due after 1 year	7,915	25%	6,927	21%
Total	19,016	60%	21,597	66%
Callable or prepayable				
Due in 1 year or less	—	—%	10	—%
Due after 1 year	49	—%	39	—%
Total	49	—%	49	—%
Putable				
Due in 1 year or less	—	—%	—	—%
Due after 1 year	5,558	17%	3,103	10%
Total	5,558	17%	3,103	10%
Other ⁽²⁾				
Due in 1 year or less	127	—%	133	—%
Due after 1 year	120	—%	140	—%
Total	247	—%	273	—%
Total fixed-rate	24,870	77%	25,022	76%
Variable-rate:				
Variable-rate ⁽¹⁾				
Due in 1 year or less	53	—%	349	1%
Due after 1 year	—	—%	—	—%
Total	53	—%	349	1%
Callable or prepayable				
Due in 1 year or less	541	2%	435	1%
Due after 1 year	6,697	21%	7,023	22%
Total	7,238	23%	7,458	23%
Total variable-rate	7,291	23%	7,807	24%
Overdrawn demand and overnight deposit accounts	—	—%	—	—%
Total advances	\$ 32,161	100%	\$ 32,829	100%

(1) Includes advances without call or put options.

(2) Includes hybrid, fixed-rate amortizing/mortgage matched advances.

Advances due in one year or less decreased from 47% of the total outstanding, at par, at December 31, 2018 to 37% of the total outstanding, at par, at September 30, 2019, reflecting members' increased demand for long-term funding. See *Notes to Financial Statements - Note 4 - Advances* for additional information.

Mortgage Loans Held for Portfolio. A breakdown of mortgage loans held for portfolio by primary product type is presented below (\$ amounts in millions).

Product Type	September 30, 2019		December 31, 2018	
	UPB	% of Total	UPB	% of Total
MPP:				
Conventional Advantage	\$ 9,751	90%	\$ 9,874	89%
Conventional Original	595	5%	688	6%
FHA	286	3%	314	3%
Total MPP	10,632	98%	10,876	98%
MPF Program:				
Conventional	185	2%	208	2%
Government	49	—%	54	—%
Total MPF Program	234	2%	262	2%
Total mortgage loans held for portfolio	\$ 10,866	100%	\$ 11,138	100%

The decrease in the UPB of mortgage loans held for portfolio was due to repayments of outstanding MPP and MPF Program loans exceeding purchases under Advantage MPP. Over time, the outstanding balance of mortgage loans purchased under our original MPP and the MPF Program will continue to decrease.

We have established and maintain an allowance for loan losses based on our best estimate of probable losses over the loss emergence period, which we have estimated to be 24 months. Our estimate of MPP losses remaining after borrower's equity, but before credit enhancements, was \$5 million at September 30, 2019 and \$4 million at December 31, 2018. After consideration of the portion recoverable under the associated credit enhancements, the resulting allowance for MPP loan losses was less than \$1 million at both September 30, 2019 and December 31, 2018. For more information, see *Notes to Financial Statements - Note 7 - Allowance for Credit Losses* in our 2018 Form 10-K.

Cash and Investments. The following table presents a comparison of the components of our cash and investments at carrying value (\$ amounts in millions).

Components	September 30, 2019	December 31, 2018	Change
Cash and short-term investments:			
Cash and due from banks	\$ 50	\$ 101	\$ (51)
Interest-bearing deposits	506	1,211	(705)
Securities purchased under agreements to resell	3,550	3,213	337
Federal funds sold	1,415	3,085	(1,670)
Total cash and short-term investments	5,521	7,610	(2,089)
Trading securities:			
U.S. Treasury obligations	4,411	—	4,411
Total trading securities	4,411	—	4,411
Other investment securities:			
AFS securities:			
GSE and TVA debentures	3,949	4,277	(328)
GSE MBS	4,433	3,427	1,006
Total AFS securities	8,382	7,704	678
HTM securities:			
Other U.S. obligations - guaranteed MBS	3,173	3,469	(296)
GSE MBS	1,788	2,205	(417)
Total HTM securities	4,961	5,674	(713)
Total other investment securities	13,343	13,378	(35)
Total cash and investments, carrying value	\$ 23,275	\$ 20,988	\$ 2,287

Cash and Short-Term Investments. Cash and short-term investments totaled \$5.5 billion at September 30, 2019, a decrease of 27% compared to December 31, 2018. Cash and short-term investments as a percent of total assets totaled 8% at September 30, 2019, compared to 12% at December 31, 2018.

Trading Securities. In January 2019, the Bank began purchasing U.S. Treasury securities as trading securities to enhance its liquidity in light of new liquidity guidance from the Finance Agency. Such securities totaled \$4.4 billion at September 30, 2019, of which \$3.4 billion is due in one year or less and \$1.0 billion is due after one year through two years.

As a result, the liquidity portfolio at September 30, 2019 totaled \$9.9 billion, an increase of \$2.3 billion, or 31%, from December 31, 2018. Additionally, the mix has changed, with U.S. Treasuries representing 44% of the liquidity portfolio at September 30, 2019.

