

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

FORM 10-Q

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

For the quarterly period ended June 30, 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 July 31, 2019

22,485,561

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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>June 30, 2019</u>	<u>December 31, 2018</u>
Assets:		
Cash and due from banks	\$ 76,477	\$ 100,735
Interest-bearing deposits	656,051	1,210,705
Securities purchased under agreements to resell	4,249,710	3,212,726
Federal funds sold	2,858,000	3,085,000
Trading securities (Note 3)	3,192,790	—
Available-for-sale securities (Note 3)	8,395,767	7,703,596
Held-to-maturity securities (estimated fair values of \$5,097,578 and \$5,676,145, respectively) (Note 3)	5,088,423	5,673,720
Advances (Note 4)	33,890,767	32,727,668
Mortgage loans held for portfolio, net of allowance for loan losses of \$(600) and \$(600), respectively (Notes 5 and 6)	11,363,834	11,384,978
Accrued interest receivable	140,913	124,611
Premises, software, and equipment, net	37,443	37,198
Derivative assets, net (Note 7)	157,136	116,764
Other assets	42,482	33,998
Total assets	<u>\$ 70,149,793</u>	<u>\$ 65,411,699</u>
Liabilities:		
Deposits	\$ 855,307	\$ 500,440
Consolidated obligations (Note 8):		
Discount notes	22,645,457	20,895,262
Bonds	42,726,793	40,265,465
Total consolidated obligations, net	<u>65,372,250</u>	<u>61,160,727</u>
Accrued interest payable	190,180	179,728
Affordable Housing Program payable (Note 9)	40,247	40,747
Derivative liabilities, net (Note 7)	2,825	21,067
Mandatorily redeemable capital stock (Note 10)	174,193	168,876
Other liabilities	315,915	289,665
Total liabilities	<u>66,950,917</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: 20,482,199 and 19,306,333, respectively	2,048,220	1,930,633
Class B-2 issued and outstanding shares: 3,028 and 3,192, respectively	303	319
Total capital stock	<u>2,048,523</u>	<u>1,930,952</u>
Retained earnings:		
Unrestricted	856,911	855,311
Restricted	236,142	222,499
Total retained earnings	<u>1,093,053</u>	<u>1,077,810</u>
Total accumulated other comprehensive income (Note 11)	<u>57,300</u>	<u>41,687</u>
Total capital	<u>3,198,876</u>	<u>3,050,449</u>
Total liabilities and capital	<u>\$ 70,149,793</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		Six Months Ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Interest Income:				
Advances	\$ 222,146	\$ 177,745	\$ 433,900	\$ 321,539
Interest-bearing deposits	5,421	3,871	9,687	7,079
Securities purchased under agreements to resell	25,846	15,715	45,660	20,812
Federal funds sold	20,134	7,633	40,515	19,921
Trading securities	10,654	—	13,455	—
Available-for-sale securities	56,786	47,924	106,267	88,490
Held-to-maturity securities	38,973	37,120	79,857	72,040
Mortgage loans held for portfolio	93,446	85,575	189,699	169,129
Other interest income	—	5	—	17
Total interest income	<u>473,406</u>	<u>375,588</u>	<u>919,040</u>	<u>699,027</u>
Interest Expense:				
Consolidated obligation discount notes	139,139	90,099	258,513	160,457
Consolidated obligation bonds	268,849	211,068	531,858	389,296
Deposits	3,521	2,633	6,515	4,610
Mandatorily redeemable capital stock	2,353	1,885	5,071	4,630
Total interest expense	<u>413,862</u>	<u>305,685</u>	<u>801,957</u>	<u>558,993</u>
Net interest income	59,544	69,903	117,083	140,034
Provision for (reversal of) credit losses	(40)	(357)	14	(461)
Net interest income after provision for credit losses	<u>59,584</u>	<u>70,260</u>	<u>117,069</u>	<u>140,495</u>
Other Income:				
Net realized gains from sale of available-for-sale securities	—	32,407	—	32,407
Net realized losses from sale of held-to-maturity securities	—	(45)	—	(45)
Net gains on trading securities	16,585	—	20,656	—
Net gains (losses) on derivatives and hedging activities	(14,365)	(2,988)	(17,787)	2,944
Service fees	202	280	395	505
Standby letters of credit fees	143	193	302	291
Other, net	903	461	2,918	393
Total other income	<u>3,468</u>	<u>30,308</u>	<u>6,484</u>	<u>36,495</u>
Other Expenses:				
Compensation and benefits	13,424	12,881	27,557	25,858
Other operating expenses	7,146	6,932	13,120	13,350
Federal Housing Finance Agency	1,001	843	1,997	1,763
Office of Finance	1,009	1,240	2,145	2,431
Other	1,284	1,993	2,372	2,884
Total other expenses	<u>23,864</u>	<u>23,889</u>	<u>47,191</u>	<u>46,286</u>
Income before assessments	39,188	76,679	76,362	130,704
Affordable Housing Program assessments	4,154	7,856	8,143	13,533
Net income	<u>\$ 35,034</u>	<u>\$ 68,823</u>	<u>\$ 68,219</u>	<u>\$ 117,171</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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income	\$ 35,034	\$ 68,823	\$ 68,219	\$ 117,171
Other Comprehensive Income:				
Net change in unrealized gains (losses) on available-for-sale securities	(7,924)	(12,581)	18,981	9,972
Net non-credit portion of other-than-temporary impairment losses	—	(29,300)	—	(29,271)
Pension benefits, net	(3,715)	(6,539)	(3,368)	(6,216)
Total other comprehensive income (loss)	(11,639)	(48,420)	15,613	(25,515)
Total comprehensive income	<u>\$ 23,395</u>	<u>\$ 20,403</u>	<u>\$ 83,832</u>	<u>\$ 91,656</u>

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

Federal Home Loan Bank of Indianapolis
Statements of Capital
Three Months Ended June 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, March 31, 2018	18,809	\$ 1,880,945	\$ 800,447	\$ 193,221	\$ 993,668	\$ 134,311	\$ 3,008,924
Total comprehensive income			55,058	13,765	68,823	(48,420)	20,403
Proceeds from issuance of capital stock	345	34,412					34,412
Shares reclassified to mandatorily redeemable capital stock, net	(232)	(23,163)					(23,163)
Distributions on mandatorily redeemable capital stock			(5)	—	(5)		(5)
Cash dividends on capital stock (4.25% annualized)			(19,612)	—	(19,612)		(19,612)
Balance, June 30, 2018	<u>18,922</u>	<u>\$ 1,892,194</u>	<u>\$ 835,888</u>	<u>\$ 206,986</u>	<u>\$ 1,042,874</u>	<u>\$ 85,891</u>	<u>\$ 3,020,959</u>
Balance, March 31, 2019	19,853	\$ 1,985,330	\$ 855,314	\$ 229,136	\$ 1,084,450	\$ 68,939	\$ 3,138,719
Total comprehensive income			28,028	7,006	35,034	(11,639)	23,395
Proceeds from issuance of capital stock	632	63,193					63,193
Shares reclassified to mandatorily redeemable capital stock, net	—	—					—
Distributions on mandatorily redeemable capital stock			(1)	—	(1)		(1)
Cash dividends on capital stock (5.50% annualized)			(26,430)	—	(26,430)		(26,430)
Balance, June 30, 2019	<u>20,485</u>	<u>\$ 2,048,523</u>	<u>\$ 856,911</u>	<u>\$ 236,142</u>	<u>\$ 1,093,053</u>	<u>\$ 57,300</u>	<u>\$ 3,198,876</u>

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

Federal Home Loan Bank of Indianapolis
Statements of Capital
Six Months Ended June 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			93,736	23,435	117,171	(25,515)	91,656
Proceeds from issuance of capital stock	576	57,591					57,591
Shares reclassified to mandatorily redeemable capital stock, net	(232)	(23,163)					(23,163)
Distributions on mandatorily redeemable capital stock			(5)	—	(5)		(5)
Cash dividends on capital stock (5.50% annualized)			(50,626)	—	(50,626)		(50,626)
Balance, June 30, 2018	<u>18,922</u>	<u>\$ 1,892,194</u>	<u>\$ 835,888</u>	<u>\$ 206,986</u>	<u>\$ 1,042,874</u>	<u>\$ 85,891</u>	<u>\$ 3,020,959</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			54,576	13,643	68,219	15,613	83,832
Proceeds from issuance of capital stock	1,196	119,680					119,680
Shares reclassified to mandatorily redeemable capital stock, net	(21)	(2,109)					(2,109)
Distributions on mandatorily redeemable capital stock			(1)	—	(1)		(1)
Cash dividends on capital stock (5.50% annualized)			(52,975)	—	(52,975)		(52,975)
Balance, June 30, 2019	<u>20,485</u>	<u>\$ 2,048,523</u>	<u>\$ 856,911</u>	<u>\$ 236,142</u>	<u>\$ 1,093,053</u>	<u>\$ 57,300</u>	<u>\$ 3,198,876</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)

