

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

FORM 10-Q

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

For the quarterly period ended September 30, 2020

OR

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

For the transition period from to

Commission File No. 000-51401



Federal Home Loan Bank of Chicago

(Exact name of registrant as specified in its charter)

Federally chartered corporation

36-6001019

(State or other jurisdiction of
incorporation or organization)

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

200 East Randolph Drive

Chicago, IL

60601

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: **(312) 565-5700**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☒

Smaller reporting company ☐

Emerging growth company ☐

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of September 30, 2020, including mandatorily redeemable capital stock, registrant had 23,232,027 total outstanding shares of Class B Capital Stock.

TABLE OF CONTENTS

PART I - FINANCIAL INFORMATION		
Item 1.	Financial Statements (unaudited).	
	Statements of Condition	3
	Statements of Income	4
	Statements of Comprehensive Income	5
	Statements of Capital	6
	Condensed Statements of Cash Flows	8
	Note 1 - Background and Basis of Presentation	9
	Note 2 - Summary of Significant Accounting Policies	10
	Note 3 - Recently Issued but Not Yet Adopted Accounting Standards	13
	Note 4 - Interest Income and Interest Expense	13
	Note 5 - Investment Debt Securities	14
	Note 6 - Advances	18
	Note 7 - MPF Loans Held in Portfolio	19
	Note 8 - Allowance for Credit Losses	20
	Note 9 - Derivatives and Hedging Activities	25
	Note 10 - Consolidated Obligations	30
	Note 11 - Capital and Mandatorily Redeemable Capital Stock (MRCS)	31
	Note 12 - Accumulated Other Comprehensive Income (Loss)	33
	Note 13 - Fair Value	34
	Note 14 - Commitments and Contingencies	37
	Note 15 – Transactions with Related Parties and Other FHLBs	38
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations.	39
Item 3.	Quantitative and Qualitative Disclosures about Market Risk.	65
Item 4.	Controls and Procedures.	66
PART II - OTHER INFORMATION		
Item 1.	Legal Proceedings.	67
Item 1A.	Risk Factors.	67
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds.	68
Item 3.	Defaults Upon Senior Securities.	68
Item 4.	Mine Safety Disclosures.	68
Item 5.	Other Information.	68
Item 6.	Exhibits.	69
	Glossary of Terms	70
	Signatures	S-1

PART I - FINANCIAL INFORMATION
Item 1. Financial Statements.
Statements of Condition (unaudited)

(U.S. Dollars in millions, except capital stock par value)

	September 30, 2020	December 31, 2019
Assets		
Cash and due from banks	\$ 1,194	\$ 29
Interest bearing deposits	1,055	1,680
Federal Funds sold	5,450	7,356
Securities purchased under agreements to resell	4,500	6,750
Investment debt securities -		
Trading, 1,240 and 432 pledged	5,444	4,648
Available-for-sale, 18,487 and 15,963 amortized cost	18,587	16,067
Held-to-maturity, 1,545 and 2,615 fair value	1,328	2,381
Investment debt securities	25,359	23,096
Advances, 1,366 and 2,808 carried at fair value	49,771	50,508
MPF Loans held in portfolio, net of (4) and (1) allowance for credit losses	10,529	10,000
Derivative assets	76	6
Other assets, 131 and 83 carried at fair value		
net of (7) and — allowance for credit losses	453	402
Assets	\$ 98,387	\$ 99,827
Liabilities		
Deposits -		
Noninterest bearing	\$ 449	\$ 184
Interest bearing, 26 and 15 from other FHLBs	958	663
Deposits	1,407	847
Consolidated obligations, net -		
Discount notes, 4,750 and 17,966 carried at fair value	41,801	41,675
Bonds, 1,826 and 7,984 carried at fair value	47,970	50,474
Consolidated obligations, net	89,771	92,149
Derivative liabilities	586	14
Affordable Housing Program assessment payable	81	84
Mandatorily redeemable capital stock	282	324
Other liabilities	356	955
Liabilities	92,483	94,373
Commitments and contingencies - see notes to the financial statements		
Capital		
Class B1 activity stock, 14 and 13 million shares issued and outstanding	1,368	1,337
Class B2 membership stock, 7 and 4 million shares issued and outstanding	673	376
Capital stock - putable, \$100 and \$100 par value per share	2,041	1,713
Retained earnings - unrestricted	3,320	3,197
Retained earnings - restricted	616	573
Retained earnings	3,936	3,770
Accumulated other comprehensive income (loss) (AOCI)	(73)	(29)
Capital	5,904	5,454
Liabilities and capital	\$ 98,387	\$ 99,827

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

Statements of Income (unaudited)
(U.S. Dollars in millions)

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Interest income	\$ 285	\$ 662	\$ 1,197	\$ 2,051
Interest expense	116	549	744	1,704
Net interest income	169	113	453	347
Provision for (reversal of) credit losses	1	—	7	—
Net interest income after provision for (reversal of) credit losses	168	113	446	347
Noninterest income -				
Trading securities	(23)	(3)	39	20
Derivatives and hedging activities	3	(5)	(156)	(31)
Instruments held under fair value option	(7)	24	69	43
MPF fees, 7, 8, 23 and 21 from other FHLBs	15	10	40	27
Other, net	4	3	11	9
Noninterest income	(8)	29	3	68
Noninterest expense -				
Compensation and benefits	29	27	100	82
Nonpayroll operating expenses	22	23	68	66
COVID-19 Relief Program	5	—	24	—
Other	9	4	15	8
Noninterest expense	65	54	207	156
Income before assessments	95	88	242	259
Affordable Housing Program	10	9	25	27
Net income	\$ 85	\$ 79	\$ 217	\$ 232

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

Statements of Comprehensive Income (unaudited)
(U.S. Dollars in millions)

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Net income	\$ 85	\$ 79	\$ 217	\$ 232
Other comprehensive income (loss) -				
Net unrealized gain (loss) available-for-sale debt securities	280	(61)	(4)	(80)
Noncredit OTTI held-to-maturity debt securities	3	7	12	20
Net unrealized gain (loss) cash flow hedges	9	(4)	(39)	(17)
Postretirement plans	(2)	(5)	(13)	—
Other comprehensive income (loss)	290	(63)	(44)	(77)
Comprehensive income	\$ 375	\$ 16	\$ 173	\$ 155

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

Statements of Capital (unaudited)

(U.S. Dollars and shares in millions)

	Capital Stock - Putable - B1 Activity		Capital Stock - Putable - B2 Membership		Retained Earnings			AOCI	Total
	Shares	Value	Shares	Value	Unrestricted	Restricted	Total		
June 30, 2020	13	\$ 1,323	5	\$ 514	\$ 3,274	\$ 599	\$ 3,873	\$ (363)	\$ 5,347
Comprehensive income					68	17	85	290	375
Proceeds from issuance of capital stock	5	394	—	—					394
Repurchases of capital stock	—	—	(2)	(190)					(190)
Transfers between classes of capital stock	(4)	(349)	4	349					
Cash dividends - class B1					(20)		(20)		(20)
Class B1 annualized rate		5.00 %							
Cash dividends - class B2					(2)		(2)		(2)
Class B2 annualized rate				2.25 %					
Total change in period, excl. cumulative effect	1	45	2	159	46	17	63	290	557
September 30, 2020	14	\$ 1,368	7	\$ 673	\$ 3,320	\$ 616	\$ 3,936	\$ (73)	\$ 5,904
December 31, 2019	13	\$ 1,337	4	\$ 376	\$ 3,197	\$ 573	\$ 3,770	\$ (29)	\$ 5,454
Cumulative effect adjustment on new accounting standards - see Note 2					(7)		(7)		(7)
Comprehensive income					174	43	217	(44)	173
Proceeds from issuance of capital stock	16	1,527	—	18					1,545
Repurchases of capital stock	—	—	(12)	(1,216)					(1,216)
Capital stock reclassified to mandatorily redeemable capital stock liability	—	—	—	(1)					(1)
Transfers between classes of capital stock	(15)	(1,496)	15	1,496					
Partial recovery of prior capital distribution to FICO - see Note 11					19		19		19
Cash dividends - class B1					(58)		(58)		(58)
Class B1 annualized rate		5.00 %							
Cash dividends - class B2					(5)		(5)		(5)
Class B2 annualized rate				2.25 %					
Total change in period, excl. cumulative effect	1	31	3	297	130	43	173	(44)	457
September 30, 2020	14	\$ 1,368	7	\$ 673	\$ 3,320	\$ 616	\$ 3,936	\$ (73)	\$ 5,904

	Capital Stock - Putable - B1 Activity		Capital Stock - Putable - B2 Membership		Retained Earnings			AOCI	Total
	Shares	Value	Shares	Value	Unrestricted	Restricted	Total		
June 30, 2019	14	\$ 1,394	3	\$ 284	\$ 3,120	\$ 543	\$3,663	\$ 41	\$ 5,382
Comprehensive income					63	16	79	(63)	16
Proceeds from issuance of capital stock	6	611	—	12					623
Repurchases of capital stock	—	—	(5)	(455)					(455)
Transfers between classes of capital stock	(4)	(360)	4	360					
Cash dividends - class B1					(19)		(19)		(19)
Class B1 annualized rate		5.00 %							
Cash dividends - class B2					(1)		(1)		(1)
Class B2 annualized rate				2.25 %					
Total change in period, excl. cumulative effect	2	251	(1)	(83)	43	16	59	(63)	164
September 30, 2019	16	\$ 1,645	2	\$ 201	\$ 3,163	\$ 559	\$3,722	\$ (22)	\$ 5,546
December 31, 2018	15	\$ 1,476	2	\$ 222	\$ 3,023	\$ 513	\$3,536	\$ 55	\$ 5,289
Cumulative effect adjustment					16		16		16
Comprehensive income					186	46	232	(77)	155
Proceeds from issuance of capital stock	20	2,065	—	24					2,089
Repurchases of capital stock	—	—	(19)	(1,931)					(1,931)
Capital stock reclassified to mandatorily redeemable capital stock liability	—	(9)	—	(1)					(10)
Transfers between classes of capital stock	(19)	(1,887)	19	1,887					
Cash dividends - class B1					(59)		(59)		(59)
Class B1 annualized rate		5.00 %							
Cash dividends - class B2					(3)		(3)		(3)
Class B2 annualized rate				2.17 %					
Total change in period, excl. cumulative effect	1	169	—	(21)	124	46	170	(77)	241
September 30, 2019	16	\$ 1,645	2	\$ 201	\$ 3,163	\$ 559	\$3,722	\$ (22)	\$ 5,546

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

Condensed Statements of Cash Flows (unaudited)
(U.S. Dollars in millions)

	Nine months ended September 30,	2020	2019
Operating	Net cash provided by (used in) operating activities	\$ (1,031)	\$ (625)
Investing	Net change interest bearing deposits	625	(480)
	Net change Federal Funds sold	1,906	(1,047)
	Net change securities purchased under agreements to resell	2,250	300
	Trading debt securities -		
	Sales	1,602	1,952
	Proceeds from maturities and paydowns	653	1,504
	Purchases	(3,025)	(4,476)
	Available-for-sale debt securities -		
	Proceeds from maturities and paydowns	779	3,508
	Purchases	(2,760)	(4,430)
	Held-to-maturity debt securities -		
	Proceeds from maturities and paydowns	2,379	2,553
	Purchases	(1,297)	(1,462)
	Advances -		
	Principal collected	781,041	1,134,786
	Issued	(779,666)	(1,139,298)
	MPF Loans held in portfolio -		
	Principal collected	2,939	995
	Purchases	(3,524)	(2,908)
	Other investing activities	(26)	8
	Net cash provided by (used in) investing activities	3,876	(8,495)
Financing	Net change deposits, 12 and (12) from other FHLBs	560	481
	Discount notes -		
	Net proceeds from issuance	579,170	1,095,704
	Payments for maturing and retiring	(578,970)	(1,091,275)
	Consolidated obligation bonds -		
	Net proceeds from issuance	35,696	33,034
	Payments for maturing and retiring	(38,377)	(28,885)
	Capital stock -		
	Proceeds from issuance	1,545	2,089
	Repurchases	(1,216)	(1,931)
	Cash dividends paid	(63)	(62)
	Other financing activities	(25)	2
	Net cash provided by (used in) financing activities	(1,680)	9,157
	Net increase (decrease) in cash and due from banks	1,165	37
	Cash and due from banks at beginning of period	29	28
	Cash and due from banks at end of period	\$ 1,194	\$ 65

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

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Note 1 – Background and Basis of Presentation

The Federal Home Loan Bank of Chicago is a federally chartered corporation and one of 11 Federal Home Loan Banks (the FHLBs) that, with the Office of Finance, comprise the Federal Home Loan Bank System (the System). The FHLBs are government-sponsored enterprises (GSE) of the United States of America and were organized under the Federal Home Loan Bank Act of 1932, as amended (FHLB Act), in order to improve the availability of funds to support home ownership. We are supervised and regulated by the Federal Housing Finance Agency (FHFA), an independent federal agency in the executive branch of the United States (U.S.) government.

Each FHLB is a member-owned cooperative with members from a specifically defined geographic district. Our defined geographic district is Illinois and Wisconsin. All federally-insured depository institutions, insurance companies engaged in residential housing finance, credit unions and community development financial institutions located in our district are eligible to apply for membership with us. All our members are required to purchase our capital stock as a condition of membership. Our capital stock is not publicly traded, and is issued, repurchased or redeemed at par value, \$100 per share, subject to certain statutory and regulatory limits. As a cooperative, we do business with our members, and former members (under limited circumstances). Specifically, we provide credit principally in the form of secured loans called advances. We also provide liquidity for home mortgage loans to members approved as Participating Financial Institutions (PFIs) through the Mortgage Partnership Finance[®] (MPF[®]) Program.

Our accounting and financial reporting policies conform to generally accepted accounting principles in the United States of America (GAAP). Amounts in prior periods may be reclassified to conform to the current presentation and, if material, are detailed in the following notes.

In the opinion of management, all normal recurring adjustments have been included for a fair statement of this interim financial information. These unaudited financial statements and the following footnotes should be read in conjunction with the audited financial statements and footnotes for the year ended December 31, 2019, included in our 2019 Annual Report on Form 10-K (2019 Form 10-K) starting on page F-1, as filed with the Securities and Exchange Commission (SEC).

Unless otherwise specified, references to we, us, our, and the Bank are to the Federal Home Loan Bank of Chicago.

"Mortgage Partnership Finance", "MPF", "MPF Xtra", and "Community First" are registered trademarks of the Federal Home Loan Bank of Chicago.

See the **Glossary of Terms** starting on page 70 for the definitions of certain terms used herein.

Use of Estimates and Assumptions

We are required to make estimates and assumptions when preparing our financial statements in accordance with GAAP. The most significant of these estimates and assumptions applies to fair value measurements. Our actual results may differ from the results reported in our financial statements due to such estimates and assumptions. This includes the reported amounts of assets and liabilities, the reported amounts of income and expense, and the disclosure of contingent assets and liabilities.

Basis of Presentation

The basis of presentation pertaining to the consolidation of our variable interest entities has not changed since we filed our 2019 Form 10-K. The basis of presentation pertaining to our gross versus net presentation of derivative financial instruments also has not changed since we filed our 2019 Form 10-K.

Refer to **Note 1- Background and Basis of Presentation** to the financial statements in our 2019 Form 10-K with respect to our basis of presentation for consolidation of variable interest entities and our gross versus net presentation of financial instruments for further details.

Notes to Financial Statements - (Unaudited)**(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)****Note 2 – Summary of Significant Accounting Policies**

Our **Summary of Significant Accounting Policies** through December 31, 2019, can be found in **Note 2 – Summary of Significant Accounting Policies** to the financial statements in our 2019 Form 10-K including details on the cumulative effect adjustment recorded in 2019.

We adopted the following policies effective January 1, 2020:

We adopted the Accounting Standards Update Measurement of Credit Losses on Financial Instruments (ASU 2016-13), as amended, for interim and annual periods effective January 1, 2020. ASU 2016-13 amended existing GAAP guidance applicable to measuring credit losses on financial instruments. Specifically, the amendment replaced the “incurred loss” impairment methodology with a “currently expected credit losses” or CECL methodology. The measurement of CECL is based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the financial instrument’s reported amount. Expected recoveries of amounts previously written off and expected to be written off should be included in the allowance for credit losses determination but should not exceed the aggregate of amounts previously written off and expected to be written off by us. In addition, for collateral dependent financial assets, the amendment clarified that an allowance for credit losses that is added to the amortized cost of the financial asset(s) should not exceed amounts previously written off.

Upon adoption, any difference between our existing and CECL allowance for credit losses was recognized as a cumulative effect adjustment to the opening balance of our retained earnings as of January 1, 2020. We recorded a cumulative effect adjustment to our opening balance of retained earnings of \$(7) million, which related to Community First® Fund (the “Fund”) loans. We elected not to measure an allowance for credit losses on accrued interest receivable as we reverse accrued interest on a monthly basis in the event of an interest shortfall. We present accrued interest receivable separately from the amortized cost of loans and held to maturity (HTM) debt securities in Other assets on our statement of condition. An allowance for credit losses determination is not required because we recognize the reversal of interest on a monthly basis in the event of an interest shortfall.

The accounting for HTM and available for sale (AFS) debt securities changed on a prospective basis. Reversals of prior losses is permitted for HTM and AFS securities purchased after January 1, 2020. Such reversals are not permitted for HTM and AFS OTTI debt securities existing prior to January 1, 2020. Additionally, HTM and AFS debt securities will have their own allowance for credit losses. HTM securities are evaluated quarterly for expected credit losses on a pool basis unless an individual assessment is deemed necessary because the securities do not possess similar risk characteristics. In assessing whether a credit loss exists on an impaired security, we consider whether there is expected to be a shortfall in receiving all cash flows contractually due. When a shortfall is considered possible, we compare the present value of cash flows expected to be collected from the security with the amortized cost of the security. If the present value of cash flows is less than amortized cost, an allowance for credit losses is recorded with a corresponding adjustment to the provision (reversal) for credit losses. Prior to January 1, 2020, credit losses were recorded as a direct write-down of the HTM security carrying value. For securities classified as available-for-sale (AFS), we evaluate an individual security for impairment on a quarterly basis. Impairment exists when the fair value of the investment is less than its amortized cost (i.e., in an unrealized loss position). In assessing whether a credit loss exists on an impaired security, we consider whether there would be a shortfall in receiving all cash flows contractually due. When a shortfall is considered possible, we compare the present value of cash flows expected to be collected from the security with the amortized cost basis of the security. If the present value of cash flows is less than amortized cost basis, an allowance for credit losses is recorded with a corresponding adjustment to the provision (reversal) for credit losses. The allowance is limited to the amount of the unrealized loss. If management intends to sell an AFS security in an unrealized loss position or more likely than not will be required to sell the security before expected recovery of its amortized cost, any allowance for credit losses is written off and the amortized cost basis is written down to the security’s fair value at the reporting date. If management does not intend to sell an AFS security, and it is not more likely than not that management will be required to sell the debt security, then the unrealized loss is recorded as net unrealized gains (losses) on AFS securities within other comprehensive income (loss) (OCI).

We adopted the Accounting Standards Update (ASU): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement (ASU 2018-15) for interim and annual periods on January 1, 2020. ASU 2018-15 amended existing GAAP to align the requirements for capitalizing implementation costs incurred in a hosting arrangement, that is, a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by these amendments. This guidance has not had a material effect on our financial condition, results of operations, and cash flows. We applied the new guidance on a prospective basis.

Notes to Financial Statements - (Unaudited)**(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)****The following amendments to GAAP became effective March 12, 2020:**

In March of 2020, the FASB issued Accounting Standards Update (ASU): Reference Rate Reform (Topic 848) Facilitation of the Effects of Reference Rate Reform on Financial Reporting (ASU 2020-04). The amendments provide optional expedients and exceptions for applying generally accepted accounting principles (GAAP) to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments apply for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting.

Optional Expedients for Contract Modifications:

- Includes replacement of reference rate and contract modifications to add or change fallback provisions.
- Modifications of receivables or debt may be accounted for prospectively adjusting the effective interest rate.
- Modifications do not require reassessment of whether embedded derivative should be bifurcated.
- Election must be applied consistently for all eligible contracts.

Optional Expedients for Fair Value Hedges:

- Change in benchmark rate is permitted. A change to the cumulative fair value basis adjustment may need to be recognized in current earnings.
- Certain qualifying conditions for the shortcut method may be disregarded for the remainder of the fair value hedging relationship to continue the shortcut method.
- The optional expedient may be elected on an individual hedging relationship basis.

Optional Expedients for Cash Flow Hedges:

- The designated hedged risk may change for a forecasted transaction and we may continue to apply hedge accounting if the hedge remains highly effective. Certain criteria need to be met, for example, if the designated hedged interest rate risk is a rate that is affected by reference rate reform.
- For cash flow hedges for which either the hedging instrument or hedged forecasted transactions reference a rate that is expected to be affected by reference rate reform, an entity may adjust how it applies the method used to initially and subsequently assess hedge effectiveness.
- For cash flow hedges of portfolios of forecasted transactions that reference a rate that is expected to be affected by reference rate reform, an entity may disregard the requirement that the group of individual transactions must share the same risk exposure for which they are designated as being hedged.
- The optional expedients for cash flow hedging relationships may be elected on an individual hedging relationship basis.

Optional One-Time Election to Sell or Transfer Debt Securities Classified as Held-to-Maturity (HTM).

The amendments apply only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The expedients and exceptions provided by the amendments do not apply to contract modifications made and hedging relationships entered into or evaluated after December 31, 2022, except for hedging relationships existing as of December 31, 2022, that we elected certain optional expedients for and that are retained through the end of the hedging relationship.

We are in the process of determining which optional expedients to elect as well as the timing and application of those elections. In this regard, during the fourth quarter of 2020, we adopted a provision of the Accounting Standards Update entitled Facilitation of the Effects of Reference Rate Reform on Financial Reporting that provides a one-time election to sell HTM securities that reference a rate affected by reference rate reform and that were classified as HTM before January 1, 2020.