Other Investment Securities. AFS securities totaled \$8.4 billion at September 30, 2019, a net increase of 9% compared to \$7.7 billion at December 31, 2018. The increase resulted from purchases of GSE MBS to maintain a ratio of MBS and ABS to total regulatory capital of up to 300%.

Net unrealized gains on AFS securities totaled \$70 million at September 30, 2019, a net increase of \$17 million compared to December 31, 2018, primarily due to changes in interest rates, credit spreads and volatility.

HTM securities totaled \$5.0 billion at September 30, 2019, a net decrease of 13% compared to \$5.7 billion at December 31, 2018. At September 30, 2019, the estimated fair value of our HTM securities totaled \$5.0 billion, of which \$2.3 billion was in an unrealized loss position, a decrease of 3% from \$2.4 billion at December 31, 2018, primarily due to changes in interest rates, credit spreads and volatility. The associated unrealized losses decreased from \$16 million at December 31, 2018 to \$11 million at September 30, 2019.

Interest-Rate Payment Terms. Our AFS and HTM securities are presented below at amortized cost by interest-rate payment terms (\$ amounts in millions).

Interest-Rate Payment Terms	September 30, 2019		December 31, 2018	
	Amortized Cost	% of Total	Amortized Cost	% of Total
AFS Securities:				
Total non-MBS fixed-rate	\$ 3,919	47%	\$ 4,240	55%
Total MBS fixed-rate	4,393	53%	3,411	45%
Total AFS securities	\$ 8,312	100%	\$ 7,651	100%
HTM Securities:				
MBS:				
Fixed-rate	\$ 857	17%	\$ 936	16%
Variable-rate	4,104	83%	4,738	84%
Total MBS	4,961	100%	5,674	100%
Total HTM securities	\$ 4,961	100%	\$ 5,674	100%
Total other investment securities:				
Total fixed-rate	\$ 9,169	69%	\$ 8,587	64%
Total variable-rate	4,104	31%	4,738	36%
Total other investment securities	\$ 13,273	100%	\$ 13,325	100%

The mix of fixed- vs. variable-rate AFS and HTM securities at September 30, 2019 was slightly higher compared to December 31, 2018, primarily due to purchases of fixed-rate MBS. However, all of the fixed-rate AFS securities are swapped to effectively create variable-rate securities, consistent with our balance sheet strategies to manage interest-rate risk.

Total Liabilities. Total liabilities were \$64.2 billion at September 30, 2019, a net increase of \$1.8 billion, or 3%, compared to December 31, 2018, substantially due to an increase in consolidated obligations.

Deposits (Liabilities). Total deposits were \$713 million at September 30, 2019, a net increase of \$213 million, or 42%, compared to December 31, 2018. These deposits represent a relatively small portion of our funding. The balances of these accounts can fluctuate from period to period and vary depending upon such factors as the attractiveness of our deposit pricing relative to the rates available on alternative money market instruments, members' preferences with respect to the maturity of their investments, and members' liquidity.

Consolidated Obligations. The carrying value of consolidated obligations outstanding at September 30, 2019 totaled \$62.5 billion, a net increase of \$1.3 billion, or 2%, from December 31, 2018. This increase supported the Bank's growth in assets.

The following table presents a breakdown by term of our consolidated obligations outstanding (\$ amounts in millions).

By Term	September 30, 2019		December 31, 2018	
	Par Value	% of Total	Par Value	% of Total
Consolidated obligations due in 1 year or less:				
Discount notes	\$ 15,332	24%	\$ 20,953	34%
CO bonds	26,034	42%	18,457	30%
Total due in 1 year or less	41,366	66%	39,410	64%
Long-term CO bonds	21,074	34%	21,918	36%
Total consolidated obligations	\$ 62,440	100%	\$ 61,328	100%

The percentage due in 1 year or less increased from 64% at December 31, 2018 to 66% at September 30, 2019 as a result of seeking to maintain a sufficient liquidity and funding balance between our financial assets and financial liabilities. Additionally, the FHLBanks work collectively to manage FHLB System-wide liquidity and funding and jointly monitor System-wide refinancing risk. In managing and monitoring the amounts of assets that require refunding, the FHLBanks may consider contractual maturities of the financial assets, as well as certain assumptions regarding expected cash flows (i.e., estimated prepayments and scheduled amortizations). For more detailed information regarding contractual maturities of certain of our financial assets and liabilities, see *Notes to Financial Statements - Note 3 - Investment Securities, Note 4 - Advances, and Note 8 - Consolidated Obligations.*

Derivatives. The volume of derivative hedges is often expressed in terms of notional amounts, which is the amount upon which interest payments are calculated. The following table presents the notional amounts by type of hedged item whether or not it is in a qualifying hedge relationship (\$ amounts in millions).