	Six Months Ended June 30,	
	2019	2018
Operating Activities:		
Net income	\$ 68,219	\$ 117,171
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Amortization and depreciation	65,681	40,516
Changes in net derivative and hedging activities	(279,398)	131,793
Provision for (reversal of) credit losses	14	(461)
Net gains on trading securities	(20,656)	—
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	(24,853)	(8,921)
Other assets	(3,598)	4,724
Accrued interest payable	10,213	22,467
Other liabilities	9,280	17,063
Total adjustments, net	(243,317)	174,819
Net cash provided by (used in) operating activities	(175,098)	291,990
Investing Activities:		
Net change in:		
Interest-bearing deposits	268,159	(206,548)
Securities purchased under agreements to resell	(1,036,984)	(1,320,066)
Federal funds sold	227,000	(122,000)
Trading securities:		
Purchases	(3,172,134)	—
Available-for-sale securities:		
Proceeds from maturities	289,500	69,662
Proceeds from sales	—	203,841
Purchases	(595,818)	(481,325)
Held-to-maturity securities:		
Proceeds from maturities	577,125	392,057
Proceeds from sales	—	41,226
Purchases	—	(352,231)
Advances:		
Principal repayments	230,990,466	165,153,875
Disbursements to members	(231,826,261)	(165,114,221)
Mortgage loans held for portfolio:		
Principal collections	605,627	589,590
Purchases from members	(587,879)	(1,137,284)
Purchases of premises, software, and equipment	(3,605)	(2,487)
Loans to other Federal Home Loan Banks:		
Principal repayments	—	400,000
Disbursements	—	(400,000)
Net cash provided by (used in) investing activities	(4,264,804)	(2,285,911)

(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)

	Six Months Ended June 30,	
	2019	2018
Financing Activities:		
Changes in deposits	270,707	86,116
Net payments on derivative contracts with financing elements	1,296	(895)
Net proceeds from issuance of consolidated obligations:		
Discount notes	151,187,829	179,134,205
Bonds	13,680,362	8,868,317
Payments for matured and retired consolidated obligations:		
Discount notes	(149,470,837)	(177,520,886)
Bonds	(11,323,625)	(8,542,040)
Proceeds from issuance of capital stock	119,680	57,591
Proceeds from issuance of mandatorily redeemable capital stock	3,704	—
Payments for redemption/repurchase of mandatorily redeemable capital stock	(497)	(6,577)
Dividend payments on capital stock	(52,975)	(50,626)
Net cash provided by (used in) financing activities	<u>4,415,644</u>	<u>2,025,205</u>
Net increase (decrease) in cash and due from banks	(24,258)	31,284
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>\$ 76,477</u>	<u>\$ 86,553</u>
Supplemental Disclosures:		
Interest payments	\$ 728,901	\$ 498,725
Purchases of securities, traded but not yet settled	—	100,643
Affordable Housing Program payments	8,643	10,065
Capitalized interest on certain held-to-maturity securities	3,289	2,749
Par value of shares reclassified to mandatorily redeemable capital stock, net	2,109	23,163

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 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 six months ended June 30, 2019 of \$8,575 and \$22,451, 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.

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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net gains on trading securities held at period end	\$ 16,585	\$ —	\$ 20,656	\$ —
Net gains (losses) on trading securities that sold/matured during the period	—	—	—	—
Net gains on trading securities	<u>\$ 16,585</u>	<u>\$ —</u>	<u>\$ 20,656</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
	June 30, 2019			
GSE and TVA debentures	\$ 4,094,182	\$ 34,685	\$ (126)	\$ 4,128,741
GSE MBS	4,229,618	43,231	(5,823)	4,267,026
Total AFS securities	<u>\$ 8,323,800</u>	<u>\$ 77,916</u>	<u>\$ (5,949)</u>	<u>\$ 8,395,767</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
June 30, 2019						
GSE and TVA debentures	\$ 41,574	\$ (126)	\$ —	\$ —	\$ 41,574	\$ (126)
GSE MBS	996,946	(4,557)	143,310	(1,266)	1,140,256	(5,823)
Total impaired AFS securities	<u>\$ 1,038,520</u>	<u>\$ (4,683)</u>	<u>\$ 143,310</u>	<u>\$ (1,266)</u>	<u>\$ 1,181,830</u>	<u>\$ (5,949)</u>
December 31, 2018						
GSE MBS	\$ 1,256,816	\$ (12,269)	\$ —	\$ —	\$ 1,256,816	\$ (12,269)
Total impaired AFS securities	<u>\$ 1,256,816</u>	<u>\$ (12,269)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,256,816</u>	<u>\$ (12,269)</u>

Realized Gains and Losses. There were no sales of AFS securities during the three and six months ended June 30, 2019. As of June 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 three months ended June 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
June 30, 2019				
MBS:				
Other U.S. obligations - guaranteed MBS	\$ 3,284,393	\$ 7,004	\$ (10,851)	\$ 3,280,546
GSE MBS	1,804,030	15,422	(2,420)	1,817,032
Total HTM securities	<u>\$ 5,088,423</u>	<u>\$ 22,426</u>	<u>\$ (13,271)</u>	<u>\$ 5,097,578</u>
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	<u>\$ 5,673,720</u>	<u>\$ 18,707</u>	<u>\$ (16,282)</u>	<u>\$ 5,676,145</u>

⁽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.

June 30, 2019	Less than 12 months		12 months or More		Total	
	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses
MBS:						
Other U.S. obligations - guaranteed MBS	\$ 1,060,651	\$ (7,658)	\$ 604,717	\$ (3,193)	\$ 1,665,368	\$ (10,851)
GSE MBS	112,610	(108)	706,867	(2,312)	819,477	(2,420)
Total impaired HTM securities	<u>\$ 1,173,261</u>	<u>\$ (7,766)</u>	<u>\$ 1,311,584</u>	<u>\$ (5,505)</u>	<u>\$ 2,484,845</u>	<u>\$ (13,271)</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 and six months ended June 30, 2019. As of June 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 three months ended June 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 June 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	June 30, 2019		December 31, 2018	
	Amount	WAIR %	Amount	WAIR %
Overdrawn demand and overnight deposit accounts	\$ 1,540	4.82	\$ —	—
Due in 1 year or less	14,533,278	2.41	15,595,985	2.47
Due after 1 year through 2 years	2,772,361	2.22	2,957,861	2.19
Due after 2 years through 3 years	1,705,538	2.35	2,444,486	2.46
Due after 3 years through 4 years	2,798,794	2.42	2,139,695	2.36
Due after 4 years through 5 years	3,824,147	2.51	1,977,925	2.76
Thereafter	8,029,497	2.40	7,713,409	2.41
Total advances, par value	33,665,155	2.40	32,829,361	2.44
Fair-value hedging adjustments	223,316		(106,499)	
Unamortized swap termination fees associated with modified advances, net of deferred prepayment fees	2,296		4,806	
Total advances	\$ 33,890,767		\$ 32,727,668	

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

	Earlier of Redemption or Next Call Date		Earlier of Redemption or Next Put Date	
	June 30, 2019	December 31, 2018	June 30, 2019	December 31, 2018
Overdrawn demand and overnight deposit accounts	\$ 1,540	\$ —	\$ 1,540	\$ —
Due in 1 year or less	21,307,139	22,574,897	15,789,378	15,595,985
Due after 1 year through 2 years	2,189,212	2,061,411	3,665,361	3,682,461
Due after 2 years through 3 years	1,453,238	1,356,186	2,525,938	3,660,486
Due after 3 years through 4 years	2,075,604	1,581,905	3,319,299	2,547,995
Due after 4 years through 5 years	2,323,647	1,425,525	3,739,647	2,633,030
Thereafter	4,314,775	3,829,437	4,623,992	4,709,404
Total advances, par value	\$ 33,665,155	\$ 32,829,361	\$ 33,665,155	\$ 32,829,361

Credit Risk Exposure and Security Terms. At June 30, 2019 and December 31, 2018, our top five borrowers held 42% 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 June 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	June 30, 2019	December 31, 2018
Fixed-rate long-term mortgages	\$ 10,186,522	\$ 10,145,476
Fixed-rate medium-term ⁽¹⁾ mortgages	931,624	992,059
Total mortgage loans held for portfolio, UPB	11,118,146	11,137,535
Unamortized premiums	248,770	251,778
Unamortized discounts	(2,348)	(2,415)
Fair-value hedging adjustments	(134)	(1,320)
Allowance for loan losses	(600)	(600)
Total mortgage loans held for portfolio, net	<u>\$ 11,363,834</u>	<u>\$ 11,384,978</u>

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

Type	June 30, 2019	December 31, 2018
Conventional	\$ 10,769,196	\$ 10,769,980
Government-guaranteed or -insured	348,950	367,555
Total mortgage loans held for portfolio, UPB	<u>\$ 11,118,146</u>	<u>\$ 11,137,535</u>

Product	June 30, 2019	December 31, 2018
MPP	\$ 10,871,758	\$ 10,875,079
MPF Program	246,388	262,456
Total mortgage loans held for portfolio, UPB	<u>\$ 11,118,146</u>	<u>\$ 11,137,535</u>

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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Liability, beginning of period	\$ 176,637	\$ 153,274	\$ 174,096	\$ 148,715
Additions	3,920	8,325	6,990	13,471
Claims paid	(55)	(79)	(142)	(249)
Distributions to PFIs	(428)	(181)	(870)	(598)
Liability, end of period	<u>\$ 180,074</u>	<u>\$ 161,339</u>	<u>\$ 180,074</u>	<u>\$ 161,339</u>

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 June 30, 2019	Conventional	Government	Total
Past due:			
30-59 days	\$ 36,192	\$ 8,740	\$ 44,932
60-89 days	9,371	1,643	11,014
90 days or more	10,709	2,023	12,732
Total past due	56,272	12,406	68,678
Total current	11,003,241	342,313	11,345,554
Total mortgage loans, recorded investment ⁽¹⁾	<u>\$ 11,059,513</u>	<u>\$ 354,719</u>	<u>\$ 11,414,232</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 June 30, 2019	Conventional	Government	Total
In process of foreclosure ⁽²⁾	\$ 4,877	\$ —	\$ 4,877
Serious delinquency rate ⁽³⁾	0.10%	0.57%	0.11%
Past due 90 days or more still accruing interest ⁽⁴⁾	\$ 9,777	\$ 2,023	\$ 11,800
On non-accrual status	\$ 1,577	\$ —	\$ 1,577

