

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

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

For the quarterly period ended: September 30, 2023

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

For the transition period from _____ to _____

Commission file number: 001-31343

Associated Banc-Corp

(Exact name of registrant as specified in its charter)

Wisconsin

(State or other jurisdiction of
incorporation or organization)

39-1098068

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

433 Main Street

Green Bay, Wisconsin

(Address of principal executive offices)

54301

(Zip Code)

(920) 491-7500

(Registrant's telephone number, including area code)

(not applicable)

(Former name, former address and former fiscal year, if changed since last report)

Securities Registered Pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common stock, par value \$0.01 per share	ASB	New York Stock Exchange
Depository Shrs, each representing 1/40th intrst in a shr of 5.875% Non-Cum. Perp Pref Stock, Srs E	ASB PrE	New York Stock Exchange
Depository Shrs, each representing 1/40th intrst in a shr of 5.625% Non-Cum. Perp Pref Stock, Srs F	ASB PrF	New York Stock Exchange
6.625% Fixed-Rate Reset Subordinated Notes due 2033	ASBA	New York Stock Exchange

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 ☒

APPLICABLE ONLY TO CORPORATE ISSUERS:

The number of shares outstanding of registrant's common stock, par value \$0.01 per share, at October 23, 2023 was 150,939,712.

ASSOCIATED BANC-CORP
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ASSOCIATED BANC-CORP
Commonly Used Terms

The following listing provides a reference of common acronyms, abbreviations, and other defined terms used throughout the document:

ACLL	Allowance for Credit Losses on Loans
AFS	Available for Sale
ALCO	Asset / Liability Committee
ASU	Accounting Standards Update
the Bank	Associated Bank, National Association
Basel III	International framework established by the Basel Committee on Banking Supervision for the regulation of capital and liquidity
bp	basis point(s)
BTFP	Bank Term Funding Program
Call Report	Consolidated Reports of Condition and Income
CDs	Certificates of Deposit
CDIs	Core Deposit Intangibles
CECL	Current Expected Credit Losses
CET1	Common Equity Tier 1
CFPB	Consumer Financial Protection Bureau
Corporation / our	Associated Banc-Corp collectively with all of its subsidiaries and affiliates
CRA	Community Reinvestment Act
CRE	Commercial Real Estate
EAR	Earnings at Risk
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
FDIC	Federal Deposit Insurance Corporation
Federal Reserve	Board of Governors of the Federal Reserve System
FFELP	Federal Family Education Loan Program
FHLB	Federal Home Loan Bank
FHLMC	Federal Home Loan Mortgage Corporation
FICO	Fair Isaac Corporation, provider of a broad-based risk score to aid in credit decisions
FNMA	Federal National Mortgage Association
FTEs	Full-time equivalent employees
FTP	Funds Transfer Pricing
GAAP	Generally Accepted Accounting Principles
GNMA	Government National Mortgage Association
GSEs	Government-Sponsored Enterprises
HTM	Held to Maturity
LOCOM	Lower of Cost or Market
LTV	Loan-to-Value
Moody's	Moody's Investors Service
MSRs	Mortgage Servicing Rights
MVE	Market Value of Equity
NAV	Measured at fair value using Net Asset Value per share (or its equivalent) as a practical expedient
Net Free Funds	Noninterest-bearing sources of funds
NPA's	Nonperforming Assets
OCI	Other Comprehensive Income
OREO	Other Real Estate Owned

Parent Company	Associated Banc-Corp individually
RAP	Retirement Account Plan - the Corporation's noncontributory defined benefit retirement plan
Repurchase Agreements	Securities sold under agreements to repurchase
Restricted Stock Awards	Restricted common stock and restricted common stock units to certain key employees
Retirement Eligible Colleagues	Colleagues whose retirement meets the early retirement or normal retirement definitions under the applicable equity compensation plan
ROCET1	Return on Common Equity Tier 1
SBA	Small Business Administration
SEC	U.S. Securities and Exchange Commission
Series E Preferred Stock	The Corporation's 5.875% Non-Cumulative Perpetual Preferred Stock, Series E, liquidation preference \$1,000 per share
Series F Preferred Stock	The Corporation's 5.625% Non-Cumulative Perpetual Preferred Stock, Series F, liquidation preference \$1,000 per share
SOFR	Secured Overnight Finance Rate
TDRs	Troubled Debt Restructurings
YTD	Year-to-Date

PART I - FINANCIAL INFORMATION

ITEM 1. Financial Statements:

**ASSOCIATED BANC-CORP
Consolidated Balance Sheets**

	Sep 30, 2023	Dec 31, 2022
(In thousands, except share and per share data)	(Unaudited)	(Audited)
Assets		
Cash and due from banks	\$ 388,694	\$ 436,952
Interest-bearing deposits in other financial institutions	323,130	156,693
Federal funds sold and securities purchased under agreements to resell	965	27,810
AFS investment securities, at fair value	3,491,679	2,742,025
HTM investment securities, net, at amortized cost	3,900,415	3,960,398
Equity securities	35,937	25,216
FHLB and Federal Reserve Bank stocks, at cost	268,698	295,496
Residential loans held for sale	54,790	20,383
Loans	30,193,187	28,799,569
Allowance for loan losses	(345,795)	(312,720)
Loans, net	29,847,392	28,486,849
Tax credit and other investments	256,905	276,773
Premises and equipment, net	373,017	376,906
Bank and corporate owned life insurance	679,775	676,530
Goodwill	1,104,992	1,104,992
Other intangible assets, net	42,674	49,282
Mortgage servicing rights, net	89,131	77,351
Interest receivable	171,119	144,449
Other assets	608,068	547,621
Total assets	\$ 41,637,381	\$ 39,405,727
Liabilities and stockholders' equity		
Noninterest-bearing demand deposits	\$ 6,422,994	\$ 7,760,811
Interest-bearing deposits	25,700,332	21,875,343
Total deposits	32,123,326	29,636,154
Federal funds purchased and securities sold under agreements to repurchase	451,644	585,139
Commercial paper	—	20,798
FHLB advances	3,733,041	4,319,861
Other long-term funding	529,459	248,071
Allowance for unfunded commitments	34,776	38,776
Accrued expenses and other liabilities	637,491	541,438
Total liabilities	\$ 37,509,738	\$ 35,390,237
Stockholders' equity		
Preferred equity	\$ 194,112	\$ 194,112
Common equity		
Common stock	\$ 1,752	\$ 1,752
Surplus	1,711,454	1,712,733
Retained earnings	3,074,014	2,904,882
Accumulated other comprehensive (loss)	(339,140)	(272,799)
Treasury stock, at cost	(514,549)	(525,190)
Total common equity	3,933,531	3,821,378
Total stockholders' equity	4,127,643	4,015,490
Total liabilities and stockholders' equity	\$ 41,637,381	\$ 39,405,727
Preferred shares authorized (par value \$1.00 per share)	750,000	750,000
Preferred shares issued and outstanding	200,000	200,000
Common shares authorized (par value \$0.01 per share)	250,000,000	250,000,000
Common shares issued	175,216,409	175,216,409
Common shares outstanding	150,951,209	150,444,019

Numbers may not sum due to rounding.

See accompanying notes to consolidated financial statements.

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Item 1. Financial Statements Continued:

ASSOCIATED BANC-CORP
Consolidated Statements of Income (Unaudited)

(In thousands, except per share data)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Interest income				
Interest and fees on loans	\$ 447,912	\$ 275,666	\$ 1,262,538	\$ 643,239
Interest and dividends on investment securities				
Taxable	38,210	19,221	104,197	54,009
Tax-exempt	15,941	16,538	47,960	49,025
Other interest	6,575	3,284	17,990	7,696
Total interest income	508,637	314,708	1,432,685	753,969
Interest expense				
Interest on deposits	193,131	26,000	464,749	37,590
Interest on federal funds purchased and securities sold under agreements to repurchase	3,100	756	8,504	1,200
Interest on other short-term funding	—	1	1	2
Interest on FHLB advances	48,143	20,792	147,365	38,663
Interest on long-term funding	10,019	2,722	25,895	8,182
Total interest expense	254,394	50,270	646,514	85,637
Net interest income	254,244	264,439	786,171	668,332
Provision for credit losses	21,943	16,998	62,014	13,006
Net interest income after provision for credit losses	232,301	247,440	724,157	655,326
Noninterest income				
Wealth management fees	20,828	19,984	61,499	63,719
Service charges and deposit account fees	12,864	15,029	38,230	48,392
Card-based fees	11,510	11,479	33,492	32,847
Other fee-based revenue	4,509	4,487	13,249	12,613
Capital markets, net	5,368	7,675	15,544	24,331
Mortgage banking, net	6,501	2,098	17,814	16,635
Bank and corporate owned life insurance	2,047	1,827	6,882	8,004
Asset gains, net	625	18	590	1,883
Investment securities gains (losses), net	(11)	5,664	55	5,676
Other	2,339	2,527	6,841	6,613
Total noninterest income	66,579	70,788	194,195	220,713
Noninterest expense				
Personnel	117,159	118,243	347,669	335,720
Technology	26,172	22,694	73,990	65,401
Occupancy	14,125	13,717	42,775	43,948
Business development and advertising	7,100	6,778	20,054	17,388
Equipment	5,016	4,921	14,921	14,841
Legal and professional	4,461	4,159	13,149	14,118
Loan and foreclosure costs	2,049	1,631	4,822	5,121
FDIC assessment	9,150	5,800	25,575	16,300
Other intangible amortization	2,203	2,203	6,608	6,608
Other	8,771	15,645	24,726	31,057
Total noninterest expense	196,205	195,791	574,291	550,503
Income before income taxes	102,674	122,438	344,061	325,536
Income tax expense	19,426	26,163	70,299	68,176
Net income	83,248	96,275	273,762	257,360
Preferred stock dividends	2,875	2,875	8,625	8,625
Net income available to common equity	\$ 80,373	\$ 93,400	\$ 265,137	\$ 248,735
Earnings per common share				
Basic	\$ 0.53	\$ 0.62	\$ 1.76	\$ 1.66
Diluted	\$ 0.53	\$ 0.62	\$ 1.75	\$ 1.65
Average common shares outstanding				
Basic	150,035	149,321	149,929	149,063
Diluted	151,014	150,262	150,971	150,205

Numbers may not sum due to rounding.

See accompanying notes to consolidated financial statements.

Item 1. Financial Statements Continued:

ASSOCIATED BANC-CORP
Consolidated Statements of Comprehensive Income (Unaudited)

(\$ in thousands)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Net income	\$ 83,248	\$ 96,275	\$ 273,762	\$ 257,360
Other comprehensive (loss), net of tax				
AFS investment securities				
Net unrealized (losses)	(56,924)	(100,092)	(69,512)	(268,413)
Unrealized (losses) on AFS securities transferred to HTM securities	—	—	—	(67,604)
Amortization of net unrealized losses on AFS securities transferred to HTM securities	2,327	2,888	6,883	7,269
Reclassification adjustment for net (gains) realized in net income	—	—	—	(12)
Income tax benefit	13,928	24,810	15,879	83,906
Other comprehensive (loss) on AFS securities	(40,669)	(72,394)	(46,751)	(244,854)
Cash flow hedge derivatives				
Net unrealized (losses)	(13,592)	—	(33,976)	—
Reclassification adjustment for net losses realized in net income	4,516	—	9,097	—
Income tax benefit	2,315	—	5,488	—
Other comprehensive (loss) on cash flow hedge derivatives	(6,762)	—	(19,391)	—
Defined benefit pension and postretirement obligations				
Amortization of prior service cost	(81)	(82)	(244)	(244)
Amortization of actuarial (gain) loss	(7)	347	15	494
Income tax benefit (expense)	23	(474)	31	(470)
Other comprehensive (loss) on pension and postretirement obligations	(66)	(209)	(198)	(221)
Total other comprehensive (loss)	(47,497)	(72,603)	(66,340)	(245,074)
Comprehensive income	\$ 35,751	\$ 23,672	\$ 207,422	\$ 12,286

Numbers may not sum due to rounding.

See accompanying notes to consolidated financial statements.

Item 1. Financial Statements Continued:

ASSOCIATED BANC-CORP
Consolidated Statements of Changes in Stockholders' Equity (Unaudited)

(In thousands, except per share data)				Retained Earnings	Accumulated Other Comprehensive (Loss)	Treasury Stock	Total
	Preferred Equity	Common Stock	Surplus				
Balance, December 31, 2022	\$ 194,112	\$ 1,752	\$ 1,712,733	\$ 2,904,882	\$ (272,799)	\$ (525,190)	4,015,490
Comprehensive income:							
Net income	—	—	—	103,360	—	—	103,360
Other comprehensive income	—	—	—	—	39,211	—	39,211
Comprehensive income							142,571
Common stock issued:							
Stock-based compensation plans, net	—	—	(12,612)	—	—	14,379	1,766
Purchase of treasury stock, stock-based compensation plans	—	—	—	—	—	(5,362)	(5,362)
Cash dividends:							
Common stock, \$0.21 per share	—	—	—	(32,013)	—	—	(32,013)
Preferred stock ^(a)	—	—	—	(2,875)	—	—	(2,875)
Stock-based compensation expense, net	—	—	6,086	—	—	—	6,086
Balance, March 31, 2023	\$ 194,112	\$ 1,752	\$ 1,706,206	\$ 2,973,354	\$ (233,588)	\$ (516,173)	4,125,663
Comprehensive income:							
Net income	—	—	—	87,154	—	—	87,154
Other comprehensive (loss)	—	—	—	—	(58,054)	—	(58,054)
Comprehensive income							29,100
Common stock issued:							
Stock-based compensation plans, net	—	—	(1,677)	—	—	1,770	93
Purchase of treasury stock, stock-based compensation plans	—	—	—	—	—	(884)	(884)
Cash dividends:							
Common stock, \$0.21 per share	—	—	—	(31,996)	—	—	(31,996)
Preferred stock ^(a)	—	—	—	(2,875)	—	—	(2,875)
Stock-based compensation expense, net	—	—	3,773	—	—	—	3,773
Balance, June 30, 2023	\$ 194,112	\$ 1,752	\$ 1,708,303	\$ 3,025,637	\$ (291,642)	\$ (515,287)	4,122,874
Comprehensive income:							
Net income	—	—	—	83,248	—	—	83,248
Other comprehensive (loss)	—	—	—	—	(47,497)	—	(47,497)
Comprehensive income							35,751
Common stock issued:							
Stock-based compensation plans, net	—	—	(497)	—	—	999	503
Purchase of treasury stock, stock-based compensation plans	—	—	—	—	—	(261)	(261)
Cash dividends:							
Common stock, \$0.21 per share	—	—	—	(31,996)	—	—	(31,996)
Preferred stock ^(a)	—	—	—	(2,875)	—	—	(2,875)
Stock-based compensation expense, net	—	—	3,648	—	—	—	3,648
Balance, September 30, 2023	\$ 194,112	\$ 1,752	\$ 1,711,454	\$ 3,074,014	\$ (339,140)	\$ (514,549)	4,127,643

Numbers may not sum due to rounding.

(a) Series E, \$ 0.3671875 per share; and Series F, \$ 0.3515625 per share.