Hedged Item	September 30, 2019	December 31, 2018
Advances	\$ 16,255	\$ 13,980
Investments	13,113	8,562
Mortgage loans	1,526	1,038
CO bonds	17,096	14,239
Total notional	\$ 47,990	\$ 37,819

The increase in the total notional amount during the nine months ended September 30, 2019 of 27% was primarily due to purchases of U.S. Treasuries in economic hedging relationships.

The following table presents the cumulative impact of fair-value hedging basis adjustments on our statement of condition (\$ amounts in millions).

September 30, 2019	Advances	Investments	CO Bonds	Total
Cumulative fair-value hedging basis adjustments on hedged items	\$ 325	\$ 272	\$ (13)	\$ 584
Estimated fair value of associated derivatives, net	(317)	(323)	10	(630)
Net cumulative fair-value hedging basis adjustments	\$ 8	\$ (51)	\$ (3)	\$ (46)

Total Capital. Total capital at September 30, 2019 was \$3.1 billion, a net increase of \$35 million, or 1%, compared to December 31, 2018, primarily due to additional capital stock issued and net income, substantially offset by capital stock reclassified to MRCS and dividends paid to shareholders, respectively.

The following table presents a percentage breakdown of the components of GAAP capital.

Components	September 30, 2019	December 31, 2018
Capital stock	63%	63%
Retained earnings	35%	36%
AOCI	2%	1%
Total GAAP capital	100%	100%

The components of GAAP capital were relatively unchanged at September 30, 2019 compared to December 31, 2018.

The following table presents a reconciliation of GAAP capital to regulatory capital (\$ amounts in millions).

Reconciliation	September 30, 2019	December 31, 2018
Total GAAP capital	\$ 3,086	\$ 3,051
Exclude: AOCI	(56)	(42)
Add: MRCS	324	169
Total regulatory capital	\$ 3,354	\$ 3,178

Liquidity and Capital Resources

Liquidity. Our primary sources of liquidity are holdings of liquid assets, comprised of cash, short-term investments, and trading securities, as well as the issuance of consolidated obligations.

Our cash and short-term investments totaled \$5.5 billion at September 30, 2019. Our short-term investments generally consist of high-quality financial instruments, many of which mature overnight. Our trading securities totaled \$4.4 billion at September 30, 2019 and consisted solely of U.S. Treasury securities. As a result, our liquidity portfolio at September 30, 2019 totaled \$9.9 billion or 15% of total assets.

During the nine months ended September 30, 2019, we maintained sufficient access to funding; our net proceeds from the issuance of consolidated obligations totaled \$273.4 billion. However, to protect against temporary disruptions in access to the debt markets, the Finance Agency currently requires us to: (i) maintain contingent liquidity sufficient to cover, at a minimum, 10 calendar days of inability to issue consolidated obligations; (ii) have available at all times an amount greater than or equal to our members' current deposits invested in specific assets; (iii) maintain, in the aggregate, unpledged qualifying assets in an amount at least equal to our participation in total consolidated obligations outstanding; and (iv) maintain, through short-term investments, an amount at least equal to our anticipated cash outflows under hypothetical adverse scenarios.

In 2018, the Finance Agency issued an Advisory Bulletin on FHLBank liquidity that communicates the Finance Agency's expectations with respect to the maintenance of sufficient liquidity. The Bank has fully implemented such liquidity guidance on a timely basis. After December 31, 2019, the standard will increase from 10 to 20 calendar days of liquidity sufficient to cover an inability to issue consolidated obligations. We anticipate that the Bank will meet or exceed the December 31, 2019 standard at that time and thereafter. For information concerning the Finance Agency's liquidity guidance, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Recent Accounting and Regulatory Developments - Legislative and Regulatory Developments - Advisory Bulletin* in our 2018 Form 10-K.

New or amended regulatory guidance from the Finance Agency could continue to increase the amount and change the characteristics of liquidity that we are required to maintain. We have not identified any other trends, demands, commitments, or events that are likely to materially increase or decrease our liquidity.

Changes in Cash Flow. Net cash used in operating activities for the nine months ended September 30, 2019 was \$215 million, compared to net cash provided by operating activities for the nine months ended September 30, 2018 of \$427 million. The decrease of \$642 million was substantially due to the fluctuation in variation margin payments on cleared derivatives. Such payments are treated by the clearinghouses as daily settled contracts.

Capital Resources.

Total Regulatory Capital. The following table provides a breakdown of our outstanding capital stock and MRCS (\$ amounts in millions).

By Type of Member Institution	September 30, 2019		December 31, 2018	
	Amount	% of Total	Amount	% of Total
Capital Stock:				
Depository institutions:				
Commercial banks and savings institutions	\$ 933	42%	\$ 985	47%
Credit unions	275	12%	263	12%
Total depository institutions	1,208	54%	1,248	59%
Insurance companies	731	32%	683	33%
CDFIs	—	—%	—	—%
Total capital stock, putable at par value	1,939	86%	1,931	92%
MRCS:				
Captive insurance companies	136	6%	132	6%
Former members ⁽¹⁾	188	8%	37	2%
Total MRCS	324	14%	169	8%
Total regulatory capital stock	\$ 2,263	100%	\$ 2,100	100%

⁽¹⁾ Balances at both September 30, 2019 and December 31, 2018 include \$1 million of MRCS that had reached the end of the five-year redemption period but will not be redeemed until the associated credit products and other obligations are no longer outstanding.