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	June 30, 2019	December 31, 2018
MPP estimated incurred losses remaining after borrower's equity, before credit enhancements ⁽¹⁾	\$ 4,952	\$ 3,505
Portion of estimated incurred losses recoverable from credit enhancements:		
PMI	(769)	(627)
LRA ⁽²⁾	(2,492)	(1,137)
SMI	(1,206)	(1,256)
Total portion recoverable from credit enhancements	(4,467)	(3,020)
Allowance for unrecoverable PMI/SMI	15	15
Allowance for MPP loan losses	500	500
Allowance for MPF Program loan losses	100	100
Allowance for loan losses	<u>\$ 600</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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Balance, beginning of period	\$ 600	\$ 850	\$ 600	\$ 850
Charge-offs	(21)	(33)	(75)	(183)
Recoveries	61	140	61	394
Provision for (reversal of) loan losses	(40)	(357)	14	(461)
Balance, end of period	<u>\$ 600</u>	<u>\$ 600</u>	<u>\$ 600</u>	<u>\$ 600</u>

Allowance for Loan Losses by Impairment Methodology	June 30, 2019	December 31, 2018
Conventional loans collectively evaluated for impairment	\$ 485	\$ 563
Conventional loans individually evaluated for impairment ⁽¹⁾	115	37
Total allowance for loan losses	<u>\$ 600</u>	<u>\$ 600</u>

Recorded Investment by Impairment Methodology	June 30, 2019	December 31, 2018
Conventional loans collectively evaluated for impairment	\$ 11,045,639	\$ 11,048,075
Conventional loans individually evaluated for impairment ⁽¹⁾	13,874	13,430
Total recorded investment in conventional loans	<u>\$ 11,059,513</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 June 30, 2019 and December 31, 2018 of \$1,395 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 June 30, 2019 and December 31, 2018 includes \$9 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 June 30, 2019 was \$660, for which we have posted collateral in cash, including accrued interest, of \$996 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 June 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 June 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.

June 30, 2019	Notional Amount	Estimated Fair Value of Derivative Assets	Estimated Fair Value of Derivative Liabilities
Derivatives designated as hedging instruments:			
Interest-rate swaps	\$ 37,134,290	\$ 48,789	\$ 309,583
Total derivatives designated as hedging instruments	37,134,290	48,789	309,583
Derivatives not designated as hedging instruments:			
Interest-rate swaps	4,597,750	754	666
Swaptions	1,650,000	163	—
Interest-rate caps/floors	679,500	997	—
Interest-rate forwards	86,400	—	143
MDCs	85,748	163	5
Total derivatives not designated as hedging instruments	7,099,398	2,077	814
Total derivatives before adjustments	\$ 44,233,688	50,866	310,397
Netting adjustments and cash collateral ⁽¹⁾		106,270	(307,572)
Total derivatives, net		\$ 157,136	\$ 2,825
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 June 30, 2019 and December 31, 2018, including accrued interest, totaled \$414,838 and \$127,952, respectively. Cash collateral received from counterparties and held at June 30, 2019 and December 31, 2018, including accrued interest, totaled \$996 and \$85,395, respectively. At June 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.

	June 30, 2019		December 31, 2018	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
Derivative instruments meeting netting requirements:				
Gross recognized amount				
Uncleared	\$ 45,176	\$ 308,665	\$ 174,725	\$ 106,333
Cleared	5,527	1,584	1,931	17,104
Total gross recognized amount	50,703	310,249	176,656	123,437
Gross amounts of netting adjustments and cash collateral				
Uncleared	(42,244)	(305,988)	(168,426)	(85,491)
Cleared	148,514	(1,584)	108,388	(17,104)
Total gross amounts of netting adjustments and cash collateral	106,270	(307,572)	(60,038)	(102,595)
Net amounts after netting adjustments and cash collateral				
Uncleared	2,932	2,677	6,299	20,842
Cleared	154,041	—	110,319	—
Total net amounts after netting adjustments and cash collateral	156,973	2,677	116,618	20,842
Derivative instruments not meeting netting requirements ⁽¹⁾	163	148	146	225
Total derivatives, at estimated fair value	\$ 157,136	\$ 2,825	\$ 116,764	\$ 21,067

⁽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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net gain (loss) related to fair-value hedge ineffectiveness:				
Interest-rate swaps	\$ —	\$ (715)	\$ —	\$ 6,609
Total net gain (loss) related to fair-value hedge ineffectiveness	—	(715)	—	6,609
Net gain (loss) on derivatives not designated as hedging instruments:				
Economic hedges:				
Interest-rate swaps	(12,579)	1,413	(12,086)	1,585
Swaptions	(421)	(177)	(593)	(235)
Interest-rate caps/floors	553	117	(2)	165
Interest-rate forwards	(580)	(287)	(1,219)	961
Net interest settlements	(1,971)	(1,766)	(5,088)	(2,404)
MDCs	633	(300)	1,201	(1,670)
Total net gain (loss) on derivatives not designated as hedging instruments	(14,365)	(1,000)	(17,787)	(1,598)
Price alignment interest ⁽¹⁾	—	(1,273)	—	(2,067)
Net gains (losses) on derivatives and hedging activities in other income	\$ (14,365)	\$ (2,988)	\$ (17,787)	\$ 2,944

⁽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 six months ended June 30, 2019. Prior period amounts presented have not been reclassified. See *Note 2 - Recently Adopted 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 June 30, 2019	Advances	Investments	CO Bonds	Total
Changes in fair value:				
Hedged items	\$ 230,420	\$ 229,361	\$ (54,303)	\$ 405,478
Derivatives	(230,259)	(236,170)	52,376	(414,053)
Net changes in fair value before price alignment interest	161	(6,809)	(1,927)	(8,575)
Price alignment interest ⁽¹⁾	(55)	(158)	(59)	(272)
Net interest settlements on derivatives ⁽²⁾⁽³⁾	20,226	12,128	(11,645)	20,709
Amortization/accretion of gains (losses) on active hedging relationships	—	96	115	211
Net gains (losses) on qualifying fair-value hedging relationships	20,332	5,257	(13,516)	12,073
Amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	5	—	(2,694)	(2,689)
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 20,337</u>	<u>\$ 5,257</u>	<u>\$ (16,210)</u>	<u>\$ 9,384</u>
Three Months Ended June 30, 2018				
Changes in fair value:				
Hedged items	\$ (21,767)	\$ (45,249)	\$ 13,604	\$ (53,412)
Derivatives	22,335	44,764	(14,402)	52,697
Net changes in fair value ⁽⁴⁾	568	(485)	(798)	(715)
Net interest settlements on derivatives ⁽²⁾⁽³⁾	13,565	4,487	(12,510)	5,542
Amortization/accretion of gains (losses) on active hedging relationships	—	54	92	146
Net gains (losses) on qualifying fair-value hedging relationships	14,133	4,056	(13,216)	4,973
Add: amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	(11)	—	(1,597)	(1,608)
Less: net changes in fair value ⁽⁴⁾	(568)	485	798	715
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 13,554</u>	<u>\$ 4,541</u>	<u>\$ (14,015)</u>	<u>\$ 4,080</u>

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

Six Months Ended June 30, 2019	Advances	Investments	CO Bonds	Total
Changes in fair value:				
Hedged items	\$ 330,610	\$ 367,154	\$ (98,875)	\$ 598,889
Derivatives	(335,101)	(385,206)	98,967	(621,340)
Net changes in fair value before price alignment interest	(4,491)	(18,052)	92	(22,451)
Price alignment interest ⁽¹⁾	(305)	(1,078)	(6)	(1,389)
Net interest settlements on derivatives ⁽²⁾⁽³⁾	43,458	25,611	(30,597)	38,472
Amortization/accretion of gains (losses) on active hedging relationships	—	176	185	361
Net gains (losses) on qualifying fair-value hedging relationships	38,662	6,657	(30,326)	14,993
Amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	(2)	—	(6,164)	(6,166)
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 38,660</u>	<u>\$ 6,657</u>	<u>\$ (36,490)</u>	<u>\$ 8,827</u>

Six Months Ended June 30, 2018

Changes in fair value:				
Hedged items	\$ (122,515)	\$ (195,831)	\$ 98,838	\$ (219,508)
Derivatives	125,943	199,091	(98,917)	226,117
Net changes in fair value ⁽⁴⁾	3,428	3,260	(79)	6,609
Net interest settlements on derivatives ⁽²⁾⁽³⁾	14,904	1,177	(11,246)	4,835
Amortization/accretion of gains (losses) on active hedging relationships	—	140	181	321
Net gains (losses) on qualifying fair-value hedging relationships	18,332	4,577	(11,144)	11,765
Add: amortization/accretion of gains (losses) on discontinued fair-value hedging relationships	(23)	—	(2,298)	(2,321)
Less: net changes in fair value ⁽⁴⁾	<u>(3,428)</u>	<u>(3,260)</u>	<u>79</u>	<u>(6,609)</u>
Net gains (losses) on derivatives and hedging activities in net interest income ⁽³⁾	<u>\$ 14,881</u>	<u>\$ 1,317</u>	<u>\$ (13,363)</u>	<u>\$ 2,835</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) Included in other income in 2018.