In October 2020, we adopted the one-time election provision to sell HTM private label mortgage backed securities (PLMBS) to reduce our exposure to LIBOR. We also sold certain LIBOR-affected AFS securities at this time. Specifically:

- We sold HTM PLMBS that had an amortized cost of \$296 million, and recognized a net realized gain of \$101 million.
- We sold AFS PLMBS with an amortized cost basis of \$26 million, and recognized a net realized gain of \$6 million.

In October 2020, we also sold certain HTM PLMBS in which the sale of the securities occurred after the Bank had already collected at least 85% of the principal outstanding at acquisition. These HTM PLMBS had an amortized cost of \$6 million, and we recognized a net realized gain of \$2 million from the sale.

Neither of the above HTM sales resulted in the tainting of our held-to-maturity portfolio.

Notes to Financial Statements - (Unaudited)**(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)**

At this time we do not expect the other optional elections to have a material financial statement impact.

Troubled Debt Restructuring Relief

On March 27, 2020, the Coronavirus, Aid, Relief, and Economic Security (CARES) Act was signed into law providing, among other things, optional, temporary relief from accounting for certain loan modifications as troubled debt restructurings (TDRs). Under the CARES Act, TDR relief is available to financial institutions for loan modifications related to the adverse effects of Coronavirus Disease 2019 (COVID-19) (COVID-related modifications) granted to borrowers that are current as of December 31, 2019. TDR relief applies to COVID-related modifications made from March 1, 2020, until the earlier of December 31, 2020, or 60 days following the termination of the national emergency declared by the President of the United States. Starting in second quarter 2020, we elected to apply the TDR relief provided by the CARES Act.

As such, all COVID-related modifications meeting the provisions of the CARES Act will be excluded from TDR classification and accounting. COVID-related modifications that do not meet the provisions of the CARES Act will continue to be assessed for TDR classification under the Bank's existing accounting policy.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 3 – Recently Issued but Not Yet Adopted Accounting Standards

There were no recently issued but not yet adopted accounting standards which may have an effect on our financial statements.

Note 4 – Interest Income and Interest Expense

The following table presents interest income and interest expense for the periods indicated:

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Interest income -				
Trading	\$ 27	\$ 24	\$ 81	\$ 62
Available-for-sale	54	127	269	381
Held-to-maturity	18	33	66	105
Investment debt securities	99	184	416	548
Advances interest income	87	326	455	1,043
Advances prepayment fees	27	—	42	3
Advances	114	326	497	1,046
MPF Loans held in portfolio	69	79	232	233
Federal funds sold and securities purchased under agreements to resell	2	64	41	201
Other	1	9	11	23
Interest income	285	662	1,197	2,051
Interest expense -				
Consolidated obligations -				
Discount notes	24	270	291	831
Bonds	88	272	439	851
Other	4	7	14	22
Interest expense	116	549	744	1,704
Net interest income	169	113	453	347
Provision for (reversal of) credit losses	1	—	7	—
Net interest income after provision for (reversal of) credit losses	\$ 168	\$ 113	\$ 446	\$ 347

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 5 – Investment Debt Securities

We classify debt securities as either trading, HTM, or AFS. Our security disclosures within these classifications are disaggregated by major security types as shown below. Our major security types are based on the nature and risks of the security:

- U.S. Government & other government related - may consist of the sovereign debt of the United States; debt issued by government sponsored enterprises (GSE); debt issued by the Tennessee Valley Authority; and securities guaranteed by the Small Business Administration.
- Federal Family Education Loan Program - asset-backed securities (FFELP ABS).
- GSE residential mortgage backed securities (MBS) - issued by Fannie Mae and Freddie Mac.
- Government guaranteed residential MBS.
- Private label residential MBS.
- State or local housing agency obligations.

We have no allowance for credit losses on our investment debt securities and we have elected to exclude accrued interest receivable from the amortized cost in the following HTM tables. See **Note 8 - Allowance for Credit Losses** for further details on these amounts.

Pledged Collateral

We disclose the amount of investment debt securities pledged as collateral pertaining to our derivatives activity on our statements of condition. See **Note 9 - Derivatives and Hedging Activities** for further details.

Trading Debt Securities

The following table presents the fair value of our trading debt securities.

As of	September 30, 2020	December 31, 2019
U.S. Government & other government related	\$ 5,435	\$ 4,636
Residential MBS		
GSE	8	11
Government guaranteed	1	1
Trading debt securities	\$ 5,444	\$ 4,648

The following table presents our gains and losses on trading debt securities recorded in Noninterest Income Other.

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Net unrealized gains (losses) on securities held at period end	\$ (23)	\$ (9)	\$ 18	\$ 3
Net realized gains (losses) on securities sold/matured during the period	—	6	21	17
Net gains (losses) on trading debt securities	\$ (23)	\$ (3)	\$ 39	\$ 20

Notes to Financial Statements - (Unaudited)

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Available-for-Sale Debt Securities (AFS)

The following table presents the amortized cost and fair value of our AFS debt securities.

	Amortized Cost Basis	^a Gross Unrealized Gains in AOCI	Gross Unrealized (Losses) in AOCI	Net Carrying Amount and Fair Value
As of September 30, 2020				
U.S. Government & other government related	\$ 1,551	\$ 84	\$ —	\$ 1,635
State or local housing agency	14	1	—	15
FFELP ABS	2,994	95	(15)	3,074
Residential MBS				
GSE	13,620	63	(141)	13,542
Government guaranteed	281	9	—	290
Private label	27	5	(1)	31
Available-for-sale debt securities	\$ 18,487	\$ 257	\$ (157)	\$ 18,587
As of December 31, 2019				
U.S. Government & other government related	\$ 749	\$ 32	\$ —	\$ 781
State or local housing agency	14	1	—	15
FFELP ABS	3,219	140	(7)	3,352
Residential MBS				
GSE	11,600	19	(97)	11,522
Government guaranteed	352	10	—	362
Private label	29	6	—	35
Available-for-sale debt securities	\$ 15,963	\$ 208	\$ (104)	\$ 16,067

^a Includes adjustments made to the cost basis of an investment for accretion, amortization, net charge-offs, fair value hedge accounting adjustments, and includes accrued interest receivable of \$49 million and \$57 million at September 30, 2020 and December 31, 2019.

We had no sales of AFS debt securities for the periods presented. As discussed in **Note 2 – Summary of Significant Accounting Policies**, subsequent to September 30, 2020, we sold PLMBS during October 2020.

Notes to Financial Statements - (Unaudited)

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Held-to-Maturity Debt Securities (HTM)

The following table presents the amortized cost, carrying amount, and fair value of our HTM debt securities.

	Amortized Cost ^a	Non-credit OTTI Recognized in AOCI (Loss)	Net Carrying Amount	Gross Unrecognized Holding Gains	Gross Unrecognized Holding (Losses)	Fair Value
As of September 30, 2020						
U.S. Government & other government related	\$ 625	\$ —	\$ 625	\$ 28	\$ —	\$ 653
Residential MBS						
GSE	328	—	328	32	—	360
Government guaranteed	128	—	128	2	—	130
Private label	320	(73)	247	156	(1)	402
Held-to-maturity debt securities	\$ 1,401	\$ (73)	\$ 1,328	\$ 218	\$ (1)	\$ 1,545
As of December 31, 2019						
U.S. Government & other government related	\$ 1,129	\$ —	\$ 1,129	\$ 18	\$ (1)	\$ 1,146
State or local housing agency	4	—	4	—	—	4
Residential MBS						
GSE	788	—	788	31	—	819
Government guaranteed	167	—	167	2	—	169
Private label	378	(85)	293	184	—	477
Held-to-maturity debt securities	\$ 2,466	\$ (85)	\$ 2,381	\$ 235	\$ (1)	\$ 2,615

^a Includes adjustments made to the cost basis of an investment for accretion, amortization, and/or net charge-offs.

We had no sales of HTM debt securities for the periods presented. As discussed in **Note 2 – Summary of Significant Accounting Policies**, subsequent to September 30, 2020, we sold PLMBS during October 2020.

Contractual Maturity Terms

The maturity of our AFS and HTM debt securities is detailed in the following table.

	Available-for-Sale		Held-to-Maturity	
	Amortized Cost Basis	Net Carrying Amount and Fair Value	Net Carrying Amount	Fair Value
As of September 30, 2020				
Year of Maturity -				
Due in one year or less	\$ 2	\$ 2	\$ 177	\$ 177
Due after one year through five years	12	13	27	28
Due after five years through ten years	485	508	119	122
Due after ten years	1,066	1,127	302	326
ABS and MBS without a single maturity date	16,922	16,937	703	892
Total debt securities	\$ 18,487	\$ 18,587	\$ 1,328	\$ 1,545

Notes to Financial Statements - (Unaudited)

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Aging of Unrealized Temporary Losses

The following table presents unrealized temporary losses on our AFS portfolio for periods less than 12 months and for 12 months or more. We recognized no credit charges on these unrealized loss positions. Refer to the **Credit Loss Analysis** in the following section for further discussion. In the tables below, in cases where the gross unrealized losses for an investment category were less than \$1 million, the losses are not reported.

	Less than 12 Months		12 Months or More		Total	
	Fair Value	Gross Unrealized (Losses)	Fair Value	Gross Unrealized (Losses)	Fair Value	Gross Unrealized (Losses)
Available-for-sale debt securities						
As of September 30, 2020						
U.S. Government & other government related	\$ —	\$ —	\$ 2	\$ —	\$ 2	\$ —
FFELP ABS	21	—	466	(15)	487	(15)
Residential MBS						
GSE	1,746	(9)	7,780	(132)	9,526	(141)
Private label	—	—	4	(1)	4	(1)
Available-for-sale debt securities	\$ 1,767	\$ (9)	\$ 8,252	\$ (148)	\$ 10,019	\$ (157)
As of December 31, 2019						
U.S. Government & other government related	\$ 44	\$ —	\$ 2	\$ —	\$ 46	\$ —
FFELP ABS	512	(7)	—	—	512	(7)
Residential MBS						
GSE	3,426	(25)	4,412	(72)	7,838	(97)
Government guaranteed	1	—	—	—	1	—
Private label	—	—	5	—	5	—
Available-for-sale debt securities	\$ 3,983	\$ (32)	\$ 4,419	\$ (72)	\$ 8,402	\$ (104)

Credit Loss Analysis

We recognized no credit losses on HTM or AFS debt securities for the periods presented. We do not intend to sell AFS securities (except for PLMBS as discussed in **Note 2 – Summary of Significant Accounting Policies**, subsequent to September 30, 2020) and we believe it is more likely than not, that we will not be required to sell them prior to recovering their amortized cost. We expect to recover the entire amortized cost on these securities.

Accretion on Prior Years' Other-Than-Temporary Impairment

Increases in cash flows expected to be collected and recognized into interest income on prior years' credit related OTTI charges on our AFS or HTM PLMBS were \$6 million and \$6 million for the three months ended September 30, 2020 and 2019, and \$18 million and \$20 million for the nine months ended September 30, 2020 and 2019. As discussed in **Note 2 – Summary of Significant Accounting Policies**, subsequent to September 30, 2020, we sold PLMBS during October 2020.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 6 – Advances

We offer a wide range of fixed- and variable-rate advance products with different maturities, interest rates, payment characteristics and options.

We have no allowance for credit losses on our advances and we have elected to exclude accrued interest receivable from the amortized cost in the following tables. See **Note 8 - Allowance for Credit Losses** for further details on these amounts.

The following table presents our advances by terms of contractual maturity and the related weighted average contractual interest rate. For amortizing advances, contractual maturity is determined based on the advance's amortization schedule. Actual maturities may differ from contractual maturities because some borrowers have the right to call or prepay advances with or without penalties.

As of September 30, 2020	Amount	Weighted Average Contractual Interest Rate
Due in one year or less	\$ 16,776	0.51 %
One to two years	4,422	1.17 %
Two to three years	5,664	0.98 %
Three to four years	6,150	0.69 % ^a
Four to five years	7,426	0.93 % ^a
More than five years	8,309	1.83 %
Par value	\$ 48,747	0.94 %

^a The weighted average interest rate is relatively low when compared to other categories due to a majority of advances in this category consisting of variable rate advances, which reset periodically at market prevailing interest rates, and to a lesser extent fixed rate advances issued in a low rate environment.

The following table reconciles the par value of our advances to the carrying amount on our statements of condition as of the dates indicated.

As of	September 30, 2020	December 31, 2019
Par value	\$ 48,747	\$ 50,122
Fair value hedging adjustments	903	344
Other adjustments	121	42
Advances	\$ 49,771	\$ 50,508

The following advance borrowers exceeded 10% of our advances outstanding:

As of September 30, 2020	Par Value	% of Total Outstanding
One Mortgage Partners Corp.	\$ 11,000 ^a	22.6 %
The Northern Trust Company	5,724	11.7 %
State Farm Mutual Automobile Insurance Company	5,716	11.7 %

^a One Mortgage Partners Corp. is a subsidiary of JPMorgan Chase Bank NA.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 7 – MPF Loans Held in Portfolio

We acquire MPF Loans from PFIs to hold in our portfolio and historically purchased participations in pools of eligible mortgage loans from other FHLBs (MPF Banks). MPF Loans that are held in portfolio are fixed-rate conventional and Government Loans secured by one-to-four family residential properties with maturities ranging from 5 years to 30 years or participations in pools of similar eligible mortgage loans from other MPF Banks.

The following table presents information on MPF Loans held in portfolio by contractual maturity at the time of purchase. We have an allowance for credit losses on our MPF Loans and we have elected to exclude accrued interest receivable from the amortized cost in the following tables. See **Note 8 - Allowance for Credit Losses** for further details on these amounts.

As of	September 30, 2020	December 31, 2019
Medium term (15 years or less)	\$ 1,339	\$ 856
Long term (greater than 15 years)	9,001	8,974
Unpaid principal balance	10,340	9,830
Net premiums, credit enhancement, and/or deferred loan fees	183	163
Fair value hedging adjustments	10	8
MPF Loans held in portfolio, before allowance for credit losses	10,533	10,001
Allowance for credit losses on MPF Loans	(4)	(1)
MPF Loans held in portfolio, net	\$ 10,529	\$ 10,000
Conventional mortgage loans	\$ 9,454	\$ 8,919
Government Loans	886	911
Unpaid principal balance	\$ 10,340	\$ 9,830

The above table excludes MPF Loans acquired under the MPF Xtra[®], MPF Direct, and MPF Government MBS products. See **Note 2 - Summary of Significant Accounting Policies** in our 2019 Form 10-K for information related to the accounting treatment of these off balance sheet MPF Loan products.

COVID-19 Forbearance

Section 4013 of the CARES Act provides temporary relief from the accounting and reporting requirements for troubled debt restructurings (TDRs) for certain loan modifications related to COVID-19. Specifically, the CARES Act provides that a qualifying financial institution may elect to suspend (1) the requirements under U.S. GAAP for certain loan modifications that would otherwise be categorized as a TDR, and (2) any determination that such loan modifications would be considered a TDR, including the related impairment for accounting purposes. Section 4013 of the CARES Act applies to any modification related to an economic hardship as a result of the COVID-19 pandemic, including a forbearance arrangement, an interest rate modification, a repayment plan, or any similar arrangement that defers or delays payment of principal or interest, that occurs during the period beginning on March 1, 2020 and ending on the earlier of December 31, 2020 or the date that is 60 days after the declaration of the national emergency related to the COVID-19 pandemic ends for a loan that was not more than 30 days past due as of December 31, 2019. We have elected to suspend TDR accounting for eligible modifications under Section 4013 of the CARES Act, such modifications to loans outstanding as of September 30, 2020 were immaterial.

Our servicers may grant a forbearance period to borrowers who have requested forbearance based on COVID-19 related difficulties regardless of the status of the loan at the time of the request. We continue to apply our accounting policy for past due loans and charge-offs to loans during the forbearance period whether it be formal or informal. A charge-off is not recognized when there is a presumption we will collect on a loan even if it is 180 days past due. The accrual status for loans under forbearance will be driven by the past due status of the loan as the legal terms of the contractual arrangement have not been modified.

As of September 30, 2020, there were \$267 million in unpaid principal balance (UPB) of conventional loans in a forbearance plan as a result of COVID-19. \$79 million in UPB of these conventional loans in forbearance had a current payment status, \$19 million were 30 to 59 days past due, \$25 million were 60 to 89 days past due, and \$144 million were greater than 90 days past due and in nonaccrual payment status. These loans in forbearance represents 3% of our MPF Loans held in portfolio at September 30, 2020.

Notes to Financial Statements - (Unaudited)**(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)****Note 8 – Allowance for Credit Losses**

See **Note 2 - Summary of Significant Accounting Policies** for further details regarding our accounting policies pertaining to credit losses that are applicable to each of our portfolio segments discussed below. Our credit analysis determines whether an asset is classified as adversely classified. An asset not adversely classified is supported by an appropriate credit analysis that documents the quality of a loan or an investment debt security, as well as ongoing analyses that demonstrate the obligor's continued repayment capacity. In such cases, the loan or investment security will not be adversely classified as substandard, doubtful, or loss. Adversely classified loans or investment debt securities are expected to have credit losses and thus will have an allowance.

We have the following portfolio segments:

Nongovernment related

- Member credit products (advances, letters of credit and other extensions of credit to borrowers)
- Conventional MPF Loans held in portfolio
- Federal Funds Sold and Securities Purchased Under Agreements to Resell
- Community First Fund (CFF)
- Municipal Securities and Standby Bond Purchase Agreements
- Private Label Mortgage Backed Securities

Member Credit Products

Member Credit Products encompass secured credit extensions to members including advances and letters of credit. The Credit Department monitors the financial performance of members at least quarterly, classifies credit extensions in accordance with our asset classification approach, monitors that our credit outstanding is sufficiently well collateralized and recommends credit reserves against individual credit exposures if needed.

We did not record an allowance for credit losses related to our advances nor a liability for our letters of credit as of the end of this reporting period based on the factors outlined below.

- None of our Member Credit Products portfolio was adversely classified.
- Loss mitigation techniques, which include, but are not limited to the following:
 - Credit monitoring which includes underwriting; credit limits; and ongoing collateral monitoring
 - Collateral policies or monitoring which include:
 - Rights to collateral, nature of the collateral and future changes to collateral.
 - Complying with regulatory requirements to fully collateralize advances, which incorporate the associated collateral haircut process. Collateral value represents the borrowing capacity assigned to pledged collateral and does not imply fair value.
- Our credit outstanding is sufficiently well collateralized as of the end of this reporting period - that is, the Advances Collateral Pledge and Security Agreement with each member requires that a member provide collateral value equal to its credit outstanding (unless we specifically require more for a particular member - for example, due to the member's risk rating based on our credit analyses of our members). Further, we require our member to pledge additional collateral if we perceive additional risk.
- Credit risk mitigation efforts such as collateral reviews to confirm the collateral meets eligibility requirements and ongoing monitoring to verify the sufficiency of collateral to advance exposure;
- All payments due under the contractual terms have been received as of the end of this reporting period. In particular, no Member Credit Products were past due, on nonaccrual status, involved in a troubled debt restructuring, or otherwise considered impaired.

Our long history of no credit losses on advances and letters of credit along with loss mitigation techniques are sufficient to support a conclusion of zero allowance for credit losses as of the end of this reporting period.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Conventional MPF Loans Held in Portfolio

We measure expected credit losses on conventional MPF Loans held in portfolio on a collective basis, pooling loans with similar risk characteristics. If an MPF Loan no longer shares risk characteristics with other loans in the pool (for example, the loan has become collateral dependent), it is removed from the pool and evaluated for expected credit losses on an individual basis.

The analysis on a pool basis includes consideration of various loan portfolio collateral related characteristics, such as past performance, current conditions, and reasonable and supportable forecasts of expected economic credit losses. The model projects cash flows of estimated expected credit losses over the remaining life of an MPF Loan, which also considers how credit enhancements mitigate those credit losses through the MPF credit sharing structure at a master commitment level. The model relies on a number of assumptions, with the primary ones being the actual implied forward rate curves from active markets and a housing price index (HPI) as follows:

- An HPI base case scenario is used
- The scenario is at the Core Based Statistical Area (CBSA) level
- A reasonable and supportable short-term forecast horizon of 12 months is used
- Next, a transition period reverting to the long-term mean, which varies based on CBSA (and on average is approximately 4 years)

The model consists of two sub-models: a transition model and a cash flow model, with Monte Carlo simulators of transitional probabilities, as well as the ability to calibrate the model to unique aspects of our portfolio. The allowance excludes accrued interest receivable since we place the loan on nonaccrual when the loan becomes impaired and reverse interest income.

In addition to evaluating our model output, management included a qualitative adjustment to reflect the additional economic uncertainty from the impact of the COVID-19 pandemic.

The COVID-19 pandemic has resulted in a weak labor market and weak overall economic conditions that have affected and are expected to continue to affect borrowers across our conventional MPF Loans, and significant judgment is required to estimate the severity and duration of the current economic downturn, as well as its potential impact on borrower defaults and loss severities. In particular, macroeconomic conditions and forecasts regarding the duration and severity of the economic downturn caused by the COVID-19 pandemic have been rapidly changing and remain highly uncertain, and it is difficult to predict exactly how borrower behavior will be impacted by these changes in economic conditions. The effectiveness of government support, customer relief and enhanced unemployment benefits should act as mitigants to credit losses, but the extent of the mitigation impact remains uncertain. Subsequent changes to this forecast and related estimates will be reflected in the provision for credit losses in future periods.

Our third quarter 2020 estimates include a forecast of unemployment, home prices, roll rates, and severities, of which actual results could differ from the estimates and assumptions in our models. At this time, given the unknown duration of the pandemic and unprecedented nature of the availability of forbearances, we have determined loan payment status based on the borrower's last payment, and therefore do not assume any benefit associated with the possibility of the borrower to completing the forbearance and becoming current on the loan.

Our allowance for credit losses considers the risk sharing structure of conventional MPF loans held in portfolio. For further detail of our **MPF Risk Sharing Structure** see page F-28 in our 2019 Form 10-K. The following table presents the activity in our allowance for credit losses for MPF Loans for the three and nine months ended September 30, 2020 and 2019.