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(In thousands, except per share data)	Accumulated						
	Preferred Equity	Common Stock	Surplus	Retained Earnings	Other Comprehensive Income (Loss)	Treasury Stock	Total
Balance, December 31, 2021	\$ 193,195	\$ 1,752	\$ 1,713,851	\$ 2,672,601	\$ (10,317)	\$ (546,229)	\$ 4,024,853
Change in accounting principle ^(a)	—	—	—	1,713	—	—	1,713
Total stockholders' equity at beginning of period, as adjusted	193,195	1,752	1,713,851	2,674,314	(10,317)	(546,229)	4,026,566
Comprehensive (loss):							
Net income	—	—	—	74,262	—	—	74,262
Other comprehensive (loss)	—	—	—	—	(126,708)	—	(126,708)
Comprehensive (loss)							(52,445)
Common stock issued:							
Stock-based compensation plans, net	—	—	(11,911)	—	—	18,565	6,654
Purchase of treasury stock, stock-based compensation plans	—	—	—	—	—	(5,193)	(5,193)
Cash dividends:							
Common stock, \$0.20 per share	—	—	—	(30,583)	—	—	(30,583)
Preferred stock ^(b)	—	—	—	(2,875)	—	—	(2,875)
Stock-based compensation expense, net	—	—	6,164	—	—	—	6,164
Balance, March 31, 2022	\$ 193,195	\$ 1,752	\$ 1,708,104	\$ 2,715,118	\$ (137,024)	\$ (532,858)	\$ 3,948,287
Comprehensive income:							
Net income	—	—	—	86,824	—	—	86,824
Other comprehensive (loss)	—	—	—	—	(45,764)	—	(45,764)
Comprehensive income							41,060
Common stock issued:							
Stock-based compensation plans, net	—	—	(1,771)	—	—	1,910	139
Purchase of treasury stock, stock-based compensation plans	—	—	—	—	—	(884)	(884)
Cash dividends:							
Common stock, \$0.20 per share	—	—	—	(30,331)	—	—	(30,331)
Preferred stock ^(b)	—	—	—	(2,875)	—	—	(2,875)
Stock-based compensation expense, net	—	—	3,986	—	—	—	3,986
Balance, June 30, 2022	\$ 193,195	\$ 1,752	\$ 1,710,319	\$ 2,768,736	\$ (182,788)	\$ (531,832)	\$ 3,959,382
Comprehensive income:							
Net income	—	—	—	96,275	—	—	96,275
Other comprehensive (loss)	—	—	—	—	(72,603)	—	(72,603)
Comprehensive income							23,672
Common stock issued:							
Stock-based compensation plans, net	—	—	(3,274)	—	—	4,540	1,266
Purchase of treasury stock, stock-based compensation plans	—	—	—	—	—	(181)	(181)
Cash dividends:							
Common stock, \$0.20 per share	—	—	—	(30,342)	—	—	(30,342)
Preferred stock ^(b)	—	—	—	(2,875)	—	—	(2,875)
Stock-based compensation expense, net	—	—	3,030	—	—	—	3,030
Other	916	—	—	(916)	—	—	—
Balance, September 30, 2022	\$ 194,112	\$ 1,752	\$ 1,710,075	\$ 2,830,877	\$ (255,391)	\$ (527,473)	\$ 3,953,952

Numbers may not sum due to rounding.

(a) MSRs at December 31, 2021 were carried at LOCOM. On January 1, 2022, the Corporation made the irrevocable election to account for MSRs at fair value.

(b) Series E, \$0.3671875 per share; and Series F, \$0.3515625 per share.

See accompanying notes to consolidated financial statements.

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Item 1. Financial Statements Continued:

**ASSOCIATED BANC-CORP
Consolidated Statements of Cash Flows (Unaudited)**

(\$ in thousands)	Nine Months Ended Sep 30,	
	2023	2022
Cash flows from operating activities		
Net income	\$ 273,762	\$ 257,360
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	62,014	13,006
Depreciation and amortization	34,703	33,743
Change in MSRs valuation	(14,658)	(22,348)
Amortization of other intangible assets	6,608	6,608
Amortization and accretion on earning assets, funding, and other, net	27,394	13,280
Net amortization of tax credit investments	25,830	25,916
(Gains) on sales of investment securities, net	—	(260)
Asset (gains), net	(590)	(1,883)
Loss on mortgage banking activities, net	2,154	5,712
Mortgage loans originated and acquired for sale	(283,469)	(535,694)
Proceeds from sales of mortgage loans held for sale	254,619	620,352
Changes in certain assets and liabilities:		
(Increase) in interest receivable	(26,670)	(35,254)
Increase in interest payable	69,461	1,795
(Decrease) in expense payable	(22,632)	(17,994)
Increase in net derivative position	3,721	320,972
Net change in other assets and other liabilities	(34,137)	37,018
Net cash provided by operating activities	378,110	722,330
Cash flows from investing activities		
Net (increase) in loans	(1,436,901)	(3,595,331)
Purchases of:		
AFS securities	(1,109,501)	(510,301)
HTM securities	(41,524)	(245,826)
FHLB and Federal Reserve Bank stocks and equity securities	(114,985)	(112,157)
Proceeds from:		
Sales of AFS securities	—	1,061
Sale of FHLB and Federal Reserve Bank stocks and equity securities	131,272	259
Prepayments, calls, and maturities of AFS securities	288,313	392,275
Prepayments, calls, and maturities of HTM securities	101,847	153,163
Sales, prepayments, calls, and maturities of other assets	20,224	31,732
Premises, equipment, and software, net of disposals	(43,541)	(45,441)
Net change in tax credit and alternative investments	(19,615)	(50,386)
Net cash (used in) investing activities	(2,224,411)	(3,980,951)
Cash flows from financing activities		
Net increase in deposits	2,487,225	732,347
Net (decrease) in short-term funding	(154,292)	(69,902)
Net increase (decrease) in short-term FHLB advances	(580,000)	2,583,000
Repayment of long-term FHLB advances	(568)	(413,523)
Proceeds from long-term FHLB advances	1,369	1,356
Proceeds from issuance of long-term funding	292,740	—
(Repayment) proceeds of finance lease principal	(64)	327
Proceeds from issuance of common stock for stock-based compensation plans	2,362	8,059
Purchase of treasury stock, stock-based compensation plans	(6,507)	(6,259)
Cash dividends on common stock	(96,005)	(91,256)
Cash dividends on preferred stock	(8,625)	(8,625)
Net cash provided by financing activities	1,937,635	2,735,525
Net increase (decrease) in cash and cash equivalents	91,334	(523,096)
Cash and cash equivalents at beginning of period	621,455	1,025,515
Cash and cash equivalents at end of period ^(a)	\$ 712,789	\$ 502,419

Numbers may not sum due to rounding.

(a) No restricted cash due to the Federal Reserve reducing the required reserve ratio to zero.

ASSOCIATED BANC-CORP
Consolidated Statements of Cash Flows (Unaudited)

(\$ in thousands)	Nine Months Ended Sep 30,	
	2023	2022
Supplemental disclosures of cash flow information		
Cash paid for interest	\$ 576,221	\$ 83,337
Cash paid for income and franchise taxes	68,382	6,087
Loans and bank premises transferred to OREO	5,917	5,052
Capitalized mortgage servicing rights	2,477	6,316
Loans transferred into held for sale from portfolio, net	6,833	1,789
Transfer of AFS securities to HTM securities	—	1,621,990
Unsettled trades to purchase securities	—	4,130
Write-up of equity securities without readily determinable fair values	—	5,690
Fair value adjustments on hedged long-term FHLB advances and subordinated debt	18,652	14,703
Fair value adjustments on foreign currency exchange forwards	3,308	10,610
Fair value adjustment on cash flow hedges	(19,391)	—

Item 1. Financial Statements Continued:

ASSOCIATED BANC-CORP
Notes to Consolidated Financial Statements

These interim consolidated financial statements have been prepared according to the rules and regulations of the SEC and, therefore, certain information and footnote disclosures normally presented in accordance with GAAP have been omitted or abbreviated. The information contained on the consolidated financial statements and footnotes in Associated Banc-Corp's 2022 Annual Report on Form 10-K should be referred to in connection with the reading of these unaudited interim consolidated financial statements.

Note 1 Basis of Presentation

In the opinion of management, the accompanying unaudited consolidated financial statements contain all adjustments necessary to present fairly the financial position, results of operations and comprehensive income, changes in stockholders' equity, and cash flows of the Corporation and Parent Company for the periods presented, and all such adjustments are of a normal recurring nature. The consolidated financial statements include the accounts of all subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation. The results of operations for the interim periods are not necessarily indicative of the results to be expected for the full year.

In preparing the consolidated financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the balance sheet and revenues and expenses for the period. Actual results could differ significantly from those estimates. Estimates that are particularly susceptible to significant change include the determination of the ACLL. Management has evaluated subsequent events for potential recognition or disclosure.

Within the tables presented, certain columns and rows may not sum due to the use of rounded numbers for disclosure purposes.

Note 2 Summary of Significant Accounting Policies

The accounting and reporting policies of the Corporation conform to U.S. GAAP and to general practice within the financial services industry. A discussion of these policies can be found in Note 1 Summary of Significant Accounting Policies included in the Corporation's 2022 Annual Report on Form 10-K.

New Accounting Pronouncements Adopted

Standard	Description	Date of adoption	Effect on financial statements
ASU 2022-02 Financial Instruments-Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures	The FASB issued these amendments to eliminate accounting guidance for TDRs by creditors in Subtopic 310-40, Receivables-Troubled Debt Restructurings by Creditors, while enhancing disclosure requirements for certain loan refinancings and restructurings by creditors when a borrower is experiencing financial difficulty, and to require that an entity disclose current-period gross writeoffs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, Financial Instruments-Credit Losses-Measured at Amortized Cost. The amendments in this Update are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and should be applied prospectively, except as provided in the next sentence. For the transition method related to the recognition and measurement of TDRs, an entity has the option to apply a modified retrospective transition method, resulting in a cumulative-effect adjustment to retained earnings in the period of adoption. Early adoption is permitted if an entity has adopted the amendments in Update 2016-03, including adoption in an interim period.	1st Quarter 2023	Adoption of this amendment did not have a material impact on the Corporation's results of operation, financial position or liquidity, but resulted in additional disclosure requirements related to gross charge offs by vintage year and the removal of TDR disclosures, replaced by additional disclosures on the types of modifications of loans to borrowers experiencing financial difficulties. The Corporation has adopted this update prospectively.

Future Accounting Pronouncements

The expected impact of applicable material accounting pronouncements recently issued or proposed but not yet required to be adopted are discussed in the table below. To the extent that the adoption of new accounting standards materially affects the Corporation's financial condition, results of operations, liquidity or disclosures, the impacts are discussed in the applicable sections of this financial review.

Standard	Description	Date of anticipated adoption	Effect on financial statements
ASU 2023-02 Investments-Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method	The amendments in this update permit reporting entities to elect to account for their tax equity investments, regardless of the tax credit program from which the income tax credits are received, using the proportional amortization method if certain conditions are met. A reporting entity may make an accounting policy election to apply the proportional amortization method on a tax-credit-program-by-tax-credit-program basis rather than electing to apply the proportional amortization method at the reporting entity level or to individual investments. The amendments in this update also remove certain guidance for Qualified Affordable Housing Project investments and require the application of the delayed equity contribution guidance to all tax equity investments. The amendments in this update are effective for fiscal years beginning after December 15, 2023, and must be applied on either a modified retrospective or a retrospective basis. Early adoption is permitted in any interim period, however if adopted in an interim period the entity shall adopt the amendments in this update as of the beginning of the fiscal year that includes the interim period.	1st Quarter 2024	The Corporation is currently evaluating the impact on its results of operation, financial position, liquidity, and disclosures.

Note 3 Earnings Per Common Share

Earnings per common share are calculated utilizing the two-class method. Basic earnings per common share are calculated by dividing the sum of distributed earnings to common shareholders and undistributed earnings allocated to common shareholders by the weighted average number of common shares outstanding. Diluted earnings per common share are calculated by dividing the sum of distributed earnings to common shareholders and undistributed earnings allocated to common shareholders by the weighted average number of common shares outstanding adjusted for the dilutive effect of common stock awards (outstanding stock options and unvested restricted stock awards). Presented below are the calculations for basic and diluted earnings per common share:

(\$ in thousands, except per share data)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Net income	\$ 83,248	\$ 96,275	\$ 273,762	\$ 257,360
Preferred stock dividends	(2,875)	(2,875)	(8,625)	(8,625)
Net income available to common equity	\$ 80,373	\$ 93,400	\$ 265,137	\$ 248,735
Common shareholder dividends	(31,806)	(30,149)	(95,417)	(90,647)
Unvested share-based payment awards	(190)	(194)	(588)	(609)
Undistributed earnings	\$ 48,377	\$ 63,057	\$ 169,132	\$ 157,479
Undistributed earnings allocated to common shareholders	\$ 48,090	\$ 62,648	\$ 168,136	\$ 156,454
Undistributed earnings allocated to unvested share-based payment awards	287	409	996	1,025
Undistributed earnings	\$ 48,377	\$ 63,057	\$ 169,132	\$ 157,479
Basic				
Distributed earnings to common shareholders	\$ 31,806	\$ 30,149	\$ 95,417	\$ 90,647
Undistributed earnings allocated to common shareholders	48,090	62,648	168,136	156,454
Total common shareholders earnings, basic	\$ 79,896	\$ 92,796	\$ 263,553	\$ 247,102
Diluted				
Distributed earnings to common shareholders	\$ 31,806	\$ 30,149	\$ 95,417	\$ 90,647
Undistributed earnings allocated to common shareholders	48,090	62,648	168,136	156,454
Total common shareholders earnings, diluted	\$ 79,896	\$ 92,796	\$ 263,553	\$ 247,102
Weighted average common shares outstanding	150,035	149,321	149,929	149,063
Effect of dilutive common stock awards	980	942	1,042	1,141
Diluted weighted average common shares outstanding	151,014	150,262	150,971	150,205
Basic earnings per common share	\$ 0.53	\$ 0.62	\$ 1.76	\$ 1.66
Diluted earnings per common share	\$ 0.53	\$ 0.62	\$ 1.75	\$ 1.65

Approximately 4 million and 3 million anti-dilutive common stock shares were excluded from the earnings per common share calculation for the three months ended September 30, 2023 and 2022, respectively, and approximately 3 million anti-dilutive

common stock shares were excluded from the earnings per common share calculation for both the nine months ended September 30, 2023 and 2022.

Note 4 Stock-Based Compensation

The fair values of stock options and restricted stock awards are amortized as compensation expense on a straight-line basis over the vesting period of the grants. For colleagues who meet the definition of retirement eligible under the 2017 Incentive Compensation Plan and the 2020 Incentive Compensation Plan, expenses related to stock options and restricted stock awards are fully recognized on the date the colleague meets the definition of normal or early retirement. Compensation expense recognized is included in personnel expense on the consolidated statements of income.

A summary of the Corporation's stock option activity for the nine months ended September 30, 2023 is presented below:

Stock Options	Shares ^(a)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value ^(a)
Outstanding at December 31, 2022	3,994	\$ 21.06	5.11 years	\$ 10,525
Exercised	61	17.04		
Forfeited or expired	10	23.45		
Outstanding at September 30, 2023	3,923	\$ 21.12	4.41 years	\$ 107
Options Exercisable at September 30, 2023	3,709	\$ 21.30	4.29 years	\$ 81

(a) In thousands

Intrinsic value represents the amount by which the fair market value of the underlying stock exceeds the exercise price of the stock option. For the nine months ended September 30, 2023, the intrinsic value of stock options exercised was approximately \$272,000, compared to \$3 million for the nine months ended September 30, 2022. For the nine months ended September 30, 2023, the total fair value of stock options vested was approximately \$955,000 compared to \$2 million for the nine months ended September 30, 2022.