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

June 30, 2019	Advances	Investments	CO Bonds
Amortized cost of hedged items ⁽¹⁾	<u>\$ 16,125,040</u>	<u>\$ 8,323,801</u>	<u>\$ 14,448,619</u>
Cumulative basis adjustments included in amortized cost:			
For active fair-value hedging relationships	\$ 223,316	\$ 131,704	\$ 2,345
For discontinued fair-value hedging relationships	—	—	(107)
Total cumulative fair-value hedging basis adjustments on hedged items ⁽²⁾	<u>\$ 223,316</u>	<u>\$ 131,704</u>	<u>\$ 2,238</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 June 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	June 30, 2019	December 31, 2018
Book value	\$ 22,645,457	\$ 20,895,262
Par value	\$ 22,716,335	\$ 20,952,650
Weighted average effective interest rate	2.37%	2.34%

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

Year of Contractual Maturity	June 30, 2019		December 31, 2018	
	Amount	WAIR%	Amount	WAIR%
Due in 1 year or less	\$ 23,250,685	2.17	\$ 18,456,870	2.07
Due after 1 year through 2 years	6,795,495	2.18	8,823,285	2.30
Due after 2 years through 3 years	2,534,970	2.37	2,640,620	2.42
Due after 3 years through 4 years	2,958,750	2.36	3,024,000	2.33
Due after 4 years through 5 years	977,625	2.66	998,375	2.54
Thereafter	6,211,350	3.19	6,431,700	3.21
Total CO bonds, par value	42,728,875	2.36	40,374,850	2.36
Unamortized premiums	22,164		23,493	
Unamortized discounts	(14,021)		(15,992)	
Unamortized concessions	(12,463)		(14,085)	
Fair-value hedging adjustments	2,238		(102,801)	
Total CO bonds	<u>\$ 42,726,793</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	June 30, 2019	December 31, 2018
Non-callable / non-putable	\$ 28,030,875	\$ 27,462,850
Callable	14,698,000	12,912,000
Total CO bonds, par value	<u>\$ 42,728,875</u>	<u>\$ 40,374,850</u>

Year of Contractual Maturity or Next Call Date	June 30, 2019	December 31, 2018
Due in 1 year or less	\$ 35,446,685	\$ 30,331,870
Due after 1 year through 2 years	3,615,495	6,069,285
Due after 2 years through 3 years	805,970	1,043,620
Due after 3 years through 4 years	719,750	626,000
Due after 4 years through 5 years	352,625	503,375
Thereafter	1,788,350	1,800,700
Total CO bonds, par value	<u>\$ 42,728,875</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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Liability at beginning of period	\$ 42,841	\$ 35,086	\$ 40,747	\$ 32,166
Assessment (expense)	4,154	7,856	8,143	13,533
Subsidy usage, net ⁽¹⁾	(6,748)	(7,308)	(8,643)	(10,065)
Liability at end of period	<u>\$ 40,247</u>	<u>\$ 35,634</u>	<u>\$ 40,247</u>	<u>\$ 35,634</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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Liability at beginning of period	\$ 174,202	\$ 163,782	\$ 168,876	\$ 164,322
Reclassification from capital stock	—	23,163	2,109	23,163
Proceeds from issuance ⁽¹⁾	—	—	3,704	—
Redemptions/repurchases	(10)	(6,037)	(497)	(6,577)
Accrued distributions	1	5	1	5
Liability at end of period	<u>\$ 174,193</u>	<u>\$ 180,913</u>	<u>\$ 174,193</u>	<u>\$ 180,913</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	June 30, 2019	December 31, 2018
Year 1 ⁽¹⁾	\$ 819	\$ 1,316
Year 2	73	—
Year 3	8,576	8,649
Year 4	23,163	—
Year 5	5,670	26,723
Thereafter ⁽²⁾	135,892	132,188
Total MRCS	<u>\$ 174,193</u>	<u>\$ 168,876</u>

⁽¹⁾ Balances at June 30, 2019 and December 31, 2018 include \$806 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 June 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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Recorded as interest expense	\$ 2,353	\$ 1,885	\$ 5,071	\$ 4,630
Recorded as distributions from retained earnings	1	5	1	5
Total	\$ 2,354	\$ 1,890	\$ 5,072	\$ 4,635

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 June 30, 2019 and December 31, 2018.

Regulatory Capital Requirements	June 30, 2019		December 31, 2018	
	Required	Actual	Required	Actual
Risk-based capital	\$ 720,732	\$ 3,315,769	\$ 786,925	\$ 3,177,638
Total regulatory capital	\$ 2,805,992	\$ 3,315,769	\$ 2,616,468	\$ 3,177,638
Total regulatory capital-to-asset ratio	4.00%	4.73%	4.00%	4.86%
Leverage capital	\$ 3,507,490	\$ 4,973,654	\$ 3,270,585	\$ 4,766,457
Leverage ratio	5.00%	7.09%	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, March 31, 2018	\$ 115,072	\$ 29,353	\$ (53)	\$ (10,061)	\$ 134,311
OCI before reclassifications:					
Net change in unrealized gains (losses)	(12,581)	389	—	—	(12,192)
Net change in fair value	—	2,665	—	—	2,665
Accretion of non-credit losses	—	—	53	—	53
Reclassifications from OCI to net income:					
Net realized gains from sale of AFS securities	—	(32,407)	—	—	(32,407)
Pension benefits, net	—	—	—	(6,539)	(6,539)
Total other comprehensive income (loss)	(12,581)	(29,353)	53	(6,539)	(48,420)
Balance, June 30, 2018	\$ 102,491	\$ —	\$ —	\$ (16,600)	\$ 85,891
Balance, March 31, 2019	\$ 79,891	\$ —	\$ —	\$ (10,952)	\$ 68,939
OCI before reclassifications:					
Net change in unrealized gains (losses)	(7,924)	—	—	—	(7,924)
Reclassifications from OCI to net income:					
Pension benefits, net	—	—	—	(3,715)	(3,715)
Total other comprehensive income (loss)	(7,924)	—	—	(3,715)	(11,639)
Balance, June 30, 2019	\$ 71,967	\$ —	\$ —	\$ (14,667)	\$ 57,300

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)	9,972	392	—	—	10,364
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	—	—	—	(6,216)	(6,216)
Total other comprehensive income (loss)	9,972	(29,322)	51	(6,216)	(25,515)
Balance, June 30, 2018	<u>\$ 102,491</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (16,600)</u>	<u>\$ 85,891</u>
Balance, December 31, 2018	\$ 52,986	\$ —	\$ —	\$ (11,299)	\$ 41,687
OCI before reclassifications:					
Net change in unrealized gains (losses)	18,981	—	—	—	18,981
Reclassifications from OCI to net income:					
Pension benefits, net	—	—	—	(3,368)	(3,368)
Total other comprehensive income (loss)	18,981	—	—	(3,368)	15,613
Balance, June 30, 2019	<u>\$ 71,967</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (14,667)</u>	<u>\$ 57,300</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 June 30, 2019			Three Months Ended June 30, 2018		
	Traditional	Mortgage Loans	Total	Traditional	Mortgage Loans	Total
Net interest income	\$ 44,218	\$ 15,326	\$ 59,544	\$ 53,672	\$ 16,231	\$ 69,903
Provision for (reversal of) credit losses	—	(40)	(40)	—	(357)	(357)
Other income (loss)	3,215	253	3,468	31,058	(750)	30,308
Other expenses	20,400	3,464	23,864	20,433	3,456	23,889
Income before assessments	27,033	12,155	39,188	64,297	12,382	76,679
Affordable Housing Program assessments	2,939	1,215	4,154	6,618	1,238	7,856
Net income	<u>\$ 24,094</u>	<u>\$ 10,940</u>	<u>\$ 35,034</u>	<u>\$ 57,679</u>	<u>\$ 11,144</u>	<u>\$ 68,823</u>
	Six Months Ended June 30, 2019			Six Months Ended June 30, 2018		
	Traditional	Mortgage Loans	Total	Traditional	Mortgage Loans	Total
Net interest income	\$ 83,445	\$ 33,638	\$ 117,083	\$ 105,996	\$ 34,038	\$ 140,034
Provision for (reversal of) credit losses	—	14	14	—	(461)	(461)
Other income (loss)	6,400	84	6,484	37,400	(905)	36,495
Other expenses	40,376	6,815	47,191	39,249	7,037	46,286
Income before assessments	49,469	26,893	76,362	104,147	26,557	130,704
Affordable Housing Program assessments	5,454	2,689	8,143	10,877	2,656	13,533
Net income	<u>\$ 44,015</u>	<u>\$ 24,204</u>	<u>\$ 68,219</u>	<u>\$ 93,270</u>	<u>\$ 23,901</u>	<u>\$ 117,171</u>

The following table presents the asset balances by operating segment.

By Date	Traditional	Mortgage Loans	Total
June 30, 2019	\$ 58,785,959	\$ 11,363,834	\$ 70,149,793
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	June 30, 2019					
	Carrying Value	Estimated Fair Value				Netting Adjustments ⁽¹⁾
		Total	Level 1	Level 2	Level 3	
Assets:						
Cash and due from banks	\$ 76,477	\$ 76,477	\$ 76,477	\$ —	\$ —	\$ —
Interest-bearing deposits	656,051	656,051	655,575	476	—	—
Securities purchased under agreements to resell	4,249,710	4,249,721	—	4,249,721	—	—
Federal funds sold	2,858,000	2,858,000	—	2,858,000	—	—
Trading securities	3,192,790	3,192,790	—	3,192,790	—	—
AFS securities	8,395,767	8,395,767	—	8,395,767	—	—
HTM securities	5,088,423	5,097,578	—	5,097,578	—	—
Advances	33,890,767	33,850,844	—	33,850,844	—	—
Mortgage loans held for portfolio, net	11,363,834	11,433,525	—	11,425,719	7,806	—
Accrued interest receivable	140,913	140,913	—	140,913	—	—
Derivative assets, net	157,136	157,136	—	50,866	—	106,270
Grantor trust assets ⁽²⁾	24,247	24,247	24,247	—	—	—
Liabilities:						
Deposits	855,307	855,307	—	855,307	—	—
Consolidated obligations:						
Discount notes	22,645,457	22,652,667	—	22,652,667	—	—
Bonds	42,726,793	43,014,071	—	43,014,071	—	—
Accrued interest payable	190,180	190,180	—	190,180	—	—
Derivative liabilities, net	2,825	2,825	—	310,397	—	(307,572)
MRCS	174,193	174,193	174,193	—	—	—

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.