Excess Capital Stock. The following table presents the composition of our excess capital stock (\$ amounts in millions).

Components	September 30, 2019	December 31, 2018
Member capital stock not subject to outstanding redemption requests	\$ 513	\$ 450
Member capital stock subject to outstanding redemption requests	1	1
MRCS	93	25
Total excess capital stock	\$ 607	\$ 476
Excess stock as a percentage of regulatory capital stock	27%	23%

The increase in excess stock during the nine months ended September 30, 2019 resulted from advance activity.

Capital Distributions. On October 24, 2019, our board of directors declared a cash dividend of 4.75% (annualized) on our Class B-1 capital stock and 3.80% (annualized) on our Class B-2 capital stock.

Adequacy of Capital. We must maintain sufficient permanent capital to meet the combined credit risk, market risk and operations risk components of the risk-based capital requirement. As presented in the following table, we were in compliance with the risk-based capital requirement at September 30, 2019 and December 31, 2018 (\$ amounts in millions).

Risk-Based Capital Components	September 30, 2019	December 31, 2018
Credit risk	\$ 300	\$ 307
Market risk	202	298
Operations risk	150	182
Total risk-based capital requirement	\$ 652	\$ 787
Permanent capital	\$ 3,354	\$ 3,178

The decrease in the total risk-based capital requirement was primarily caused by a decrease in the market risk component due to changes in the market environment, including interest rates, spreads, volatility and changes in balance sheet composition. Our permanent capital at September 30, 2019 remained well in excess of our total risk-based capital requirement.

Off-Balance Sheet Arrangements

At September 30, 2019, principal previously paid in full by our MPP servicers totaling \$1 million remains subject to potential claims by those servicers for any losses resulting from past or future liquidations of the underlying properties. An estimate of the losses is included in the MPP allowance for loan losses. For more information, see *Notes to Financial Statements - Note 7 - Allowance for Credit Losses* in our 2018 Form 10-K.

Critical Accounting Policies and Estimates

We determined that three of our accounting policies and estimates are critical because they require management to make particularly difficult, subjective, and/or complex judgments about matters that are inherently uncertain and because of the likelihood that materially different amounts could be reported under different conditions or using different assumptions. These accounting policies pertain to:

- Derivatives and hedging activities (see *Notes to Financial Statements - Note 7 - Derivatives and Hedging Activities* for more detail);
- Fair value estimates (see *Notes to Financial Statements - Note 13 - Estimated Fair Values* for more detail); and
- Provision for credit losses (see *Notes to Financial Statements - Note 6 - Allowance for Credit Losses* for more detail).

A full discussion of our critical accounting policies and estimates is included in *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Estimates* in our 2018 Form 10-K. See below for additional information regarding certain of these policies.

Provision for Credit Losses.

Mortgage Loans Acquired under the MPP. Our allowance for loan losses incorporates our analysis of delinquent conventional MPP loans, using the estimated fair value of the underlying collateral, further reduced by estimated liquidation costs.

As part of our loan loss analysis at December 31, 2018, we considered an adverse scenario whereby we used a haircut on our underlying collateral values of 20% for delinquent conventional loans, including individually evaluated loans. We consider such a haircut to represent the most distressed scenario that is reasonably possible to occur over the loss emergence period of 24 months. In this distressed scenario, while holding all other assumptions constant, our estimated incurred losses remaining after borrowers' equity, but before credit enhancements, would increase by approximately \$2.2 million. However, such increase would be substantially offset by credit enhancements. Based upon subsequent changes in underlying collateral values, we would not expect this amount to have significantly changed at September 30, 2019. Therefore, the allowance for loan losses continues to be based upon our best estimate of the probable losses over the loss emergence period that would not be recovered from the credit enhancements.

Recent Accounting and Regulatory Developments

Accounting Developments. For a description of how recent accounting developments may impact our financial condition, results of operations or cash flows, see *Notes to Financial Statements - Note 2 - Recently Adopted and Issued Accounting Guidance*.

Legislative and Regulatory Developments.

Advisory Bulletin (AB 2019-03) - Capital Stock Management. On August 14, 2019, the Finance Agency issued Advisory Bulletin 2019-03 ("AB") providing guidance that augments existing statutory and regulatory capital requirements to require each FHLBank to maintain a ratio of at least two percent of capital stock to total assets in order to help preserve the cooperative structure incentives that encourage members to remain fully engaged in the oversight of their investment in the Bank. Beginning in February 2020, the FHFA will consider the proportion of capital stock to assets, measured on a daily average basis at month-end, when assessing each FHLBank's capital management practices.