	Three months ended September 30,		Nine months ended September 30,	
For the periods ending	2020	2019	2020	2019
Allowance for MPF credit losses beginning balance	\$ 4	1	\$ 1	1
Allowance for MPF credit losses charged off	—	—	(3)	—
Provision for (reversal of) allowance for MPF for credit losses	—	—	6	—
Allowance for MPF credit losses ending balances	<u>\$ 4</u>	<u>\$ 1</u>	<u>\$ 4</u>	<u>\$ 1</u>

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

The following tables summarize our MPF Loans by our key **Credit Quality Indicators**, as further described on page F-29 in our 2019 Form 10-K. The recorded investment at December 31, 2019 includes accrued interest receivable whereas the amortized cost at September 30, 2020 excludes accrued interest receivable. See **COVID-19 Forbearance in Note 7 – MPF Loans Held in Portfolio** for more information on how the forbearance impacts the accounting for the below credit quality indicators.

	September 30, 2020			December 31, 2019
	Amortized Cost by Origination Year			Recorded Investment
	2016 to 2020	Prior to 2016	Total	
Past due 30-59 days	\$ 44	\$ 27	\$ 71	\$ 82
Past due 60-89 days	25	10	35	19
Past due 90 days or more	136	41	177	28
Past due	205	78	283	129
Current	8,364	987	9,351	8,994
Total	\$ 8,569	\$ 1,065	\$ 9,634	\$ 9,123

	September 30, 2020			December 31, 2019		
	Amortized Cost			Recorded Investment		
As of	Conventional	Government	Total	Conventional	Government	Total
In process of foreclosure	\$ 14	\$ 5	\$ 19	\$ 10	\$ 4	\$ 14
Serious delinquency rate	1.88 %	4.22 %	2.08 %	0.31 %	1.67 %	0.44 %
Past due 90 days or more and still accruing interest	\$ 12	\$ 36	\$ 48	\$ 4	\$ 16	\$ 20
Loans on nonaccrual status	174	—	174			
Loans on nonaccrual status with no allowance for credit losses	25	—	25			
Loans without an allowance for credit losses and on nonaccrual status				29	—	29
Unpaid principal balance of impaired loans without an allowance for credit losses				31	—	31

Interest Bearing Deposits, Federal Funds Sold and Term Securities Purchased Under Agreements to Resell

We face credit risk on our unsecured short-term investment portfolio. We invest in unsecured overnight interest bearing deposits and Federal Funds sold in order to ensure the availability of funds to meet members' credit and liquidity needs. If the credit markets experience significant disruptions, it may increase the likelihood that one of our counterparties could experience liquidity or financial constraints that may cause them to become insolvent or otherwise default on their obligations to us.

We did not establish an allowance for credit losses for our unsecured overnight interest bearing deposits or Federal Funds sold as of September 30, 2020 since all Federal Funds sold were repaid and all unsecured overnight interest bearing deposits were returned according to their contractual terms.

We invest in overnight securities purchased under agreements to resell in order to ensure the availability of funds to meet members' liquidity and credit needs. Securities purchased under agreements to resell are secured by marketable securities held by a third-party custodian and collateral is adjusted daily to ensure full collateral coverage. For securities purchased under an agreement to resell, we use the collateral maintenance provision practical expedient, which allows expected credit losses to be measured based on the difference between fair value of the collateral and the investment's amortized cost provided the borrower is expected to replenish the collateral in accordance with the contractual terms. If the credit markets experience disruptions and as a result, one of our counterparties becomes insolvent or otherwise defaults on their obligations to us and the collateral is insufficient to cover our exposure, we may suffer a credit loss. We did not record credit losses for our securities purchased under an agreement to resell portfolio segment since the entire portfolio was not adversely classified and sufficient collateral existed as of September 30, 2020. We also did not establish an allowance for credit losses for overnight securities purchased under an agreement to resell as of September 30, 2020 since overnight securities purchased under agreements to resell were paid according to their contractual terms.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Community First Fund (the Fund)

We created the Fund, which is structured as an on balance sheet revolving pool of funds, with a mission to provide access to capital that supports economic development and affordable housing needs in the communities that our members serve in Illinois and Wisconsin. This is accomplished by providing long-term, unsecured loans to community development intermediary organizations (Partners). Partners to the Fund are unregulated and are often less sophisticated than our regulated members. We calculate a loss allowance based expected loss rates on representative rated securities and average tenor of the outstanding portfolio.

As of September 30, 2020 we had \$45 million in Fund loans outstanding, unchanged from \$45 million at December 31, 2019. We had no allowance as of December 31, 2019, under the pre-CECL accounting policy, as we had not incurred any credit losses to that date. Under CECL effective January 1, 2020, we are recording allowances for credit losses on an expected basis over the life of the loans, although as of September 30, 2020, all Fund loans were current and none were past due or on nonaccrual status. Our allowance for credit losses on Fund loans was \$7 million at September 30, 2020.

Municipal Securities and Standby Bond Purchase Agreements

We invest in municipal securities consisting of Housing Finance Authority (HFA) securities and off balance sheet Standby Bond Purchase Agreements (SBPAs) with these authorities. Nearly all of the securities were classified as AFS, only a de minimis amount were HTM. We review the ratings of the HFA securities and the corresponding Moody's Default Balance to determine potential credit exposure. Our municipal securities are rated above BBB, and no credit losses were expected for HFA securities and SBPAs at September 30, 2020.

PLMBS

We invested in senior tranches of PLMBS that are classified as Prime, Alt-A, or Subprime. The majority of PLMBS are HTM. The HTM PLMBS are subject to the forward-looking model of CECL through the analysis of projected cash flows. The projected cash flows exceed the amortized cost of our PLMBS, and consequently, there was no additional allowance for credit losses for these PLMBS during the third quarter of 2020. We assess an HTM separately from AFS PLMBS. We assess an AFS PLMBS for credit losses whenever its fair value is less than its amortized cost as of the reporting date.

Our evaluation includes estimating the projected cash flows that we are likely to collect based on an assessment of available information, including the structure of the applicable security and certain assumptions such as:

- the remaining payment terms for the security;
- prepayment speeds based on underlying loan-level borrower and loan characteristics;
- expected default rates based on underlying loan-level borrower and loan characteristics;
- expected loss severity on the collateral supporting each security based on underlying loan-level borrower and loan characteristics;
- expected housing price changes; and
- expected interest-rate assumptions.

The results of these models can vary significantly with changes in assumptions and expectations. The projected cash flows reflect a best estimate scenario and include a base case housing price forecast and a base case housing price recovery path.

As of September 30, 2020, 6% of our PLMBS were rated single-A, or above, by a nationally recognized statistical rating organization and the remaining securities were either rated less than single-A, or were unrated; unchanged from 6% at December 31, 2019. As discussed in **Note 2 – Summary of Significant Accounting Policies**, subsequent to September 30, 2020, we sold PLMBS during October 2020.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
U.S. Government related assets

- Investment debt securities issued or guaranteed by the U.S. Government
- Investment debt securities issued or guaranteed by U.S. Government Sponsored Enterprises
- U.S. Government guaranteed Federal Family Education Loan Program (FFELP)
- U.S. Government guaranteed MPF Loans held in portfolio

We have not established an allowance for credit losses for U.S. Government related assets, as we do not expect any losses on the basis of: 1) an explicit U.S. Government guarantee; 2) the assumption that an implicit U.S. Government guarantee exists; 3) a demonstration of the U.S. Government's willingness to act on the implicit guarantee as evidenced by U.S. Government capitalization and support during past financial crisis events that resulted in no losses for investors in such securities; and 4) the assumption of the U.S. Government's willingness and ability to act on the explicit and implicit guarantees in the future on the basis of the importance of the Agencies in terms of promoting public policy and economic stability.

With respect to defaulted U.S. Government guaranteed MPF Loans, any losses incurred that are not recovered from the U.S. Government insurer or guarantor are absorbed by the MPF PFI servicer. Accordingly, credit losses are based on our assessment of our servicers' ability to absorb losses not covered by the applicable U.S. Government guarantee or insurance. We did not establish an allowance for credit losses on our Government Loans held in portfolio for the reporting periods presented based on our assessment that our servicers have the ability to absorb such losses. Further, no Government MPF Loans were placed on nonaccrual status or as troubled debt restructurings for the same reason.

Accrued interest receivable

As permitted under the new CECL accounting standard, we elected to present accrued interest receivable separately for loans and HTM debt securities which are carried at amortized cost. We also elected not to measure an allowance for credit losses on accrued interest receivables as we reverse accrued interest on a monthly basis in the event of an interest shortfall.

The following table summarizes our accrued interest receivable by portfolio segment.

Financial Instrument Type	September 30, 2020	December 31, 2019
Total MPF Loans held in portfolio	\$ 50	\$ 52
HTM securities	7	11
Interest bearing deposits	—	2
Advances	39	83
Other	—	1
Accrued interest receivable	\$ 96	\$ 149

Notes to Financial Statements - (Unaudited)

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Note 9 – Derivatives and Hedging Activities

Refer to **Note 2 - Summary of Significant Accounting Policies** in our 2019 Form 10-K for our accounting policies for derivatives.

We transact most of our derivatives with large banks and major broker-dealers. Some of these banks and broker-dealers or their affiliates buy, sell, and distribute consolidated obligations. We are not a derivatives dealer and do not trade derivatives for speculative purposes. We enter into derivative transactions through either of the following:

- A bilateral agreement with an individual counterparty for over-the-counter derivative transactions.
- Clearinghouses classified as Derivatives Clearing Organizations (DCOs) through Futures Commission Merchants (FCMs), which are clearing members of the DCOs, for cleared derivative transactions.

Managing Interest Rate Risk

We use fair value hedges to manage our exposure to changes in the fair value of (1) a recognized asset or liability or (2) an unrecognized firm commitment, attributable to changes in a benchmark interest rate. Our cash flow hedge strategy is to hedge the variability in the total proceeds received from rolling forecasted zero-coupon discount note issuance, attributable to changes in the benchmark interest rate, by entering into pay-fixed interest rate swaps.

We may elect the fair value option for financial instruments, such as advances, MPF Loans held for sale, and consolidated obligation discount notes and bonds, in cases where hedge accounting treatment may not be achieved due to the inability to meet the hedge effectiveness testing criteria, or in certain cases where we wish to mitigate the risk associated with selecting the fair value option for other instruments. We may also use economic hedges when hedge accounting is not permitted or hedge effectiveness is not achievable.

Managing Credit Risk on Derivative Agreements

Over-the-counter (bilateral) Derivative Transactions: We are subject to credit risk due to the risk of nonperformance by counterparties to our derivative agreements. For bilateral derivative agreements, the degree of counterparty risk depends on the extent to which master netting arrangements, collateral requirements and other credit enhancements are included in such contracts to mitigate the risk. We manage counterparty credit risk through credit analysis, collateral requirements and adherence to the requirements set forth in our policies and FHFA regulations. We require collateral agreements on all over-the-counter derivatives. Additionally, collateral related to over-the-counter derivatives with member institutions includes collateral assigned to us, as evidenced by a written security agreement, and which may be held by the member institution for our benefit. As of September 30, 2020, based on credit analyses and collateral requirements, we have not recorded a credit loss on our over-the-counter derivative agreements. See **Note 15 - Fair Value** in our 2019 Form 10-K for discussion regarding our fair value methodology for over-the-counter derivative assets and liabilities, including an evaluation of the potential for the fair value of these instruments to be affected by counterparty credit risk.

For nearly all of our bilateral derivative transactions executed prior to March 1, 2017, and for all transactions entered into after March 1, 2017, our bilateral derivative agreements are fully collateralized with a zero unsecured threshold in accordance with variation margin requirements issued by the U.S. federal bank regulatory agencies and the Commodity Futures Trading Commission (CFTC). In this regard, we pledged \$602 million of investment securities that can be sold or repledged, as of September 30, 2020, on our bilateral derivative transactions.

For certain transactions executed prior to March 1, 2017, we may be required to post net additional collateral with our counterparties if there is deterioration in our credit rating. If our credit rating had been lowered from its current rating to the next lower rating by a major credit rating agency, such as Standard and Poor's or Moody's, the amount of collateral we would have been required to deliver would have been immaterial at September 30, 2020.

Cleared Derivative Transactions: Cleared derivative transactions are subject to variation and initial margin requirements established by the DCO and its clearing members. As a result of rule changes adopted by our DCOs, variation margin payments are characterized as settlement of a derivative's mark-to-market exposure and not as collateral against the derivative's mark-to-market exposure. See **Note 1 - Background and Basis of Presentation** and **Note 2 - Summary of Significant Accounting Policies** to the financial statements in our 2019 Form 10-K for further discussion. We post our initial margin collateral payments and make variation margin settlement payments through our FCMs, on behalf of the DCO, which could expose us to institutional credit risk in the event that the FCMs or the DCO fail to meet their obligations. Clearing derivatives through a DCO mitigates counterparty credit risk exposure because the DCO is substituted for individual counterparties and variation margin settlement payments are made daily through the FCMs for changes in the value of cleared derivatives. The DCO determines initial margin

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

requirements for cleared derivatives. In this regard, we pledged \$638 million of investment securities that can be sold or repledged, as part of our initial margin related to cleared derivative transactions at September 30, 2020. Additionally, an FCM may require additional initial margin to be posted based on credit considerations, including but not limited to, if our credit rating downgrades. We had no requirement to post additional initial margin by our FCMs at September 30, 2020.

The following table presents details on the notional amounts, and cleared and bilateral derivative assets and liabilities on our statements of condition. The netting adjustment amount includes cash collateral (either received or paid by us) and related accrued interest in cases where we have a legal right, by contract (e.g., master netting agreement) or otherwise, to offset cash flow obligations between us and our counterparty into a single net payable or receivable.

As of	September 30, 2020			December 31, 2019		
	Notional Amount	Derivative Assets	Derivative Liabilities	Notional Amount	Derivative Assets	Derivative Liabilities
Derivatives in hedge accounting relationships-						
Interest rate contracts	\$ 38,884	\$ 89	\$ 859	\$ 38,509	\$ 76	\$ 257
Derivatives not in hedge accounting relationships-						
Interest rate contracts	16,185	76	167	36,404	110	89
Other	5,109	41	42	1,122	2	1
Derivatives not in hedge accounting relationships	21,294	117	209	37,526	112	90
Gross derivative amount before netting adjustments and cash collateral	\$ 60,178	206	1,068	\$ 76,035	188	347
Netting adjustments and cash collateral		(130)	(482)		(182)	(333)
Derivatives on statements of condition		\$ 76	\$ 586		\$ 6	\$ 14
	Cash Collateral			Cash Collateral		
Cash collateral posted and related accrued interest	\$ 378			\$ 187		
Cash collateral received and related accrued interest	26			35		

The following table presents the noninterest income - derivatives and hedging activities as presented in the statements of income.

For the periods ending	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Economic hedges -				
Interest rate contracts	\$ 4	(9)	\$ (155)	(44)
Other	(1)	(1)	(5)	4
Economic hedges	3	(10)	(160)	(40)
Variation margin on daily settled cleared derivatives	—	5	4	9
Noninterest income - Derivatives and hedging activities	\$ 3	\$ (5)	\$ (156)	\$ (31)

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

The following table presents details regarding the offsetting of our cleared and bilateral derivative assets and liabilities on our statements of condition. The netting adjustment amount includes cash collateral (either received or paid by us) and related accrued interest in cases where we have a legal right, by contract (e.g., master netting agreement) or otherwise, to offset cash flow obligations between us and our counterparty into a single net payable or receivable.

	Derivative Assets			Derivative Liabilities		
	Bilateral	Cleared	Total	Bilateral	Cleared	Total
As of September 30, 2020						
Derivatives with legal right of offset -						
Gross recognized amount	\$ 85	\$ 80	\$ 165	\$ 972	\$ 54	\$ 1,026
Netting adjustments and cash collateral	(76)	(54)	(130)	(428)	(54)	(482)
Derivatives with legal right of offset - net	9	26	35	544	—	544
Derivatives without legal right of offset	41	—	41	42	—	42
Derivatives on statements of condition	50	26	76	586	—	586
Less:						
Noncash collateral received or pledged and cannot be sold or repledged	—	—	—	541	—	541
Net amount	\$ 50	\$ 26	\$ 76	\$ 45	\$ —	\$ 45
As of December 31, 2019						
Derivatives with legal right of offset -						
Gross recognized amount	\$ 129	\$ 57	\$ 186	\$ 281	\$ 65	\$ 346
Netting adjustments and cash collateral	(127)	(55)	(182)	(279)	(54)	(333)
Derivatives with legal right of offset - net	2	2	4	2	11	13
Derivatives without legal right of offset	2	—	2	1	—	1
Derivatives on statements of condition	4	2	6	3	11	14
Less:						
Noncash collateral received or pledged and cannot be sold or repledged	—	—	—	—	11	11
Net amount	\$ 4	\$ 2	\$ 6	\$ 3	\$ —	\$ 3

At September 30, 2020, we had \$638 million of additional credit exposure on cleared derivatives due to pledging of noncash collateral to our DCOs (for initial margin), which exceeded our cleared net derivative asset position, in addition we had \$61 million of additional credit exposure which exceeded our bilateral net derivative liability position. At December 31, 2019, we had \$421 million of comparable exposure on our cleared derivatives and none on our bilateral derivatives.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Fair Value Hedges

The following table presents our fair value hedging results by the type of hedged item. We had no net gain or loss on hedged firm commitments that no longer qualified as a fair value hedge. Changes in fair value of the derivative and the hedged item attributable to the hedged risk for designated fair value hedges are recorded in net interest income in the same line as the earnings effect of the hedged item. Gains (losses) on derivatives include unrealized changes in fair value, as well as net interest settlements.

	Gain (Loss) on Derivative	Gain (Loss) on Hedged Item	Amount Recorded in Net Interest Income
Three months ended September 30, 2020			
Available-for-sale debt securities	\$ 84	\$ (154)	\$ (70)
Advances	59	(194)	(135)
Consolidated obligation bonds	(6)	49	43
MPF Loans held for portfolio	—	(1)	(1)
Total	\$ 137	\$ (300)	\$ (163)
Three months ended September 30, 2019			
Available-for-sale debt securities	\$ (302)	\$ 294	\$ (8)
Advances	(131)	134	3
Consolidated obligation bonds	23	(30)	(7)
MPF Loans held for portfolio	—	(1)	(1)
Total	\$ (410)	\$ 397	\$ (13)
Nine months ended September 30, 2020			
Available-for-sale debt securities	\$ (1,254)	\$ 1,145	\$ (109)
Advances	(734)	559	(175)
Consolidated obligation bonds	277	(191)	86
MPF Loans held for portfolio	—	(1)	(1)
Total	\$ (1,711)	\$ 1,512	\$ (199)
Nine months ended September 30, 2019			
Available-for-sale debt securities	\$ (825)	\$ 798	\$ (27)
Advances	(404)	429	25
Consolidated obligation bonds	255	(307)	(52)
MPF Loans held for portfolio	—	(1)	(1)
Total	\$ (974)	\$ 919	\$ (55)

The following table presents the cumulative basis adjustments on hedged items designated as fair value hedges and the related amortized cost of the hedged items. The line for MPF Loans held for portfolio relates to discontinued closed fair value hedges that are being amortized over the remaining life of the loans, as we did not have any active fair value hedges on our MPF Loans as of September 30, 2020.

As of September 30, 2020	Amortized cost of hedged asset/ liability	Basis adjustments active hedges included in amortized cost	Basis adjustments discontinued hedges included in amortized cost	Total amount of fair value hedging basis adjustments
Advances	\$ 16,161	\$ 899	\$ 3	\$ 902
Available-for-sale securities	13,694	1,795	—	1,795
MPF Loans held for portfolio	576	—	10	10
Consolidated obligation bonds	10,927	268	(24)	244

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Cash Flow Hedges

For cash flow hedges the entire change in the fair value of the hedging instrument is recorded in AOCI and reclassified into earnings (net interest income) as the hedged item affects earnings. Hedge effectiveness testing is performed to determine whether hedge accounting is qualified.

We are exposed to the variability in the total net proceeds received from forecasted zero-coupon discount note issuances, which is attributable to changes in the benchmark interest rate. As a result, we enter into cash flow hedge relationships utilizing derivative agreements to hedge the total net proceeds received from our "rolling" forecasted zero-coupon discount note issuances attributable to changes in the benchmark interest rate. The maximum length of time over which we are hedging this exposure is 10 years. We reclassify amounts in AOCI into our statements of income in the same periods during which the hedged forecasted transaction affects our earnings. We had no discontinued cash flow hedges for the periods presented. The deferred net gains (losses) on derivative instruments in AOCI that are expected to be reclassified to earnings during the next twelve months were immaterial as of September 30, 2020.

The following table presents our cash flow hedging results by type of hedged item. Additionally, the table indicates where cash flow hedging results are classified in our statements of income. In this regard, the **Amount Reclassified from AOCI into Net Interest Income** column includes the following:

- The amortization of closed cash flow hedging adjustments, which are reclassified from AOCI into the interest income/expense line item of the respective hedged item type.
- The effect of net interest settlements attributable to open derivative hedging instruments, which are initially recorded in AOCI and are reclassified to the interest income/expense line item of the respective hedged item type.

	Gross Amount Initially Recognized in AOCI	Amount Reclassified from AOCI into Net Interest Income
Three months ended September 30, 2020		
Discount notes	\$ 2	\$ (7)
Three months ended September 30, 2019		
Discount notes	\$ (8)	\$ (4)
Nine months ended September 30, 2020		
Discount notes	\$ (56)	\$ (16)
Bonds	—	(1)
Total	\$ (56)	\$ (17)
Nine months ended September 30, 2019		
Discount notes	\$ (40)	\$ (22)
Bonds	—	(1)
Total	\$ (40)	\$ (23)

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 10 – Consolidated Obligations

The FHLBs issue consolidated obligations through the Office of Finance as their agent. Consolidated obligations consist of discount notes and consolidated obligation bonds. Consolidated discount notes are issued to raise short-term funds, are issued at less than their face amount and redeemed at par value when they mature. The maturity of consolidated obligation bonds may range from less than one year to over 20 years, but they are not subject to any statutory or regulatory limits on maturity.

The following table presents our consolidated obligation discount notes for which we are the primary obligor. All are due in one year or less.