The Corporation recognized compensation expense for the vesting of stock options of approximately \$ 265,000 for the nine months ended September 30, 2023, compared to approximately \$587,000 for the nine months ended September 30, 2022. At September 30, 2023, the Corporation had approximately \$113,000 of unrecognized compensation expense related to stock options that is expected to be recognized over the remaining requisite service periods that extend predominately through the first quarter of 2024.

The Corporation also has issued time-based and performance-based restricted stock awards under the 2017 Incentive Compensation Plan and subsequent 2020 Incentive Compensation Plan. Performance awards are based on performance goals determined by the Compensation and Benefits Committee of the Corporation's Board of Directors, with vesting ranging from a minimum of 0% to a maximum of 150% of the target award. Performance awards are valued utilizing a Monte Carlo simulation model to estimate fair value of the awards at the grant date.

The following table summarizes information about the Corporation's restricted stock awards activity for the nine months ended September 30, 2023:

Restricted Stock	Shares ^(a)	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2022	2,303	\$ 20.81
Granted	830	22.47
Vested	771	21.01
Forfeited	35	22.10
Outstanding at September 30, 2023	2,327	\$ 21.32

(a) In thousands

The Corporation amortizes the expense related to restricted stock awards as compensation expense over the vesting period specified in the grant's award agreement. Performance-based restricted stock awards granted during 2022 and 2023 will cliff-vest after the three year performance period has ended. Service-based restricted stock awards granted during 2022 and 2023 will generally vest ratably over a period of four years. Expense for restricted stock awards of \$14 million was recorded for the nine months ended September 30, 2023, compared to \$ 13 million for the nine months ended September 30, 2022. Included in compensation expense for the first nine months of 2023 was \$3 million of expense for the accelerated vesting of restricted stock awards granted to retirement eligible colleagues. The Corporation had \$23 million of unrecognized compensation costs related to restricted stock awards at September 30, 2023 that are expected to be recognized over the remaining requisite service periods that extend predominately through the first quarter of 2027.

The Corporation has the ability to issue shares from treasury or new shares upon the exercise of stock options or the granting of restricted stock awards. The Board of Directors has authorized management to repurchase shares of the Corporation's common stock, to be made available for issuance in connection with the Corporation's employee incentive plans and for other corporate purposes. The repurchase of shares, if any, will be based on market and investment opportunities, capital levels, growth prospects, and regulatory constraints. Such repurchases may occur from time to time in open market purchases, block transactions, private transactions, accelerated share repurchase programs, or similar facilities.

Note 5 Investment Securities

Investment securities are designated as AFS, HTM, or equity on the consolidated balance sheets at the time of purchase. The amortized cost and fair values of AFS and HTM securities at September 30, 2023 were as follows:

(\$ in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Fair Value
AFS investment securities				
U.S. Treasury securities	\$ 124,555	\$ —	\$ (15,531)	\$ 109,024
Agency securities	15,000	—	(1,410)	13,590
Obligations of state and political subdivisions (municipal securities)	226,808	—	(16,492)	210,317
Residential mortgage-related securities:				
FNMA/FHLMC	1,678,641	115	(241,997)	1,436,759
GNMA	1,416,569	—	(31,898)	1,384,670
Commercial mortgage-related securities:				
FNMA/FHLMC	18,779	—	(2,625)	16,154
GNMA	188,667	—	(12,193)	176,474
Asset backed securities:				
FFELP	140,881	83	(2,450)	138,514
SBA	3,299	9	(46)	3,261
Other debt securities	3,000	—	(85)	2,915
Total AFS investment securities	\$ 3,816,198	\$ 207	\$ (324,727)	\$ 3,491,679
HTM investment securities				
U.S. Treasury securities	\$ 999	\$ —	\$ (51)	\$ 948
Obligations of state and political subdivisions (municipal securities)	1,700,162	12	(279,659)	1,420,516
Residential mortgage-related securities:				
FNMA/FHLMC	956,107	28,038	(220,577)	763,567
GNMA	50,489	15	(5,192)	45,312
Private-label	349,410	10,228	(85,120)	274,518
Commercial mortgage-related securities:				
FNMA/FHLMC	782,291	13,329	(206,522)	589,097
GNMA	61,025	421	(9,506)	51,940
Total HTM investment securities	\$ 3,900,483	\$ 52,043	\$ (806,627)	\$ 3,145,898

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The amortized cost and fair values of AFS and HTM securities at December 31, 2022 were as follows:

(\$ in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Fair Value
AFS investment securities				
U.S. Treasury securities	\$ 124,441	\$ —	\$ (15,063)	\$ 109,378
Agency securities	15,000	—	(1,468)	13,532
Obligations of state and political subdivisions (municipal securities)	235,693	96	(5,074)	230,714
Residential mortgage-related securities:				
FNMA/FHLMC	1,820,642	404	(216,436)	1,604,610
GNMA	502,537	314	(5,255)	497,596
Commercial mortgage-related securities:				
FNMA/FHLMC	19,038	—	(1,896)	17,142
GNMA	115,031	—	(4,569)	110,462
Asset backed securities:				
FFELP	157,138	—	(5,947)	151,191
SBA	4,512	15	(51)	4,477
Other debt securities	3,000	—	(78)	2,922
Total AFS investment securities	\$ 2,997,032	\$ 830	\$ (255,837)	\$ 2,742,025
HTM investment securities				
U.S. Treasury securities	\$ 999	\$ —	\$ (62)	\$ 936
Obligations of state and political subdivisions (municipal securities)	1,732,351	1,994	(182,697)	1,551,647
Residential mortgage-related securities:				
FNMA/FHLMC	961,231	31,301	(175,760)	816,771
GNMA	52,979	85	(3,436)	49,628
Private-label	364,728	11,697	(72,920)	303,505
Commercial mortgage-related securities:				
FNMA/FHLMC	778,796	15,324	(178,281)	615,839
GNMA	69,369	577	(7,254)	62,691
Total HTM investment securities	\$ 3,960,451	\$ 60,978	\$ (620,411)	\$ 3,401,018

Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. The expected maturities of AFS and HTM securities at September 30, 2023, are shown below:

(\$ in thousands)	AFS		HTM	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due in one year or less	\$ 7,436	\$ 7,368	\$ 16,715	\$ 16,673
Due after one year through five years	190,843	170,918	47,774	46,115
Due after five years through ten years	136,473	125,923	155,329	144,145
Due after ten years	34,611	31,636	1,481,344	1,214,531
Total debt securities	369,363	335,846	1,701,161	1,421,464
Residential mortgage-related securities:				
FNMA/FHLMC	1,678,641	1,436,759	956,107	763,567
GNMA	1,416,569	1,384,670	50,489	45,312
Private-label	—	—	349,410	274,518
Commercial mortgage-related securities:				
FNMA/FHLMC	18,779	16,154	782,291	589,097
GNMA	188,667	176,474	61,025	51,940
Asset backed securities:				
FFELP	140,881	138,514	—	—
SBA	3,299	3,261	—	—
Total investment securities	\$ 3,816,198	\$ 3,491,679	\$ 3,900,483	\$ 3,145,898
Ratio of fair value to amortized cost		91.5 %		80.7 %

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On a quarterly basis, the Corporation refreshes the credit quality of each HTM security. The following table summarizes the credit quality indicators of HTM securities at amortized cost at September 30, 2023:

(\$ in thousands)	AAA	AA	A	Not Rated	Total
U.S. Treasury securities	\$ 999	\$ —	\$ —	\$ —	999
Obligations of state and political subdivisions (municipal securities)	769,052	923,707	6,248	1,156	1,700,162
Residential mortgage-related securities:					
FNMA/FHLMC	956,107	—	—	—	956,107
GNMA	50,489	—	—	—	50,489
Private-label	349,410	—	—	—	349,410
Commercial mortgage-related securities:					
FNMA/FHLMC	782,291	—	—	—	782,291
GNMA	61,025	—	—	—	61,025
Total HTM securities	\$ 2,969,372	\$ 923,707	\$ 6,248	\$ 1,156	\$ 3,900,483

The following table summarizes the credit quality indicators of HTM securities at amortized cost at December 31, 2022:

(\$ in thousands)	AAA	AA	A	Not Rated	Total
U.S. Treasury securities	\$ 999	\$ —	\$ —	\$ —	999
Obligations of state and political subdivisions (municipal securities)	806,529	917,059	7,604	1,158	1,732,351
Residential mortgage-related securities:					
FNMA/FHLMC	961,231	—	—	—	961,231
GNMA	52,979	—	—	—	52,979
Private-label	364,728	—	—	—	364,728
Commercial mortgage-related securities:					
FNMA/FHLMC	778,796	—	—	—	778,796
GNMA	69,369	—	—	—	69,369
Total HTM securities	\$ 3,034,630	\$ 917,059	\$ 7,604	\$ 1,158	\$ 3,960,451

The following table summarizes gross realized gains and losses on AFS securities, net write-up of equity securities, and proceeds from the sale of AFS investment securities for the three and nine months ended September 30, 2023 and 2022:

(\$ in thousands)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Gross realized gains on AFS securities	\$ —	\$ —	\$ —	21
Gross realized (losses) on AFS securities	—	—	—	(8)
Gain on sale and net write-up (down) of equity securities	(11)	5,664	55	5,664
Investment securities gains (losses), net	\$ (11)	\$ 5,664	\$ 55	\$ 5,676
Proceeds from sales of AFS investment securities	\$ —	\$ —	\$ —	1,061

During the third quarter of 2022, the Corporation sold its Visa Class B restricted shares obtained in the acquisition of First Staunton, which were carried at a zero-cost basis. The remaining shares, which are carried at fair value, were subsequently written up to reflect the new observable price resulting from that sale.

Investment securities with a carrying value of \$ 1.6 billion and \$2.3 billion at September 30, 2023 and December 31, 2022, respectively, were pledged as required to secure certain deposits or for other purposes.

Accrued interest receivable on HTM securities totaled \$ 16 million and \$19 million at September 30, 2023 and December 31, 2022, respectively. Accrued interest receivable on AFS securities totaled \$14 million and \$9 million at September 30, 2023 and December 31, 2022, respectively. Accrued interest receivable on both HTM and AFS securities is included in interest receivable on the consolidated balance sheets. There was no interest income reversed for investments going into nonaccrual at both September 30, 2023 and December 31, 2022.

A security is considered past due once it is 30 days past due under the terms of the agreement. At both September 30, 2023 and December 31, 2022, the Corporation had no past due HTM securities.

The allowance for credit losses on HTM securities was approximately \$ 67,000 at September 30, 2023 and approximately \$ 54,000 at December 31, 2022, attributable entirely to the Corporation's municipal securities, included in HTM investment securities, net, at amortized cost on the consolidated balance sheets. The Corporation also holds U.S. Treasury, municipal, and mortgage-related securities issued by the U.S. government or a GSE which are backed by the full faith and credit of the U.S. government and private-label residential mortgage-related securities that have credit enhancement which covers the first 15% of losses and, as a result, no allowance for credit losses has been recorded related to these securities.

The following represents gross unrealized losses and the related fair value of AFS and HTM securities, aggregated by investment category and length of time individual securities have been in a continuous unrealized loss position, at September 30, 2023:

(\$ in thousands)	Less than 12 months			12 months or more			Total	
	Number of Securities	Unrealized (Losses)	Fair Value	Number of Securities	Unrealized (Losses)	Fair Value	Unrealized (Losses)	Fair Value
AFS investment securities								
U.S. Treasury securities	—	\$ —	\$ —	7	\$ (15,531)	\$ 109,024	\$ (15,531)	\$ 109,024
Agency securities	—	—	—	1	(1,410)	13,590	(1,410)	13,590
Obligations of state and political subdivisions (municipal securities)	229	(6,575)	108,953	182	(9,916)	100,413	(16,492)	209,367
Residential mortgage-related securities:								
FNMA/FHLMC	20	(1,390)	24,258	107	(240,606)	1,394,562	(241,997)	1,418,820
GNMA	75	(27,131)	1,271,478	17	(4,767)	61,087	(31,898)	1,332,565
Commercial mortgage-related securities:								
FNMA/FHLMC	—	—	—	1	(2,625)	16,154	(2,625)	16,154
GNMA	9	(5,848)	100,659	33	(6,345)	75,815	(12,193)	176,474
Asset backed securities:								
FFELP	—	—	—	14	(2,450)	129,503	(2,450)	129,503
SBA	2	(1)	620	7	(46)	1,525	(46)	2,144
Other debt securities	1	(21)	979	2	(63)	1,937	(85)	2,915
Total	336	\$ (40,967)	\$ 1,506,947	371	\$ (283,760)	\$ 1,903,609	\$ (324,727)	\$ 3,410,556
HTM investment securities								
U.S. Treasury securities	—	\$ —	\$ —	1	\$ (51)	\$ 948	\$ (51)	\$ 948
Obligations of state and political subdivisions (municipal securities)	586	(48,660)	663,360	567	(230,998)	743,274	(279,659)	1,406,634
Residential mortgage-related securities:								
FNMA/FHLMC	31	(2,239)	37,996	92	(218,338)	725,539	(220,577)	763,535
GNMA	8	(466)	11,058	78	(4,726)	34,253	(5,192)	45,312
Private-label	—	—	—	18	(85,120)	274,518	(85,120)	274,518
Commercial mortgage-related securities:								
FNMA/FHLMC	2	(2,746)	24,130	43	(203,776)	564,968	(206,522)	589,097
GNMA	—	—	—	13	(9,506)	51,940	(9,506)	51,940
Total	627	\$ (54,112)	\$ 736,544	812	\$ (752,515)	\$ 2,395,440	\$ (806,627)	\$ 3,131,984

For comparative purposes, the following represents gross unrealized losses and the related fair value of AFS and HTM securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, at December 31, 2022:

(\$ in thousands)	Less than 12 months			12 months or more			Total	
	Number of Securities	Unrealized (Losses)	Fair Value	Number of Securities	Unrealized (Losses)	Fair Value	Unrealized (Losses)	Fair Value
AFS investment securities								
U.S. Treasury securities	—	\$ —	\$ —	7	\$ (15,063)	\$ 109,378	\$ (15,063)	\$ 109,378
Agency securities	—	—	—	1	(1,468)	13,532	(1,468)	13,532
Obligations of state and political subdivisions (municipal securities)	358	(5,066)	201,260	4	(8)	1,916	(5,074)	203,176
Residential mortgage-related securities:								
FNMA/FHLMC	24	(31,266)	260,986	84	(185,170)	1,321,420	(216,436)	1,582,406
GNMA	23	(4,415)	220,276	2	(840)	11,096	(5,255)	231,372
Commercial mortgage-related securities:								
FNMA/FHLMC	1	(1,896)	17,142	—	—	—	(1,896)	17,142
GNMA	33	(3,920)	101,036	4	(649)	9,426	(4,569)	110,462
Asset backed securities:								
FFELP	3	(1,668)	44,304	12	(4,278)	106,887	(5,947)	151,191
SBA	2	(1)	417	6	(50)	2,057	(51)	2,474
Other debt securities	2	(30)	1,970	1	(49)	951	(78)	2,922
Total	446	\$ (48,263)	\$ 847,391	121	\$ (207,575)	\$ 1,576,665	\$ (255,837)	\$ 2,424,055
HTM investment securities								
U.S. Treasury securities	1	\$ (62)	\$ 936	—	\$ —	\$ —	\$ (62)	\$ 936
Obligations of state and political subdivisions (municipal securities)	771	(96,282)	1,079,216	156	(86,415)	231,022	(182,697)	1,310,238
Residential mortgage-related securities:								
FNMA/FHLMC	79	(18,925)	143,201	22	(156,836)	671,570	(175,760)	814,770
GNMA	81	(3,436)	44,476	—	—	—	(3,436)	44,476
Private-label	3	(9,509)	58,733	15	(63,411)	244,772	(72,920)	303,505
Commercial mortgage-related securities:								
FNMA/FHLMC	4	(3,814)	20,338	39	(174,467)	576,911	(178,281)	597,249
GNMA	8	(2,528)	34,612	6	(4,726)	28,080	(7,254)	62,691
Total	947	\$ (134,556)	\$ 1,381,511	238	\$ (485,855)	\$ 1,752,354	\$ (620,411)	\$ 3,133,865

The Corporation reviews the AFS investment securities portfolio on a quarterly basis to monitor its credit exposure. A determination as to whether a security's decline in fair value is the result of credit risk takes into consideration numerous factors and the relative significance of any single factor can vary by security. Some factors the Corporation may consider in this impairment analysis include the extent to which the security has been in an unrealized loss position, the change in security rating, financial condition and near-term prospects of the issuer, as well as the security and industry specific economic conditions.