June 30, 2019	Total	Level 1	Level 2	Level 3	Netting Adjustments ⁽¹⁾
Trading securities:					
U.S. Treasury securities	\$ 3,192,790	\$ —	\$ 3,192,790	\$ —	\$ —
Total trading securities	3,192,790	—	3,192,790	—	—
AFS securities:					
GSE and TVA debentures	4,128,741	—	4,128,741	—	—
GSE MBS	4,267,026	—	4,267,026	—	—
Total AFS securities	8,395,767	—	8,395,767	—	—
Derivative assets:					
Interest-rate related	156,973	—	50,703	—	106,270
Interest-rate forwards	—	—	—	—	—
MDCs	163	—	163	—	—
Total derivative assets, net	157,136	—	50,866	—	106,270
Grantor trust assets ⁽²⁾	24,247	24,247	—	—	—
Total assets at recurring estimated fair value	\$ 11,769,940	\$ 24,247	\$ 11,639,423	\$ —	\$ 106,270
Derivative liabilities:					
Interest-rate related	\$ 2,677	\$ —	\$ 310,249	\$ —	\$ (307,572)
Interest-rate forwards	143	—	143	—	—
MDCs	5	—	5	—	—
Total derivative liabilities, net	2,825	—	310,397	—	(307,572)
Total liabilities at recurring estimated fair value	\$ 2,825	\$ —	\$ 310,397	\$ —	\$ (307,572)
Mortgage loans held for portfolio ⁽³⁾	\$ 1,808	\$ —	\$ —	\$ 1,808	\$ —
Total assets at non-recurring estimated fair value	\$ 1,808	\$ —	\$ —	\$ 1,808	\$ —
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 six months ended June 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	June 30, 2019		
	Expire within one year	Expire after one year	Total
Letters of credit outstanding	\$ 225,917	\$ 119,351	\$ 345,268
Unused lines of credit ⁽¹⁾	1,027,068	—	1,027,068
Commitments to fund additional advances ⁽²⁾	116,960	—	116,960
Commitments to fund or purchase mortgage loans, net ⁽³⁾	85,748	—	85,748

- (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	June 30, 2019		December 31, 2018	
	Par value	% of Total	Par value	% of Total
Capital stock	\$ 48,792	2%	\$ 43,315	2%
Advances	658,255	2%	600,869	2%

The par values at June 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.

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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net capital stock issuances (redemptions and repurchases)	\$ 4,542	\$ —	\$ 4,568	\$ 846
Net advances (repayments)	47,206	4,400	85,445	(92,900)
Mortgage loan purchases	6,734	10,434	11,328	16,789

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

Loans to other FHLBanks	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Disbursements	\$ —	\$ (100,000)	\$ —	\$ (400,000)
Principal repayments	—	100,000	—	400,000

There were no borrowings from other FHLBanks during the three and six months ended June 30, 2019 or 2018. There were no loans to or borrowings from other FHLBanks outstanding at June 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 second quarter of 2019. The duration of the current economic expansion remains at a record length. During the second quarter, the U.S. Gross Domestic Product (GDP) for first quarter 2019 was revised down to an annualized 3.1% from 3.2% in the initial estimate. This compares to an increase of 2.2% in the fourth quarter of 2018. According to the Department of Commerce, GDP rose in the first quarter as a result of increases from exports, personal consumption expenditures, non-residential fixed investment, private inventory investment, and state and local government spending. A preliminary release of GDP for the second quarter of 2019 is 2.1%.

Yields on U.S. Treasuries decreased during the second quarter of 2019 relative to the prevailing yields at the end of the first quarter. Over the course of 2019, certain maturity ranges in the U.S. Treasury yield curve were inverted, meaning the shorter-term bond yields exceeded the longer-term bond yields. This market condition has often been a precursor to slowing economic growth and is one of many leading economic indicators that are often used by economists in economic forecasting. At its meeting in July 2019, the FOMC announced its decision to lower the federal funds target rate by 25 bps to a range of 2.0% to 2.25%, noting that continued expansion of economic activity, strong labor market conditions, and inflation around 2% are the most likely outcomes, but uncertainties about this outlook remain.

Labor markets remained very strong, with unemployment rates near record lows. The long-time lack of wage growth accompanying low unemployment levels appears to be dissipating, as wage inflation begins to take root. Regardless of the causes, low unemployment and wage growth characteristically lead to higher consumer confidence and spending, helping to perpetuate economic growth. The national unemployment rate in 2019 has remained in the 3%-4% range, with the latest reported rate of 3.7% in June 2019.

Led by accommodative monetary and fiscal policy, low interest rates, and strong consumer demand, global economic growth and corporate earnings remained solid. Both the manufacturing and service sectors have continued to expand domestically. Tempering the strong 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, and the repricing of assets and debt. According to the Institute for Supply Management® (ISM®) Manufacturing Business Survey Committee, respondents "...expressed concern about U.S.-China trade turbulence, potential Mexico trade actions and the global economy. Overall, sentiment this month is evenly mixed."

The housing market remained positive, but higher home prices have begun to impact overall sales despite the strength in the overall economy. The Mortgage Bankers Association expects housing demand to remain strong, combined with wage growth and home price growth moderation, leading to favorable housing conditions. Home mortgage refinance applications hit an all-time high in early 2019 for borrowers with large balances.

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				
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018
Statement of Condition:					
Advances	\$ 33,891	\$ 32,830	\$ 32,728	\$ 33,567	\$ 33,888
Mortgage loans held for portfolio, net	11,364	11,398	11,385	11,294	10,888
Cash and short-term investments	7,840	6,787	7,610	8,056	6,279
Investment securities	16,677	14,985	13,378	13,240	13,069
Total assets	70,150	66,383	65,412	66,472	64,452
Discount notes	22,645	21,254	20,895	22,650	21,987
CO bonds	42,727	40,376	40,266	39,564	38,123
Total consolidated obligations	65,372	61,630	61,161	62,214	60,110
MRCS	174	174	169	164	181
Capital stock	2,049	1,985	1,931	1,901	1,892
Retained earnings	1,093	1,084	1,078	1,061	1,043
AOCI	57	70	42	95	86
Total capital	3,199	3,139	3,051	3,057	3,021
Statement of Income:					
Net interest income	\$ 60	\$ 57	\$ 75	\$ 73	\$ 70
Provision for (reversal of) credit losses	—	—	—	—	—
Other income (loss)	3	3	(9)	(7)	31
Other expenses	24	23	23	23	24
AHP assessments	4	4	4	4	8
Net income	<u>\$ 35</u>	<u>\$ 33</u>	<u>\$ 39</u>	<u>\$ 39</u>	<u>\$ 69</u>
Selected Financial Ratios:					
Net interest margin ⁽¹⁾	0.35%	0.36%	0.46%	0.44%	0.45%
Return on average equity ⁽²⁾	4.45%	4.37%	5.01%	5.05%	6.20%
Return on average assets ⁽²⁾	0.20%	0.21%	0.24%	0.23%	0.30%
Weighted average dividend rate ⁽³⁾	5.50%	5.50%	4.50%	4.50%	4.25%
Dividend payout ratio ⁽⁴⁾	75.44%	79.99%	55.66%	54.18%	28.50%
Total capital ratio ⁽⁵⁾	4.56%	4.73%	4.66%	4.60%	4.69%
Total regulatory capital ratio ⁽⁶⁾	4.73%	4.89%	4.86%	4.70%	4.83%
Average equity to average assets	4.59%	4.75%	4.70%	4.62%	4.83%

(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 June 30, 2019, March 31, 2019, December 31, 2018, September 30, 2018 and June 30, 2018 would be 80%, 69%, 55%, 31% and 41%, 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 Six Months Ended June 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 June 30,				Six Months Ended June 30,			
	2019	2018	\$ Change	% Change	2019	2018	\$ Change	% Change
Net interest income	\$ 60	\$ 70	\$ (10)	(15%)	\$ 117	\$ 140	\$ (23)	(16%)
Provision for (reversal of) credit losses	—	—	—		—	—	—	
Net interest income after provision for credit losses	60	70	(10)	(15%)	117	140	(23)	(17%)
Other income (loss)	3	31	(28)		6	37	(31)	
Other expenses	24	24	—		47	46	1	
Income before assessments	39	77	(38)	(49%)	76	131	(55)	(42%)
AHP assessments	4	8	(4)		8	14	(6)	
Net income	35	69	(34)	(49%)	68	117	(49)	(42%)
Total other comprehensive income (loss)	(12)	(48)	36		16	(25)	41	
Total comprehensive income	\$ 23	\$ 21	\$ 2	15%	\$ 84	\$ 92	\$ (8)	(9%)

The decrease in net income for the three months ended June 30, 2019 compared to the corresponding period in the prior year 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. The decrease in net income for the six months ended June 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 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 Six Months Ended June 30, 2019. The following table presents the comparative highlights of our changes in financial condition (\$ amounts in millions).