As of	September 30, 2020	December 31, 2019
Consolidated obligation discount notes - carrying amount	\$ 41,801	\$ 41,675
Consolidated obligation discount notes - par amount	41,809	41,770
Weighted Average Interest Rate	0.11 %	1.61 %

The following table presents maturities and weighted average interest rates on our consolidated obligation bonds, for which we are the primary obligor, including callable bonds that are redeemable in whole, or in part, at our discretion on predetermined call dates.

As of September 30, 2020	Contractual Maturity	Weighted Average Interest Rate	By Maturity or Next Call Date
Due in one year or less	\$ 27,599	0.36 %	\$ 34,251
One to two years	7,958	1.40 %	7,890
Two to three years	3,730	2.09 %	3,164
Three to four years	1,286	1.76 %	915
Four to five years	2,470	1.57 %	1,178
Thereafter	4,686	2.59 %	331
Total par value	\$ 47,729	0.99 %	\$ 47,729

The following table presents consolidated obligation bonds outstanding by call feature:

As of	September 30, 2020	December 31, 2019
Noncallable	\$ 39,871	\$ 35,556
Callable	7,858	14,842
Par value	47,729	50,398
Fair value hedging adjustments	244	53
Other adjustments	(3)	23
Consolidated obligation bonds	\$ 47,970	\$ 50,474

The following table summarizes the consolidated obligations of the FHLBs and those for which we are the primary obligor. We did not accrue a liability for our joint and several liability related to the other FHLBs' share of the consolidated obligations as of September 30, 2020, and December 31, 2019. See **Note 16 - Commitments and Contingencies** in our 2019 Form 10-K for further details.

	September 30, 2020			December 31, 2019		
Par values as of	Bonds	Discount Notes	Total	Bonds	Discount Notes	Total
FHLB System total consolidated obligations	\$513,212	\$306,651	\$819,863	\$620,942	\$404,953	\$1,025,895
FHLB Chicago as primary obligor	47,729	41,809	89,538	50,398	41,770	92,168
As a percent of the FHLB System	9 %	14 %	11 %	8 %	10 %	9 %

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 11 – Capital and Mandatorily Redeemable Capital Stock (MRCS)

Under our Capital Plan our stock consists of two sub-classes of stock, Class B1 activity stock and Class B2 membership stock (together, Class B stock), both with a par value of \$100 and redeemable on five years' written notice, subject to certain conditions. Under the Capital Plan, each member is required to own capital stock in an amount equal to the greater of a membership stock requirement or an activity stock requirement. All stock that supports a member's activity stock requirement with the Bank is classified as Class B1 activity stock. Any additional amount of stock necessary for the total amount of Class B stock held to equal a member's minimum investment amount will be classified as Class B2 membership stock. Members purchase Class B2 membership stock to satisfy their membership stock requirement with the Bank. See **Note 12 – Capital and Mandatorily Redeemable Capital Stock (MRCS)** to the financial statements in our 2019 Form 10-K for further information on our capital stock and MRCS.

Minimum Capital Requirements

For details on our minimum capital requirements, including how the ratios below were calculated, see **Minimum Capital Requirements** on page F-39 of our 2019 Form 10-K. We complied with our minimum regulatory capital requirements as shown below.

	September 30, 2020		December 31, 2019	
	Requirement	Actual	Requirement	Actual
Total regulatory capital	\$ 3,935	\$ 6,259	\$ 3,993	\$ 5,807
Total regulatory capital ratio	4.00 %	6.36 %	4.00 %	5.82 %
Leverage capital	\$ 4,919	\$ 9,390	\$ 4,991	\$ 8,710
Leverage capital ratio	5.00 %	9.54 %	5.00 %	8.73 %
Risk-based capital	\$ 1,397	\$ 6,259	\$ 1,141	\$ 5,807

Total regulatory capital and leverage capital includes mandatorily redeemable capital stock (MRCS) but does not include AOCI. Under the FHFA regulation on capital classifications and critical capital levels for the FHLBs, we are adequately capitalized.

The following members had regulatory capital stock exceeding 10% of our total regulatory capital stock outstanding (which includes MRCS):

As of September 30, 2020	Regulatory Capital Stock Outstanding	% of Total Outstanding	Amount of Which is Classified as a Liability (MRCS)
State Farm Mutual Automobile Insurance Company	\$ 259	11.1 %	\$ —
One Mortgage Partners Corp.	245 ^a	10.5 %	245

^a One Mortgage Partners Corp. is a subsidiary of JPMorgan Chase Bank NA.

Dividends

Our ability to pay dividends is subject to the FHLB Act and FHFA regulations. On October 29, 2020 our Board of Directors declared a 5.00% dividend (annualized) for Class B1 activity stock and a 2.25% dividend (annualized) for Class B2 membership stock based on our preliminary financial results for the third quarter of 2020. This dividend totaled \$25 million (recorded as \$22 million dividends on capital stock and \$3 million interest expense on mandatorily redeemable capital stock) and is scheduled for payment on November 12, 2020. Any future dividend payment remains subject to declaration by the Board and will depend on future operating results, our Retained Earnings and Dividend Policy and any other factors the Board determines to be relevant.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

FICO Dissolution

The Competitive Equality Banking Act of 1987 was enacted in August 1987, which, among other things, provided for the recapitalization of the Federal Savings and Loan Insurance Corporation through a newly-chartered entity, the Financing Corporation (FICO). The capitalization of FICO was provided by capital distributions from the FHLBs to FICO in exchange for FICO nonvoting capital stock. Capital distributions were made by the FHLBs in 1987, 1988 and 1989 that aggregated to \$680 million. Upon passage of the Financial Institutions Reform, Recovery and Enforcement Act of 1989, the FHLBs' previous investment in capital stock of FICO was determined to be non-redeemable and the FHLBs charged-off their prior capital distributions to FICO directly against retained earnings.

In connection with the dissolution of FICO in July 2020, FICO determined that excess funds aggregating to \$200 million were available for distribution to its stockholders, the FHLBs, and FICO distributed these funds to the FHLBs in June 2020. Specifically, our partial recovery of prior capital distribution was \$19 million, which was determined based on our share of the \$680 million originally contributed to FICO. We treated the receipt of these funds as a return of our investment in FICO capital stock, and therefore as a partial recovery of the prior capital distributions we made to FICO in 1987, 1988, and 1989. These funds have been credited to unrestricted retained earnings in our **Statements of Capital** on page 6 and in Other Financing Activities in our **Condensed Statements of Cash Flows** on page 8.

Notes to Financial Statements - (Unaudited)

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Note 12 - Accumulated Other Comprehensive Income (Loss)

The following table summarizes the gains (losses) in AOCI for the reporting periods indicated.

	Net Unrealized -	Non-credit OTTI -			
	Available-for- sale Debt Securities	Held-to- maturity Debt Securities	Net Unrealized - Cash Flow Hedges	Post- Retirement Plans	Total in AOCI
Three months ended September 30, 2020					
Beginning balance	\$ (180)	\$ (76)	\$ (86)	\$ (21)	\$ (363)
Change in the period recorded to the statements of condition, before reclassifications to statements of income	280	3	2	(2)	283
Amounts reclassified in period to statements of income:					
Net interest income	—	—	7		7
Ending balance	<u>\$ 100</u>	<u>\$ (73)</u>	<u>\$ (77)</u>	<u>\$ (23)</u>	<u>\$ (73)</u>
Three months ended September 30, 2019					
Beginning balance	\$ 192	\$ (101)	\$ (44)	\$ (6)	\$ 41
Change in the period recorded to the statements of condition, before reclassifications to statements of income	(61)	7	(8)	(6)	(68)
Amounts reclassified in period to statements of income:					
Net interest income	—	—	4		4
Noninterest expense				1	1
Ending balance	<u>\$ 131</u>	<u>\$ (94)</u>	<u>\$ (48)</u>	<u>\$ (11)</u>	<u>\$ (22)</u>
Nine months ended September 30, 2020					
Beginning balance	\$ 104	\$ (85)	\$ (38)	\$ (10)	\$ (29)
Change in the period recorded to the statements of condition, before reclassifications to statements of income	(4)	12	(56)	(14)	(62)
Amounts reclassified in period to statements of income:					
Net interest income	—		17		17
Noninterest expense				1	1
Ending balance	<u>\$ 100</u>	<u>\$ (73)</u>	<u>\$ (77)</u>	<u>\$ (23)</u>	<u>\$ (73)</u>
Nine months ended September 30, 2019					
Beginning balance	\$ 211	\$ (114)	\$ (31)	\$ (11)	\$ 55
Change in the period recorded to the statements of condition, before reclassifications to statements of income	(80)	20	(40)	(2)	(102)
Amounts reclassified in period to statements of income:					
Net interest income	—	—	23		23
Noninterest expense				2	2
Ending balance	<u>\$ 131</u>	<u>\$ (94)</u>	<u>\$ (48)</u>	<u>\$ (11)</u>	<u>\$ (22)</u>

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 13 - Fair Value

The following table is a summary of the fair value estimates and related levels in the hierarchy. The carrying amounts are per the statements of condition. Fair value estimates represent the exit prices that we would receive to sell assets or pay to transfer liabilities in an orderly transaction with market participants at the measurement date. They do not represent an estimate of our overall market value as a going concern, as they do not take into account future business opportunities or profitability of assets and liabilities. We measure instrument-specific credit risk attributable to our consolidated obligations based on our nonperformance risk, which includes the credit risk associated with the joint and several liability of other FHLBs, see **Note 16 - Commitments and Contingencies** in our 2019 Form 10-K. As a result, we did not recognize any instrument-specific credit risk attributable to our consolidated obligations that are carried at fair value. See **Note 2 - Summary of Significant Accounting Policies** in our 2019 Form 10-K for our fair value policies and **Note 15 - Fair Value** in our 2019 Form 10-K for our valuation techniques and significant inputs. See **Note 9 - Derivatives and Hedging Activities** for more information on the Netting and Cash Collateral amounts.

	Carrying Amount	Fair Value	Level 1	Level 2	Level 3	Netting & Cash Collateral
September 30, 2020						
Carried at amortized cost						
Cash and due from banks	\$ 1,194	\$ 1,194	\$ 1,194	\$ —	\$ —	
Interest bearing deposits	1,055	1,055	1,055	—	—	
Federal Funds sold and securities purchased under agreements to resell	9,950	9,950	—	9,950	—	
Held-to-maturity debt securities	1,328	1,545	—	1,143	402	
Advances	48,405	48,659	—	48,659	—	
MPF Loans held in portfolio, net	10,507	10,785	—	10,779	6	
Other assets	96	96	—	96	—	
Carried at fair value on a recurring basis						
Trading debt securities	5,444	5,444	—	5,444	—	
Government related non-MBS, ABS, and MBS	18,556	18,556	—	18,556	—	
Private label residential MBS	31	31	—	—	31	
Available-for-sale debt securities	18,587	18,587	—	18,556	31	
Advances - fair value option election	1,366	1,366	—	1,366	—	
Derivative assets	76	76	—	206	—	\$ (130)
Other assets - held for sale at fair value	131	131	—	131	—	
Carried at fair value on a nonrecurring basis						
MPF Loans held in portfolio, net	22	22	—	—	22	
Financial assets	98,161	\$ 98,910	\$ 2,249	\$ 96,330	\$ 461	\$ (130)
Other non financial assets	226					
Assets	\$ 98,387					
Carried at amortized cost						
Deposits	\$ (1,407)	\$ (1,407)	\$ —	\$ (1,407)	\$ —	
Consolidated obligation discount notes	(37,051)	(37,053)	—	(37,053)	—	
Consolidated obligation bonds	(46,144)	(46,547)	—	(46,547)	—	
Mandatorily redeemable capital stock	(282)	(282)	(282)	—	—	
Other liabilities	(111)	(111)	—	(111)	—	
Carried at fair value on a recurring basis						
Consolidated obligation discount notes - fair value option	(4,750)	(4,750)	—	(4,750)	—	
Consolidated obligation bonds - fair value option	(1,826)	(1,826)	—	(1,826)	—	
Derivative liabilities	(586)	(586)	—	(1,068)	—	\$ 482
Financial liabilities	(92,157)	\$ (92,562)	\$ (282)	\$ (92,762)	\$ —	\$ 482
Other non financial liabilities	(326)					
Liabilities	\$ (92,483)					

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

	Carrying Amount	Fair Value	Level 1	Level 2	Level 3	Netting
December 31, 2019						
Carried at amortized cost						
Cash and due from banks	\$ 29	\$ 29	\$ 29	\$ —	\$ —	
Interest bearing deposits	1,680	1,680	1,680	—	—	
Federal Funds sold and securities purchased under agreements to resell	14,106	14,106	—	14,106	—	
Held-to-maturity debt securities	2,381	2,615	—	2,138	477	
Advances	47,700	47,780	—	47,780	—	
MPF Loans held in portfolio, net	9,995	10,189	—	10,183	6	
Other assets	149	149	—	149	—	
Carried at fair value on a recurring basis						
Trading debt securities	4,648	4,648	—	4,648	—	
Government related non-MBS, ABS, and MBS	16,032	16,032	—	16,032	—	
Private label residential MBS	35	35	—	—	35	
Available-for-sale debt securities	16,067	16,067	—	16,032	35	
Advances - fair value option election	2,808	2,808	—	2,808	—	
Derivative assets	6	6	2	186	—	\$ (182)
Other assets - held for sale at fair value	83	83	—	83	—	
Carried at fair value on a nonrecurring basis						
MPF Loans held in portfolio, net	5	5	—	—	5	
Other assets	1	1	—	—	1	
Financial assets	99,658	\$ 100,166	\$ 1,711	\$ 98,113	\$ 524	\$ (182)
Other non financial assets	169					
Assets	<u>\$ 99,827</u>					
Carried at amortized cost						
Deposits	(847)	(847)	—	(847)	—	
Consolidated obligation discount notes	(23,709)	(23,709)	—	(23,709)	—	
Consolidated obligation bonds	(42,490)	(42,728)	—	(42,728)	—	
Mandatorily redeemable capital stock	(324)	(324)	(324)	—	—	
Other liabilities	(158)	(158)	—	(158)	—	
Carried at fair value on a recurring basis						
Consolidated obligation discount notes - fair value option	(17,966)	(17,966)	—	(17,966)	—	
Consolidated obligation bonds - fair value option	(7,984)	(7,984)	—	(7,984)	—	
Derivative liabilities	(14)	(14)	—	(347)	—	333
Financial liabilities	(93,492)	\$ (93,730)	\$ (324)	\$ (93,739)	\$ —	\$ 333
Other non financial liabilities	(881)					
Liabilities	<u>\$ (94,373)</u>					

We had no transfers between levels for the periods shown.

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Fair Value Option

We may elect the fair value option for financial instruments, such as advances, MPF Loans held for sale, and consolidated obligation discount notes and bonds, in cases where hedge accounting treatment may not be achieved due to the inability to meet the hedge effectiveness testing criteria, or in certain cases where we wish to mitigate the risk associated with selecting the fair value option for other instruments. Financial instruments for which we elected the fair value option along with their related fair value are shown on our **Statements of Condition** on page 3. Refer to our **Note 2 – Summary of Significant Accounting Policies** to the financial statements in our 2019 Form 10-K for further details.

The following table presents the changes in fair values of financial assets and liabilities carried at fair value under the fair value option. These changes were recognized in noninterest income - instruments held under the fair value option in our statements of income.

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Advances	\$ (5)	\$ 18	\$ 73	\$ 52
Other assets	(2)	—	—	—
Consolidated obligation bonds	—	6	(4)	(9)
Noninterest income - Instruments held under fair value option	\$ (7)	\$ 24	\$ 69	\$ 43

The following table reflects the difference between the aggregate UPB outstanding and the aggregate fair value for our long term financial instruments for which the fair value option has been elected. None of the advances were 90 days or more past due and none were on nonaccrual status.

As of	September 30, 2020		December 31, 2019	
	Advances	Consolidated Obligation Bonds	Advances	Consolidated Obligation Bonds
Unpaid principal balance	\$ 1,254	\$ 1,821	\$ 2,768	\$ 7,955
Fair value over (under) UPB	112	5	40	29
Fair value	\$ 1,366	\$ 1,826	\$ 2,808	\$ 7,984

Notes to Financial Statements - (Unaudited)
(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)
Note 14 – Commitments and Contingencies

The following table shows our commitments outstanding, which represent off-balance sheet obligations.

As of	September 30, 2020			December 31, 2019		
	Expire within one year	Expire after one year	Total	Expire within one year	Expire after one year	Total
Member standby letters of credit	\$ 14,503	\$ 7,163 ^a	\$ 21,666	\$ 18,077	\$ 5,774 ^a	\$ 23,851
MPF delivery commitments	2,553	—	2,553	615	—	615
Advance commitments	90	12	102	8	30	38
Housing authority standby bond purchase agreements	—	432	432	32	409	441
Unsettled consolidated obligation discount notes	—	—	—	750	—	750
Unsettled consolidated obligation bonds	235	—	235	81	—	81
Other	5	—	5	1	—	1
Commitments	\$ 17,386	\$ 7,607	\$ 24,993	\$ 19,564	\$ 6,213	\$ 25,777

^a Contains \$6.4 billion and \$4.2 billion of member standby letters of credit as of September 30, 2020, and December 31, 2019, which were renewable annually.

For a description of defined terms see **Note 16 - Commitments and Contingencies** to the financial statements in our 2019 Form 10-K.

Notes to Financial Statements - (Unaudited)**(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)****Note 15 – Transactions with Related Parties and Other FHLBs**

We define related parties as either members whose officers or directors serve on our Board of Directors, or members that control more than 10% of our total voting interests. We did not have any members that controlled more than 10% of our total voting interests for the periods presented in these financial statements.

In the normal course of business, we may extend credit to or enter into other transactions with a related party. These transactions are done at market terms that are no more favorable than the terms of comparable transactions with other members who are not considered related parties.

Members

The following table summarizes material balances we had with our members who are related parties as defined above (including their affiliates) as of the periods presented. The related net income impacts to our Statements of Income were not material.

As of	September 30, 2020	December 31, 2019
Assets - Advances	\$ 266	\$ 696
Liabilities - Deposits	9	10
Equity - Capital Stock	17	31

Other FHLBs

From time to time, we may loan to, or borrow from, other FHLBs. These transactions are done at market terms that are no more favorable than the terms of comparable transactions with other counterparties. These transactions are overnight, maturing the following business day.

In addition, we provide programmatic and operational support in our role as the administrator of the MPF Program on behalf of the other MPF Banks for a fee.

Material transactions with other FHLBs are identified on the face of our **Financial Statements**.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

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

	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
Selected statements of condition data					
Investments ^a	\$ 36,364	\$ 36,005	\$ 37,249	\$ 38,882	\$ 35,475
Advances	49,771	49,250	55,005	50,508	57,629
MPF Loans held in portfolio, net	10,529	10,947	10,647	10,000	9,004
Total assets	98,387	96,731	103,443	99,827	102,543
Consolidated obligation discount notes, net	41,801	37,440	47,095	41,675	47,647
Consolidated obligation bonds, net	47,970	51,760	48,593	50,474	46,738
Mandatorily redeemable capital stock recorded as a liability	282	289	328	324	324
Capital stock	2,041	1,837	1,954	1,713	1,846
Retained earnings	3,936	3,873	3,822	3,770	3,722
Total capital	5,904	5,347	5,065	5,454	5,546
Other selected data at period end					
Member standby letters of credit outstanding	\$ 21,666	\$ 24,825	\$ 25,192	\$ 23,851	\$ 23,753
MPF Loans par value outstanding - FHLB System ^b	71,297	71,768	70,347	68,759	65,669
MPF Loans par value outstanding - FHLB Chicago PFIs ^b	18,957	18,772	17,954	17,364	16,441
FHLB system consolidated obligations par value outstanding	819,863	915,753	1,174,670	1,025,895	1,010,271
Number of members	683	687	685	689	697
Total employees (full and part time)	486	488	487	488	484
Selected statements of income data					
Net interest income after provision for credit losses	\$ 168	\$ 134	\$ 144	\$ 111	\$ 113
Noninterest income	(8)	9	2	32	29
Noninterest expense	65	85	57	67	54
Net income	85	52	80	68	79
Other selected MPF data during the periods ^b					
MPF Loans par value amounts funded - FHLB System	\$ 7,145	\$ 8,641	\$ 4,929	\$ 7,346	\$ 6,391
Quarterly number of PFIs funding MPF products - FHLB System	730	764	783	808	794
MPF Loans par value amounts funded - FHLB Chicago PFIs	\$ 2,371	\$ 2,985	\$ 1,497	\$ 2,094	\$ 1,699
Quarterly number of PFIs funding MPF products - FHLB Chicago	184	195	197	196	192
Selected ratios (rates annualized)					
Total regulatory capital to assets ratio	6.36 %	6.20 %	5.90 %	5.82 %	5.75 %
Market value of equity to book value of equity	106 %	104 %	103 %	105 %	105 %
Primary mission asset ratio ^c	72.2 %	72.0 %	71.6 %	72.3 %	72.5 %
Dividend rate class B1 activity stock-period paid	5.00 %	5.00 %	5.00 %	5.00 %	5.00 %
Dividend rate class B2 membership stock-period paid	2.25 %	2.25 %	2.25 %	2.25 %	2.25 %
Return on average assets	0.33 %	0.20 %	0.30 %	0.27 %	0.32 %
Return on average equity	6.13 %	3.41 %	5.41 %	4.74 %	5.55 %
Average equity to average assets	5.38 %	5.87 %	5.55 %	5.70 %	5.77 %
Net yield on average interest-earning assets	0.67 %	0.54 %	0.57 %	0.44 %	0.46 %
Return on average Regulatory Capital spread to three month LIBOR index	3.23 %	2.88 %	3.80 %	2.71 %	3.29 %
Cash dividends-period paid	\$ 22	\$ 20	\$ 21	\$ 20	\$ 20
Dividend payout ratio-period paid	26 %	38 %	26 %	29 %	25 %

^a Includes investment debt securities, interest bearing deposits, Federal Funds sold, and securities purchased under agreements to resell.