Based on the Corporation's evaluation, management does not believe any unrealized losses at September 30, 2023 represent credit deterioration as these unrealized losses are primarily attributable to changes in interest rates and the current market conditions. The Corporation does not intend to sell, nor does it believe that it will be required to sell, the securities in an unrealized loss position before recovery of their amortized cost basis.

FHLB and Federal Reserve Bank stocks: The Corporation is required to maintain Federal Reserve Bank stock and FHLB stock as a member bank of both the Federal Reserve System and the FHLB, and in amounts as required by these institutions. These equity securities are "restricted" in that they can only be sold back to the respective institutions or another member institution at par. Therefore, they are less liquid than other marketable equity securities and their fair value is equal to amortized cost. The Corporation had FHLB stock of \$182 million and \$209 million at September 30, 2023 and December 31, 2022, respectively. The Corporation had Federal Reserve Bank stock of \$87 million at both September 30, 2023 and December 31, 2022. Accrued interest receivable on FHLB stock totaled \$3 million at both September 30, 2023 and December 31, 2022. There was approximately \$ 958,000 of accrued interest receivable on Federal Reserve Bank Stock at September 30, 2023 and none at December 31, 2022. Accrued interest receivable on both FHLB stock and Federal Reserve Bank stock is included in interest receivable on the consolidated balance sheets.

Equity Securities

Equity securities with readily determinable fair values: The Corporation's portfolio of equity securities with readily determinable fair values is primarily comprised of CRA Qualified Investment mutual funds and other mutual funds. The Corporation had equity securities with readily determinable fair values of \$7 million at September 30, 2023 and \$ 6 million at December 31, 2022.

Equity securities without readily determinable fair values: The Corporation's portfolio of equity securities without readily determinable fair values, which primarily consists of Visa Class B restricted shares and an investment in a private SBA loan fund, was carried at \$29 million and \$19 million at September 30, 2023 and December 31, 2022, respectively.

Note 6 Loans

The period end loan composition was as follows:

(\$ in thousands)	Sep 30, 2023	Dec 31, 2022
Commercial and industrial	\$ 10,099,068	\$ 9,759,454
Commercial real estate — owner occupied	1,054,969	991,722
Commercial and business lending	11,154,037	10,751,176
Commercial real estate — investor	5,218,980	5,080,344
Real estate construction	2,130,719	2,155,222
Commercial real estate lending	7,349,699	7,235,565
Total commercial	18,503,736	17,986,742
Residential mortgage	8,782,645	8,511,550
Auto finance	2,007,164	1,382,073
Home equity	623,650	624,353
Other consumer	275,993	294,851
Total consumer	11,689,451	10,812,828
Total loans	\$ 30,193,187	\$ 28,799,569

Accrued interest receivable on loans totaled \$ 136 million at September 30, 2023, and \$ 113 million at December 31, 2022, and is included in interest receivable on the consolidated balance sheets. Interest accrued but not received is reversed against interest income when a loan is placed on nonaccrual. The amount of accrued interest reversed was approximately \$347,000 and \$1 million for the three and nine months ended September 30, 2023, respectively, and approximately \$189,000 and \$328,000 for the three and nine months ended September 30, 2022, respectively.

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The following table presents loans by credit quality indicator by origination year at September 30, 2023:

			Term Loans Amortized Cost Basis by Origination Year ^(a)															
			Rev Loans Converted to Term ^(a)	Rev Loans Amortized Cost Basis	YTD 2023	2022	2021	2020	2019			Prior	Total					
Commercial and industrial:																		
Risk rating:																		
Pass	\$	477	\$	2,065,717	\$	1,775,767	\$	2,516,155	\$	1,427,787	\$	549,748	\$	481,866	\$	895,313	\$	9,712,353
Special mention		39		26,400		39		39,694		8,731		3,667		—		26,136		104,666
Potential problem		829		72,533		311		51,502		57,611		20,222		4,434		623		207,237
Nonaccrual		14,756		—		13,945		20,299		18,898		21,617		—		53		74,812
Commercial and industrial	\$	16,101	\$	2,164,649	\$	1,790,062	\$	2,627,650	\$	1,513,027	\$	595,254	\$	486,300	\$	922,126	\$	10,099,068
Commercial real estate - owner occupied:																		
Risk rating:																		
Pass	\$	—	\$	17,557	\$	133,133	\$	182,517	\$	196,057	\$	104,786	\$	142,602	\$	229,321	\$	1,005,973
Special mention		—		421		—		2,000		7,666		2,446		4,737		—		17,269
Potential problem		—		—		748		1,177		3,334		1,205		1,807		19,520		27,792
Nonaccrual		—		—		—		1,568		2,260		—		—		108		3,936
Commercial real estate - owner occupied	\$	—	\$	17,978	\$	133,882	\$	187,262	\$	209,317	\$	108,436	\$	149,146	\$	248,950	\$	1,054,969
Commercial and business lending:																		
Risk rating:																		
Pass	\$	477	\$	2,083,273	\$	1,908,900	\$	2,698,672	\$	1,623,845	\$	654,533	\$	624,468	\$	1,124,635	\$	10,718,325
Special mention		39		26,821		39		41,694		16,396		6,112		4,737		26,136		121,935
Potential problem		829		72,533		1,060		52,679		60,945		21,427		6,242		20,143		235,029
Nonaccrual		14,756		—		13,945		21,868		21,158		21,617		—		161		78,748
Commercial and business lending	\$	16,101	\$	2,182,627	\$	1,923,943	\$	2,814,912	\$	1,722,344	\$	703,689	\$	635,446	\$	1,171,075	\$	11,154,037
Commercial real estate - investor:																		
Risk rating:																		
Pass	\$	—	\$	157,976	\$	500,154	\$	1,278,072	\$	1,181,060	\$	687,373	\$	459,677	\$	634,704	\$	4,899,015
Special mention		—		—		9,400		54,103		26,330		—		64,801		5,608		160,243
Potential problem		—		—		6,425		5,842		4,771		69,079		10,903		51,820		148,840
Nonaccrual		—		—		—		—		—		—		—		10,882		10,882
Commercial real estate - investor	\$	—	\$	157,976	\$	515,979	\$	1,338,016	\$	1,212,162	\$	756,452	\$	535,381	\$	703,014	\$	5,218,980
Real estate construction:																		
Risk rating:																		
Pass	\$	—	\$	27,872	\$	251,100	\$	1,008,428	\$	716,123	\$	91,982	\$	11,970	\$	23,141	\$	2,130,617
Nonaccrual		—		—		—		—		—		—		—		103		103
Real estate construction	\$	—	\$	27,872	\$	251,100	\$	1,008,428	\$	716,123	\$	91,982	\$	11,970	\$	23,244	\$	2,130,719
Commercial real estate lending:																		
Risk rating:																		
Pass	\$	—	\$	185,848	\$	751,254	\$	2,286,500	\$	1,897,183	\$	779,355	\$	471,646	\$	657,845	\$	7,029,632
Special mention		—		—		9,400		54,103		26,330		—		64,801		5,608		160,243
Potential problem		—		—		6,425		5,842		4,771		69,079		10,903		51,820		148,840
Nonaccrual		—		—		—		—		—		—		—		10,985		10,985
Commercial real estate lending	\$	—	\$	185,848	\$	767,080	\$	2,346,445	\$	1,928,284	\$	848,434	\$	547,351	\$	726,258	\$	7,349,699
Total commercial:																		
Risk rating:																		
Pass	\$	477	\$	2,269,121	\$	2,660,154	\$	4,985,172	\$	3,521,028	\$	1,433,889	\$	1,096,114	\$	1,782,480	\$	17,747,957
Special mention		39		26,821		9,439		95,797		42,727		6,112		69,538		31,744		282,178
Potential problem		829		72,533		7,485		58,521		65,716		90,506		17,144		71,963		383,869
Nonaccrual		14,756		—		13,945		21,868		21,158		21,617		—		11,146		89,732
Total commercial	\$	16,101	\$	2,368,474	\$	2,691,023	\$	5,161,357	\$	3,650,628	\$	1,552,123	\$	1,182,797	\$	1,897,334	\$	18,503,736

(\$ in thousands)	Term Loans Amortized Cost Basis by Origination Year ^(a)								
	Rev Loans Converted to Term ^(a)	Rev Loans Amortized Cost Basis	YTD 2023	2022	2021	2020	2019	Prior	Total
Residential mortgage:									
Risk rating:									
Pass	\$ —	\$ —	\$ 294,499	\$ 1,725,855	\$ 2,176,722	\$ 1,585,071	\$ 757,087	\$ 2,176,012	\$ 8,715,245
Potential problem	—	—	—	80	—	77	347	744	1,247
Nonaccrual	—	—	142	3,098	7,003	7,506	6,742	41,662	66,153
Residential mortgage	\$ —	\$ —	\$ 294,640	\$ 1,729,032	\$ 2,183,725	\$ 1,592,654	\$ 764,176	\$ 2,218,418	\$ 8,782,645
Auto finance:									
Risk rating:									
Pass	\$ —	\$ —	\$ 885,528	\$ 1,031,283	\$ 82,447	\$ 204	\$ 614	\$ 202	\$ 2,000,278
Special mention	—	—	601	1,436	316	—	—	—	2,353
Nonaccrual	—	—	452	3,551	527	—	4	—	4,533
Auto finance	\$ —	\$ —	\$ 886,581	\$ 1,036,271	\$ 83,289	\$ 204	\$ 617	\$ 202	\$ 2,007,164
Home equity:									
Risk rating:									
Pass	\$ 7,318	\$ 514,431	\$ 4,986	\$ 35,751	\$ 1,671	\$ 1,450	\$ 4,703	\$ 51,693	\$ 614,685
Special mention	343	102	—	40	73	—	55	542	811
Potential problem	11	—	—	—	—	—	45	192	236
Nonaccrual	832	67	—	68	105	99	373	7,205	7,917
Home equity	\$ 8,504	\$ 514,599	\$ 4,986	\$ 35,859	\$ 1,849	\$ 1,549	\$ 5,175	\$ 59,631	\$ 623,650
Other consumer:									
Risk rating:									
Pass	\$ 99	\$ 193,494	\$ 5,521	\$ 3,933	\$ 2,772	\$ 1,234	\$ 514	\$ 67,749	\$ 275,217
Special mention	17	520	—	—	16	14	2	2	553
Nonaccrual	81	66	11	1	8	73	11	52	222
Other consumer	\$ 197	\$ 194,079	\$ 5,532	\$ 3,934	\$ 2,797	\$ 1,321	\$ 527	\$ 67,803	\$ 275,993
Total consumer:									
Risk rating:									
Pass	\$ 7,417	\$ 707,925	\$ 1,190,534	\$ 2,796,822	\$ 2,263,612	\$ 1,587,959	\$ 762,917	\$ 2,295,656	\$ 11,605,425
Special mention	360	621	601	1,476	405	14	57	543	3,717
Potential problem	11	—	—	80	—	77	392	935	1,483
Nonaccrual	913	133	604	6,718	7,644	7,679	7,129	48,919	78,826
Total consumer	\$ 8,701	\$ 708,679	\$ 1,191,739	\$ 2,805,096	\$ 2,271,661	\$ 1,595,728	\$ 770,495	\$ 2,346,054	\$ 11,689,451
Total loans:									
Risk rating:									
Pass	\$ 7,894	\$ 2,977,046	\$ 3,850,688	\$ 7,781,993	\$ 5,784,640	\$ 3,021,848	\$ 1,859,031	\$ 4,078,136	\$ 29,353,382
Special mention	398	27,442	10,039	97,273	43,132	6,126	69,595	32,288	285,895
Potential problem	841	72,533	7,485	58,600	65,716	90,583	17,536	72,899	385,352
Nonaccrual	15,669	133	14,549	28,585	28,801	29,295	7,129	60,065	168,558
Total loans	\$ 24,802	\$ 3,077,153	\$ 3,882,762	\$ 7,966,452	\$ 5,922,289	\$ 3,147,851	\$ 1,953,292	\$ 4,243,388	\$ 30,193,187

(a) Revolving loans converted to term loans are those converted during the reporting period and are also reported in their year of origination.

The following table presents loans by credit quality indicator by origination year at December 31, 2022:

(\$ in thousands)	Rev Loans Converted to Term ^(a)	Rev Loans Amortized Cost Basis	Term Loans Amortized Cost Basis by Origination Year ^(a)						
			2022	2021	2020	2019	2018	Prior	Total
Commercial and industrial:									
Risk rating:									
Pass	\$ 1,423	\$ 1,938,777	\$ 3,245,546	\$ 2,367,008	\$ 567,833	\$ 573,120	\$ 330,642	\$ 432,906	\$ 9,455,833
Special mention	—	93,209	3,411	23,607	—	—	19	32,497	152,744
Potential problem	447	24,549	41,400	4,193	21,887	38,169	218	6,133	136,549
Nonaccrual	3,926	—	5,210	—	9,119	—	—	—	14,329
Commercial and industrial	\$ 5,796	\$ 2,056,535	\$ 3,295,567	\$ 2,394,809	\$ 598,839	\$ 611,289	\$ 330,879	\$ 471,535	\$ 9,759,454
Commercial real estate - owner occupied:									
Risk rating:									
Pass	\$ —	\$ 12,447	\$ 211,645	\$ 225,627	\$ 163,965	\$ 160,370	\$ 73,487	\$ 97,420	\$ 944,961
Special mention	—	—	—	—	1,136	1,491	9,713	—	12,339
Potential problem	—	1,325	1,238	11,141	5,523	10,769	370	4,055	34,422
Commercial real estate - owner occupied	\$ —	\$ 13,772	\$ 212,883	\$ 236,769	\$ 170,624	\$ 172,630	\$ 83,570	\$ 101,475	\$ 991,722
Commercial and business lending:									
Risk rating:									
Pass	\$ 1,423	\$ 1,951,224	\$ 3,457,191	\$ 2,592,636	\$ 731,798	\$ 733,490	\$ 404,129	\$ 530,326	\$ 10,400,794
Special mention	—	93,209	3,411	23,607	1,136	1,491	9,732	32,497	165,083
Potential problem	447	25,874	42,638	15,335	27,410	48,938	589	10,188	170,971
Nonaccrual	3,926	—	5,210	—	9,119	—	—	—	14,329
Commercial and business lending	\$ 5,796	\$ 2,070,307	\$ 3,508,450	\$ 2,631,578	\$ 769,463	\$ 783,919	\$ 414,449	\$ 573,010	\$ 10,751,176
Commercial real estate - investor:									
Risk rating:									
Pass	\$ 38,412	\$ 106,280	\$ 1,633,094	\$ 1,419,000	\$ 683,121	\$ 530,444	\$ 262,858	\$ 210,299	\$ 4,845,096
Special mention	—	—	61,968	24,149	7,361	9,400	—	10,455	113,333
Potential problem	—	—	16,147	21,303	27,635	1,333	19,017	7,099	92,535
Nonaccrual	—	—	2,177	25,668	—	—	—	1,535	29,380
Commercial real estate - investor	\$ 38,412	\$ 106,280	\$ 1,713,387	\$ 1,490,120	\$ 718,117	\$ 541,177	\$ 281,875	\$ 229,387	\$ 5,080,344
Real estate construction:									
Risk rating:									
Pass	\$ —	\$ 29,892	\$ 900,593	\$ 913,107	\$ 241,230	\$ 12,062	\$ 2,226	\$ 9,775	\$ 2,108,885
Special mention	—	—	—	—	12,174	33,087	—	—	45,261
Potential problem	—	—	—	—	970	—	—	—	970
Nonaccrual	—	—	—	—	—	—	—	105	105
Real estate construction	\$ —	\$ 29,892	\$ 900,593	\$ 913,107	\$ 254,374	\$ 45,149	\$ 2,226	\$ 9,880	\$ 2,155,222
Commercial real estate lending:									
Risk rating:									
Pass	\$ 38,412	\$ 136,173	\$ 2,533,687	\$ 2,332,107	\$ 924,351	\$ 542,505	\$ 265,083	\$ 220,073	\$ 6,953,981
Special mention	—	—	61,968	24,149	19,535	42,487	—	10,455	158,595
Potential problem	—	—	16,147	21,303	28,605	1,333	19,017	7,099	93,505
Nonaccrual	—	—	2,177	25,668	—	—	—	1,640	29,485
Commercial real estate lending	\$ 38,412	\$ 136,173	\$ 2,613,980	\$ 2,403,227	\$ 972,492	\$ 586,326	\$ 284,101	\$ 239,267	\$ 7,235,565