We do not expect the AB to have a material impact on our capital management practices, financial condition, or results of operations.

FHFA Supervisory Letter - Planning for LIBOR Phase-Out. On September 27, 2019, the Finance Agency issued a Supervisory Letter ("Supervisory Letter") to the FHLBanks, designed to ensure the FHLBanks will be able to identify and prudently manage the risks associated with the termination of LIBOR in a safe and sound manner. The Supervisory Letter provides that the FHLBanks should, by December 31, 2019, stop purchasing investments that reference LIBOR and mature after December 31, 2021. In addition, the FHLBanks should, by March 31, 2020, cease entering into new LIBOR-referenced financial assets, liabilities, and derivatives with maturities beyond December 31, 2021 for all product types, subject to limited exceptions granted by the Finance Agency for LIBOR-linked products that serve compelling mission, risk mitigating, and/or hedging purposes that do not currently have readily available alternatives. These phase-out dates do not apply to collateral accepted by the FHLBanks. However, the Supervisory Letter directs the FHLBanks to update their pledged collateral certification reporting requirements by March 31, 2020 to encourage members to distinguish LIBOR-linked collateral maturing after December 31, 2021.

We have already suspended the issuance of LIBOR-indexed debt with maturities beyond 2021. As a result of the Supervisory Letter, before December 31, 2019, we will cease purchasing investments that reference LIBOR and mature after December 31, 2021. In addition, beginning December 31, 2019, we will no longer enter into derivatives with swaps, caps, or floors indexed to LIBOR that terminate after December 31, 2021. Also, beginning March 31, 2020, we expect to suspend transactions in certain structured advances and advances with terms directly linked to LIBOR that mature after December 31, 2021. We continue to evaluate the potential impact of the Supervisory Letter on our financial condition and results of operations.

Risk Management

We have exposure to a number of risks in pursuing our business objectives. These risks may be broadly classified as market, credit, liquidity, operational, and business. Market risk is discussed in *Item 3. Quantitative and Qualitative Disclosures about Market Risk*. See *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management* in our 2018 Form 10-K for more information.

Credit Risk Management. We face credit risk on advances and other credit products, investments, mortgage loans, derivative financial instruments, and AHP grants.

Advances and Other Credit Products. New or renewed credit extensions to captive insurance companies that became members prior to September 12, 2014 are subject to certain regulatory restrictions relating to maturity dates and cannot exceed 40% of the member's total assets. As of September 30, 2019, one such captive insurance company member's total outstanding balance of credit products exceeded the percentage limit. Therefore, no new or renewed credit extensions have been extended to this member. We may impose additional restrictions on extensions of credit to our members, including captive insurance companies, at our discretion.

Concentration. Our credit risk is magnified due to the concentration of advances in a few borrowers. As of September 30, 2019, our top borrower held 11% of total advances outstanding, at par, and our top five borrowers held 39% of total advances outstanding, at par. As a result of this concentration, we perform frequent credit and collateral reviews on our largest borrowers. In addition, we analyze the implications to our financial management and profitability if we were to lose the business of one or more of these borrowers.

One such depository institution with an outstanding balance of advances at September 30, 2019 totaling \$2.0 billion, or 6% of total advances outstanding, at par value, merged with a non-member depository institution effective August 1, 2019. Of these advances outstanding, \$1.4 billion has been repaid and an additional \$0.3 billion is scheduled to mature before December 31, 2019. We do not expect a material impact on our profitability as a result of the repayment of these advances.

Investments. We are also exposed to credit risk through our investment portfolios. Our policies restrict the acquisition of investments to high-quality, short-term money market instruments and high-quality long-term securities.

The following table presents the unsecured investment credit exposure to private counterparties, categorized by the domicile of the counterparty's ultimate parent, based on the lowest of the counterparty's NRSRO long-term credit ratings, stated in terms of the S&P equivalent. The table does not reflect the foreign sovereign government's credit rating (\$ amounts in millions).

September 30, 2019	A	Total
Domestic	\$ 1,606	\$ 1,606
Canada	315	315
Total unsecured credit exposure	<u>\$ 1,921</u>	<u>\$ 1,921</u>

A Finance Agency regulation provides that the total amount of our investments in MBS and ABS, calculated using amortized historical cost, must not exceed 300% of our total regulatory capital, as of the day we purchase the securities, based on the capital amount most recently reported to the Finance Agency. At September 30, 2019 these investments totaled 272% of total regulatory capital. Generally, our goal is to maintain these investments near the 300% limit in order to enhance earnings and capital for our members and diversify our revenue stream.

The following table presents the carrying values of our investments, excluding accrued interest, grouped by credit rating and investment category. Applicable rating levels are determined using the lowest relevant long-term rating from S&P, Moody's and Fitch Ratings, Inc., each stated in terms of the S&P equivalent. Rating modifiers are ignored when determining the applicable rating level for a given counterparty or investment. Amounts reported do not reflect any subsequent changes in ratings, outlook, or watch status (\$ amounts in millions).