^b Includes all MPF products, whether on or off our balance sheet. See **Mortgage Partnership Finance Program** on page 8 in our 2019 Form 10-K.

^c Annual average year to date basis. The FHFA issued an advisory bulletin that provides guidance relating to a primary mission asset ratio by which the FHFA will assess each FHLB's core mission achievement. See **Mission Asset Ratio** on page 5 in our 2019 Form 10-K for more information.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Forward-Looking Information

Statements contained in this report, including statements describing the plans, objectives, projections, estimates, strategies, or future predictions of management, statements of belief, any projections or guidance on dividends or other financial items, or any statements of assumptions underlying the foregoing, may be “forward-looking statements.” These statements may use forward-looking terminology, such as “anticipates,” “believes,” “expects,” “could,” “plans,” “estimates,” “may,” “should,” “will,” their negatives, or other variations of these terms. We caution that, by their nature, forward-looking statements involve risks and uncertainties related to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. These risks and uncertainties could cause actual results to differ materially from those expressed or implied in these forward-looking statements and could affect the extent to which a particular objective, projection, estimate, or prediction is realized. As a result, undue reliance should not be placed on such statements.

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

- the impact of the coronavirus disease 2019 (COVID-19) pandemic on the global and national economies and on our and our members’ businesses;
- changes in the demand by our members for advances, including the impact of pricing increases and the availability of other sources of funding for our members, such as deposits;
- regulatory limits on our investments;
- the impact of new business strategies, including our ability to develop and implement business strategies focused on maintaining net interest income; our ability to successfully maintain our balance sheet and cost infrastructure at an appropriate composition and size scaled to member demand; our ability to execute our business model, implement business process improvements and scale our size to our members’ borrowing needs; the extent to which our members use our advances as part of their core financing rather than just as a back-up source of liquidity; and our ability to implement product enhancements and new products and generate enough volume in new products to cover our costs related to developing such products;
- the extent to which we are able to maintain current capital stock requirements and/or continue to offer the Reduced Capitalization Advance Program for certain future advance borrowings, our ability to continue to pay enhanced dividends on our activity stock, and any amendments to our capital plan, will impact borrowing by our members;
- our ability to meet required conditions to repurchase and redeem capital stock from our members (including maintaining compliance with our minimum regulatory capital requirements and determining that our financial condition is sound enough to support such repurchases), the amount and timing of such repurchases or redemptions, and our ability to maintain compliance with regulatory and statutory requirements relating to our dividend payments ;
- general economic and market conditions, including the timing and volume of market activity, inflation/deflation, unemployment rates, housing prices, the condition of the mortgage and housing markets, increased delinquencies and/or loss rates on mortgages, prolonged or delayed foreclosure processes, and the effects on, among other things, mortgage backed securities; volatility resulting from the effects of, and changes in, various monetary or fiscal policies and regulations, such as those determined by the Federal Reserve Board and Federal Deposit Insurance Corporation; impacts from various measures to stimulate the economy and help borrowers refinance home mortgages; disruptions in the credit and debt markets and the effect on future funding costs, sources, and availability; the impact of the occurrence of a major natural or other disaster, or other disruptive event;
- volatility of market prices, rates, and indices, or other factors, such as natural disasters, that could affect the value of our investments or collateral; changes in the value or liquidity of collateral securing advances to our members;
- changes in the value of and risks associated with our investments in mortgage loans, mortgage backed securities and the related credit enhancement protections;
- changes in our ability or intent to hold mortgage backed securities to maturity;
- changes in mortgage interest rates and prepayment speeds on mortgage assets;

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

- membership changes, including the loss of members through mergers and consolidations or as a consequence of regulatory requirements; changes in the financial health of our members, including the resolution of some members; risks related to expanding our membership to include more institutions with regulators and resolution processes with which we have less experience;
- increased reliance on short-term funding and changes in investor demand and capacity for consolidated obligations and/or the terms of interest rate derivatives and similar agreements, including changes in the relative attractiveness of consolidated obligations as compared to other investment opportunities; changes in our cost of funds due to concerns over U.S. fiscal policy, and any related rating agency actions impacting FHLB consolidated obligations;
- uncertainties relating to the scheduled phase-out of the London Interbank Offered Rate (LIBOR);
- political events, including legislative, regulatory, judicial, or other developments that affect us, our members, our counterparties and/or investors in consolidated obligations, including, among other things, changes to the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and related regulations and proposals and legislation related to housing finance and GSE reform; changes by our regulator or changes affecting our regulator and changes in the FHLB Act or applicable regulations as a result of the Housing and Economic Recovery Act of 2008 (Housing Act) or as may otherwise be issued by our regulator; the potential designation of us as a nonbank financial company for supervision by the Federal Reserve;
- regulatory changes to FHLB membership requirements, capital requirements, and liquidity requirements by the FHFA; and increased guidance from the FHFA impacting our balance sheet management;
- the ability of each of the other FHLBs to repay the principal and interest on consolidated obligations for which it is the primary obligor and with respect to which we have joint and several liability;
- the pace of technological change and our ability to develop and support technology and information systems, including our ability to protect the security of our information systems and manage any failures, interruptions or breaches in our information systems or technology services provided to us through third party vendors;
- our ability to attract and retain skilled employees;
- the impact of new accounting standards and the application of accounting rules, including the impact of regulatory guidance on our application of such standards and rules;
- the volatility of reported results due to changes in the fair value of certain assets and liabilities;
- our ability to identify, manage, mitigate, and/or remedy internal control weaknesses and other operational risks; and
- the reliability of our projections, assumptions, and models on our future financial performance and condition, including dividend projections.

For a more detailed discussion of the risk factors applicable to us, see **Risk Factors** in our 2019 Form 10-K on page 18 and **Risk Factors** on page 67 .

These forward-looking statements are representative only as of the date they are made, and we undertake no obligation to update any forward-looking statement as a result of new information, future events, changed circumstances, or any other reason.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Executive Summary

Third Quarter 2020 Financial Highlights

At the end of the third quarter of 2020, activity on advances and MPF Loans outstanding remained elevated due to market uncertainties and historically low rates.

- Advances outstanding decreased \$0.7 billion to \$49.8 billion at September 30, 2020, down from \$50.5 billion at December 31, 2019. Many of our depository members experienced an inflow of deposits on their balance sheets along with reduced loan demand, while also having access to other liquidity sources as a result of certain government actions related to the COVID-19 pandemic. Although these factors continued to reduce our depository members' need for advances, increased advance borrowing by insurance company members has partially offset the decrease by depository members.
- MPF Loans held in portfolio increased to \$10.5 billion at September 30, 2020, up from \$10.0 billion at December 31, 2019, due mainly to increased volume from loan origination activity driven by refinancing as mortgage rates declined overall.
- Total investment securities increased 10% to \$25.4 billion at September 30, 2020, up from \$23.1 billion at December 31, 2019, as purchases exceeded paydowns and maturities.
- Total assets decreased to \$98.4 billion as of September 30, 2020, compared to \$99.8 billion as of December 31, 2019, primarily due to a decrease in short-term liquid assets and advances.
- Letters of credit commitments decreased to \$21.7 billion at September 30, 2020, down from \$23.9 billion at December 31, 2019, primarily due to reduced member demand.
- We recorded net income of \$85 million in the third quarter of 2020, up from \$79 million in the third quarter of 2019, primarily due to increased net interest income from advance prepayments, partially offset by unrealized losses on assets carried at fair value. Earlier this year, we committed to spend approximately \$30 million for targeted relief associated with the impact of the COVID-19 pandemic across our district, of which \$24 million was provided to members and recorded as an expense in the second and third quarters of 2020.
- Net interest income after provision for credit losses for the third quarter of 2020 was \$168 million, up from \$113 million for the third quarter of 2019, primarily due to a short-term trend of widening interest rate spreads between our assets predominantly linked to LIBOR and our debt increasingly linked to SOFR and the receipt of approximately \$27 million of advance prepayment fees (net of associated hedging costs) compared to less than \$1 million in the same period a year ago.
- In the third quarter of 2020, noninterest income (loss) was (\$8) million, down \$37 million from \$29 million for the third quarter of 2019, primarily due to unrealized losses on assets carried at fair value (trading securities and instruments held under fair value option).
- We remained in compliance with all of our regulatory capital requirements as of September 30, 2020.

Summary and Outlook

The COVID-19 pandemic has made this year a difficult year for communities across Illinois and Wisconsin, and the challenges will likely continue well into next year as these communities are experiencing a rise in COVID-19 cases resulting in plans to reopen being reconsidered or rolled back. As we move into winter, it is likely that local economies will continue to be strained. And, while vaccines to aid in preventing the virus are in development, none are likely to be widely available until 2021. We believe these conditions make the support our members' communities receive from our members even more essential.

We believe our members are the fabric of their communities and we are pleased that we have been and are continuing to support our members as they provide assistance to their communities. Member participation in our COVID-19 Relief Program (announced in April 2020) and Targeted Impact Fund (further discussed below) has been significant; 98% of our members used COVID-19 Relief Advances (which are subsidized, 0% advances), COVID-19 Relief Grants, or both, and as of October 19, 2020, 58% of our members have used the Targeted Impact Fund to support many of the beneficiaries most impacted by the pandemic. In fact, overall member utilization of Bank resources has never been greater, with nearly 90% of our members using one or more core products (advances, MPF products, letters of credit, Affordable Housing Program grants, or Downpayment Plus® Programs) to support their businesses and communities this year.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Targeted Impact Fund

As the COVID-19 pandemic unfolded, we saw the disproportionate impact the pandemic is having on certain populations across Illinois and Wisconsin. Our members have responded with compassion by participating in our Targeted Impact Fund to deploy direct support to those most in need. Through the Targeted Impact Fund, many of our members are accessing grants to provide aid to Black, Latino, and Native American communities as well as the elderly, rural, and low- and moderate-income areas, and to support organizations that promote equity and opportunity for these underserved populations. As of October 19, 2020, Targeted Impact Fund highlights include:

- 58% of members have utilized the Targeted Impact Fund and 30% of participating members have provided matching funds.
- The Bank has provided members nearly \$6.4 million in grant dollars.
- Grant dollars have supported 1,077 beneficiaries across Illinois and Wisconsin.
- Grant dollars have been distributed to the beneficiary categories as shown in the table below; note that some beneficiaries fall into more than one category

Beneficiary Category	Grant Dollars	Number of Beneficiaries	*% of Beneficiaries
Minority and Women Business Enterprises	\$1.2 million	198	18%
Advancement of Black and Latino communities	\$2.1 million	272	25%
Community empowerment for populations hardest-hit by COVID-19	\$5.0 million	724	67%
Affordable housing sustainability	\$2.4 million	300	28%

*Beneficiaries can qualify under multiple categories.

The deadline to apply for funding under the Target Impact Fund has been extended to November 10, 2020.

Optimizing Members' Collateral

Expanding members' collateral eligibility to maximize their borrowing capacity with us continues to be one of our primary objectives as a member-focused Bank. We implemented new collateral enhancements this year that not only expand member eligibility, but also make pledging easier in a virtual environment. In August 2020, we began accepting 1-4 family residential mortgage eNotes (electronic promissory notes) as collateral. Relatedly, we announced how this digital solution automates the origination process, provides a more efficient funding experience, and can help reduce operation and servicing costs. Earlier in October 2020, we began accepting construction, land development, and other land loans such as vacant land loans from our depository members. These eligible loan types can be used to support a variety of borrowing activities with us or serve as an additional source of contingent liquidity.

Third Quarter 2020 Dividends and Dividend Guidance

Based on our preliminary financial results for the third quarter of 2020, the Board of Directors declared a dividend of 5.00% (annualized) for Class B1 activity stock, in line with the Class B1 guidance last provided on July 30, 2020. Additionally, the Board of Directors also declared a dividend of 2.25% (annualized) for Class B2 membership stock. The dividend for the third quarter of 2020 will be paid by crediting members' DID accounts on November 12, 2020. We expect to maintain a 5.00% (annualized) dividend for Class B1 activity stock for the fourth quarter of 2020 and first quarter of 2021, based on current projections and assumptions regarding our financial condition. We are providing this information to assist members in planning their activity with us. We pay a higher dividend per share on Class B1 activity stock to recognize members that support the entire cooperative through the use of our products. The higher dividend received on Class B1 activity stock has the effect of lowering members' borrowing costs, and this benefit has increased on a relative basis as the Federal Reserve has cut short-term interest rates twice this year.

As we have clearly demonstrated during this pandemic, we are committed to meeting members' liquidity and funding needs. Any future dividend payments remain subject to determination and declaration by our Board of Directors and may be impacted by further changes in financial or economic conditions, regulatory and statutory limitations, and any other relevant factors.

Operating as a Virtual Bank During the COVID-19 Pandemic

Serving Bank members and ensuring the health and well-being of Bank employees remain our highest priorities. To date, our business resiliency plans have helped us remain fully operational as a virtual workplace and we expect to continue to operate effectively in the foreseeable future.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

The extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will depend on future developments, which are uncertain and cannot be predicted. For a discussion of the risks and potential risks facing the Bank as a result of the COVID-19 pandemic, see **Risk Factors** on page 67.

Recent Developments: HTM and AFS Securities Sale

In October 2020, we adopted the one-time election provision under the Accounting Standards Update entitled Reference Rate Reform (Topic 848) Facilitation of the Effects of Reference Rate Reform on Financial Reporting (ASU 2020-04) to sell held-to-maturity (HTM) private label mortgage backed securities (PLMBS) to reduce our exposure to LIBOR. We also sold certain LIBOR-affected available-for-sale (AFS) securities at this time. Specifically:

- We sold HTM PLMBS that had an amortized cost of \$296 million, and recognized a net realized gain of \$101 million.
- We sold AFS PLMBS with an amortized cost basis of \$26 million, and recognized a net realized gain of \$6 million.

In October 2020, we also sold certain HTM PLMBS in which the sale of the securities occurred after the Bank had already collected at least 85% of the principal outstanding at acquisition. These HTM PLMBS had an amortized cost of \$6 million, and we recognized a net realized gain of \$2 million from the sale.

Neither of the above HTM sales resulted in the tainting of our held-to-maturity portfolio.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Critical Accounting Policies and Estimates

For a detailed description of our Critical Accounting Policies and Estimates see page 38 in our 2019 Form 10-K.

See **Note 2 - Summary of Significant Accounting Policies** and **Note 3 - Recently Issued but Not Yet Adopted Accounting Standards** to the financial statements in this Form 10-Q for the impact of changes to our critical accounting policies subsequent to December 31, 2019.

There have been no significant changes to our critical accounting estimates subsequent to December 31, 2019.

Results of Operations

Net Interest Income

Net interest income is the difference between the amount we recognize into interest income on our interest earning assets and the amount we recognize into interest expense on our interest bearing liabilities. These amounts were determined in accordance with GAAP and were based on the underlying contractual interest rate terms of our interest earning assets and interest bearing liabilities as well as the following items:

- Amortization of premiums;
- Accretion of discounts and credit OTTI reversals;
- Beginning January 1, 2019 on a prospective basis, hedge ineffectiveness, which represents the difference between changes in fair value of the derivative hedging instrument and the related change in fair value of the hedged item is recognized into either interest income or interest expense, whichever is appropriate. For cash flow hedges, recognition occurs only when amounts are reclassified out of accumulated other comprehensive income. Such recognition occurs when earnings are affected by the hedged item. Prior to January 1, 2019, hedge ineffectiveness was classified in noninterest income on derivatives and hedging activities;
- Net interest paid or received on interest rate swaps that are accounted for as fair value or cash flow hedges;
- Amortization of fair value and cash flow closed hedge adjustments;
- Advance and investment prepayment fees; and
- MPF credit enhancement fees.

The following table presents the increase or decrease in interest income and expense due to volume or rate variances. The calculation of these components includes the following considerations:

- *Average Balance:* Average balances are calculated using daily balances. Amortized cost is used to compute the average balances for most of our financial instruments, including MPF Loans held in portfolio (including those that are on nonaccrual status) and available-for-sale debt securities. Fair value is used to compute average balances for our trading debt securities and financial instruments carried at fair value under the fair value option.
- *Total Interest:* Total interest includes the net interest income components, as discussed above, applicable to our interest earning assets and interest bearing liabilities.
- *Yield/Rate:* Effective yields/rates are based on total interest and average balances as defined above. Yields/rates are calculated on an annualized basis. The calculation of the yield on our available-for-sale securities does not give effect to changes in fair value that are reflected as a component of accumulated other comprehensive income (AOCI).
- The change in volume is calculated as the change in average balance multiplied by the current year yield. The change in rate is calculated as the change in yield multiplied by the prior year average balance. Any changes due to the combined volume/rate variance have been allocated to volume.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Increase or decrease in interest income and expense due to volume or rate variances

	September 30, 2020			September 30, 2019			Increase (decrease) due to		
	Average Balance	Interest Income/Expense	Yield/Rate	Average Balance	Interest Income/Expense	Yield/Rate	Volume	Rate	Net Change
For the three months ended									
Investment debt securities	\$ 24,124	\$ 99	1.64 %	\$ 21,275	\$ 184	3.46 %	\$ 12	\$ (97)	\$ (85)
Advances	54,488	114	0.84 %	54,658	326	2.39 %	—	(212)	(212)
MPF Loans held in portfolio	10,550	69	2.62 %	8,563	79	3.69 %	13	(23)	(10)
Federal funds sold and securities purchased under agreements to resell	8,855	2	0.09 %	11,479	64	2.23 %	(1)	(61)	(62)
Other interest earning assets	2,157	1	0.19 %	1,563	9	2.30 %	—	(8)	(8)
Interest earning assets	100,174	285	1.14 %	97,538	662	2.71 %	6	(383)	(377)
Noninterest earning assets	2,301			2,173					
Total assets	102,475			99,711					
Consolidated obligation discount notes	42,387	24	0.23 %	47,764	270	2.26 %	(4)	(242)	(246)
Consolidated obligation bonds	51,282	88	0.69 %	43,709	272	2.49 %	13	(197)	(184)
Other interest bearing liabilities	1,407	4	1.14 %	1,048	7	2.67 %	1	(4)	(3)
Interest bearing liabilities	95,076	116	0.49 %	92,521	549	2.37 %	2	(435)	(433)
Noninterest bearing liabilities	1,266			1,479					
Total liabilities	96,342			94,000					
Net yield interest earning assets	\$ 100,174	\$ 169	0.67 %	\$ 97,538	\$ 113	0.46 %	\$ 5	\$ 51	\$ 56
For the nine months ended									
Investment debt securities	\$ 23,835	\$ 416	2.33 %	\$ 20,368	\$ 548	3.59 %	\$ 60	\$ (192)	\$ (132)
Advances	55,086	497	1.20 %	55,198	1,046	2.53 %	2	(551)	(549)
MPF Loans held in portfolio	10,485	232	2.95 %	7,920	233	3.92 %	57	(58)	(1)
Federal funds sold and securities purchased under agreements to resell	9,904	41	0.55 %	11,417	201	2.35 %	(6)	(154)	(160)
Other interest earning assets	2,326	11	0.63 %	1,263	23	2.43 %	5	(17)	(12)
Interest earning assets	101,636	1,197	1.57 %	96,166	2,051	2.84 %	62	(916)	(854)
Noninterest earning assets	2,262			1,858					
Total assets	103,898			98,024					
Consolidated obligation discount notes	45,450	291	0.85 %	45,949	831	2.41 %	(2)	(538)	(540)
Consolidated obligation bonds	49,720	439	1.18 %	44,205	851	2.57 %	49	(461)	(412)
Other interest bearing liabilities	1,380	14	1.35 %	945	22	3.10 %	4	(12)	(8)
Interest bearing liabilities	96,550	744	1.03 %	91,099	1,704	2.49 %	38	(998)	(960)
Noninterest bearing liabilities	1,295			1,287					
Total liabilities	97,845			92,386					
Net yield on interest earning assets	\$ 101,636	\$ 453	0.59 %	\$ 96,166	\$ 347	0.48 %	\$ 27	\$ 79	\$ 106

The following analysis and comparisons apply to the periods presented in the above table unless otherwise indicated.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

- Interest income from investment debt securities decreased due to lower market interest rates in 2020 compared to the same period in 2019. Subject to FHFA regulatory limits as discussed in **Investments** on page 10 in our 2019 Form 10-K, we are currently making investments in MBS.
- Interest income from advances decreased due to lower market interest rates in 2020 compared to the same period in 2019.
- Interest income from MPF Loans held in portfolio declined due to the lower mortgage rate environment impacting the yield earned on new loan originations, along with the recognition of premium amortization as loans prepaid during the period. However, the decline in overall yield of the MPF portfolio was offset by higher volumes, as new-acquisition volume continued to outpace paydown and maturity activity due to loan origination activity driven by refinancing as mortgage rates declined overall. A higher number of our PFIs delivering into the MPF Traditional program also contributed to the higher volume in MPF Loans held in portfolio.
- Interest income from overnight Federal Funds sold and securities purchased under agreements to resell decreased due to lower market interest rates in 2020 compared to the same period in 2019.
- Interest expense on our shorter term consolidated obligation discount notes decreased due to lower market interest rates in 2020 compared to the same period in 2019.
- Interest expense on our longer term consolidated obligation bonds decreased due to lower market interest rates in 2020 compared to the same period in 2019.
- Net interest income increased primarily due to a short term trend of widening interest rate spreads between our assets still predominantly linked to LIBOR and our debt increasingly linked to SOFR, in addition to the receipt of approximately \$27 million and \$42 million of advance prepayment fees for the three months and nine months ended September 30 respectively, compared to less than \$1 million and \$3 million for the same periods a year ago.
- For details of the effect our fair value and cash flow hedge activities had on our net interest income see **Total Net Effect Gain (Loss) of Hedging Activities** table on page 48.

Although the Bank maintained ready access to funding throughout the first three quarters of 2020, we have experienced some disruptions in the long-term debt markets. The impact of the COVID-19 pandemic on our overall funding costs may cause compression in net interest margin in the future as returns on our liquidity asset portfolio decline over the same time. The extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will depend on future developments, which are uncertain and cannot be predicted. For a discussion of risks relating to our financial condition and results of operation as a result of the COVID-19 pandemic, including risks relating to our net interest margin and advance levels, see **Risk Factors** on page 67 in this Form 10-Q .