(\$ in thousands)	Term Loans Amortized Cost Basis by Origination Year ^(a)									
	Rev Loans Converted to Term ^(a)	Rev Loans Amortized Cost Basis	2022	2021	2020	2019	2018	Prior	Total	
Total commercial:										
Risk rating:										
Pass	\$ 39,835	\$ 2,087,396	\$ 5,990,879	\$ 4,924,743	\$ 1,656,149	\$ 1,275,996	\$ 669,213	\$ 750,399	\$ 17,354,774	
Special mention	—	93,209	65,379	47,756	20,671	43,978	9,732	42,952	323,677	
Potential problem	447	25,874	58,785	36,638	56,016	50,271	19,606	17,287	264,476	
Nonaccrual	3,926	—	7,387	25,668	9,119	—	—	1,640	43,814	
Total commercial	\$ 44,208	\$ 2,206,480	\$ 6,122,430	\$ 5,034,805	\$ 1,741,955	\$ 1,370,245	\$ 698,550	\$ 812,278	\$ 17,986,742	
Residential mortgage:										
Risk rating:										
Pass	\$ —	\$ —	\$ 1,410,566	\$ 2,184,125	\$ 1,716,663	\$ 817,164	\$ 370,724	\$ 1,951,406	\$ 8,450,648	
Special mention	—	—	—	284	96	—	—	63	444	
Potential problem	—	—	455	71	—	738	29	685	1,978	
Nonaccrual	—	—	8,506	3,851	6,219	3,744	5,014	31,145	58,480	
Residential mortgage	\$ —	\$ —	\$ 1,419,527	\$ 2,188,332	\$ 1,722,979	\$ 821,645	\$ 375,768	\$ 1,983,299	\$ 8,511,550	
Auto finance:										
Risk rating:										
Pass	\$ —	\$ —	\$ 1,271,205	\$ 106,102	\$ 333	\$ 1,267	\$ 446	\$ 61	\$ 1,379,414	
Special mention	—	—	1,052	118	—	—	—	—	1,170	
Nonaccrual	—	—	1,149	331	—	9	—	—	1,490	
Auto finance	\$ —	\$ —	\$ 1,273,406	\$ 106,551	\$ 333	\$ 1,276	\$ 446	\$ 61	\$ 1,382,073	
Home equity:										
Risk rating:										
Pass	\$ 7,254	\$ 508,212	\$ 31,389	\$ 6,508	\$ 2,112	\$ 6,197	\$ 6,966	\$ 54,827	\$ 616,211	
Special mention	47	102	—	—	—	—	47	310	458	
Potential problem	—	15	—	—	—	34	2	146	197	
Nonaccrual	1,590	—	306	102	131	307	319	6,322	7,487	
Home equity	\$ 8,891	\$ 508,329	\$ 31,695	\$ 6,610	\$ 2,243	\$ 6,538	\$ 7,333	\$ 61,605	\$ 624,353	
Other consumer:										
Risk rating:										
Pass	\$ 64	\$ 199,942	\$ 7,429	\$ 5,256	\$ 2,468	\$ 1,238	\$ 174	\$ 77,611	\$ 294,117	
Special mention	6	490	11	—	5	5	—	25	537	
Nonaccrual	78	56	11	21	10	56	10	34	197	
Other consumer	\$ 147	\$ 200,488	\$ 7,452	\$ 5,276	\$ 2,482	\$ 1,300	\$ 184	\$ 77,670	\$ 294,851	
Total consumer:										
Risk rating:										
Pass	\$ 7,318	\$ 708,154	\$ 2,720,589	\$ 2,301,991	\$ 1,721,576	\$ 825,866	\$ 378,310	\$ 2,083,904	\$ 10,740,390	
Special mention	52	592	1,063	403	101	5	47	398	2,609	
Potential problem	—	15	455	71	—	772	31	831	2,175	
Nonaccrual	1,668	56	9,973	4,304	6,360	4,116	5,343	37,501	67,654	
Total consumer	\$ 9,038	\$ 708,817	\$ 2,732,080	\$ 2,306,769	\$ 1,728,037	\$ 830,759	\$ 383,731	\$ 2,122,635	\$ 10,812,828	
Total loans:										
Risk rating:										
Pass	\$ 47,152	\$ 2,795,551	\$ 8,711,468	\$ 7,226,734	\$ 3,377,725	\$ 2,101,861	\$ 1,047,522	\$ 2,834,303	\$ 28,095,164	
Special mention	52	93,801	66,443	48,159	20,772	43,983	9,778	43,350	326,286	
Potential problem	447	25,889	59,240	36,709	56,016	51,043	19,637	18,118	266,651	
Nonaccrual	5,595	56	17,360	29,972	15,479	4,116	5,343	39,141	111,467	
Total loans	\$ 53,246	\$ 2,915,297	\$ 8,854,510	\$ 7,341,574	\$ 3,469,992	\$ 2,201,004	\$ 1,082,280	\$ 2,934,912	\$ 28,799,569	

(a) Revolving loans converted to term loans are those converted during the reporting period and are also reported in their year of origination.

The following table presents gross charge offs by origination year at September 30, 2023:

(\$ in thousands)	Gross Charge Offs by Origination Year							
	Rev Loans							
	Amortized Cost Basis	YTD 2023	2022	2021	2020	2019	Prior	Total
Commercial and industrial	\$ 2,760	\$ 401	\$ 5,695	\$ 13,264	\$ 5,900	\$ —	\$ 3,795	\$ 31,816
Commercial and business lending	2,760	401	5,695	13,264	5,900	—	3,795	31,816
Commercial real estate-investor	—	—	—	—	—	—	242	242
Real estate construction	—	—	—	—	—	—	25	25
Commercial real estate lending	—	—	—	—	—	—	266	266
Total commercial	2,760	401	5,695	13,264	5,900	—	4,062	32,082
Residential mortgage	—	—	128	22	148	7	410	714
Auto finance	—	254	3,355	442	—	5	—	4,056
Home equity	12	—	43	45	—	22	147	269
Other consumer	3,351	—	149	124	29	12	106	3,769
Total consumer	3,363	254	3,674	633	177	45	662	8,809
Total gross charge offs	\$ 6,124	\$ 655	\$ 9,369	\$ 13,897	\$ 6,077	\$ 45	\$ 4,724	\$ 40,891

Factors that are important to managing overall credit quality are sound loan underwriting and administration, systematic monitoring of existing loans and commitments, effective loan review on an ongoing basis, early identification of potential problems, and appropriate policies for ACLL, nonaccrual loans, and charge offs.

For commercial loans, management has determined the pass credit quality indicator to include credits exhibiting acceptable financial statements, cash flow, and leverage. If any risk exists, it is mitigated by the loan structure, collateral, monitoring, or control. For consumer loans, performing loans include credits performing in accordance with the original contractual terms.

Loans are considered past due if the required principal and interest payments have not been received as of the date such payments were due. Special mention credits have potential weaknesses that warrant specific attention from management. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects for the credit. Accruing loan modifications could be pass or special mention, depending on the risk rating on the loan. Potential problem loans are considered inadequately protected by the current net worth and paying capacity of the obligor or the collateral pledged. These loans generally have a well-defined weakness, or weaknesses, which may jeopardize liquidation of the debt, and are characterized by the distinct possibility the Corporation will sustain some loss if the deficiencies are not corrected. Management has determined commercial loan relationships in nonaccrual status, and commercial and consumer loan relationships with their terms restructured in a loan modification, meet the criteria to be individually evaluated. Commercial loans classified as special mention, potential problem, and nonaccrual are reviewed at a minimum on a quarterly basis, while pass credits, which are performing rated credits, are generally reviewed on an annual basis or more frequently if the loan renewal is less than one year or if otherwise warranted.

The following table presents loans by past due status at September 30, 2023:

	Accruing						
(\$ in thousands)	Current	30-59 Days Past Due	60-89 Days Past Due	90+ Days Past Due	Nonaccrual ^{(a)(b)}		Total
Commercial and industrial	\$ 10,022,308	\$ 671	\$ 835	\$ 441	\$ 74,812		\$ 10,099,068
Commercial real estate - owner occupied	1,049,156	1,877	—	—	3,936		1,054,969
Commercial and business lending	11,071,464	2,548	835	441	78,748		11,154,037
Commercial real estate - investor	5,197,977	10,120	1	—	10,882		5,218,980
Real estate construction	2,130,606	10	—	—	103		2,130,719
Commercial real estate lending	7,328,583	10,130	1	—	10,985		7,349,699
Total commercial	18,400,047	12,678	836	441	89,732		18,503,736
Residential mortgage	8,704,840	11,652	—	—	66,153		8,782,645
Auto finance	1,985,943	14,335	2,353	—	4,533		2,007,164
Home equity	612,045	2,876	811	—	7,917		623,650
Other consumer	272,175	1,255	625	1,715	222		275,993
Total consumer	11,575,003	30,118	3,789	1,715	78,826		11,689,451
Total loans	\$ 29,975,051	\$ 42,797	\$ 4,626	\$ 2,156	\$ 168,558		\$ 30,193,187

(a) Of the total nonaccrual loans, \$ 114 million, or 68%, were current with respect to payment at September 30, 2023.

(b) No interest income was recognized on nonaccrual loans for the three and nine months ended September 30, 2023. In addition, there were \$ 65 million of nonaccrual loans for which there was no related ACLL at September 30, 2023.

The following table presents loans by past due status at December 31, 2022:

(\$ in thousands)	Accruing				Nonaccrual ^{(a)(b)}	Total
	Current	30-59 Days Past Due	60-89 Days Past Due	90+ Days Past Due		
Commercial and industrial	\$ 9,738,561	\$ 716	\$ 5,566	\$ 282	\$ 14,329	\$ 9,759,454
Commercial real estate - owner occupied	991,493	218	12	—	—	991,722
Commercial and business lending	10,730,053	934	5,578	282	14,329	10,751,176
Commercial real estate - investor	5,049,897	1,067	—	—	29,380	5,080,344
Real estate construction	2,155,077	39	—	—	105	2,155,222
Commercial real estate lending	7,204,975	1,105	—	—	29,485	7,235,565
Total commercial	17,935,028	2,040	5,578	282	43,814	17,986,742
Residential mortgage	8,443,072	9,811	63	124	58,480	8,511,550
Auto finance	1,371,176	8,238	1,170	—	1,490	1,382,073
Home equity	611,259	5,149	458	—	7,487	624,353
Other consumer	291,722	1,018	592	1,322	197	294,851
Total consumer	10,717,229	24,216	2,283	1,446	67,654	10,812,828
Total loans	\$ 28,652,257	\$ 26,256	\$ 7,861	\$ 1,728	\$ 111,467	\$ 28,799,569

(a) Of the total nonaccrual loans, \$64 million, or 58%, were current with respect to payment at December 31, 2022.

(b) No interest income was recognized on nonaccrual loans for the year ended December 31, 2022. In addition, there were \$ 11 million of nonaccrual loans for which there was no related ACLL at December 31, 2022.

Loan Modifications and Troubled Debt Restructurings

Under ASU 2022-02, effective January 1, 2023, loan modifications are reported if concessions have been granted to borrowers that are experiencing financial difficulty. Information on these loan modifications originated after the effective date is presented according to the new accounting guidance. Reporting periods prior to the adoption of ASU 2022-02 present information on TDRs under the previous disclosure requirements.

The following tables show the composition of loan modifications made to borrowers experiencing financial difficulty by the loan portfolio and type of concessions granted during the nine months ended September 30, 2023. Each of the types of concessions granted comprised less than 1% of their respective classes of loan portfolios at September 30, 2023.

(\$ in thousands)	Interest Rate Concession	
	Amortized Cost	
Commercial and industrial	\$	234
Auto		169
Home equity		77
Other consumer		1,243
Total loans modified	\$	1,724

(\$ in thousands)	Term Extension	
	Amortized Cost	
Residential mortgage	\$	208
Home equity		26
Total loans modified	\$	234

(\$ in thousands)	Combination - Interest Rate Concession and Term Extension	
	Amortized Cost	
Residential mortgage	\$	830
Home equity		262
Total loans modified	\$	1,092

The following tables summarize, by loan portfolio, the financial effect of the Corporation's loan modifications on the modified loans as of September 30, 2023:

Interest Rate Concession	
Loan Type	Financial Effect, Weighted Average Contractual Interest Rate (Decrease) Increase
Commercial and industrial	(18) %
Auto	(4) %
Home equity	— %
Other consumer	(21) %
Weighted average of total loans modified	(10) %

Term Extension	
Loan Type	Financial Effect, Weighted Average Term Increase ^(a)
Residential mortgage	26 months
Home equity	78 months
Weighted average of total loans modified	32 months

(a) During the nine months ended September 30, 2023, term extensions changed the weighted average term on modified loans from 297 to 328 months.