September 30, 2019	AAA	AA	A	BBB	Below Investment Grade	Total
Short-term investments:						
Interest-bearing deposits	\$ —	\$ —	\$ 506	\$ —	\$ —	\$ 506
Securities purchased under agreements to resell	—	3,550	—	—	—	3,550
Federal funds sold	—	—	1,415	—	—	1,415
Total short-term investments	—	3,550	1,921	—	—	5,471
Long-term investments:						
U.S. Treasury obligations	—	4,411	—	—	—	4,411
GSE and TVA debentures	—	3,949	—	—	—	3,949
GSE MBS	—	6,221	—	—	—	6,221
Other U.S. obligations - guaranteed RMBS	—	3,173	—	—	—	3,173
Total long-term investments	—	17,754	—	—	—	17,754
Total investments, carrying value	\$ —	\$ 21,304	\$ 1,921	\$ —	\$ —	\$ 23,225
Percentage of total	—%	92%	8%	—%	—%	100%
December 31, 2018						
Short-term investments:						
Interest-bearing deposits	\$ —	\$ 1	\$ 1,210	\$ —	\$ —	\$ 1,211
Securities purchased under agreements to resell	—	3,213	—	—	—	3,213
Federal funds sold	—	1,630	1,455	—	—	3,085
Total short-term investments	—	4,844	2,665	—	—	7,509
Long-term investments:						
GSE and TVA debentures	—	4,277	—	—	—	4,277
GSE MBS	—	5,632	—	—	—	5,632
Other U.S. obligations - guaranteed RMBS	—	3,469	—	—	—	3,469
Total long-term investments	—	13,378	—	—	—	13,378
Total investments, carrying value	\$ —	\$ 18,222	\$ 2,665	\$ —	\$ —	\$ 20,887
Percentage of total	—%	87%	13%	—%	—%	100%

Mortgage Loans Held for Portfolio. The following table presents the changes in the LRA for original MPP and Advantage MPP (\$ amounts in millions).

LRA Activity	Three Months Ended September 30, 2019		
	Original	Advantage	Total
Liability, beginning of period	\$ 7	\$ 173	\$ 180
Additions	—	3	3
Claims paid	—	—	—
Distributions to PFIs	—	—	—
Liability, end of period	<u>\$ 7</u>	<u>\$ 176</u>	<u>\$ 183</u>

LRA Activity	Nine Months Ended September 30, 2019		
	Original	Advantage	Total
Liability, beginning of period	\$ 7	\$ 167	\$ 174
Additions	—	10	10
Claims paid	—	—	—
Distributions to PFIs	—	(1)	(1)
Liability, end of period	<u>\$ 7</u>	<u>\$ 176</u>	<u>\$ 183</u>

Derivatives. The following table presents key information on derivative positions with counterparties on a settlement date basis using the lowest credit ratings from S&P or Moody's, stated in terms of the S&P equivalent (\$ amounts in millions).

September 30, 2019	Notional Amount	Net Estimated Fair Value Before Collateral	Cash Collateral Pledged To (From) Counterparties	Net Credit Exposure
Non-member counterparties:				
Asset positions with credit exposure				
Uncleared derivatives - A	\$ 37	\$ —	\$ —	\$ —
Cleared derivatives ⁽¹⁾	15,696	1	97	98
Liability positions with credit exposure				
Uncleared derivatives - A	11,776	(248)	251	3
Cleared derivatives ⁽¹⁾	7,840	—	86	86
Total derivative positions with credit exposure to non-member counterparties	35,349	(247)	434	187
Total derivative positions with credit exposure to member institutions ⁽²⁾	55	—	—	—
Subtotal - derivative positions with credit exposure	35,404	\$ (247)	\$ 434	\$ 187
Derivative positions without credit exposure	12,586			
Total derivative positions	<u>\$ 47,990</u>			

(1) Represents derivative transactions cleared by two clearinghouses (one rated AA- and the other unrated).

(2) Includes MDCs from member institutions under our MPP.

Business Risk Management.

Replacement of the LIBOR Benchmark Interest Rate. In July 2017, the Financial Conduct Authority ("FCA"), a regulator of financial services firms and financial markets in the UK, announced that it will plan for a phase-out of regulatory oversight of LIBOR interest rate indices. The FCA indicated that it will cease persuading or compelling banks to submit rates for the calculation of LIBOR after 2021, and that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. The Alternative Reference Rates Committee has proposed SOFR as its recommended alternative to LIBOR, and the Federal Reserve Bank of New York began publishing SOFR rates in April 2018.