Noninterest Income

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Noninterest income -				
Trading securities	(23)	(3)	\$ 39	\$ 20
Derivatives and hedging activities	\$ 3	\$ (5)	(156)	(31)
Instruments held under fair value option	(7)	24	69	43
MPF fees, 7 , 8 , 23 and 21 from other FHLBs	15	10	40	27
Other, net	4	3	11	9
Noninterest income	\$ (8)	\$ 29	\$ 3	\$ 68

The following analysis and comparisons apply to the periods presented in the above table.

Trading Securities, Derivatives and Hedging Activities, and Instruments Held Under Fair Value Option

Losses on our trading securities and instruments held under fair value option were the driver of our decrease in noninterest income for the three months ended September 30, 2020. Losses on our derivatives and hedging activities were the driver of our decrease in noninterest income for the nine months ended September 30, 2020 offset by, in part, gains our trading securities and instruments held under fair value option. The corresponding gains and losses were primarily attributable to the decline in market interest rates in 2020 compared to 2019, which began to reverse during the third quarter of 2020 as rates rose slightly and the instruments continued to pull to par toward maturity.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

The following table details the effect of these transactions on our statements of income.

Total Net Effect Gain (Loss) of Hedging Activities

	Advances	Investments	MPF Loans	Discount Notes	Bonds	Other	Total
Three months ended September 30, 2020							
Recorded in net interest income	\$ (135)	\$ (70)	\$ (1)	\$ (7)	\$ 43	\$ —	\$ (170)
Recorded in derivatives & hedging activities	3	2	(1)	—	(1)	—	3
Recorded in trading securities	—	(23)	—	—	—	—	(23)
Recorded on instruments held under fair value option	(5)	—	(2)	—	—	—	(7)
Total net effect gain (loss) of hedging activities	\$ (137)	\$ (91)	\$ (4)	\$ (7)	\$ 42	\$ —	\$ (197)
Three months ended September 30, 2019							
Recorded in net interest income	\$ 1	\$ (9)	\$ —	\$ (4)	\$ (8)	\$ —	\$ (20)
Recorded in derivatives & hedging activities	(18)	3	6	—	(1)	5	(5)
Recorded in trading securities	—	(4)	—	—	—	—	(4)
Recorded on instruments held under fair value option	18	—	—	—	6	—	24
Total net effect gain (loss) of hedging activities	\$ 1	\$ (10)	\$ 6	\$ (4)	\$ (3)	\$ 5	\$ (5)
Nine months ended September 30, 2020							
Recorded in net interest income	\$ (175)	\$ (109)	\$ (1)	\$ (16)	\$ 85	\$ —	\$ (216)
Recorded in derivatives & hedging activities	(97)	(92)	1	20	8	4	(156)
Recorded in trading securities	—	18	—	—	—	—	18
Recorded on instruments held under fair value option	73	—	—	—	(4)	—	69
Total net effect gain (loss) of hedging activities	\$ (199)	\$ (183)	\$ —	\$ 4	\$ 89	\$ 4	\$ (285)
Nine months ended September 30, 2019							
Recorded in net interest income	\$ 25	\$ (27)	\$ (1)	\$ (22)	\$ (52)	\$ —	\$ (77)
Recorded in derivatives & hedging activities	(59)	(14)	20	3	10	9	(31)
Recorded in trading securities	—	19	—	—	—	—	19
Recorded on instruments held under fair value option	52	—	—	—	(9)	—	43
Total net effect gain (loss) of hedging activities	\$ 18	\$ (22)	\$ 19	\$ (19)	\$ (51)	\$ 9	\$ (46)

MPF fees (including from other FHLBs)

A majority of MPF fees are from other FHLBs that pay us a fixed membership fee to participate in the MPF Program and a volume based fee for us to provide services related to MPF Loans carried on their balance sheets. MPF fees also include income from other third party off balance sheet MPF Loan products and other related transaction fees. These fees are designed to offset a portion of the expenses we incur to administer the program for them. We had an increase in fee income for 2020 compared to 2019.

Other, net

Other, net consists primarily of fee income earned on member standby letter of credit products, as noted in **Selected Financial Data** on page 39.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Noninterest Expense

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Compensation and benefits	\$ 29	\$ 27	\$ 100	\$ 82
Nonpayroll operating expenses	22	23	68	66
COVID-19 Relief Program	5	—	24	—
Other	9	4	15	8
Noninterest expense	\$ 65	\$ 54	\$ 207	\$ 156

The following analysis and comparisons apply to the periods presented in the above table.

Compensation and benefits increased due to increases in salaries, incentive compensation expenses and pension-related expenses. We had 486 employees as of September 30, 2020, compared to 484 as of September 30, 2019.

Operating expenses were comparable to prior periods as we continue our planned investment in information technology, specifically applications, infrastructure and resiliency.

Other expenses primarily increased due to net benefit costs associated with our nonqualified deferred compensation plan. Other also consists of our share of the funding for the FHFA, our regulator, and the Office of Finance, which manages the consolidated obligation debt issuances of the FHLBs. In addition, Other includes MPF related non-operating expenses/gains on the sale of real estate owned.

In response to the COVID-19 pandemic, on April 20, 2020 the Bank announced the COVID-19 Relief Program to support communities in Illinois and Wisconsin. Under this program, each Bank member and non-member housing associate was eligible to draw up to \$4 million in an interest-free advance (up to a total of \$2.76 billion in interest-free advances under the program). Additionally, under this program, the Bank offered all members and non-member housing associates the opportunity to request up to \$20,000 in grants to benefit small businesses and non-profit organizations of their choosing. As a follow-up to this initial relief programming, we are now offering grants to our members under the new Targeted Impact Fund to support communities hardest hit by the COVID-19 pandemic, including Black, Latino, and Native American communities as well as the elderly, rural, and low- and moderate-income populations. These grants may also be used to promote equity and opportunity for underserved populations. (The Covid-19 Relief Program and the Targeted Impact Fund are collectively, the "Relief Programs.") The Bank committed to invest approximately \$30 million in the Relief Programs, of which \$24 million was provided to members and recorded as an expense in the second and third quarters of 2020. We anticipate deploying the remaining Relief Program funds to members through the Targeted Impact Fund in the fourth quarter of 2020.

The extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will depend on future developments, which are uncertain and cannot be predicted. For a discussion of risks relating to our financial condition and results of operation as a result of the COVID-19 pandemic, see **Risk Factors** on page 67.

As noted in **Noninterest Income** on page 47, we earn MPF fees from the MPF Program, a majority of which are from other FHLBs, but also include income from other third party investors. These fees are designed to offset a portion of the expenses we incur to administer the program. Our expenses relating to the MPF fees earned are included in the relevant line items in the noninterest expense table shown above. The following table summarizes MPF related fees and expenses.

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
MPF fees earned	\$ 15	\$ 10	\$ 40	\$ 27
Expenses related to MPF fees earned	10	7	30	24

Assessments

We record the Affordable Housing Program (AHP) assessment expense at a rate of 10% of income before assessments, excluding interest expense on MRCS. See **Note 11 - Affordable Housing Program** in our 2019 Form 10-K for further details.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Other Comprehensive Income (Loss)

	Three months ended September 30,		Nine months ended September 30,		Balance remaining in AOCI as of
	2020	2019	2020	2019	September 30, 2020
Net unrealized gain (loss) available-for-sale debt securities	\$ 280	\$ (61)	\$ (4)	\$ (80)	\$ 100
Noncredit OTTI held-to-maturity debt securities	3	7	12	20	(73)
Net unrealized gain (loss) cash flow hedges	9	(4)	(39)	(17)	(77)
Postretirement plans	(2)	(5)	(13)	—	(23)
Other comprehensive income (loss)	\$ 290	\$ (63)	\$ (44)	\$ (77)	\$ (73)

The following analysis and comparisons apply to the periods presented in the above table.

Net unrealized gain (loss) on available-for-sale debt securities

The net unrealized gain on our available-for-sale (AFS) portfolio for the three months ended September 30, 2020 is primarily due to spreads to swaps reversing the widening initially experienced in the first quarter of 2020 resulting from the effects of the COVID-19 pandemic on the financial markets. The small net unrealized loss on our AFS portfolio for the nine months ended September 30, 2020 is also a result of spreads to swaps reversing the widening initially experienced in the first quarter of 2020 resulting from the effects of the COVID-19 pandemic on the financial markets, as much of the losses experienced have since reversed. As these securities approach maturity, we expect these net unrealized gains to reverse over the remaining life of these securities (since we expect to receive par value at maturity).

Noncredit OTTI on held-to-maturity debt securities

We recorded unrealized noncredit impairments on held-to-maturity debt securities during the last financial crisis of 2008. The market value of these securities have improved from their impaired values and because we intend to hold these securities to maturity, we are recording accretion to the carrying amount of the securities, reversing the remaining loss balance in AOCI over the remaining life of these securities. As discussed in **Note 2 – Summary of Significant Accounting Policies**, subsequent to September 30, 2020, we sold PLMBS during October 2020.

Net unrealized gain (loss) on cash flow hedges

The net unrealized gain on cash flow hedges for the three months ended September 30, 2020 was primarily a result of our hedges' higher sensitivity to the slight increase in longer term market interests for the third quarter of 2020. The net unrealized loss on cash flow hedges for the nine months ended September 30, 2020 was due to the decrease in market interest rates for 2020.

Postretirement plans

The loss recorded in 2020 was primarily due to an actuarial adjustment resulting from a decline in the discount rate used to calculate postretirement benefits.

We did not recognize any instrument-specific credit risk in our statements of comprehensive income as of September 30, 2020 due to our credit standing. For further details on the activity in our Other Comprehensive Income (Loss) see **Note 12 - Accumulated Other Comprehensive Income (Loss)** to the financial statements.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Statement of Condition

	September 30, 2020	December 31, 2019
Cash and due from banks, interest bearing deposits, Federal Funds sold, and securities purchased under agreement to resell	\$ 12,199	\$ 15,815
Investment debt securities	25,359	23,096
Advances	49,771	50,508
MPF Loans held in portfolio, net of allowance for credit losses	10,529	10,000
Other, net of allowance for credit losses	529	408
Assets	98,387	99,827
Consolidated obligation discount notes	41,801	41,675
Consolidated obligation bonds	47,970	50,474
Other	2,712	2,224
Liabilities	92,483	94,373
Capital stock	2,041	1,713
Retained earnings	3,936	3,770
Accumulated other comprehensive income (loss)	(73)	(29)
Capital	5,904	5,454
Total liabilities and capital	\$ 98,387	\$ 99,827

The following is an analysis of the above table and comparisons apply to September 30, 2020 compared to December 31, 2019.

Cash and due from banks, interest bearing deposits, Federal Funds sold, and securities purchased under agreements to resell

Amounts held in these typically overnight accounts will vary each day based on the following:

- Interest rate spreads between Federal Funds sold and securities purchased under agreements to resell and our debt;
- Liquidity requirements;
- Counterparties available; and
- Collateral availability on securities purchased under agreements to resell.

In the third quarter of 2020, we maintained a sufficient pool of liquidity to support anticipated member demand for advances and letters of credit.

Investment Debt Securities

Investment debt securities increased due to purchases in our investment debt securities portfolio in 2020. This increase was offset by declines in our MBS/ABS securities that matured or paid down.

Advances

Advance balances slightly decreased at the end of third quarter 2020 compared to year end 2019 primarily due to a reduction in borrowing from our depository members, driven by continued elevated deposit levels as federal government liquidity programs continued to impact our members' balance sheets. Partially offsetting this decline in advances was an increase in borrowing from our insurance company members. Advance balances will vary based primarily on member demand or need for wholesale funding and the underlying cost of the advance to the member. It is possible that member demand for our advances could decline further in future periods should their funding needs change, or to the extent they elect alternative funding resources. In addition, as our advances with captive insurance companies mature, our total advance levels may decrease. For a discussion of risks relating to our captive insurance companies, see **Risk Factors** on page 19 of the Bank's 2019 Form 10-K. For a discussion of risks relating to our advance levels as a result of the COVID-19 pandemic, see **Risk Factors** on page 67.

MPF Loans Held in Portfolio, Net of Allowance for Credit Losses

MPF Loans held in portfolio increased as new-acquisition volume continued to outpace paydown and maturity activity. A significant portion of the new acquisition volume was the result of refinancing activity as mortgage rates declined overall. Another factor driving growth in MPF Loans held in portfolio was an increase in the number of different PFIs delivering loans into the MPF Traditional program. In addition to our MPF Loans held in portfolio, we have MPF off-balance sheet products, where we

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

buy and concurrently resell MPF Loans to Fannie Mae or other third party investors or pool and securitize them into Ginnie Mae MBS.

Liquidity, Funding, & Capital Resources

Liquidity

For the period ending September 30, 2020, we maintained a liquidity position in accordance with FHFA regulations and guidance, and policies established by our Board of Directors. Based upon our excess liquidity position described below, we anticipate remaining in compliance with our current liquidity requirements. See **Liquidity, Funding, & Capital Resources** on page 47 in our 2019 Form 10-K for a detailed description of our current liquidity requirements. We use different measures of liquidity as follows:

Overnight Liquidity – Our policy requires us to maintain overnight liquid assets at least equal to 3.5% or \$3.4 billion of total assets. As of September 30, 2020, our overnight liquidity was \$14.8 billion or 15% of total assets, giving us an excess overnight liquidity of \$11.3 billion.

Deposit Coverage – To support our member deposits, FHFA regulations require us to have an amount equal to the current deposits invested in obligations of the U.S. Government, deposits in eligible banks or trust companies, or advances with maturities not exceeding five years. As of September 30, 2020, we had excess liquidity of \$51.7 billion to support member deposits.

Liquidity Reserves – As discussed on page 48 in the **Liquidity, Funding, & Capital Resources** section of our 2019 Form 10-K, FHFA guidance on liquidity (the “Liquidity AB”) requires that we hold positive cash flow assuming no access to the capital markets for a period of between ten to thirty calendar days, and assuming the renewal of all maturing advances. The Liquidity AB also requires the Bank to maintain liquidity reserves between one and 20 percent of our outstanding letter of credit commitments.

The Liquidity AB requires the Bank to hold an additional amount of liquid assets, which could reduce the Bank’s ability to invest in higher-yielding assets, and may in turn negatively impact net interest income. To the extent that the Bank adjusts pricing for its short-term advances and letters of credit, these products may become less competitive, which may adversely affect advance and capital stock levels as well as letters of credit levels. For additional discussion of how our liquidity requirements may impact our earnings, see page 18 in the **Risk Factors** section of our 2019 Form 10-K.

In addition, we fund certain overnight or shorter-term investments and advances with debt that has a maturity that extends beyond the maturities of the related investments or advances. The Liquidity AB provides guidance on maintaining appropriate funding gaps for three-month (-10% to -20%) and one-year (-25% to -35%) maturity horizons. Subject to market conditions, our cost of funding may increase if we are required to achieve the appropriate funding gap by using longer term funding, on which we generally pay higher interest than on our short-term funding.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

We are sensitive to maintaining an appropriate liquidity and funding balance between our financial assets and liabilities, and we measure and monitor the risk of refunding such assets as liabilities mature (refunding risk). In measuring the level of assets requiring refunding, we take into account their contractual maturities, as further described in the notes to the financial statements. In addition, we make certain assumptions about their expected cash flows. These assumptions include: calls for assets with such features, projected prepayments and scheduled amortizations for our MPF Loans held in portfolio, MBS and ABS investments.

The following table presents the unpaid principal balances of (1) MPF Loans held in portfolio, (2) AFS securities, and (3) HTM securities (including ABS and MBS investments), by expected principal cash flows. The table is illustrative of our assumptions about the expected cash flow of our assets, including prepayments made in advance of maturity. As discussed in **Executive Summary** on page 44, subsequent to September 30, 2020, we sold AFS and HTM PLMBS in October 2020.

	MPF Loans Held in Portfolio	Investment Debt Securities	
As of September 30, 2020		Available-for Sale	Held-to- Maturity
Year of Expected Principal Cash Flows			
One year or less	\$ 4,078	\$ 734	\$ 788
After one year through five years	3,594	2,504	471
After five years through ten years	1,555	9,439	241
After ten years	1,113	3,891	53
Total	\$ 10,340	\$ 16,568	\$ 1,553

We consider our liabilities available to fund assets until their contractual maturity. For further discussion of the liquidity risks related to our access to funding, see page 23 of the **Risk Factors** section in our 2019 Form 10-K.

Funding

Conditions in Financial Markets

The COVID-19 pandemic continued to affect the markets and the economy during the third quarter of 2020. At its meeting in July 2020, the Federal Open Markets Committee (FOMC) kept the Federal Funds rate at a target range between zero and 0.25 percent. At the Federal Reserve's Monetary Policy Framework Review at the Jackson Hole Economic Policy Symposium in August 2020, the Federal Reserve announced a policy shift where it would prioritize unemployment over inflation, allowing inflation to rise above 2% to help ensure maximum employment and offset periods where inflation runs below its long-term target. At its meeting in September 2020, the FOMC again maintained the Federal Funds rate in the same range and committed to continuing their recently announced programs and policies. U.S. Gross Domestic Product (GDP) was announced for the second quarter of 2020, showing a decrease of 31.4% due to limited activity during the COVID-19 pandemic. Yields on U.S. Treasuries were mixed during the third quarter of 2020 as compared to end of the second quarter of 2020, and were generally lower for shorter maturities and higher for maturities 10 years and longer. In the equity markets, the S&P 500 Index rose over 8% and the Dow Jones Industrial Average rose over 7% during the third quarter of 2020.

Our reliance on shorter-term funding during the second quarter continued throughout the third quarter of 2020, primarily through discount notes and SOFR floating rate notes. However, funding levels for longer term debt continues to improve and move closer to historical norms.

The extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will continue to depend on future developments, which are uncertain and cannot be predicted. For a discussion of the funding risks to the Bank as a result of the COVID-19 pandemic, including risks related to government action in response to the impact of the pandemic, see **Risk Factors** on page 67 in this Form 10-Q.

We maintained ready access to funding throughout the nine months ended September 30, 2020.

LIBOR Transition

In July 2017, the United Kingdom's (U.K.) Financial Conduct Authority (FCA), a regulator of financial services firms and financial markets in the U.K., announced its intention to cease sustaining the LIBOR indices after 2021. In response, the Federal Reserve Board (FRB) and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee (ARRC) to identify a set of alternative reference interest rates for possible use as market benchmarks. The ARRC has identified the Secured Overnight Financing Rate (SOFR) as its recommended alternative rate. SOFR is based on a broad segment of the overnight Treasuries repurchase market and is intended to be a measure of the cost of borrowing cash overnight collateralized by Treasury

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

securities. The Federal Reserve Bank of New York began publishing SOFR rates in April 2018 and the FHLB System issued its first SOFR-linked debt in the market on November 13, 2018. Many of our assets and liabilities are indexed to LIBOR, some with maturities or termination dates extending past December 31, 2021.

On September 27, 2019, the FHFA issued a Supervisory Letter (the "Supervisory Letter") that the FHFA stated is designed to ensure the FHLBs will be able to identify and prudently manage the risks associated with the termination of LIBOR in a safe and sound manner. Among other things, the Supervisory Letter provides that the FHLBs should cease entering into certain transactions referencing LIBOR that mature after December 31, 2021. Accordingly, we previously ceased entering into option embedded advance products that reference LIBOR and have ceased purchasing investments that reference LIBOR and mature after December 31, 2021. Effective July 1, 2020, we suspended transactions in certain structured advances and advances with terms directly linked to LIBOR that mature after December 31, 2021. Also as of July 1, 2020, we no longer enter into consolidated obligation bonds and derivatives with swaps, caps, or floors indexed to LIBOR that terminate after December 31, 2021. For further discussion of the risks related to the replacement of LIBOR, see page 24 of the **Risk Factors** section in our 2019 Form 10-K.

We continue to evaluate and plan for the eventual replacement of the LIBOR benchmark interest rate, including the possibility of SOFR as the primary replacement rate for investments and advances. We have developed an initial LIBOR transition action plan and convened a project team to implement the transition, which is led by a senior executive and comprised of representatives from various areas across the Bank. Our Asset-Liability Management Committee (ALCO) is the management committee responsible for overseeing the transition from LIBOR. In assessing our current exposure to LIBOR, we have developed an inventory of financial instruments impacted and identified contracts that may require adding or adjusting the "fallback" language which provides for contractual alternatives to the use of LIBOR when LIBOR cannot be determined based on the method provided in the agreement. We have amended the terms of certain advance products to include fallback language and the OF has added or adjusted fallback language applicable to FHLB consolidated obligations. For over the counter derivatives, as discussed in the **Legislative & Regulatory Developments** section of this Form 10-Q on page 63, we have adhered to the ISDA LIBOR Fallbacks Protocol. For cleared derivatives, as part of the transition from LIBOR to SOFR, the clearinghouses revised their discounting methodology used to calculate the present value of future cash flows and price alignment on variation margin for USD cleared swaps from the daily Effective Federal Funds Rate (EFFR) to SOFR. Both clearinghouses implemented their own unique cash and basis swap compensation mechanisms for market participants to neutralize any value transfer discrepancies from the LIBOR to SOFR conversion. We continue to monitor the market-wide efforts to address fallback language related to cleared derivatives and investment securities as well as fallback language for new activities and issuances of financial instruments. We continue to assess our operational readiness, including updating our processes and information technology systems to support the transition from LIBOR to an alternative reference rate.