The Corporation closely monitors the performance of loans that are modified to borrowers experiencing financial difficulty to understand the effectiveness of its modification efforts. The following table depicts the performance of loans that have been modified in the nine months ended September 30, 2023:

(\$ in thousands)	Payment Status (Amortized Cost Basis)			
	Current	30-89 Days Past Due	90+ Days Past Due	Nonaccrual
Commercial and industrial	\$ 234	\$ —	\$ —	—
Residential mortgage	81	126	—	832
Auto	169	—	—	—
Home equity	236	—	—	130
Other consumer	1,243	—	—	—
Total loans modified	\$ 1,963	\$ 126	\$ —	961

The following table provides the amortized cost of loan modifications by loan portfolio and type of concession that were modified in the previous nine months and subsequently had a payment default, as of September 30, 2023:

(\$ in thousands)	Amortized Cost of Loan Modifications that Subsequently Defaulted		
	Interest Rate Concession	Term Extension	Combination Interest Rate Reduction and Term Extension
Residential mortgage	\$ —	\$ 208	\$ 206
Home equity	—	—	18
Total loans modified	\$ —	\$ 208	\$ 224

The following table presents nonaccrual and performing restructured loans by loan portfolio at December 31, 2022:

(\$ in thousands)	Performing Restructured Loans	Nonaccrual Restructured Loans ^(a)
Commercial and industrial	\$ 12,453	\$ —
Commercial real estate — owner occupied	316	—
Commercial real estate — investor	128	2,074
Real estate construction	195	9
Residential mortgage	16,829	17,117
Home equity	2,148	927
Other consumer	798	—
Total restructured loans	\$ 32,868	\$ 20,127

(a) Nonaccrual restructured loans have been included within nonaccrual loans.

The following table provides the number of loans modified in a TDR by loan portfolio, the recorded investment, and unpaid principal balance for the nine months ended September 30, 2022:

(\$ in thousands)	Number of Loans	Recorded Investment ^(a)	Unpaid Principal Balance ^(b)
Commercial and industrial	2	\$ 265	\$ 265
Commercial real estate — investor	1	547	573
Residential mortgage	44	9,641	9,833
Home equity	12	390	412
Total loans modified	59	\$ 10,844	\$ 11,083

(a) Represents post-modification outstanding recorded investment.

(b) Represents pre-modification outstanding recorded investment.

During the nine months ended September 30, 2022, restructured loan modifications of commercial loans primarily included maturity date extensions and payment schedule modifications. Restructured loan modifications of consumer loans for the nine months ended September 30, 2022 primarily included maturity date extensions, interest rate concessions, non-reaffirmed Chapter 7 bankruptcies, or a combination of these concessions.

The following table provides the number of loans modified during the previous twelve months which subsequently defaulted during the nine months ended September 30, 2022, and the recorded investment in these restructured loans at the time of default as of September 30, 2022:

(\$ in thousands)	Nine Months Ended September 30, 2022	
	Number of Loans	Recorded Investment
Residential mortgage	4	\$ 1,178

The nature and extent of the impairment of modified loans, including those which have experienced a subsequent payment default, are considered in the determination of an appropriate level of the ACLL.

Allowance for Credit Losses on Loans

The ACLL is comprised of the allowance for loan losses and the allowance for unfunded commitments. The level of the ACLL represents management's estimate of an amount appropriate to provide for expected lifetime credit losses in the loan portfolio at the balance sheet date. The expected lifetime credit losses are the product of multiplying the Corporation's estimates of probability of default, loss given default, and the individual loan level exposure at default on an undiscounted basis. A main factor in the determination of the ACLL is the economic forecast. The forecast the Corporation used for September 30, 2023 was the Moody's baseline scenario from August 2023, which was reviewed against the September 2023 baseline scenario with no material updates made, over a 2 year reasonable and supportable period with straight-line reversion to the historical losses over the second year of the period. The allowance for unfunded commitments is maintained at a level believed by management to be sufficient to absorb expected lifetime losses related to unfunded credit facilities (including unfunded loan commitments and letters of credit). See Note 11 for additional information on the change in the allowance for unfunded commitments.

The following table presents a summary of the changes in the ACLL by portfolio segment for the nine months ended September 30, 2023:

(\$ in thousands)	Dec 31, 2022	Charge offs	Recoveries	Net Charge offs	Provision for credit losses	Sep 30, 2023	ACLL / Loans
Allowance for loan losses							
Commercial and industrial	\$ 119,076	\$ (31,816)	\$ 2,322	\$ (29,494)	\$ 34,710	\$ 124,292	
Commercial real estate — owner occupied	9,475	—	8	8	1,976	11,459	
Commercial and business lending	128,551	(31,816)	2,329	(29,487)	36,686	135,751	
Commercial real estate — investor	54,398	(242)	2,789	2,547	10,520	67,466	
Real estate construction	45,589	(25)	42	18	6,128	51,734	
Commercial real estate lending	99,986	(266)	2,831	2,565	16,648	119,200	
Total commercial	228,538	(32,082)	5,161	(26,921)	53,334	254,951	
Residential mortgage	38,298	(714)	357	(358)	2,496	40,437	
Auto finance	19,619	(4,056)	783	(3,273)	6,654	23,000	
Home equity	14,875	(269)	921	652	(413)	15,114	
Other consumer	11,390	(3,769)	744	(3,025)	3,928	12,293	
Total consumer	84,182	(8,809)	2,805	(6,004)	12,666	90,844	
Total loans	\$ 312,720	\$ (40,891)	\$ 7,965	\$ (32,925)	\$ 66,000	\$ 345,795	
Allowance for unfunded commitments							
Commercial and industrial	\$ 12,997	\$ —	\$ —	\$ —	\$ (2,365)	\$ 10,632	
Commercial real estate — owner occupied	103	—	—	—	15	119	
Commercial and business lending	13,101	—	—	—	(2,350)	10,751	
Commercial real estate — investor	710	—	—	—	39	749	
Real estate construction	20,583	—	—	—	(1,000)	19,583	
Commercial real estate lending	21,292	—	—	—	(961)	20,331	
Total commercial	34,393	—	—	—	(3,311)	31,082	
Home equity	2,699	—	—	—	(17)	2,682	
Other consumer	1,683	—	—	—	(672)	1,011	
Total consumer	4,382	—	—	—	(689)	3,693	
Total loans	\$ 38,776	\$ —	\$ —	\$ —	\$ (4,000)	\$ 34,776	
Allowance for credit losses on loans							
Commercial and industrial	\$ 132,073	\$ (31,816)	\$ 2,322	\$ (29,494)	\$ 32,345	\$ 134,924	1.34 %
Commercial real estate — owner occupied	9,579	—	8	8	1,991	11,578	1.10 %
Commercial and business lending	141,652	(31,816)	2,329	(29,487)	34,336	146,502	1.31 %
Commercial real estate — investor	55,108	(242)	2,789	2,547	10,560	68,214	1.31 %
Real estate construction	66,171	(25)	42	18	5,128	71,317	3.35 %
Commercial real estate lending	121,279	(266)	2,831	2,565	15,687	139,531	1.90 %
Total commercial	262,931	(32,082)	5,161	(26,921)	50,023	286,033	1.55 %
Residential mortgage	38,298	(714)	357	(358)	2,496	40,437	0.46 %
Auto finance	19,619	(4,056)	783	(3,273)	6,654	23,000	1.15 %
Home equity	17,574	(269)	921	652	(430)	17,797	2.85 %
Other consumer	13,073	(3,769)	744	(3,025)	3,256	13,304	4.82 %
Total consumer	88,565	(8,809)	2,805	(6,004)	11,977	94,538	0.81 %
Total loans	\$ 351,496	\$ (40,891)	\$ 7,965	\$ (32,925)	\$ 62,000	\$ 380,571	1.26 %

The following table presents a summary of the changes in the ACLL by portfolio segment for the year ended December 31, 2022:

(\$ in thousands)	Dec 31, 2021	Charge offs	Recoveries	Net Charge offs	Provision for credit losses	Dec 31, 2022	ACLL / Loans
Allowance for loan losses							
Commercial and industrial	\$ 89,857	\$ (4,491)	\$ 5,282	\$ 791	\$ 28,428	\$ 119,076	
Commercial real estate — owner occupied	11,473	—	13	13	(2,011)	9,475	
Commercial and business lending	101,330	(4,491)	5,295	804	26,418	128,551	
Commercial real estate — investor	72,803	(50)	50	—	(18,405)	54,398	
Real estate construction	37,643	(48)	106	58	7,887	45,589	
Commercial real estate lending	110,446	(98)	156	58	(10,518)	99,986	
Total commercial	211,776	(4,588)	5,451	862	15,900	228,538	
Residential mortgage	40,787	(567)	908	341	(2,830)	38,298	
Auto finance	1,999	(1,041)	98	(943)	18,563	19,619	
Home equity	14,011	(587)	1,385	798	66	14,875	
Other consumer	11,441	(3,363)	1,010	(2,353)	2,301	11,390	
Total consumer	68,239	(5,558)	3,401	(2,157)	18,100	84,182	
Total loans	\$ 280,015	\$ (10,146)	\$ 8,852	\$ (1,294)	\$ 34,000	\$ 312,720	
Allowance for unfunded commitments							
Commercial and industrial	\$ 18,459	\$ —	\$ —	\$ —	\$ (5,462)	\$ 12,997	
Commercial real estate — owner occupied	208	—	—	—	(105)	103	
Commercial and business lending	18,667	—	—	—	(5,566)	13,101	
Commercial real estate — investor	936	—	—	—	(226)	710	
Real estate construction	15,586	—	—	—	4,997	20,583	
Commercial real estate lending	16,522	—	—	—	4,770	21,292	
Total commercial	35,189	—	—	—	(796)	34,393	
Home equity	2,592	—	—	—	107	2,699	
Other consumer	1,995	—	—	—	(311)	1,683	
Total consumer	4,587	—	—	—	(204)	4,382	
Total loans	\$ 39,776	\$ —	\$ —	\$ —	\$ (1,000)	\$ 38,776	
Allowance for credit losses on loans							
Commercial and industrial	\$ 108,316	\$ (4,491)	\$ 5,282	\$ 791	\$ 22,967	\$ 132,073	1.35 %
Commercial real estate — owner occupied	11,681	—	13	13	(2,115)	9,579	0.97 %
Commercial and business lending	119,997	(4,491)	5,295	804	20,852	141,652	1.32 %
Commercial real estate — investor	73,739	(50)	50	—	(18,631)	55,108	1.08 %
Real estate construction	53,229	(48)	106	58	12,884	66,171	3.07 %
Commercial real estate lending	126,968	(98)	156	58	(5,748)	121,279	1.68 %
Total commercial	246,965	(4,588)	5,451	862	15,104	262,931	1.46 %
Residential mortgage	40,787	(567)	908	341	(2,830)	38,298	0.45 %
Auto finance	1,999	(1,041)	98	(943)	18,563	19,619	1.42 %
Home equity	16,603	(587)	1,385	798	173	17,574	2.81 %
Other consumer	13,436	(3,363)	1,010	(2,353)	1,990	13,073	4.43 %
Total consumer	72,825	(5,558)	3,401	(2,157)	17,896	88,565	0.82 %
Total loans	\$ 319,791	\$ (10,146)	\$ 8,852	\$ (1,294)	\$ 33,000	\$ 351,496	1.22 %

Note 7 Goodwill and Other Intangible Assets

Goodwill

Goodwill is not amortized but is instead subject to impairment tests on at least an annual basis, and more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

The Corporation conducted its most recent annual impairment testing in May 2023, utilizing a qualitative assessment. Factors that management considered in this assessment included macroeconomic conditions, industry and market considerations, overall financial performance of the Corporation and each reporting unit (both current and projected), changes in management strategy, and changes in the composition or carrying amount of net assets. In addition, management considered the changes in both the Corporation's common stock price and in the KBW Nasdaq Regional Banking Index (KRX), as well as the Corporation's earnings per common share trend over the past year. Based on these assessments, management concluded that it is

more likely than not that the estimated fair value exceeded the carrying value (including goodwill) for each reporting unit. Therefore, a step one quantitative analysis was not required. There have been no events since the May 2023 impairment test that have changed the Corporation's impairment assessment conclusion. There were no impairment charges recorded in 2022 or the first nine months of 2023.

The Corporation had goodwill of \$ 1.1 billion at both September 30, 2023 and December 31, 2022.

Core Deposit Intangibles

The Corporation has CDIs which are amortized. Changes in the gross carrying amount, accumulated amortization, and net book value for CDIs were as follows:

(\$ in thousands)	Nine Months Ended September 30, 2023		Year Ended Dec 31, 2022	
Core deposit intangibles				
Gross carrying amount at the beginning of period	\$	88,109	\$	88,109
Accumulated amortization		(45,435)		(38,827)
Net book value	\$	42,674	\$	49,282
Amortization during the period	\$	6,608	\$	8,811

Mortgage Servicing Rights

The Corporation sells residential mortgage loans in the secondary market and typically retains the right to service the loans sold. MSRs are not traded in active markets. As a result, a cash flow model is used to determine fair value. Key assumptions and estimates, projected prepayment speeds, assumed servicing costs, ancillary income, costs to service delinquent loans, costs of foreclosure, and discount rates with option-adjusted spreads, are used in measuring the fair value of the MSRs asset. These assumptions are considered significant unobservable inputs. See Note 11 for a discussion of the recourse provisions on sold residential mortgage loans. See Note 12 which further discusses fair value measurement relative to the MSRs asset.

A summary of changes in the balance of the MSRs asset under the fair value measurement method for the nine months ended September 30, 2023 and the year ended December 31, 2022 is as follows:

(\$ in thousands)	Nine Months Ended September 30, 2023		Year Ended Dec 31, 2022	
Mortgage servicing rights				
Mortgage servicing rights at beginning of period	\$	77,351	\$	54,862
Cumulative effect of accounting methodology change		N/A		2,296
Balance at beginning of period, adjusted	\$	77,351	\$	57,158
Additions		2,477		7,279
Paydowns		(5,354)		(9,350)
Valuation:				
Change in fair value model assumptions		8,338		5,715
Changes in fair value of asset		6,320		16,549
Mortgage servicing rights at end of period	\$	89,131	\$	77,351
Portfolio of residential mortgage loans serviced for others ("servicing portfolio")	\$	6,451,969	\$	6,711,820
Mortgage servicing rights to servicing portfolio		1.38 %		1.15 %

The projections of amortization expense for CDIs and decay for MSRs are based on existing asset balances, the current interest rate environment, and prepayment speeds as of September 30, 2023. The actual expense the Corporation recognizes in any given period may be significantly different depending upon acquisition or sale activities, changes in interest rates, prepayment speeds, market conditions, regulatory requirements, and events or circumstances that indicate the carrying amount of an asset may not be recoverable. The following table shows the estimated future amortization expense for CDIs and decay for MSRs:

(\$ in thousands)	Core Deposit Intangibles		Mortgage Servicing Rights	
Three months ended December 31, 2023	\$	2,203	\$	3,630
2024		8,811		13,789
2025		8,811		12,373
2026		8,811		11,111
2027		8,811		9,768
2028		3,485		8,641
Beyond 2028		1,742		29,819
Total estimated amortization expense and MSRs decay	\$	42,674	\$	89,131

Note 8 Short and Long-Term Funding

The following table presents the components of short-term funding (funding with original contractual maturities of one year or less), and long-term funding (funding with original contractual maturities greater than one year):

(\$ in thousands)	Sep 30, 2023	Dec 31, 2022
Short-term funding		
Federal funds purchased	\$ 300,000	\$ 344,170
Securities sold under agreements to repurchase	151,644	240,969
Federal funds purchased and securities sold under agreements to repurchase	451,644	585,139
Commercial paper	—	20,798
Total short-term funding	\$ 451,644	\$ 605,937
Long-term funding		
Corporation subordinated notes, at par	\$ 550,000	\$ 250,000
Discount and capitalized costs	(8,027)	(544)
Subordinated debt fair value hedge ^(a)	(12,919)	(1,855)
Finance leases	405	469
Total long-term funding	\$ 529,459	\$ 248,071
Total short and long-term funding, excluding FHLB advances	\$ 981,103	\$ 854,007
FHLB advances		
Short-term FHLB advances	\$ 2,545,000	\$ 3,125,000
Long-term FHLB advances	1,209,938	1,209,170
FHLB advances fair value hedge ^(a)	(21,897)	(14,308)
Total FHLB advances	\$ 3,733,041	\$ 4,319,861
Total short and long-term funding	\$ 4,714,145	\$ 5,173,869

(a) For additional information on the fair value hedges, see Note 9.