Most of our advances, investments, consolidated obligation bonds, derivative assets, derivative liabilities, and related collateral are indexed to LIBOR. Some of these assets and liabilities and related collateral have maturity dates that extend beyond 2021. As a result, we are evaluating the potential impact of the replacement of the LIBOR benchmark interest rate, including the possibility of SOFR as the dominant replacement on an ongoing basis. We have also developed an evolving transition plan that will change with market developments and member needs. The key components of our LIBOR replacement plan are: exposure, fallback language, information technology systems preparation, and balance sheet strategy. We have assessed our current exposure to LIBOR including completing an inventory of all financial instruments impacted and identifying financial instruments and contracts that may require adding or adjusting fallback language. We are assessing our operational readiness including potential effects on core Bank systems and replacing LIBOR references in policies and procedures. From a balance sheet management perspective, we have participated in the issuance of SOFR-indexed debt and suspended the issuance of LIBOR-indexed debt with maturities beyond 2021. Additionally, we have implemented OIS as an alternative interest rate hedging strategy for certain financial instruments.

The following table presents our LIBOR-rate indexed financial instruments outstanding at September 30, 2019 by year of maturity (\$ amounts in millions).

Financial Instruments	LIBOR-rate indexed financial instruments		
	Due in 2019 through 2021	Due in 2022 and thereafter	Total LIBOR- rate indexed
Advances by redemption term	\$ 499	\$ 3,866	\$ 4,365
MBS by contractual maturity ⁽¹⁾	36	4,061	4,097
CO bonds by contractual maturity	13,155	—	13,155
Total principal	<u>\$ 13,690</u>	<u>\$ 7,927</u>	<u>\$ 21,617</u>
Total notional of derivatives by termination date	<u>\$ 20,687</u>	<u>\$ 22,489</u>	<u>\$ 43,176</u>

⁽¹⁾ Year of redemption on our MBS is based on contractual maturity. Their actual maturities will likely differ from contractual maturities as borrowers have the right to prepay their obligations with or without prepayment fees.

See *Item 1A. Risk Factors - Changes to or Replacement of the LIBOR Benchmark Interest Rate Could Adversely Affect Our Business, Financial Condition and Results of Operations* in our 2018 Form 10-K for more information.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Measuring Market Risks

To evaluate market risk, we utilize multiple risk measurements, including duration of equity, duration gap, convexity, VaR, earnings at risk, and changes in MVE. Periodically, we conduct stress tests to measure and analyze the effects that extreme movements in the level of interest rates and the shape of the yield curve would have on our risk position.

As part of our overall interest-rate risk management process, we continue to evaluate strategies to manage interest-rate risk. Certain strategies, if implemented, could have an adverse impact on future earnings.

Market Risk-Based Capital Requirement. When calculating the risk-based capital requirement, the VaR comprising the first factor of the market risk component is defined as the potential dollar loss from adverse market movements, for a holding period of 120 business days, with a 99% confidence interval, based on those historical prices and market rates. The table below presents the VaR (\$ amounts in millions).

Date	VaR
September 30, 2019	\$ 202
December 31, 2018	298

Market Value of Equity. MVE represents the difference between the estimated market value of total assets and the estimated market value of total liabilities, including any off-balance sheet positions. It measures, in present value terms, the long-term economic value of current capital and the long-term level and volatility of net interest income.

We also monitor the sensitivities of MVE to potential interest-rate scenarios. We measure potential changes in the market value to book value of equity based on the current month-end level of rates versus large parallel shifts in rates. Our board of directors determines acceptable ranges for the change in MVE for 200 bps shock scenario.

Key Metrics. The following table presents certain market and interest-rate metrics under different interest-rate scenarios (\$ amounts in millions).

September 30, 2019	Down 200 ⁽¹⁾	Down 100 ⁽¹⁾	Base	Up 100	Up 200
MVE	\$ 3,221	\$ 3,151	\$ 3,113	\$ 3,049	\$ 3,113
Percent change in MVE from base	3.5%	1.2%	—%	(2.0)%	—%
MVE/Book value of equity	94.5%	92.4%	91.3%	89.4 %	91.3%
Duration of equity ⁽²⁾	0.8	1.8	2.4	(0.5)	(2.1)
December 31, 2018 ⁽³⁾					
MVE	\$ 3,240	\$ 3,191	\$ 3,120	\$ 3,024	\$ 2,995
Percent change in MVE from base	3.8%	2.3%	0%	(3.1)%	(4.0)%
MVE/Book value of equity	100.7%	99.1%	96.9%	93.9 %	93.0 %
Duration of equity ⁽²⁾	1.4	1.7	2.9	2.5	(0.3)

⁽¹⁾ Given the low interest rates in the short-to-medium term points of the yield curves, downward rate shocks are constrained to prevent rates from becoming negative.

⁽²⁾ We use interest-rate shocks in 50 bps increments to determine duration of equity.

⁽³⁾ Metrics previously presented have been revised.

The changes in these key metrics from December 31, 2018 resulted primarily from the change in market value of the assets and liabilities in response to changes in the market environment, changes in portfolio composition, and our hedging strategies.

Duration Gap. The base case duration gap was 0.08% and 0.09% at September 30, 2019 and December 31, 2018, respectively.