Condensed Statements of Condition	June 30, 2019	December 31, 2018	\$ Change	% Change
Advances	\$ 33,891	\$ 32,728	\$ 1,163	4%
Mortgage loans held for portfolio, net	11,364	11,385	(21)	—%
Cash and short-term investments ⁽¹⁾	7,840	7,610	230	3%
Investment securities and other assets ⁽²⁾	17,055	13,689	3,366	25%
Total assets	\$ 70,150	\$ 65,412	\$ 4,738	7%
Consolidated obligations	\$ 65,372	\$ 61,161	\$ 4,211	7%
MRCS	174	169	5	3%
Other liabilities	1,405	1,031	374	36%
Total liabilities	66,951	62,361	4,590	7%
Capital stock	2,049	1,931	118	6%
Retained earnings ⁽³⁾	1,093	1,078	15	1%
AOCI	57	42	15	37%
Total capital	3,199	3,051	148	5%
Total liabilities and capital	\$ 70,150	\$ 65,412	\$ 4,738	7%
Total regulatory capital ⁽⁴⁾	\$ 3,316	\$ 3,178	\$ 138	4%

(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 June 30, 2019 and December 31, 2018 of \$236 million and \$222 million, respectively.

(4) Total capital less AOCI plus MRCS.

The increase in total assets at June 30, 2019 compared to December 31, 2018 was primarily driven by additions to our liquidity portfolio.

The increase in total liabilities at June 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 June 30, 2019 compared to December 31, 2018 was primarily due to additional capital stock issued and net income, partially offset by dividends to shareholders.

Analysis of Results of Operations for the Three and Six Months Ended June 30, 2019 and 2018.

Net Interest Income. The decrease in net interest income for the three and six months ended June 30, 2019 compared to the corresponding periods in 2018 was primarily due to hedging losses resulting from derivatives in a fair-value relationship. 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 six months ended June 30, 2019 was reduced by \$9 million and \$22 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 June 30,					
	2019			2018		
	Average Balance	Interest Income/Expense	Average Yield ⁽¹⁾	Average Balance	Interest Income/Expense	Average Yield ⁽¹⁾
Assets:						
Federal funds sold and securities purchased under agreements to resell	\$ 7,533	\$ 46	2.45%	\$ 5,211	\$ 24	1.80%
Investment securities ⁽²⁾	15,936	106	2.68%	12,911	86	2.64%
Advances ⁽³⁾	32,651	222	2.73%	32,701	177	2.18%
Mortgage loans held for portfolio ⁽³⁾	11,407	94	3.29%	10,657	85	3.22%
Other assets (interest-earning) ⁽⁴⁾	954	6	2.28%	951	4	1.63%
Total interest-earning assets	68,481	474	2.77%	62,431	376	2.41%
Other assets ⁽⁵⁾	291			467		
Total assets	<u>\$ 68,772</u>			<u>\$ 62,898</u>		
Liabilities and Capital:						
Interest-bearing deposits	\$ 648	3	2.18%	\$ 658	3	1.60%
Discount notes	22,747	140	2.45%	20,744	90	1.74%
CO bonds ⁽³⁾	41,270	269	2.61%	37,781	211	2.24%
MRCS	174	2	5.42%	182	2	4.17%
Total interest-bearing liabilities	64,839	414	2.56%	59,365	306	2.07%
Other liabilities	774			497		
Total capital	3,159			3,036		
Total liabilities and capital	<u>\$ 68,772</u>			<u>\$ 62,898</u>		
Net interest income		<u>\$ 60</u>			<u>\$ 70</u>	
Net spread on interest-earning assets less interest-bearing liabilities			0.21%			0.34%
Net interest margin ⁽⁶⁾			0.35%			0.45%
Average interest-earning assets to interest-bearing liabilities	1.06			1.05		

	Six Months Ended June 30,					
	2019			2018		
	Average Balance	Interest Income/ Expense	Average Yield ⁽¹⁾	Average Balance	Interest Income/ Expense	Average Yield ⁽¹⁾
Assets:						
Federal funds sold and securities purchased under agreements to resell	\$ 7,081	\$ 86	2.45%	\$ 4,991	\$ 41	1.65%
Investment securities ⁽²⁾	15,043	199	2.68%	12,937	161	2.50%
Advances ⁽³⁾	32,065	434	2.73%	32,972	321	1.97%
Mortgage loans held for portfolio ⁽³⁾	11,396	190	3.36%	10,542	169	3.24%
Other assets (interest-earning) ⁽⁴⁾	865	10	2.26%	946	7	1.51%
Total interest-earning assets	66,450	919	2.79%	62,388	699	2.26%
Other assets ⁽⁵⁾	331			461		
Total assets	<u>\$ 66,781</u>			<u>\$ 62,849</u>		
Liabilities and Capital:						
Interest-bearing deposits	\$ 598	6	2.20%	\$ 634	5	1.47%
Discount notes	21,299	259	2.45%	20,667	160	1.57%
CO bonds ⁽³⁾	40,789	532	2.63%	37,879	389	2.07%
MRCs	174	5	5.89%	173	5	5.41%
Total interest-bearing liabilities	62,860	802	2.57%	59,353	559	1.90%
Other liabilities	803			486		
Total capital	3,118			3,010		
Total liabilities and capital	<u>\$ 66,781</u>			<u>\$ 62,849</u>		
Net interest income		<u>\$ 117</u>			<u>\$ 140</u>	
Net spread on interest-earning assets less interest-bearing liabilities			0.22%			0.36%
Net interest margin ⁽⁶⁾			0.36%			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) 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 June 30, 2019 was 2.77%, an increase of 36 bps compared to the corresponding period in 2018, resulting primarily from increases in market interest rates that led to higher yields on advances and investments. The average cost of total interest-bearing liabilities was 2.56%, an increase of 49 bps due to higher funding costs on consolidated obligations. The net effect was a decrease in the net interest spread of 13 bps to 0.21% for the three months ended June 30, 2019 from 0.34% for the corresponding period in 2018. Including the hedging losses from derivatives in a fair-value relationship prospectively in net interest income for the three months ended June 30, 2019 caused 10 bps of that net decrease.

The average yield on total interest-earning assets for the six months ended June 30, 2019 was 2.79%, an increase of 53 bps compared to the corresponding period in 2018, resulting primarily from increases in market interest rates that led to higher yields on advances and investments. The average cost of total interest-bearing liabilities was 2.57%, an increase of 67 bps due to higher funding costs on consolidated obligations. The net effect was a decrease in the net interest spread of 14 bps to 0.22% for the six months ended June 30, 2019 from 0.36% for the corresponding period in 2018. Including the hedging losses from derivatives in a fair-value relationship prospectively in net interest income for the six months ended June 30, 2019 caused 7 bps of that net decrease.

Average Balances. The average balances outstanding of interest-earning assets for the three months ended June 30, 2019 increased by 10% compared to the corresponding period in 2018. The average balance of short-term investments increased by 45% in light of new liquidity guidance from the Finance Agency. The average balance of investment securities increased by 23% 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 7% due to strong demand by our members for Advantage MPP. The increase in average interest-bearing liabilities was due to an increase in consolidated obligations outstanding to fund the increases in the average balances of interest-earning assets.

The average balances outstanding of interest-earning assets for the six months ended June 30, 2019 increased by 7% compared to the corresponding period in 2018. The average balance of short-term investments increased by 42% in light of new liquidity guidance from the Finance Agency. The average balance of investment securities increased by 16% 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 8% due to strong 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 the average balances of interest-earning assets.

Provision for Credit Losses. The change in the provision for (reversal of) credit losses for the three and six months ended June 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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net realized gains from sale of available-for-sale securities	\$ —	\$ 32	\$ —	\$ 32
Net realized losses from sale of held-to-maturity securities	—	—	—	—
Net gains on trading securities	17	—	21	—
Net gains (losses) on derivatives and hedging activities	(15)	(3)	(18)	3
Other	1	2	3	2
Total other income (loss)	\$ 3	\$ 31	\$ 6	\$ 37

The decrease in total other income for the three and six months ended June 30, 2019 compared to the corresponding periods in 2018 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 six months ended June 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 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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net changes in fair value ⁽¹⁾	\$ (9)	\$ —	\$ (22)	\$ 7
Price alignment interest ⁽²⁾	—	(1)	(1)	(2)
Amortization/accretion of gains (losses) on hedging relationships	(2)	(2)	(6)	(2)
Net gains on trading securities, net of swaps	3	—	4	—
Other economic hedging gains (losses)	1	—	4	1
Total gains (losses) from derivatives and hedging activities before net interest settlements	(7)	(3)	(21)	4
Net interest settlements on derivatives ⁽³⁾	19	4	33	2
Total gains (losses) from derivatives and hedging activities	\$ 12	\$ 1	\$ 12	\$ 6

(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 six months ended June 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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Compensation and benefits	\$ 14	\$ 13	\$ 28	\$ 26
Other operating expenses	7	7	13	13
Finance Agency and Office of Finance expenses	2	2	4	4
Other	1	2	2	3
Total other expenses	\$ 24	\$ 24	\$ 47	\$ 46

The increase in total other expenses for the six months ended June 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 months ended June 30, 2019 primarily consisted of unrealized losses on AFS securities. Total OCI for the six months ended June 30, 2019 consisted substantially of unrealized gains on AFS securities. Total OCI for the three and six months ended June 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.

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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net interest income	\$ 44	\$ 54	\$ 83	\$ 106
Provision for (reversal of) credit losses	—	—	—	—
Other income (loss)	3	31	6	37
Other expenses	20	20	40	39
Income before assessments	27	65	49	104
AHP assessments	3	7	5	11
Net income	<u>\$ 24</u>	<u>\$ 58</u>	<u>\$ 44</u>	<u>\$ 93</u>

The decrease in net income for the traditional segment for the three and six months ended June 30, 2019 compared to the corresponding periods in 2018 was primarily due to the non-recurring net realized gain on the sale of all of the Bank's private-label MBS in 2018 and, for the six months, 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.