Market activity in SOFR-indexed financial instruments continues to increase, including the emergence of a SOFR-based derivative market, and we continue to participate in the issuance of SOFR-indexed consolidated bonds. For the nine months ended September 30, 2020, we have participated in the issuance of \$27.0 billion in SOFR-linked consolidated bonds. We are using Federal Funds Overnight Index Swap (Fed Funds OIS) swaps as an interest rate hedging strategy for financial instruments that do not have embedded options, as an alternative to using LIBOR when entering into new derivative transactions. We are offering SOFR-linked advances to our members, and for the nine months ended September 30, 2020, have issued \$367 million in SOFR-linked advances. We also offer Discount Note-index floater advances, which some members have used as alternatives to LIBOR-linked advance products.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Variable-Rate Financial Instruments by Interest-Rate Index and LIBOR-Indexed Financial Instruments

We have advances, investment securities, consolidated bonds, and derivatives with interest rates indexed to LIBOR. The following tables presents our variable rate financial instruments by interest-rate index at September 30, 2020 and may not include instruments that indirectly incorporate LIBOR or another interest rate index. The tables also do not consider the impact of any fallback language contained in our financial products. ABS and MBS are presented by contractual maturity; however, their expected maturities will likely differ from contractual maturities as borrowers may have the right to call or prepay obligations with or without call or prepayment fees. As discussed in **Executive Summary** on page 44, subsequent to September 30, 2020, we sold LIBOR indexed AFS and HTM PLMBS in October 2020.

As of September 30, 2020	Advances	Investments	Consolidated Obligations
Principal amount of variable rate instruments outstanding ^a			
LIBOR	\$ 1,763	\$ 3,654	\$ (750)
SOFR	367	—	(28,227)
Treasury	—	149	—
Other	15,876 ^b	257	—
Total	\$ 18,006	\$ 4,060	\$ (28,977)
LIBOR indexed instruments principal amount outstanding by contractual maturity/termination date			
Before January 1, 2022	\$ 431	\$ 27	\$ (500)
January 1, 2022, and thereafter	1,332	3,627	(250)
Total	\$ 1,763	\$ 3,654	\$ (750)
Principal amount of SOFR-linked instruments issued YTD through September 30, 2020			
	\$ 367	\$ —	\$ (26,991)

^a With respect to advances, includes fixed rate advances that have cap/floor optionality linked to an interest rate index.

^b Consists primarily of advances indexed to consolidated obligation yields.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

As of September 30, 2020	Derivative Notional Amount Outstanding	
	Pay Leg	Receive Leg
Interest rate swaps outstanding		
Fixed rate	\$ 37,788	\$ 17,178
LIBOR	8,429	20,992
SOFR	158	1,323
OIS	8,591	15,073
Other	—	400
Total interest rate swaps	\$ 54,966	\$ 54,966
LIBOR indexed interest rate swaps by contractual maturity/termination date		
Maturity/termination before January 1, 2022	\$ 2,231	\$ 1,889
Maturity/termination January 1, 2022, and thereafter	3,226	10,152
Total cleared	5,457	12,041
Maturity/termination before January 1, 2022	1,700	929
Maturity/termination January 1, 2022, and thereafter	1,272	8,022
Total uncleared	2,972	8,951
Total LIBOR indexed interest rate swaps	\$ 8,429	\$ 20,992

Condensed Statements of Cash Flows

Net cash flows from operating activities

Nine months ended September 30,	2020	2019	Change
Net cash provided by (used in) operating activities	\$ (1,031)	\$ (625)	\$ (406)

The majority of our operating cash outflows in 2020 were related to cash sent daily to clearinghouses to settle mark-to-market derivative positions with them, which were significantly higher in 2020 due to the COVID-19 pandemic impact on market volatility, which occurred primarily in the first quarter.

Net cash flows from investing activities with significant activity

Nine months ended September 30,	2020	2019	Change
Liquid assets (Federal Funds sold, securities purchased under agreements to resell, and interest bearing deposits)	\$ 4,781	\$ (1,227)	\$ 6,008
Investment debt securities	(1,669)	(851)	(818)
Advances	1,375	(4,512)	5,887
MPF Loans held in portfolio	(585)	(1,913)	1,328
Other	(26)	8	(34)
Net cash provided by (used in) investing activities	\$ 3,876	\$ (8,495)	\$ 12,371

Our investing activities consist predominantly of liquid assets, investment debt securities, advances, and MPF Loans in portfolio. The change in net cash provided by (used in) investing activities and changes in allocation within investing activities are discussed below.

- In 2020, our liquid assets were reduced as we funded increased investment debt securities. In 2019, we invested in liquid assets to increase our liquidity position to comply with new FHFA liquidity guidance. We continue to maintain compliance with this guidance.
- We increased our investment debt security purchases in 2020, as we achieved key liquidity, MBS, and mission asset ratios.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

- Our advances outstanding decreased in 2020 due to decreased depository member demand for funding. We experienced an increase in advances during the same period in 2019.
- Net investment in MPF Loans held in portfolio in 2020 declined relative to a larger increase in 2019 as the low mortgage rate environment has caused elevated borrower home refinancings and the commensurate acceleration in the rate of principal paydowns in our portfolio, relative to new loan acquisitions.

Net cash flows from financing activities with significant activity

Nine months ended September 30,	2020	2019	Change
Consolidated obligation discount notes	\$ 200	\$ 4,429	\$ (4,229)
Consolidated obligation bonds	(2,681)	4,149	(6,830)
Other	801	579	222
Net cash provided by (used in) financing activities	\$ (1,680)	\$ 9,157	\$ (10,837)

Our financing activities primarily reflect cash flows related to issuing and repaying consolidated obligation bonds and discount notes. The change in net cash provided by (used in) financing activities and change in funding allocations are discussed below.

- We reduced our consolidated obligation debt financing to match the overall decline in assets as discussed in investing activities above.
- Other financing activities increased primarily due to an increase in member deposits.

Capital Resources

Capital Rules

We implemented an Amended and Restated Capital Plan of the Federal Home Loan Bank of Chicago, effective July 1, 2020 (Amended Capital Plan). Although the overall design of our capital structure and total amount of capital stock held by members remains unchanged under the Amended Capital Plan, certain changes discussed below are designed to reward members who use the Bank's products, provide tighter ranges on capital stock requirements and streamline certain aspects of capital stock administration for improved efficiency and member experience. We do not expect the Amended Capital Plan to impact our ability to meet our capital requirements.

Under the Amended Capital Plan our stock continues to consist of two sub-classes of stock, Class B1 activity stock and Class B2 membership stock (together, Class B stock), both with a par value of \$100 per share and redeemable on five years' written notice, subject to certain conditions. Each member is required to own capital stock in an amount equal to the greater of a membership stock requirement or an activity stock requirement. All stock that supports a member's activity stock requirement with the Bank is classified as Class B1 activity stock. Any additional amount of stock necessary for the total amount of Class B stock held to equal a member's minimum investment amount will be classified as Class B2 membership stock. Members purchase Class B2 membership stock to satisfy their membership stock requirement with the Bank. Under our prior capital plan, to the extent that a member had advances, we converted capital stock that would otherwise be classified as Class B2 membership stock to Class B1 activity stock, except for a "threshold" of \$10,000 that remained Class B2 membership stock. Our Amended Capital Plan removes the threshold so that all capital stock that supports a member's advance activity is now classified as Class B1 activity stock. As with our prior capital plan, any dividend declared on Class B1 activity stock must be greater than or equal to the dividend on Class B2 membership stock for the same period. The higher dividend paid on Class B1 activity stock since late 2013 acknowledges that members, through their utilization of Bank advances, provide support to the entire cooperative.

As with our prior capital plan, each member's activity stock requirement remains at 4.5% for advances other than those borrowed under the Reduced Capitalization Advance Program (RCAP) as further discussed below. The Amended Capital Plan continues to provide that the Board of Directors may periodically adjust members' activity stock requirement for advances, but the range of adjustment has now been reduced to between 2% and 5% of a member's outstanding advances.

The activity stock requirement for MPF Loans acquired for our portfolio remains set at 0% under our Amended Capital Plan, and the range within which our Board may adjust this requirement has been reduced to between 0% and 5%. As a result of regulatory guidance, our Amended Capital plan now allows for an activity stock requirement within a range of 0% to 2% for letters of credit, which our Board has initially set at 0%. At such time as the Board decides to introduce, or at such time as our regulator imposes, an activity stock requirement for MPF Loans or standby letters of credit, we intend to notify members sufficiently in advance of the change and apply that change only to future acquisitions or transactions.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

As with our prior capital plan, each member's membership stock requirement remains the greater of either \$10,000 or 0.40% of a member's mortgage assets. The Amended Capital Plan continues to provide that the Board may periodically adjust members' membership stock requirement, but the range of adjustment has been reduced to between 0.20% to 1% of a member's mortgage assets. A member's investment in membership stock remains capped at \$5 million, which is now subject to adjustment by the Board within a simplified and reduced range of between \$1 million and \$25 million.

Membership stock requirements will continue to be recalculated annually, whereas the activity stock requirement and any automatic conversion between Class B2 membership stock and Class B1 activity stock related to advance activity continue to apply on a daily basis.

We may only redeem or repurchase capital stock from a member if, following the redemption or repurchase, the member continues to meet its minimum investment requirement and we remain in compliance with our regulatory capital requirements as discussed in **Note 11 - Capital and Mandatorily Redeemable Capital Stock (MRCS)** to the financial statements in this Form 10-Q. Members that withdraw from membership must wait at least five years after their membership was terminated and all of their capital stock was redeemed or repurchased before being readmitted to membership in any FHLB.

For details on our capital stock requirements under our Capital Plan during 2019 and the first nine months of 2020, see **Capital Resources** on page 54 of our 2019 Form 10-K. Under the terms of our Capital Plan, our Board of Directors is authorized to amend the Capital Plan, and the FHFA must approve all such amendments before they become effective.

For details on our minimum regulatory capital requirements see **Note 11 - Capital and Mandatorily Redeemable Capital Stock (MRCS)** to the financial statements in this Form 10-Q, and **Minimum Capital Requirements** on page F-39 of our 2019 Form 10-K.

Reduced Capitalization Advance Program (RCAP)

RCAP allows members to borrow one or more advances with an activity stock requirement of only 2% for the life of the advance instead of the current 4.5% requirement under our Capital Plan's general provisions. As of September 30, 2020, and December 31, 2019, RCAP advances outstanding total \$22.4 billion to 496 members and \$24.2 billion to 141 members, respectively. The advances issued through our COVID-19 Relief Program were all RCAP advances, which resulted in the increased number of members with RCAP advances outstanding at September 30, 2020. We may implement future programs for advances with a reduced activity stock requirement that may or may not have the same characteristics as current RCAP offerings.

Repurchase of Excess Capital Stock

Currently members may request repurchase of excess capital stock on any business day. All repurchases of excess capital stock requested by members will continue until otherwise announced, but remain subject to our regulatory requirements, certain financial and capital thresholds, and prudent business practices. For details on the financial and capital thresholds relating to repurchases, see **Repurchase of Excess Capital Stock** on page 57 of our 2019 Form 10-K.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Capital Amounts

The following table reconciles our capital reported in our statements of condition to the amount of capital stock reported for regulatory purposes. MRCS is included in the calculation of the regulatory capital and leverage ratios but is recorded in other liabilities in our statements of condition.

	September 30, 2020	December 31, 2019
Capital Stock	\$ 2,041	\$ 1,713
MRCS	282	324
Regulatory capital stock	2,323	2,037
Retained earnings	3,936	3,770
Regulatory capital	\$ 6,259	\$ 5,807
Capital stock	\$ 2,041	\$ 1,713
Retained earnings	3,936	3,770
Accumulated other comprehensive income (loss)	(73)	(29)
GAAP capital	\$ 5,904	\$ 5,454

Accumulated other comprehensive income (loss) in the above table consists of changes in market value of various balance sheet accounts where the change is not recorded in earnings but are instead recorded in equity capital as the income (loss) is not yet realized. For details on these changes please see **Note 12 - Accumulated Other Comprehensive Income (Loss)** to the financial statements.

We may not pay dividends if we fail to satisfy our minimum capital and liquidity requirements under the FHLB Act and FHFA regulations. On October 29, 2020, our Board of Directors declared a 5.00% dividend (annualized) for Class B1 activity stock and a 2.25% dividend (annualized) for Class B2 membership stock based on our preliminary financial results for the third quarter of 2020. This dividend totaled \$25 million (recorded as \$22 million dividends on capital stock and \$3 million interest expense on mandatorily redeemable capital stock) and is scheduled for payment on November 12, 2020.

Although we continue to work to maintain our financial strength to support a reasonable dividend, any future dividend payment remains subject to declaration by our Board and will depend on future operating results, our Retained Earnings and Dividend Policy and any other factors the Board determines to be relevant. For further information see **Retained Earnings & Dividends** on page 58 in our 2019 Form 10-K.

We continue to allocate 20% of our net income each quarter to a restricted retained earnings account in accordance with the Joint Capital Enhancement Agreement that we entered into with the other FHLBs, as further discussed in **Joint Capital Enhancement Agreement** on page F-41 in our 2019 Form 10-K.

Beginning in February 2020, the FHFA will consider the proportion of capital stock to assets, measured on a daily average basis at month end, when assessing each FHLB's capital management practices. See **Recent Legislative and Regulatory Developments** on page 13 in our 2019 Form 10-K.

Financing Corporation (FICO) Dissolution

In connection with the dissolution of FICO in July 2020, excess funds were available for distribution to its stockholders, the FHLBs, and were distributed in June 2020. We treated the receipt of these funds as a return of our investment in FICO capital stock, and therefore as a partial recovery of the prior capital distributions we made to FICO in 1987, 1988, and 1989. Our share of the distribution was \$19 million, which we credited to unrestricted retained earnings in our **Statements of Capital** on page 6 and as a Financing Activity in our **Condensed Statements of Cash Flows** on page 8. Also see **Note 11 – Capital and Mandatorily Redeemable Capital Stock (MRCS)** for further details.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Credit Risk Management

In light of the economic and financial disruptions related COVID-19 pandemic, we are closely monitoring our credit risk exposure. However, the extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will depend on future developments, which are uncertain and cannot be predicted. For a discussion of the credit risks facing the Bank as a result of the COVID-19 pandemic, including as a result of increased forbearances granted by Bank members or PFIs or a decline in the fair value of Bank investments, see **Risk Factors** on page 67 of this Form 10-Q.

Managing Our Credit Risk Exposure Related to Member Credit Products

Our credit risk rating system focuses primarily on our member's overall financial health and takes into account the member's asset quality, earnings, and capital position. For further information please see **Credit Risk** starting on page 61 in our 2019 Form 10-K.

The following table presents the number of members and related credit outstanding to them by credit risk rating. Credit outstanding consists primarily of outstanding advances and letters of credit. MPF credit enhancement obligations, member derivative exposures, and other obligations make up the rest. Of the total credit outstanding, \$48.7 billion were advances (par value) and \$21.7 billion were letters of credit at September 30, 2020, compared to \$50.1 billion and \$23.9 billion at December 31, 2019.

Rating	September 30, 2020			December 31, 2019		
	Borrowing Members	Credit Outstanding	Collateral Loan Value	Borrowing Members	Credit Outstanding	Collateral Loan Value
1-3	580	\$ 69,864	\$ 144,953	492	\$ 73,421	\$ 134,965
4	8	848	967	2	871	881
5	8	33	65	9	60	88
Total	596	\$ 70,745	\$ 145,985	503	\$ 74,352	\$ 135,934

Members assigned a 4 rating in the above table were required to submit specific collateral listings and the members assigned a 5 rating were required to deliver collateral to us or to a third party custodian on our behalf.

In response to the COVID-19 pandemic, we began accepting Paycheck Protection Program (PPP) loans as eligible collateral. In addition, as many of our members assist borrowers affected by the COVID-19 pandemic, we are accepting as eligible collateral loans temporarily granted forbearance due to the pandemic as long as the loans continue to meet all other eligibility requirements as defined in our collateral guidelines. To the extent that these loans become delinquent or do not meet the Bank's eligibility guidelines in the future, the value of collateral pledged to secure member credit may be negatively impacted.

MPF Loans and Related Exposures

For details on our allowance for credit losses on MPF Loans, please see **Note 8 - Allowance for Credit Losses** to the financial statements.

Credit Risk Exposure - Our credit risk exposure on conventional MPF Loans held in portfolio is the potential for financial loss due to borrower default and depreciation in the value of the real estate collateral securing the MPF Loan, offset by our ability to recover losses from PMI, Recoverable CE Fees, and the CE Amount which may include SMI. The PFI is required to pledge collateral to secure any portion of its CE Amount that is a direct obligation of the PFI. For further details see **Loss Structure for Credit Risk Sharing Products** on page 9 of our 2019 Form 10-K, and **Credit Risk Exposure** and **Setting Credit Enhancement Levels** on page 64 of our 2019 Form 10-K.

Under our MPF Program for non-government insured or guaranteed loans held in our portfolio, the loan payment forbearance we offer to borrowers impacted by the COVID-19 pandemic allows a borrower to defer loan payments for up to 180 days without requiring documentation from the borrower to support the relief requested. Borrowers that continue to be impacted by COVID-19 may request an extension of the loan payment forbearance. A hardship certification from the borrower supporting the continued hardship due to the COVID-19 pandemic is required for approval of additional payment forbearance. During forbearance, late fees are not assessed. At the end of forbearance, borrowers are presented with options for bringing their mortgage loan to a current status. For government insured or guaranteed loans held in our portfolio, we follow the insuring or guaranteeing agency's forbearance plan requirements. For MPF Xtra loans that are serviced under the MPF Program, we follow Fannie Mae's forbearance plan requirements. The CARES Act requires that servicers servicing government insured or guaranteed loans and

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

also loans purchased by Fannie Mae offer their borrowers a slightly different payment forbearance plan where the initial forbearance period is up to 180 days with the availability of an additional 180 days for COVID-19 related hardship.

The COVID-19 pandemic and related economic disruptions may impact borrowers' ability to repay their mortgage loans, which may lead to elevated rates of delinquencies or defaults and adversely impact the credit performance of MPF Loans held in portfolio. The extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will depend on future developments, which are highly uncertain and difficult to predict.

Mortgage Repurchase Risk

For details on our mortgage repurchase risk in connection with our sale of MPF Loans to third party investors and MPF Loans securitized into MBS when a loan eligibility requirement or other warranty is breached, see **Mortgage Repurchase Risk** on page 65 in our 2019 Form 10-K.

Investment Debt Securities

We hold a variety of AA or better rated investment securities, mostly government backed or insured securities, and we believe these investments are currently low risk. There were no material changes in the credit ratings of these securities since December 31, 2019. For further details see **Investment Debt Securities by Rating** on page 68 in our 2019 Form 10-K. Except for PLMBS, we have never taken an impairment charge on our investment securities. As discussed in **Executive Summary** on page 44, subsequent to September 30, 2020, we sold LIBOR indexed AFS and HTM PLMBS in October 2020.

Unsecured Short-Term Investments

See **Unsecured Short-Term Investments** on page 70 in our 2019 Form 10-K for further details on our unsecured short-term investments as well as policies and procedures to limit and monitor our unsecured credit risk exposure.

The following table presents the credit ratings of our unsecured investment counterparties, organized by the domicile of the counterparty or, where the counterparty is a U.S. branch or agency office of a foreign commercial bank, by the domicile of the counterparty's parent. This table does not reflect the foreign sovereign government's credit rating. The rating used was the lowest rating among the three largest NRSROs. The unsecured investment credit exposure presented in the table may not reflect the average or maximum exposure during the period as the table reflects only the balances at period end.

As of September 30, 2020	AA	A	Total
Domestic U.S.			
Interest-Bearing Deposits	\$ —	\$ 1,055	\$ 1,055
U.S. branches and agency offices of foreign commercial banks - Federal Funds sold:			
Australia	—	700	700
Canada	—	1,650	1,650
Finland	750	—	750
France	—	750	750
Japan	—	700	700
Netherlands	—	700	700
Sweden	200	—	200
Total U.S. branches and agency offices of foreign commercial banks	950	4,500	5,450
Total unsecured credit exposure	\$ 950	\$ 5,555	\$ 6,505

All \$6.505 billion of the unsecured credit exposure shown in the above table were overnight investments.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Managing Our Credit Risk Exposure Related to Derivative Agreements

See **Note 9 - Derivatives and Hedging Activities** to the financial statements for a discussion of how we manage our credit risk exposure related to derivative agreements. We have credit exposure on net asset positions where we have not received adequate collateral from our counterparties. We also have credit exposure on net liability positions where we have pledged collateral in excess of our liability to a counterparty.

The following table presents our derivative positions where we have such credit exposures. The rating used was the lowest rating among the three largest NRSROs. Non-cash collateral pledged consists of initial margin we posted through our FCMs, on behalf of the DCOs for cleared derivatives and is included in our derivative positions with credit exposure.

	Net Derivative Fair Value Before Collateral	Cash Collateral Pledged	Noncash Collateral Pledged	Net Credit Exposure to Counterparties ^a
As of September 30, 2020				
Nonmember counterparties -				
Undercollateralized asset positions -				
Bilateral derivatives -				
BBB	\$ 20	\$ (20)	\$ —	\$ —
Cleared derivatives	26	—	638	664
Overcollateralized liability positions -				
Bilateral derivatives -				
AA	(29)	30	—	1
A	(488)	310	191	13
BBB	(389)	34	411	56
Nonmember counterparties	(860)	354	1,240	734
Member institutions	41	—	—	41
Total	\$ (819)	\$ 354	\$ 1,240	\$ 775
As of December 31, 2019				
Nonmember counterparties -				
Undercollateralized asset positions -				
Bilateral derivatives -				
AA	\$ 8	\$ (8)	\$ —	\$ —
A	6	(6)	—	—
Overcollateralized liability positions -				
Bilateral derivatives -				
A	(82)	83	—	1
BBB	(60)	61	—	1
Cleared derivatives	(8)	—	432	424
Nonmember counterparties	(136)	130	432	426
Member counterparties	2	—	—	2
Total	\$ (134)	\$ 130	\$ 432	\$ 428

^a Less than \$1 million is shown as zero.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Legislative and Regulatory Developments

Significant regulatory actions and developments are summarized below.

LIBOR Transition – ISDA 2020 Interbank Offered Rates (IBOR) Fallbacks Protocol and Supplement to the 2006 ISDA Definitions. On October 23, 2020, the International Swaps and Derivatives Association, Inc. (ISDA), launched the Supplement to the 2006 ISDA Definitions (“Supplement”) and the ISDA 2020 IBOR Fallbacks Protocol (“Protocol”). Both the Supplement and the Protocol will take effect on January 25, 2021. On that date, all legacy bilateral derivatives transactions subject to Protocol-covered agreements (including ISDA agreements) that incorporate certain covered ISDA definitional booklets and reference a covered IBORs, including US Dollar LIBOR, will be amended to apply the new ISDA-recommended IBOR fallbacks in the event of the relevant IBOR’s cessation. Both an FHLB and its relevant counterparty must have adhered to the Protocol in order to effectively amend legacy derivative contracts, otherwise the parties must bilaterally agree to amend legacy contracts to address LIBOR fallbacks. The Protocol will remain open for adherence after this effective date. As of January 25, 2021, new and future derivative contracts will be subject to the relevant IBOR fallbacks set forth in the Supplement.