For information about our use of derivative hedges see, *Item 7A. Quantitative and Qualitative Disclosures About Market Risk - Use of Derivative Hedges* in our 2018 Form 10-K.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We are responsible for establishing and maintaining disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in our reports filed under the Exchange Act is: (a) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and (b) accumulated and communicated to our management, including our principal executive officer, principal financial officer, and principal accounting officer, to allow timely decisions regarding required disclosures.

As of September 30, 2019, we conducted an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer (the principal executive officer), Chief Financial Officer (the principal financial officer) and Chief Accounting Officer (the principal accounting officer), of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15 of the Exchange Act. Based on that evaluation, our Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer concluded that our disclosure controls and procedures were effective as of September 30, 2019.

Internal Control Over Financial Reporting

Changes in Internal Control Over Financial Reporting. There were no changes in our internal control over financial reporting, as defined in rules 13a-15(f) and 15(d)-15(f) of the Exchange Act, that occurred during our most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls. We do not expect that our disclosure controls and procedures and other internal controls will prevent all error and fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can only be reasonable assurance that any design will succeed in achieving its stated goals under all potential future conditions. Additionally, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Part II. OTHER INFORMATION

Item 1. LEGAL PROCEEDINGS

In the ordinary course of business, we may from time to time become a party to lawsuits involving various business matters. We are unaware of any lawsuits presently pending which, individually or in the aggregate, could have a material effect on our financial condition or results of operations.

Item 1A. RISK FACTORS

There have been no material changes in the risk factors described in *Item 1A. Risk Factors* of our 2018 Form 10-K.

Item 6. EXHIBITS

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
3.1*	<u>Organization Certificate of the Federal Home Loan Bank of Indianapolis, incorporated by reference to our Registration Statement on Form 10 (Commission File No. 000-51404) filed on February 14, 2006</u>
3.2*	<u>Bylaws of the Federal Home Loan Bank of Indianapolis, effective June 28, 2019, incorporated by reference to Exhibit 3.1 of our Quarterly Report on Form 10-Q (Commission File No. 000-51404) for the quarter ended June 30, 2019, filed on August 12, 2019</u>
4.0*	<u>Capital Plan of the Federal Home Loan Bank of Indianapolis, effective September 5, 2011, incorporated by reference to Exhibit 99.2 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on August 5, 2011</u>
10.1*	<u>Joint Capital Enhancement Agreement dated August 5, 2011, incorporated by reference to Exhibit 99.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on August 5, 2011</u>
10.2*	<u>Directors' Compensation and Expense Reimbursement Policy, effective January 1, 2020, incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-k (Commission File No. 000-51404) filed on October 11, 2019</u>
31.1	<u>Certification of the President - Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
31.2	<u>Certification of the Executive Vice President - Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
31.3	<u>Certification of the Senior Vice President - Chief Accounting Officer pursuant to Section 302 of the Sarbanes - Oxley Act of 2002</u>
32	<u>Certification of the President - Chief Executive Officer, Executive Vice President - Chief Financial Officer, and Senior Vice President - Chief Accounting Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

* These documents are incorporated by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

November 7, 2019

By: /s/ CINDY L. KONICH

Name: Cindy L. Konich

Title: President - Chief Executive Officer

November 7, 2019

By: /s/ GREGORY L. TEARE

Name: Gregory L. Teare

Title: Executive Vice President - Chief Financial Officer

November 7, 2019

By: /s/ K. LOWELL SHORT, JR.

Name: K. Lowell Short, Jr.

Title: Senior Vice President - Chief Accounting Officer

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Cindy L. Konich, certify that:

1. I have reviewed this quarterly report on Form 10-Q of the Federal Home Loan Bank of Indianapolis;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

By: /s/ CINDY L. KONICH

Name: Cindy L. Konich

Title: President - Chief Executive Officer

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Gregory L. Teare, certify that:

1. I have reviewed this quarterly report on Form 10-Q of the Federal Home Loan Bank of Indianapolis;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

By: /s/ GREGORY L. TEARE

Name: Gregory L. Teare

Title: Executive Vice President - Chief Financial Officer

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, K. Lowell Short, Jr., certify that:

1. I have reviewed this quarterly report on Form 10-Q of the Federal Home Loan Bank of Indianapolis;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

By: /s/ K. LOWELL SHORT, JR.

Name: K. Lowell Short, Jr.

Title: Senior Vice President - Chief Accounting Officer

SECTION 1350 CERTIFICATIONS

In connection with the quarterly report of the Federal Home Loan Bank of Indianapolis ("Bank") on Form 10-Q for the period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof ("Report"), each of the undersigned officers certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Bank.

By: /s/ CINDY L. KONICH

Cindy L. Konich
President - Chief Executive Officer
November 7, 2019

By: /s/ GREGORY L. TEARE

Gregory L. Teare
Executive Vice President - Chief Financial Officer
November 7, 2019

By: /s/ K. LOWELL SHORT, JR.

K. Lowell Short, Jr.
Senior Vice President - Chief Accounting Officer
November 7, 2019