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 June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net interest income	\$ 16	\$ 16	\$ 34	\$ 34
Provision for (reversal of) credit losses	—	—	—	—
Other income (loss)	—	—	—	—
Other expenses	4	4	7	7
Income before assessments	12	12	27	27
AHP assessments	1	1	3	3
Net income	<u>\$ 11</u>	<u>\$ 11</u>	<u>\$ 24</u>	<u>\$ 24</u>

Net income for the mortgage loans segment for the three and six months ended June 30, 2019 compared to the corresponding periods in 2018 was relatively unchanged.

Analysis of Financial Condition

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

Major Asset Categories	June 30, 2019		December 31, 2018	
	Carrying Value	% of Total	Carrying Value	% of Total
Advances	\$ 33,891	48%	\$ 32,728	50%
Mortgage loans held for portfolio, net	11,364	16%	11,385	17%
Cash and short-term investments	7,840	11%	7,610	12%
Trading securities	3,193	5%	—	—%
Other investment securities	13,484	19%	13,378	21%
Other assets ⁽¹⁾	378	1%	311	—%
Total assets	\$ 70,150	100%	\$ 65,412	100%

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

Total assets were \$70.1 billion as of June 30, 2019, a net increase of \$4.7 billion, or 7%, compared to December 31, 2018, primarily driven by additions to our liquidity portfolio.

Advances. Advances at carrying value totaled \$33.9 billion at June 30, 2019, a net increase of \$1.2 billion, or 4%, compared to December 31, 2018.

The par value of advances to depository members, comprising commercial banks, savings institutions and credit unions, increased by 2%. The par value of advances to insurance company members increased by 3%. Advances to depository institutions, as a percent of total advances outstanding at par value, were 53% at June 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	June 30, 2019		December 31, 2018	
	Par Value	% of Total	Par Value	% of Total
Depository institutions:				
Commercial banks and savings institutions	\$ 14,821	45 %	\$ 14,019	43 %
Credit unions	2,627	8 %	3,099	10 %
Total depository institutions	17,448	53 %	17,118	53 %
Insurance companies:				
Captive insurance companies ⁽¹⁾	2,842	8 %	2,936	9 %
Other insurance companies	13,102	39 %	12,491	38 %
Total insurance companies	15,944	47 %	15,427	47 %
Total members	33,392	100 %	32,545	100 %
Former members	273	— %	284	— %
Total advances	\$ 33,665	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 putable 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	June 30, 2019		December 31, 2018	
	Par Value	% of Total	Par Value	% of Total
Fixed-rate:				
Fixed-rate ⁽¹⁾				
Due in 1 year or less	\$ 13,751	41%	\$ 14,670	45%
Due after 1 year	7,556	23%	6,927	21%
Total	21,307	64%	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	4,629	14%	3,103	10%
Total	4,629	14%	3,103	10%
Other ⁽²⁾				
Due in 1 year or less	127	—%	133	—%
Due after 1 year	132	—%	140	—%
Total	259	—%	273	—%
Total fixed-rate	26,244	78%	25,022	76%
Variable-rate:				
Variable-rate ⁽¹⁾				
Due in 1 year or less	46	—%	349	1%
Due after 1 year	—	—%	—	—%
Total	46	—%	349	1%
Callable or prepayable				
Due in 1 year or less	610	2%	435	1%
Due after 1 year	6,764	20%	7,023	22%
Total	7,374	22%	7,458	23%
Total variable-rate	7,420	22%	7,807	24%
Overdrawn demand and overnight deposit accounts	1	—%	—	—%
Total advances	\$ 33,665	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 43% of the total outstanding, at par, at June 30, 2019, reflecting members' decreased demand for short-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	June 30, 2019		December 31, 2018	
	UPB	% of Total	UPB	% of Total
MPP:				
Conventional Advantage	\$ 9,944	89%	\$ 9,874	89%
Conventional Original	631	6%	688	6%
FHA	297	3%	314	3%
Total MPP	10,872	98%	10,876	98%
MPF Program:				
Conventional	194	2%	208	2%
Government	52	—%	54	—%
Total MPF Program	246	2%	262	2%
Total mortgage loans held for portfolio	\$ 11,118	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 June 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 June 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	June 30, 2019	December 31, 2018	Change
Cash and short-term investments:			
Cash and due from banks	\$ 76	\$ 101	\$ (25)
Interest-bearing deposits	656	1,211	(555)
Securities purchased under agreements to resell	4,250	3,213	1,037
Federal funds sold	2,858	3,085	(227)
Total cash and short-term investments	7,840	7,610	230
Trading securities:			
U.S. Treasury obligations	3,193	—	3,193
Total trading securities	3,193	—	3,193
Other investment securities:			
AFS securities:			
GSE and TVA debentures	4,129	4,277	(148)
GSE MBS	4,267	3,427	840
Total AFS securities	8,396	7,704	692
HTM securities:			
Other U.S. obligations - guaranteed MBS	3,284	3,469	(185)
GSE MBS	1,804	2,205	(401)
Total HTM securities	5,088	5,674	(586)
Total other investment securities	13,484	13,378	106
Total cash and investments, carrying value	\$ 24,517	\$ 20,988	\$ 3,529

Cash and Short-Term Investments. Cash and short-term investments totaled \$7.8 billion at June 30, 2019, an increase of 3% compared to December 31, 2018. Cash and short-term investments as a percent of total assets totaled 11% at June 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 \$3.2 billion at June 30, 2019, of which \$1.7 billion is due in one year or less and \$1.5 billion is due after one year through two years.

As a result, the liquidity portfolio at June 30, 2019 totaled \$11.0 billion, which represented 16% of total assets and an increase of \$3.4 billion, or 45%, from December 31, 2018. Additionally, the mix has changed, with U.S. Treasuries representing 29% of the liquidity portfolio at June 30, 2019.

Other Investment Securities. AFS securities totaled \$8.4 billion at June 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 \$72 million at June 30, 2019, a net increase of \$19 million compared to December 31, 2018, primarily due to changes in interest rates, credit spreads and volatility.

HTM securities totaled \$5.1 billion at June 30, 2019, a net decrease of 10% compared to \$5.7 billion at December 31, 2018. At June 30, 2019, the estimated fair value of our HTM securities totaled \$5.1 billion, of which \$2.5 billion was in an unrealized loss position, an increase of 4% 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 \$13 million at June 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	June 30, 2019		December 31, 2018	
	Amortized Cost	% of Total	Amortized Cost	% of Total
AFS Securities:				
Total non-MBS fixed-rate	\$ 4,094	49%	\$ 4,240	55%
Total MBS fixed-rate	4,230	51%	3,411	45%
Total AFS securities	\$ 8,324	100%	\$ 7,651	100%
HTM Securities:				
MBS:				
Fixed-rate	\$ 891	18%	\$ 936	16%
Variable-rate	4,197	82%	4,738	84%
Total MBS	5,088	100%	5,674	100%
Total HTM securities	\$ 5,088	100%	\$ 5,674	100%
Total other investment securities:				
Total fixed-rate	\$ 9,215	69%	\$ 8,587	64%
Total variable-rate	4,197	31%	4,738	36%
Total other investment securities	\$ 13,412	100%	\$ 13,325	100%

The mix of fixed- vs. variable-rate AFS and HTM securities at June 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 \$67.0 billion at June 30, 2019, a net increase of 7% compared to December 31, 2018, substantially due to an increase in consolidated obligations.

Deposits (Liabilities). Total deposits were \$855 million at June 30, 2019, a net increase of 71% 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 June 30, 2019 totaled \$65.4 billion, a net increase of \$4.2 billion, or 7%, 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	June 30, 2019		December 31, 2018	
	Par Value	% of Total	Par Value	% of Total
Consolidated obligations due in 1 year or less:				
Discount notes	\$ 22,716	35%	\$ 20,953	34%
CO bonds	23,251	35%	18,457	30%
Total due in 1 year or less	45,967	70%	39,410	64%
Long-term CO bonds	19,478	30%	21,918	36%
Total consolidated obligations	\$ 65,445	100%	\$ 61,328	100%

The percentage due in 1 year or less increased from 64% at December 31, 2018 to 70% at June 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.*

The following table presents our variable-rate CO Bonds outstanding by interest-rate index (\$ amounts in millions).

Interest-Rate Index	June 30, 2019	
	Par Value	% of Total
LIBOR-indexed variable-rate		
Due in 2019	\$ 7,935	47%
Due in 2020	6,960	42%
Due in 2021	—	—%
Total LIBOR-indexed variable-rate	14,895	89%
SOFR-indexed variable-rate		
Due in 2019	966	6%
Due in 2020	682	4%
Due in 2021	100	1%
Total SOFR-indexed variable-rate	1,748	11%
Total variable-rate CO Bonds	\$ 16,643	100%

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	June 30, 2019	December 31, 2018
Advances	\$ 15,902	\$ 13,980
Investments	12,062	8,562
Mortgage loans	1,822	1,038
CO bonds	14,448	14,239
Total notional	<u>\$ 44,234</u>	<u>\$ 37,819</u>

The increase in the total notional amount during the six months ended June 30, 2019 of 17% 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 statements of condition (\$ amounts in millions).

June 30, 2019	Advances	Investments	CO Bonds	Total
Cumulative fair-value hedging basis adjustments on hedged items	\$ 223	\$ 132	\$ (2)	\$ 353
Estimated fair value of associated derivatives, net	(221)	(173)	11	(383)
Net cumulative fair-value hedging basis adjustments	<u>\$ 2</u>	<u>\$ (41)</u>	<u>\$ 9</u>	<u>\$ (30)</u>

Total Capital. Total capital at June 30, 2019 was \$3.2 billion, a net increase of \$148 million, or 5%, compared to December 31, 2018, primarily due to additional capital stock issued and net income, partially offset by dividends to shareholders.