Securities Sold Under Agreements to Repurchase

The Corporation enters into agreements under which it sells securities subject to an obligation to repurchase the same or similar securities. Under these arrangements, the Corporation may transfer legal control over the assets but still retain effective control through an agreement that both entitles and obligates the Corporation to repurchase the assets. The obligation to repurchase the securities is reflected as a liability on the Corporation's consolidated balance sheets, while the securities underlying the repurchase agreements remain in the respective investment securities asset accounts (i.e., there is no offsetting or netting of the investment securities assets with the repurchase agreement liabilities).

The Corporation utilizes repurchase agreements to facilitate the needs of its customers. The fair value of securities pledged to secure repurchase agreements may decline. At September 30, 2023, the Corporation had pledged securities valued at 164% of the gross outstanding balance of repurchase agreements to manage this risk.

The remaining contractual maturity of the securities sold under agreements to repurchase on the consolidated balance sheets as of September 30, 2023 and December 31, 2022 are presented in the following table:

	Overnight and Continuous	
(\$ in thousands)	Sep 30, 2023	Dec 31, 2022
Repurchase agreements		
Agency mortgage-related securities	\$ 151,644	\$ 240,969

Long-Term Funding

Subordinated Notes

In November 2014, the Corporation issued \$250 million of 10-year subordinated notes, due January 2025, and callable October 2024. The subordinated notes have a fixed coupon interest rate of 4.25% and were issued at a discount.

In February 2023, the Corporation issued \$300 million of 10-year subordinated notes, due March 1, 2033 and redeemable (i) on the reset date of March 1, 2028 and on any interest payment date thereafter, (ii) at any time on or after the three month period prior to the maturity date, and (iii) upon the occurrence of a Regulatory Capital Treatment Event (as defined in the Global Note). The subordinated notes have a fixed coupon interest rate of 6.625% until the reset date, after which the rate will be equal to the Five-Year U.S. Treasury Rate as of the reset date plus 2.812% per annum. The notes were issued at a discount.

Finance Leases

Finance leases are used in conjunction with branch operations. See Note 16 for additional disclosure regarding the Corporation's leases.

Note 9 Derivative and Hedging Activities

The Corporation is exposed to certain risk arising from both its business operations and economic conditions. The Corporation principally manages its exposures to a wide variety of business and operational risks through management of its core business activities. The Corporation manages economic risks, including interest rate, liquidity, foreign currency, and credit risk, primarily by managing the amount, sources, and duration of its assets and liabilities and the use of derivative financial instruments. Specifically, the Corporation enters into derivative financial instruments to manage exposures that arise from business activities that result in the receipt or payment of future known and uncertain cash amounts, the values of which are determined by interest rates and/or foreign currency exchange rates. The Corporation's derivative financial instruments are used to manage differences in the amount, timing, and duration of the Corporation's known or expected cash receipts and its known or expected cash payments principally related to the Corporation's assets.

The contract or notional amount of a derivative is used to determine, along with the other terms of the derivative, the amounts to be exchanged between the counterparties. The Corporation is exposed to credit risk in the event of nonperformance by counterparties to financial instruments. To mitigate the counterparty risk, contracts generally contain language outlining collateral pledging requirements for each counterparty. For non-centrally cleared derivatives, collateral must be posted when the market value exceeds certain mutually agreed upon threshold limits. Securities and cash are often pledged as collateral. The Corporation pledged \$95 million and \$92 million of investment securities as collateral at September 30, 2023 and December 31, 2022, respectively. Cash is often pledged as collateral for derivatives that are not centrally cleared. The Corporation had no required cash collateral at September 30, 2023, compared to \$3 million at December 31, 2022.

To qualify for hedge accounting, a hedging relationship must be highly effective at mitigating the risk associated with the exposure being hedged. The Corporation performs effectiveness assessments of its derivative financial instruments prospectively at inception and both prospectively and retrospectively quarterly thereafter. The initial prospective assessment is performed on a quantitative basis unless the hedging relationship meets certain conditions, and subsequent assessments are performed on a quantitative basis unless certain conditions are met where a qualitative basis may be used. If it is determined that a derivative financial instrument is not highly effective at hedging the designated exposure, hedge accounting is discontinued.

Federal regulations require the Corporation to clear all compound SOFR interest rate swaps through a clearing house, if possible. For derivatives cleared through central clearing houses, the variation margin payments are legally characterized as daily settlements of the derivative rather than collateral. The Corporation's clearing agent for interest rate derivative contracts that are centrally cleared through the Chicago Mercantile Exchange and the London Clearing House settles the variation margin daily. As a result, the variation margin payment and the related derivative instruments are considered a single unit of account for accounting and financial reporting purposes. Depending on the net position, the fair value is reported in other assets or accrued expenses and other liabilities on the consolidated balance sheets. The daily settlement of the derivative exposure does not change or reset the contractual terms of the instrument.

Fair Value Hedges of Interest Rate Risk

The Corporation is exposed to changes in the fair value of its fixed-rate debt due to changes in benchmark interest rates. The Corporation uses interest rate swaps to manage its exposure to changes in fair value on these instruments attributable to changes in the designated benchmark interest rates. Interest rate swaps designated as fair value hedges involve receiving payment of fixed-rate amounts from a counterparty in exchange for the Corporation paying variable-rate payments over the life of the agreements without the exchange of the underlying notional amount.

For derivatives designated and that qualify as fair value hedges, as allowed under U.S. GAAP, the Corporation applied the "shortcut" method of accounting, which permits the assumption of perfect effectiveness. The gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in interest expense. These items, along with the net interest from the derivative, are reported in the same income statement line as the fixed-rate debt expense.

Fair Value Hedges of Foreign Currency Exchange Rate Risk

The Corporation is exposed to changes in the fair value of its foreign currency denominated loans due to changes in foreign currency exchange rates. The Corporation uses foreign currency exchange forward contracts to manage its exposure to changes in fair value on these foreign currency denominated loans.

To assess effectiveness of the foreign currency exchange forward contracts, the Corporation has elected to utilize the critical terms match method. Under the critical terms match method, if the hedging relationship meets certain criteria, it allows the Corporation to assume that the hedging relationship is perfectly effective, eliminating the quantitative aspect of assessing effectiveness. The gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in capital markets, net.

Cash Flow Hedges of Interest Rate Risk

The Corporation is exposed to variability in cash flows on its floating rate assets due to changes in benchmark interest rates. The Corporation uses interest rate swaps to hedge certain forecasted transactions for the variability in cash flows attributable to the contractually specified interest rate in order to add stability to net interest income and to manage its exposure to interest rate movements. Interest rate swaps designated as cash flow hedges involve receiving fixed-rate amounts from a counterparty in exchange for the Corporation making variable-rate payments over the life of the agreements without the exchange of the underlying notional amount. These items, along with the net interest from the derivative, are reported in the same income statement line as the interest income from the floating-rate assets.

To assess effectiveness of interest rate swaps, the Corporation performs a quantitative analysis using a period by period regression method. When the relationship between the hedged item and hedging instrument is highly effective at achieving offsetting changes in cash flows attributable to the hedged risk, changes in the fair value of these cash flow hedges are recorded in accumulated other comprehensive income (loss) and are subsequently reclassified to interest income as interest payments are made on such variable rate loans.

Derivatives to Accommodate Customer Needs

The Corporation facilitates customer borrowing activity by entering into various derivative contracts which are designated as free standing derivative contracts. Free standing derivative products are entered into primarily for the benefit of commercial customers seeking to manage their exposures to interest rate risk and foreign currency. These derivative contracts are not designated against specific assets and liabilities on the consolidated balance sheets or forecasted transactions and, therefore, do not qualify for hedge accounting treatment. Such derivative contracts are carried at fair value in other assets and accrued expenses and other liabilities on the consolidated balance sheets with changes in the fair value recorded as a component of capital markets, net, and typically include interest rate-related instruments (swaps and caps) and foreign currency exchange forwards. See Note 10 for additional information and disclosures on balance sheet offsetting.

Interest rate-related and other instruments: The Corporation provides interest rate risk management services to commercial customers, primarily interest rate swaps and caps. The Corporation's market risk from unfavorable movements in interest rates related to these derivative contracts is generally economically hedged by concurrently entering into offsetting derivative contracts. The offsetting derivative contracts have identical notional values, terms, and indices, except in rare circumstances where the indices are not identical which creates a negligible basis mismatch. The Corporation also enters into credit risk participation agreements with financial institution counterparties for interest rate swaps related to loans as either a participant or a lead bank. The risk participation agreements entered into by the Corporation as a participant bank provide credit protection to the financial institution counterparty should the borrower fail to perform on its interest rate derivative contract with that financial institution.

Foreign currency exchange forwards: The Corporation provides foreign currency exchange services to customers, primarily forward contracts. The Corporation's customers enter into a foreign currency exchange forward with the Corporation as a means for them to mitigate exchange rate risk. The Corporation mitigates its risk by then entering into an offsetting foreign currency exchange derivative contract.

Mortgage Derivatives

Interest rate lock commitments to originate residential mortgage loans held for sale and forward commitments to sell residential mortgage loans are considered derivative instruments, and the fair value of these commitments are recorded in other assets and accrued expenses and other liabilities on the consolidated balance sheets with the changes in fair value recorded as a component of mortgage banking, net on the consolidated statements of income.

Interest rate-related instruments for MSRs hedge: The fair value of the Corporation's MSRs asset changes in response to changes in primary mortgage loan rates and other assumptions. To mitigate the earnings volatility caused by changes in the fair value of MSRs, the Corporation designates certain financial instruments as an economic hedge. Changes in the fair value of these instruments are generally expected to partially offset changes in the fair value of MSRs and are recorded in other assets and accrued expenses and other liabilities on the consolidated balance sheets with the changes in fair value recorded as a component of mortgage banking, net on the consolidated statements of income.

The following table presents the total notional amounts and gross fair values of the Corporation's derivatives, as well as the balance sheet netting adjustments as of September 30, 2023 and December 31, 2022. The derivative assets and liabilities are presented on a gross basis prior to the application of bilateral collateral and master netting agreements, but after the variation margin payments with central clearing organizations have been applied as settlement, as applicable. Total derivative assets and liabilities are adjusted to take into consideration the effects of legally enforceable master netting agreements and cash collateral received or paid as of September 30, 2023 and December 31, 2022. The resulting net derivative asset and liability fair values are included in other assets and accrued expenses and other liabilities, respectively, on the consolidated balance sheets.

(\$ in thousands)	Sep 30, 2023				Dec 31, 2022			
	Asset		Liability		Asset		Liability	
	Notional Amount	Fair Value	Notional Amount	Fair Value	Notional Amount	Fair Value	Notional Amount	Fair Value
Designated as hedging instruments:								
Interest rate-related instruments	\$ 1,150,000	\$ 2,109	\$ 1,700,000	\$ 21,520	\$ 900,000	\$ 4,349	\$ 1,150,000	\$ 1,260
Foreign currency exchange forwards	353,217	2,886	70,019	134	261,595	416	167,088	972
Total designated as hedging instruments		4,995		21,654		4,765		2,233
Not designated as hedging instruments:								
Interest rate-related and other instruments	3,022,150	140,414	6,320,192	294,062	4,246,823	62,401	4,599,391	251,398
Foreign currency exchange forwards	74,245	1,751	63,309	1,393	68,570	437	34,240	402
Mortgage banking ^{(a)(b)}	43,436	1,213	84,000	—	21,265	86	33,000	46
Total not designated as hedging instruments		143,379		295,455		62,925		251,847
Gross derivatives before netting		148,373		317,109		67,690		254,079
Less: Legally enforceable master netting agreements		1,252		1,252		2,788		2,788
Less: Cash collateral pledged/received		88,207		—		26,898		217
Total derivative instruments, after netting		\$ 58,915		\$ 315,857		\$ 38,003		\$ 251,073

(a) The notional amount of the mortgage derivative asset includes interest rate lock commitments, while the notional amount of the mortgage derivative liability includes forward commitments.

(b) At September 30, 2023, the mortgage derivative asset included approximately \$ 806,000 of forward commitments fair value.

The following table presents amounts that were recorded on the consolidated balance sheets related to cumulative basis adjustments for fair value hedges:

Line Item in the Consolidated Balance Sheets in Which the Hedged Item is Included				
(\$ in thousands)	Cumulative Amount of Fair Value Hedging Adjustment Included in		Cumulative Amount of Fair Value Hedging Adjustment Included in	
	Carrying Amount of the Hedged Assets/(Liabilities) ^(a)	the Carrying Amount of the Hedged Assets/(Liabilities)	Carrying Amount of the Hedged Assets/(Liabilities) ^(a)	the Carrying Amount of the Hedged Assets/(Liabilities)
	September 30, 2023		December 31, 2022	
Other long-term funding	\$ (537,081)	\$ 12,919	\$ (248,145)	\$ 1,855
FHLB advances	(578,103)	21,897	(585,692)	14,308
Total	\$ (1,115,185)	\$ 34,815	\$ (833,837)	\$ 16,163

(a) Excludes hedged items where only foreign currency risk is the designated hedged risk. At September 30, 2023 and December 31, 2022, the carrying amount excluded for foreign currency denominated loans was \$423 million and \$429 million, respectively.

The Corporation terminated its \$500 million fair value hedge during the fourth quarter of 2019. At September 30, 2023, the amortized cost basis of the closed portfolios which had previously been used in the terminated hedging relationship was \$292 million and is included in loans on the consolidated balance sheets. This amount includes \$1 million of hedging adjustments on the discontinued hedging relationships, which are not presented in the table above.

The tables below identify the effect of fair value and cash flow hedge accounting on the Corporation's consolidated statements of income for the three and nine months ended September 30, 2023 and 2022:

(\$ in thousands)	Location and Amount Recognized on the Consolidated Statements of Income in Fair Value and Cash Flow Hedging Relationships							
	Three months ended Sep 30,				Nine Months Ended Sep 30,			
	2023		2022		2023		2022	
	Interest Income	Interest Expense	Interest Income	Interest Expense	Interest Income	Interest Expense	Interest Income	Interest Expense
Total amounts of income/expense presented on the consolidated statements of income in which the effects of the fair value or cash flow hedges are recorded ^(a)	\$ (4,589)	\$ 5,195	\$ (120)	\$ (380)	\$ (9,286)	\$ 12,039	\$ (428)	\$ (380)

The effects of fair value and cash flow hedging: Impact on fair value hedging relationships in Subtopic 815-20

Interest contracts:								
Hedged items	(74)	(9,001)	(120)	(14,703)	(189)	(18,652)	(428)	(14,703)
Derivatives designated as hedging instruments ^(a)	(4,516)	14,196	—	14,323	(9,097)	30,691	—	14,323

(a) Includes net settlements on the derivatives.