On October 21, 2020, the FHFA issued a Supervisory Letter to the FHLBs that requires each FHLB to adhere to the Protocol no later than December 31, 2020, and to the extent necessary, to amend any bilateral agreements regarding the adoption of the Protocol by December 15, 2020.

We have adhered to the Protocol, and although we are still reviewing the Protocol, we do not currently expect a material impact on the Bank.

Margin and Capital Requirements for Covered Swap Entities. On July 1, 2020, the Office of the Comptroller of the Currency (OCC), the Federal Reserve Board (Federal Reserve), the Federal Deposit Insurance Corporation (FDIC), the Farm Credit Administration, and the FHFA (collectively, Prudential Banking Regulators) jointly published a final rule, effective August 31, 2020, amending regulations that established minimum margin and capital requirements for uncleared swaps for covered swap entities under the jurisdiction of the Prudential Banking Regulators (Prudential Margin Rules) which, among other changes: (1) allows swaps entered into by a covered swap entity prior to an applicable compliance date to retain their legacy status and not become subject to the Prudential Margin Rules in the event that the legacy swaps are amended to replace an interbank offered rate (such as LIBOR) or other discontinued rate; and (2) introduces a new Phase 6 compliance date for initial margin requirements for covered swap entities and their counterparties with an average daily aggregate notional amount (AANA) of uncleared swaps from \$8 billion to \$50 billion, and limits Phase 5 to counterparties with an AANA of uncleared swaps from \$50 billion to \$750 billion; and (3) clarifies that initial margin trading documentation does not need to be executed prior to a counterparty reaching the initial margin threshold.

On the same date, the Prudential Banking Regulators issued an interim final rule, effective September 1, 2020, extending the initial margin compliance date for Phase 5 counterparties to September 1, 2021 and extending the initial margin compliance date for Phase 6 counterparties to September 1, 2022. On July 10, 2020, the Commodity Futures Trading Commission (CFTC) issued a final rule and a proposed rule to amend the minimum margin and capital requirements for uncleared swaps under the jurisdiction of the CFTC (CFTC Margin Rules) which collectively, among other things, extend the initial margin compliance date for Phase 5 counterparties to September 1, 2021 and extend the initial margin compliance date for Phase 6 counterparties to September 1, 2022, thereby aligning with the Prudential Banking Regulators.

On September 22, 2020, the CFTC issued a proposed rule to amend the CFTC Margin Rules which would permit, among other changes, covered swap entities to maintain separate minimum transfer amounts (MTA) for initial and variation margin for each swap counterparty, provided the combined MTA does not exceed \$500,000. Separately, on September 23, 2020, the CFTC issued a proposed rule to address concerns by covered entities related to determining IM compliance across different regulators and jurisdictions. The CFTC’s proposed rule would, among other things, require entities subject to the CFTC’s jurisdiction to calculate the AANA for uncleared swaps during March, April and May of the current year, based on an average of month-end dates, as opposed to the existing requirement which requires the calculation of AANA during June, July and August of the prior year, based on daily calculations. Parties would continue to be expected to exchange IM based on the AANA totals as of September 1 of the current year. The proposed change aligns with the recommendation of the Basel Committee on Banking Supervision and Board of the International Organization of Securities Commissions.

We do not expect these final or proposed rules, if adopted as proposed, to have a material effect on our financial condition or results of operations.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Developments Related to COVID-19 Pandemic

FHFA Supervisory Letter - Paycheck Protection Program (PPP) Loans as Collateral for FHLB Advances. On July 1, 2020, Congress approved an extension of the Paycheck Protection Program until August 8, 2020. The April 23, 2020 Supervisory Letter from the FHFA allowing FHLBs to accept PPP loans as collateral remains in effect.

Federal Reserve Lending Facilities. The Federal Reserve announced on July 28, 2020 that its lending facilities scheduled to expire on or around September 30, 2020 would be extended through December 31, 2020.

Coronavirus Aid, Relief, and Economic Security Act. The CARES Act provisions began to expire in July 2020, but some have been extended by regulatory action.

- Additional federal unemployment funds expired July 31, 2020.
- Statutory eviction freeze for federally-backed properties expired July 25, 2020.
- Foreclosure moratorium on federally-backed properties and on evictions was extended by the FHFA on August 27, 2020 to until "at least" December 31, 2020.

Additional phases of the CARES Act or other COVID-19 pandemic relief legislation may be enacted by Congress. We continue to evaluate the potential impact of the CARES Act on our business, including its continued impact to the U.S. economy; impacts to mortgages held or serviced by our members and that we accept as collateral; and the impacts on our MPF program.

Additional COVID-19 Presidential, Legislative and Regulatory Developments. In light of the COVID-19 pandemic, the President, through executive orders, governmental agencies, including the Securities and Exchange Commission, OCC, Federal Reserve, FDIC, National Credit Union Administration, CFTC and the FHFA, as well as state governments and agencies, have taken, and may continue to take, actions to provide various forms of relief from, and guidance regarding, the financial, operational, credit, market, and other effects of the pandemic, some of which may have a direct or indirect impact on us or our members. Many of these actions are temporary in nature. We continue to monitor these actions and guidance as they evolve and to evaluate their potential impact on us.

For further discussion of the risks and potential risks relating to the COVID-19 pandemic, see **Risk Factors** on page 67.

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Our Asset/Liability Management Committee provides oversight of our risk management practices and policies. This includes routine reporting to senior Bank management and the Board of Directors, as well as maintaining the Income and Market Value Risk Policy, which defines our interest rate risk limits. The table below reflects the expected change in market value of equity for the stated increase or decrease in interest rates based on our models and related loss limit for each scenario established in the policy. For our down scenario shock analysis, the down shocks are constrained by scenarios provided by our regulator so that shocked rates will not go negative. As a result, we floored the down shock scenario at 10 bps. Due to the low rate environment, this floor setting was triggered in our down shock scenarios presented below.

Scenario as of	September 30, 2020		December 31, 2019	
	Change in Market Value of Equity	Loss Limit	Change in Market Value of Equity	Loss Limit
-200 bp	\$ 514	\$ (450)	\$ 199	\$ (450)
-100 bp	387	(200)	58	(200)
-50 bp	268	(90)	29	(90)
-25 bp	200	(45)	15	(45)
+25 bp	(25)	(45)	(20)	(45)
+50 bp	(54)	(90)	(46)	(90)
+100 bp	(133)	(200)	(107)	(200)
+200 bp	(300)	(450)	(243)	(450)

Measurement of Market Risk Exposure

To measure our exposure, we discount the cash flows generated from modeling the terms and conditions of all interest rate-sensitive securities using current interest rates to determine their fair values or spreads to the swap curve for securities where third party prices are used. This includes considering explicit and embedded options using a lattice model or Monte Carlo simulation. We estimate yield curve, option, and basis risk exposures by calculating the fair value change in relation to various parallel changes in interest rates, implied volatility, prepayment speeds, spreads to the swap curve and mortgage rates.

The table below summarizes our sensitivity to various interest rate risk exposures in terms of changes in market value.

	Option Risk			Basis Risk	
	Yield Curve Risk	Implied Volatility	Prepayment Speeds	Spread to Swap Curve	Mortgage Spread
As of September 30, 2020	\$ (1)	\$ —	\$ (4)	(26)	\$ 1
As of December 31, 2019	(1)	(2)	(3)	(22)	2

Yield curve risk – Change in market value for a one basis point parallel increase in the swap curve.

Option risk (implied volatility) – Change in market value for a one percent parallel increase in the swaption volatility.

Option risk (prepayment speeds) – Change in market value for a one percent increase in prepayment speeds.

Basis risk (spread to swap curve) – Change in market value for a one basis point parallel increase in the spread to the swap curve.

Basis risk (mortgage spread) – Change in market value for a one basis point increase in mortgage rates.

As of September 30, 2020, our sensitivity to changes in implied volatility using these models was immaterial, compared to \$(2) million at December 31, 2019. These sensitivities are limited in that they do not incorporate other risks, including but not limited to, non-parallel changes in yield curves, prepayment speeds, and basis risk related to differences between the swap and the other curves. Option positions embedded in our mortgage assets and callable debt impact our yield curve risk profile, such that swap curve changes significantly greater than one basis point cannot be linearly interpolated from the table above.

Duration of equity is another measure to express interest rate sensitivity. We report the results of our duration of equity calculations to the FHFA each quarter. We measure duration of equity in a base case using the actual yield curve as of a specified date and then shock it with an instantaneous shift of the entire curve. The following table presents the duration of equity reported by us to the FHFA in accordance with the FHFA's guidance, which prescribes that down and up interest-rate shocks equal 200 basis points. The results are shown in years of duration equity. We continue to monitor impacts of the

(U.S. Dollars in tables in millions except per share amounts unless otherwise indicated)

COVID-19 pandemic on the markets and the economy which may impact our mortgage prepayment speed projections and duration of equity in the fourth quarter of 2020.

Scenario as of	Duration of equity in years		
	Down 200 bps	Base	Up 200 bps
September 30, 2020	2.4	1.4	2.6
December 31, 2019	2.2	1.2	2.4

As of September 30, 2020, on a U.S. GAAP basis, our fair value surplus (relative to book value) was \$350 million, and our market value of equity to book value of equity ratio was 106%, compared to \$266 million and 105% at December 31, 2019. The COVID-19 pandemic continues to affect the markets and the economy in the third quarter of 2020. However, with the government and Federal Reserve accommodated policies in place, the markets continued to normalize in third quarter of 2020. Our market to book value of total capital for regulatory risk-based capital purposes differs from this GAAP calculation, as discussed in **Note 11 - Capital and Mandatorily Redeemable Capital Stock (MRCS)** to the financial statements.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

Under the supervision and with the participation of management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report (the Evaluation Date). Based on this evaluation, the principal executive officer and principal financial officer concluded as of the Evaluation Date that the disclosure controls and procedures were effective such that information relating to us that is required to be disclosed in reports filed with the SEC (i) is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

For the most recent quarter presented in this Form 10-Q, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Consolidated Obligations

Our disclosure controls and procedures include controls and procedures for accumulating and communicating information relating to our joint and several liability for the consolidated obligations of other FHLBs. For further information, see **Item 9A. Controls and Procedures** on page 81 of our 2019 Form 10-K.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

For a discussion of the litigation relating to PLMBS bonds purchased by the Bank, see **Item 3. Legal Proceedings** on page 30 of our 2019 Form 10-K.

The Bank may also be subject to various other legal proceedings arising in the normal course of business. After consultation with legal counsel, management is not aware of any other proceedings that might have a material effect on the Bank's financial condition or results of operations.

Item 1A. Risk Factors.

The ongoing coronavirus disease 2019 (COVID-19) pandemic, its impact on the economy and markets, and the government measures intended to prevent its spread and mitigate its economic and market impact, could have a material adverse effect on our business, results of operations, and financial condition.

On March 11, 2020, the World Health Organization declared COVID-19 a pandemic. To date, the COVID-19 pandemic has caused, and is likely to continue to cause, significant volatility and disruption in the international and U.S. financial markets and increased unemployment levels. Our business and results of operations are sensitive to the U.S. housing and mortgage markets, as well as international, domestic and district-specific markets and other economic conditions. Adverse economic trends, including the effects on the mortgage lending sector and residential real estate sector, as a result of the impact of the COVID-19 pandemic could materially: reduce the value of collateral pledged to secure member credit; increase credit losses, including as a result of increased forbearances granted by Bank members and PFIs to borrowers, or as a result of mortgage servicer failures; reduce the fair value of the Bank's investments; adversely affect demand for Bank products and FHLB debt; affect our ability to maintain an appropriate liquidity and funding balance between our financial assets and liabilities; and cause our derivative or Federal Fund counterparties, or our counterparties for securities purchased under agreements to resell, to fail to meet their obligations to us. The effects of the COVID-19 pandemic on overall funding costs may continue to cause compression in net interest margin if returns on our liquidity asset portfolio also decline. Economic uncertainty resulting from the COVID-19 pandemic may also increase the risk of loss in our Fannie Mae DUS bond investments if default on the underlying loans results in increased prepayments of these bonds by Fannie Mae. Since any such prepayment can be made without a prepayment premium, the Bank may suffer losses as it unwinds the related hedging swaps in a low rate environment. If economic and market conditions continue to deteriorate, the Bank's financial condition, results of operation, ability to pay dividends, meet dividend guidance or projections, or redeem or repurchase capital stock could be adversely impacted.

To mitigate the adverse economic conditions caused by the COVID-19 pandemic, the U.S. federal government and its agencies have instituted various legislative, fiscal, and monetary policies and actions. Any federal government actions and policies, including Federal Reserve rate cuts, the continuation of a low rate environment, or any future negative rate environment, may directly and indirectly influence interest rates on the Bank's assets and liabilities, the cost or demand for FHLB debt or advances, or prepayment on our MPF Loans and investments with associated reinvestment risks, which could adversely affect our financial condition, results of operations, and ability to pay dividends. Additionally, the Federal Reserve's emergency actions to increase liquidity, along with market conditions resulting from the COVID-19 pandemic, have resulted in lower demand for new advances from our depository members and prepayment of their existing advances. To the extent this trend continues or escalates, our financial condition and results of operation could be adversely impacted. Moreover, new or modified legislation enacted by Congress or regulations or guidance adopted by the FHFA or other agencies could have a negative effect on our and our members' ability to conduct business or the costs of doing business.

The extent to which the COVID-19 pandemic will affect or will continue to affect our business, financial condition, and results of operations will depend on future developments, which are uncertain and cannot be predicted. There is uncertainty in the scope and duration of the pandemic, the continued effectiveness of our business continuity plan (which currently primarily leverages work-from-home arrangements that are dependent on third party providers of phone and internet services that vary by worker), the direct and indirect impact on our workforce and board of directors (any of whom could become infected with the COVID-19 virus, and depending on the number and severity of their cases, could negatively impact our business), our members, our counterparties and service providers, as well as other market participants, and governmental authorities and other third parties' actions taken in response to the COVID-19 pandemic. Adverse developments with respect to any of these factors could have a material adverse impact on the Bank's financial condition and results of operation.

In addition to the information presented in this report, readers should carefully consider the factors set forth in the **Risk Factors** section on page 18 in our 2019 Form 10-K, which could materially affect our business, financial condition, or future results. These risks are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also severely affect us.

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

Not applicable.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

4.1	Capital Plan of the Federal Home Loan Bank of Chicago, effective as of July 1, 2020*
10.1	Employment Agreement between the Federal Home Loan Bank of Chicago and Michael Ericson, entered into as of January 1, 2021**
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by the Principal Executive Officer
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by the Principal Financial Officer
32.1	Certification pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the Principal Executive Officer
32.2	Certification pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the Principal Financial Officer
101.INS	Inline XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed as Exhibit 4.1 with our Form 8-K Current Report on May 19, 2020 SEC File No. 000-51401

** Filed as Exhibit 10.1 with our Form 8-K/A Current Report on September 18, 2020, SEC File No. 000-51401

Glossary of Terms

Advances: Secured loans to members.

ABS: Asset backed securities.

AFS: Available-for-sale debt securities.

AOCI: Accumulated Other Comprehensive Income.

Capital Plan (or Amended Capital Plan): The Amended and Restated Capital Plan of the Federal Home Loan Bank of Chicago, effective as of July 1, 2020.

CARES Act: The Coronavirus, Aid, Relief, and Economic Security Act, enacted March 27, 2020.

CE Amount: A PFI's assumption of credit risk on conventional MPF Loan products held in an MPF Bank's portfolio that are funded by, or sold to, an MPF Bank by providing credit enhancement either through a direct liability to pay credit losses up to a specified amount or through a contractual obligation to provide SMI. Does not apply to the MPF Government, MPF Xtra, MPF Direct or MPF Government MBS product.

CE Fee: Credit enhancement fee. PFIs are paid a credit enhancement fee for managing credit risk and in some instances, all or a portion of the CE Fee may be performance based.

CFTC: Commodity Futures Trading Commission

Consolidated Obligations (CO): FHLB debt instruments (bonds and discount notes) which are the joint and several liability of all FHLBs; issued by the Office of Finance.

Consolidated obligation bonds: Consolidated obligations that make periodic interest payments with a term generally over one year, although we have issued for terms of less than one year.

DCO: Derivatives Clearing Organization. A clearinghouse, clearing association, clearing corporation, or similar entity that enables each party to an agreement, contract, or transaction to substitute, through novation or otherwise, the credit of the DCO for the credit of the parties; arranges or provides, on a multilateral basis, for the settlement or netting of obligations; or otherwise provides clearing services or arrangements that mutualize or transfer credit risk among participants.

Discount notes: Consolidated obligations with a term of one year or less, which sell at less than their face amount and are redeemed at par value when they mature.

Dodd-Frank Act: Dodd-Frank Wall Street Reform and Consumer Protection Act, enacted July 21, 2010, and as amended from time to time.

Excess capital stock: Capital stock held by members in excess of their minimum investment requirement.

Fannie Mae: Federal National Mortgage Association.

FASB: Financial Accounting Standards Board.

FCM: Futures Commission Merchant.

FFELP: Federal Family Education Loan Program.

FHFA: Federal Housing Finance Agency - The Housing and Economic Recovery Act of 2008 enacted on July 30, 2008 created the Federal Housing Finance Agency which became the regulator of the FHLBs.

FHLB Act: The Federal Home Loan Bank Act of 1932, as amended.

FHLBs: The 11 Federal Home Loan Banks or subset thereof.

FHLB System: The 11 FHLBs and the Office of Finance.

FHLB Chicago: The Federal Home Loan Bank of Chicago.

FLA: First loss account is a memo account used to track the MPF Bank's exposure to losses until the CE Amount is available to cover losses.

Freddie Mac: Federal Home Loan Mortgage Corporation.

GAAP: Generally accepted accounting principles in the United States of America.

Ginnie Mae: Government National Mortgage Association.

Ginnie Mae MBS: Mortgage backed securities guaranteed by Ginnie Mae.

Government Loans: Mortgage loans insured or guaranteed by the Federal Housing Administration (FHA), the Department of Housing and Urban Development (HUD), the Department of Veteran Affairs (VA) or Department of Agriculture Rural Housing Service (RHS).

GSE: Government sponsored enterprise.

HFS: Held for sale.

HTM: Held-to-maturity debt securities.

LIBOR: London Interbank Offered Rate.

Liquidity AB: Advisory Bulletin 2018-07 Liquidity Guidance, issued by the FHFA on August 23, 2018.

Master Commitment (MC): Pool of MPF Loans purchased or funded by an MPF Bank.

MBS: Mortgage backed securities.

Moody's: Moody's Investors Service.

MPF[®]: Mortgage Partnership Finance.

MPF Banks: FHLBs that participate in the MPF program.

MPF Direct product: The MPF Program product under which we acquire non-conforming (jumbo) MPF Loans from PFIs without any CE Amount and concurrently resell them to a third party investor.

MPF Government MBS product: The MPF Program product under which we aggregate Government Loans acquired from PFIs in order to issue securities guaranteed by the Ginnie Mae that are backed by such Government Loans.

MPF Loans: Conventional and government mortgage loans secured by one-to-four family residential properties with maturities from five to 30 years or participations in such mortgage loans that are acquired under the MPF Program.

MPF Program: A secondary mortgage market structure that provides liquidity to FHLB members that are PFIs through the purchase or funding by an FHLB of MPF Loans.

MPF Xtra[®] product: The MPF Program product under which we acquire MPF Loans from PFIs without any CE Amount and concurrently resell them to Fannie Mae.

MRCS: Mandatorily redeemable capital stock.

NRSRO: Nationally Recognized Statistical Rating Organization.

Office of Finance: A joint office of the FHLBs established by the Finance Board to facilitate issuing and servicing of consolidated obligations.

OIS: Overnight Index Swap

OTTI: Other-than-temporary impairment.

PFI: Participating Financial Institution. A PFI is a member (or eligible housing associate) of an MPF Bank that has applied to and been accepted to do business with its MPF Bank under the MPF Program.

PLMBS: Private label mortgage backed securities.

PMI: Primary Mortgage Insurance.

RCAP: Reduced Capitalization Advance Program.

Recorded Investment: Recorded investment in a loan is its amortized cost plus related accrued interest receivable, if any. Recorded investment is not net of an allowance for credit losses but is net of any direct charge-off on a loan. Amortized cost is defined as either the amount funded or the cost to purchase MPF Loans. Specifically, the amortized cost includes the initial fair value amount of the delivery commitment as of the purchase or settlement date, agent fees (i.e., market risk premiums or discounts paid to or received from PFIs), if any, subsequently adjusted, if applicable, for accretion, amortization, collection of cash, charge-offs, and cumulative basis adjustments related to fair value hedges.

Recoverable CE Fee: Under the MPF Program, the PFI may receive a contingent performance based credit enhancement fee whereby such fees are reduced up to the amount of the FLA by losses arising under the Master Commitment.

Regulatory capital: Regulatory capital stock plus retained earnings.

Regulatory capital stock: The sum of the paid-in value of capital stock and mandatorily redeemable capital stock.

REO: Real estate owned

SEC: Securities and Exchange Commission.

SOFR: Secured Overnight Financing Rate.

SMI: Supplemental mortgage insurance.

System or FHLB System: The Federal Home Loan Bank System consisting of the 11 Federal Home Loan Banks and the Office of Finance.

UPB: Unpaid Principal Balance.

U.S.: United States

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 CHICAGO

/s/ Matthew R. Feldman

Name: Matthew R. Feldman

Title: President and Chief Executive Officer
(Principal Executive Officer)

Date: November 5, 2020

/s/ Roger D. Lundstrom

Name: Roger D. Lundstrom

Title: Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Date: November 5, 2020