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

Components	June 30, 2019	December 31, 2018
Capital stock	64%	63%
Retained earnings	34%	36%
AOCI	2%	1%
Total GAAP capital	<u>100%</u>	<u>100%</u>

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

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

Reconciliation	June 30, 2019	December 31, 2018
Total GAAP capital	\$ 3,199	\$ 3,051
Exclude: AOCI	(57)	(42)
Add: MRCS	174	169
Total regulatory capital	<u>\$ 3,316</u>	<u>\$ 3,178</u>

Even though regulatory capital increased in 2019, the regulatory capital ratio declined from 4.86% at December 31, 2018 to 4.73% at June 30, 2019, primarily due to the significant increase in liquid assets which generate lower returns.

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 \$7.8 billion at June 30, 2019. Our short-term investments generally consist of high-quality financial instruments, many of which mature overnight. Our trading securities totaled \$3.2 billion at June 30, 2019 and consisted solely of U.S. Treasury securities. As a result, our liquidity portfolio at June 30, 2019 totaled \$11.0 billion or 16% of total assets.

During the six months ended June 30, 2019, we maintained sufficient access to funding; our net proceeds from the issuance of consolidated obligations totaled \$164.9 billion. However, to protect us 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, ten 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. 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.

Portions of the Finance Agency's liquidity guidance Advisory Bulletin relating to funding gap measures and the standby letters of credit component of the base case liquidity provisions have been implemented. Phased-in measures for the cash flow component of the base case liquidity provisions began on March 31, 2019 with full implementation planned as required by December 31, 2019.

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 six months ended June 30, 2019 was \$175 million, compared to net cash provided by operating activities for the six months ended June 30, 2018 of \$292 million. The decrease of \$467 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	June 30, 2019		December 31, 2018	
	Amount	% of Total	Amount	% of Total
Capital Stock:				
Depository institutions:				
Commercial banks and savings institutions	\$ 1,051	47%	\$ 985	47%
Credit unions	274	12%	263	12%
Total depository institutions	1,325	59%	1,248	59%
Insurance companies	724	33%	683	33%
CDFIs	—	—%	—	—%
Total capital stock, putable at par value	2,049	92%	1,931	92%
MRCS:				
Captive insurance companies	136	6%	132	6%
Former members ⁽¹⁾	38	2%	37	2%
Total MRCS	174	8%	169	8%
Total regulatory capital stock	\$ 2,223	100%	\$ 2,100	100%

⁽¹⁾ Balances at both June 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	June 30, 2019	December 31, 2018
Member capital stock not subject to outstanding redemption requests	\$ 474	\$ 450
Member capital stock subject to outstanding redemption requests	1	1
MRCS	34	25
Total excess capital stock	\$ 509	\$ 476
Excess stock as a percentage of regulatory capital stock	23%	23%

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

Capital Distributions. On July 25, 2019, our board of directors declared a cash dividend of 5.50% (annualized) on our Class B-1 capital stock and 4.40% (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 June 30, 2019 and December 31, 2018 (\$ amounts in millions).

Risk-Based Capital Components	June 30, 2019	December 31, 2018
Credit risk	\$ 312	\$ 307
Market risk	243	298
Operations risk	166	182
Total risk-based capital requirement	\$ 721	\$ 787
Permanent capital	\$ 3,316	\$ 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 and volatility. Our permanent capital at June 30, 2019 remained well in excess of our total risk-based capital requirement.

Off-Balance Sheet Arrangements

At June 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 June 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 Accounting Guidance.*

Legislative and Regulatory Developments.

Finance Agency Advisory Bulletin 2019-01 - Business Resiliency Management. On May 7, 2019, the Finance Agency issued Advisory Bulletin 2019-01 on Business Resiliency Management for FHLBanks and other entities regulated by the FHFA ("Business Resiliency AB") that communicates the FHFA's expectations with respect to minimizing the impact of disruptions in service from uncontrolled events and the maintenance of business operations at predefined levels. The Business Resiliency AB indicates that a business resiliency program should guide the regulated entity's appropriate responses to disruptions affecting business operations, personnel, equipment, facilities, IT systems, and information assets. In addition, the Business Resiliency AB provides guidance on the elements of a safe and sound business resiliency program, which include governance, risk assessment and business impact analysis, risk mitigation and plan development, testing and analysis, and risk monitoring and program sustainability.

The Business Resiliency AB rescinds Federal Housing Finance Board Advisory Bulletin 2002-03 on disaster recovery planning. We do not expect the Business Resiliency AB to have a material effect on our financial condition or results of operations.

CFTC Staff Advisory on Initial Margin Documentation Requirements. On July 9, 2019, the CFTC issued a staff advisory ("Advisory") on Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants ("Margin Rules"), to clarify that documentation governing the posting, collection, and custody of initial margin is not required to be completed until such time as the aggregate unmarginated exposure to a counterparty (and its margin affiliates) exceeds a threshold of \$50 million. Under the Margin Rules, covered swap entities and non-prudentially regulated swap dealers generally are required to post and collect initial margin with counterparties that are swap dealers or financial end users with material swap exposure. The Margin Rules, however, contain an initial margin threshold amount of \$50 million between a covered swap entity (and its margin affiliates) on the one hand, and its counterparty (and its margin affiliates), on the other hand. The Advisory clarifies that no initial margin documentation is required until the amount of initial margin exchangeable between a covered swap entity (and its margin affiliates) and its counterparty (and its margin affiliates) exceeds that initial margin threshold amount. The Advisory does, however, instruct covered swap entities to closely monitor initial margin amounts if they are approaching the \$50 million threshold with a counterparty and to take appropriate steps to ensure that required documentation is in place at such time as the threshold is reached. The Advisory confirms the September 1, 2020 compliance deadline for us under the Margin Rules. We are currently monitoring developments relating to the Margin Rules and our bilateral derivatives balances.

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 June 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 June 30, 2019, our top borrower held 12% of total advances outstanding, at par, and our top five borrowers held 42% 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 June 30, 2019 totaling \$3.0 billion, or 9% of total advances outstanding, at par value, merged with a non-member depository institution effective August 1, 2019. Of these advances, \$2.7 billion is scheduled to mature in 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).

June 30, 2019	AA	A	Total
Domestic	\$ —	\$ 2,024	\$ 2,024
Australia	870	—	870
Canada	—	620	620
Total unsecured credit exposure	<u>\$ 870</u>	<u>\$ 2,644</u>	<u>\$ 3,514</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 June 30, 2019 these investments totaled 277% 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).

June 30, 2019	Below Investment Grade					Total
	AAA	AA	A	BBB		
Short-term investments:						
Interest-bearing deposits	\$ —	\$ —	\$ 656	\$ —	\$ —	\$ 656
Securities purchased under agreements to resell	—	4,250	—	—	—	4,250
Federal funds sold	—	870	1,988	—	—	2,858
Total short-term investments	—	5,120	2,644	—	—	7,764
Long-term investments:						
U.S. Treasury obligations	—	3,193	—	—	—	3,193
GSE and TVA debentures	—	4,129	—	—	—	4,129
GSE MBS	—	6,071	—	—	—	6,071
Other U.S. obligations - guaranteed RMBS	—	3,284	—	—	—	3,284
Total long-term investments	—	16,677	—	—	—	16,677
Total investments, carrying value	\$ —	\$ 21,797	\$ 2,644	\$ —	\$ —	\$ 24,441
Percentage of total	—%	89%	11%	—%	—%	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 June 30, 2019		
	Original	Advantage	Total
Liability, beginning of period	\$ 7	\$ 170	\$ 177
Additions	—	4	4
Claims paid	—	—	—
Distributions to PFIs	—	(1)	(1)
Liability, end of period	\$ 7	\$ 173	\$ 180

LRA Activity	Six Months Ended June 30, 2019		
	Original	Advantage	Total
Liability, beginning of period	\$ 7	\$ 167	\$ 174
Additions	—	7	7
Claims paid	—	—	—
Distributions to PFIs	—	(1)	(1)
Liability, end of period	\$ 7	\$ 173	\$ 180

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).

June 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 - AA	\$ 282	\$ —	\$ —	\$ —
Uncleared derivatives - A	59	—	—	—
Cleared derivatives ⁽¹⁾	22,955	4	150	154
Liability positions with credit exposure				
Uncleared derivatives - A	9,665	(150)	153	3
Total derivative positions with credit exposure to non-member counterparties	32,961	(146)	303	157
Total derivative positions with credit exposure to member institutions ⁽²⁾	69	—	—	—
Subtotal - derivative positions with credit exposure	33,030	\$ (146)	\$ 303	\$ 157
Derivative positions without credit exposure	11,204			
Total derivative positions	\$ 44,234			

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

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

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.

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
June 30, 2019	\$ 243
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).

June 30, 2019	Down 200 ⁽¹⁾	Down 100 ⁽¹⁾	Base	Up 100	Up 200
MVE	\$ 3,318	\$ 3,210	\$ 3,114	\$ 3,012	\$ 3,033
Percent change in MVE from base	6.6%	3.1%	0%	(3.3)%	(2.6)%
MVE/Book value of equity	98.4%	95.2%	92.3%	89.3 %	89.9 %
Duration of equity ⁽²⁾	2.4	2.5	3.4	1.8	(2.7)
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 0.12% and 0.09% at June 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 June 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 June 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>Bylaws of the Federal Home Loan Bank of Indianapolis, effective June 28, 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

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

August 12, 2019

By: /s/ CINDY L. KONICH

Name: Cindy L. Konich

Title: President - Chief Executive Officer

August 12, 2019

By: /s/ GREGORY L. TEARE

Name: Gregory L. Teare

Title: Executive Vice President - Chief Financial Officer

August 12, 2019

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

Name: K. Lowell Short, Jr.

Title: Senior Vice President - Chief Accounting Officer