(\$ in thousands)	Location and Amount Recognized on the Consolidated Statements of Income in Fair Value Hedging Relationships			
	Three months ended Sep 30,		Nine Months Ended Sep 30,	
	2023		2022	
	Capital Markets, Net	Capital Markets, Net	Capital Markets, Net	Capital Markets, Net
Total amounts of income/expense presented on the consolidated statements of income in which the effects of the fair value hedges are recorded	\$ —	\$ —	\$ —	\$ —

The effects of fair value hedging: Impact on fair value hedging relationships in Subtopic 815-20

Foreign currency contracts:				
Hedged items	(11,575)	(29,846)	(2,186)	(40,346)
Derivatives designated as hedging instruments	11,575	29,846	2,186	40,346

The following table presents the effect of cash flow hedge accounting on accumulated other comprehensive income (loss) for the three and nine months ended September 30, 2023 and 2022:

(\$ in thousands)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Interest rate-related instruments designated as cash flow hedging instruments				
Amount of (loss) recognized in OCI on cash flow hedge derivative ^(a)	\$ (13,592)	\$ —	\$ (33,976)	\$ —
Amount of loss reclassified from accumulated other comprehensive income (loss) into interest income ^(a)	4,516	—	9,097	—

(a) The entirety of (losses) recognized in OCI as well as the losses reclassified from accumulated other comprehensive income (loss) into interest income were included components in the assessment of hedge effectiveness.

Amounts reported in accumulated other comprehensive income (loss) related to cash flow hedge derivatives are reclassified to interest income as interest payments are made on the hedged variable interest rate assets. The Corporation estimates that \$18 million will be reclassified as a decrease to interest income over the next 12 months. This amount could differ from amounts actually recognized due to changes in interest rates, hedge de-designations, or the addition of other hedges subsequent to September 30, 2023. The maximum length of time over which the Corporation is hedging its exposure to the variability in future cash flows is 38 months as of September 30, 2023.

The table below identifies the effect of derivatives not designated as hedging instruments on the Corporation's consolidated statements of income for the three and nine months ended September 30, 2023 and 2022:

	Consolidated Statements of Income Category of Gain / (Loss) Recognized in Income	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
		2023	2022	2023	2022
Derivative instruments					
Interest rate-related and other instruments — customer and mirror, net	Capital markets, net	\$ 222	\$ (33)	\$ 359	\$ 533
Interest rate-related instruments — MSRs hedge	Mortgage banking, net	(5,877)	(3,547)	(5,551)	(12,559)
Foreign currency exchange forwards	Capital markets, net	365	709	1,751	1,442
Interest rate lock commitments (mortgage)	Mortgage banking, net	(24)	(1,389)	321	(3,020)
Forward commitments (mortgage)	Mortgage banking, net	470	3,543	853	3,415

Note 10 Balance Sheet Offsetting

Interest Rate-Related Instruments and Foreign Exchange Forwards (“Interest and Foreign Exchange Agreements”)

The Corporation enters into interest rate-related instruments to facilitate the interest rate risk management strategies of commercial customers and foreign exchange forwards to manage customers' exposure to fluctuating foreign exchange rates. The Corporation typically mitigates these risks by entering into equal and offsetting agreements with highly rated third-party financial institutions, though in rare circumstances the agreements are not perfectly equal and offsetting, which creates a negligible basis mismatch. The Corporation is party to master netting arrangements with some of its financial institution counterparties that create single net settlements of all legal claims or obligations to pay or receive the net amount of settlement of the individual interest and foreign exchange agreements. Collateral, usually in the form of investment securities and cash, is posted by the counterparty with net liability positions in accordance with contract thresholds. Derivatives subject to a legally enforceable master netting agreement are reported with assets and liabilities offset resulting in a net position which is further offset by any cash collateral, and is reported in other assets and accrued expenses and other liabilities on the face of the consolidated balance sheets. For disclosure purposes, the net position on the consolidated balance sheets can be further netted down by investment securities collateral received or pledged. See Note 9 for additional information on the Corporation's derivative and hedging activities.

The following table presents the interest rate and foreign exchange assets and liabilities subject to an enforceable master netting arrangement as of September 30, 2023 and December 31, 2022. The interest rate and foreign exchange agreements the Corporation has with its commercial customers are not subject to an enforceable master netting arrangement and are therefore excluded from this table:

(\$ in thousands)	Gross Amounts Recognized	Gross Amounts Subject to Master Netting Arrangements Offset on the Consolidated Balance Sheets		Net Amounts Presented on the Consolidated Balance Sheets	Gross Amounts Not Offset on the Consolidated Balance Sheets	
		Derivative Liabilities Offset	Cash Collateral Received		Security Collateral Received	Net Amount
Derivative assets						
September 30, 2023	\$ 140,884	\$ (1,252)	\$ (88,207)	\$ 51,425	\$ (32,257)	\$ 19,168
December 31, 2022	63,029	(2,788)	(26,898)	33,342	(30,753)	2,589

(\$ in thousands)	Gross Amounts Recognized	Gross Amounts Subject to Master Netting Arrangements Offset on the Consolidated Balance Sheets			Net Amounts	Gross Amounts Not Offset on the Consolidated Balance Sheets		
		Derivative Assets Offset	Cash Collateral Pledged	Consolidated Balance Sheets	Presented on the	Security Collateral Pledged	Net Amount	
Derivative liabilities								
September 30, 2023	\$	22,964	\$	(1,252)	\$	—	\$	21,713
December 31, 2022		3,096		(2,788)		(217)		91

Note 11 Commitments, Off-Balance Sheet Arrangements, Legal Proceedings, and Regulatory Matters

The Corporation utilizes a variety of financial instruments in the normal course of business to meet the financial needs of its customers and to manage its own exposure to fluctuations in interest rates. These financial instruments include lending-related and other commitments (see below) as well as derivative instruments (see Note 9). The following is a summary of lending-related commitments:

(\$ in thousands)	Sep 30, 2023	Dec 31, 2022
Commitments to extend credit, excluding commitments to originate residential mortgage loans held for sale ^{(a)(b)}	\$ 11,228,683	\$ 12,444,275
Commercial letters of credit ^(a)	4,067	3,188
Standby letters of credit ^(c)	246,954	270,692

(a) These off-balance sheet financial instruments are exercisable at the market rate prevailing at the date the underlying transaction will be completed and, thus, are deemed to have no current fair value, or the fair value is based on fees currently charged to enter into similar agreements and was not material at September 30, 2023 or December 31, 2022.

(b) Interest rate lock commitments to originate residential mortgage loans held for sale are considered derivative instruments and are disclosed in Note 9.

(c) Standby letters of credit are presented excluding participations. The Corporation has established a liability of \$ 3 million at both September 30, 2023 and December 31, 2022, as an estimate of the fair value of these financial instruments.

Lending-related Commitments

As a financial services provider, the Corporation routinely enters into commitments to extend credit. Such commitments are subject to the same credit policies and approval process accorded to loans made by the Corporation, with each customer's creditworthiness evaluated on a case-by-case basis. The commitments generally have fixed expiration dates or other termination clauses and may require the payment of a fee. The Corporation's exposure to credit loss in the event of nonperformance by the other party to these financial instruments is represented by the contractual amount of those instruments. The amount of collateral obtained, if deemed necessary by the Corporation upon extension of credit, is based on management's credit evaluation of the customer. Since a significant portion of commitments to extend credit are subject to specific restrictive loan covenants or may expire without being drawn upon, the total commitment amounts do not necessarily represent future cash flow requirements. An allowance for unfunded commitments is maintained at a level believed by management to be sufficient to absorb expected lifetime losses related to unfunded commitments (including unfunded loan commitments and letters of credit).

The following table presents a summary of the changes in the allowance for unfunded commitments:

(\$ in thousands)	Nine Months Ended September 30, 2023	Year Ended December 31, 2022
Allowance for unfunded commitments		
Balance at beginning of period	\$ 38,776	\$ 39,776
Provision for unfunded commitments	(4,000)	(1,000)
Balance at end of period	\$ 34,776	\$ 38,776

Lending-related commitments include commitments to extend credit, commitments to originate residential mortgage loans held for sale, commercial letters of credit, and standby letters of credit. Commitments to extend credit are legally binding agreements to lend to customers at predetermined interest rates, as long as there is no violation of any condition established in the contracts. Interest rate lock commitments to originate residential mortgage loans held for sale and forward commitments to sell residential mortgage loans are considered derivative instruments, and the fair value of these commitments is recorded in other assets and accrued expenses and other liabilities on the consolidated balance sheets. The Corporation's derivative and hedging activity is further described in Note 9. Commercial and standby letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. Commercial letters of credit are issued specifically to facilitate commerce and typically result in the commitment being drawn on when the underlying transaction is consummated between the customer and the third party, while standby letters of credit generally are contingent upon the failure of the customer to perform according to the terms of the underlying contract with the third party.

Other Commitments

The Corporation invests in qualified affordable housing projects, historic projects, new market projects, and opportunity zone funds for the purpose of community reinvestment and obtaining tax credits and other tax benefits. Return on the Corporation's investment in these projects and funds comes in the form of the tax credits and tax losses that pass through to the Corporation, and deferral or elimination of capital gain recognition for tax purposes. The aggregate carrying value of these investments at September 30, 2023 was \$222 million, compared to \$250 million at December 31, 2022, included in tax credit and other investments on the consolidated balance sheets. The Corporation utilizes the proportional amortization method to account for investments in qualified affordable housing projects.

Under the proportional amortization method, the Corporation amortizes the initial cost of the investment in proportion to the tax credits and other tax benefits. The Corporation recognized additional income tax expense attributable to the amortization of investments in qualified affordable housing projects of \$26 million and \$25 million for the nine months ended September 30,

2023 and September 30, 2022, respectively, and \$9 million for both the three months ended September 30, 2023 and September 30, 2022. The Corporation's remaining investment in qualified affordable housing projects accounted for under the proportional amortization method totaled \$219 million at September 30, 2023 and \$246 million at December 31, 2022.

The Corporation's unfunded equity contributions relating to investments in qualified affordable housing and historic projects are recorded in accrued expenses and other liabilities on the consolidated balance sheets. The Corporation's remaining unfunded equity contributions totaled \$27 million at September 30, 2023 and \$40 million at December 31, 2022.

For the nine months ended September 30, 2023 and the year ended December 31, 2022, the Corporation did not record any impairment related to qualified affordable housing investments.

The Corporation has principal investment commitments to provide capital-based financing to private companies through either direct investment in specific companies or through investment funds and partnerships. The timing of future cash requirements to fund such principal investment commitments is generally dependent on the investment cycle, whereby privately held companies are funded by private equity investors and ultimately sold, merged, or taken public through an initial offering, which can vary based on overall market conditions, as well as the nature and type of industry in which the companies operate. The Corporation also invests in loan pools that support CRA loans. The timing of future cash requirements to fund these pools is dependent upon loan demand, which can vary over time. The aggregate carrying value of these investments was \$34 million at September 30, 2023 and \$27 million at December 31, 2022, included in tax credit and other investments on the consolidated balance sheets.

Legal Proceedings

The Corporation is party to various pending and threatened claims and legal proceedings arising in the normal course of business activities, some of which involve claims for substantial amounts. Although there can be no assurance as to the ultimate outcomes, the Corporation believes it has meritorious defenses to the claims asserted against it in its currently outstanding matters and intends to continue to defend itself vigorously with respect to such legal proceedings. The Corporation will consider settlement of cases when, in management's judgment, it is in the best interests of the Corporation and its shareholders.

On at least a quarterly basis, the Corporation assesses its liabilities and contingencies in connection with all pending or threatened claims and litigation, utilizing the most recent information available. On a matter by matter basis, an accrual for loss is established for those matters which the Corporation believes it is probable that a loss may be incurred and that the amount of such loss can be reasonably estimated. Once established, each accrual is adjusted as appropriate to reflect any subsequent developments. Accordingly, management's estimate will change from time to time, and actual losses may be more or less than the current estimate. For matters where a loss is not probable, or the amount of the loss cannot be estimated, no accrual is established.

Resolution of legal claims is inherently unpredictable, and in many legal proceedings various factors exacerbate this inherent unpredictability, including where the damages sought are unsubstantiated or indeterminate, it is unclear whether a case brought as a class action will be allowed to proceed on that basis, discovery is not complete, the proceeding is not yet in its final stages, the matters present legal uncertainties, there are significant facts in dispute, there are a large number of parties (including where it is uncertain how liability, if any, will be shared among multiple defendants), or there is a wide range of potential results.

Management believes that the legal proceedings currently pending against it should not have a material adverse effect on the Corporation's consolidated financial condition. However, in light of the uncertainties involved in such proceedings, there is no assurance that the ultimate resolution of these matters will not significantly exceed the reserves the Corporation has currently accrued or that a matter will not have material reputational or other qualitative consequences. As a result, the outcome of a particular matter may be material to the Corporation's operating results for a particular period, depending on, among other factors, the size of the loss or liability imposed and the level of the Corporation's income for that period.

Regulatory Matters

A variety of consumer products, including mortgage and deposit products, and certain fees and charges related to such products, have come under increased regulatory scrutiny. It is possible that regulatory authorities could bring enforcement actions, including civil money penalties, or take other actions against the Corporation in regard to these consumer products. The Bank could also determine of its own accord, or be required by regulators, to refund or otherwise make remediation payments to customers in connection with these products, fees and charges. It is not possible at this time for management to assess the probability of a material adverse outcome or reasonably estimate the amount of any potential loss related to such matters.

In recent consent orders with financial institutions, the CFPB has asserted that certain overdraft charges constitute "unfair and abusive acts and practices." In certain instances, these financial institutions have agreed to make restitution to customers and to

pay civil money penalties. Included in the practices that the CFPB has asserted are “unfair and abusive” are 1) overdraft fees on transactions that had a sufficient balance at the time authorized but then later settled with an insufficient balance (“APSN Fees”), and 2) repeat insufficient funds fees on transactions resubmitted for payment after they were initially declined (“Representment Fees”). In light of these orders, the Corporation has undertaken a review of its current and past practices regarding APSN Fees and Representment Fees. Such review could result in changes to our overdraft fee policies, which would reduce our fee income in future periods and which could also result in a decision to make remediation payments to current and past customers who incurred such fees. The Corporation's financial results may be materially impacted in any period in which the Corporation determines to make any such remediation payments. In addition to the review described above, the Corporation received an arbitration request in July 2023 which, among other things, seeks to recover APSN Fees and Representment Fees on behalf of approximately 1,400 current and former deposit customers of the Corporation (the “arbitration request”). The arbitration request is being considered in the review of APSN Fees and Representment Fees described above. It is not possible for management to assess the probability of a material adverse outcome or reasonably estimate the amount of any potential loss at this time with respect to the arbitration request.

Mortgage Repurchase Reserve

The Corporation sells residential mortgage loans to investors in the normal course of business. Residential mortgage loans sold to others are predominantly conventional residential first lien mortgages originated under the Corporation's usual underwriting procedures, and are most often sold on a nonrecourse basis, primarily to the GSEs. The Corporation's agreements to sell residential mortgage loans in the normal course of business usually require certain representations and warranties on the underlying loans sold, related to credit information, loan documentation, collateral, and insurability. Subsequent to being sold, if a material underwriting deficiency or documentation defect is discovered, the Corporation may be obligated to repurchase the loan or reimburse the GSEs for losses incurred (collectively, “make whole requests”). The make whole requests and any related risk of loss under the representations and warranties are largely driven by borrower performance. The Corporation also sells qualifying residential mortgage loans guaranteed by U.S. government agencies into GNMA pools.

As a result of make whole requests, the Corporation has repurchased loans with aggregate principal balances of \$ 5 million and \$6 million for the nine months ended September 30, 2023 and the year ended December 31, 2022, respectively. There were no loss reimbursement and settlement claims paid in the nine months ended September 30, 2023 or for the year ended December 31, 2022. Make whole requests since January 1, 2022 generally arose from loans originated since January 1, 2020 with such balances totaling \$4.6 billion at the time of sale, consisting primarily of loans sold to GSEs. As of September 30, 2023, \$3.3 billion of those loans originated since January 1, 2020 remain outstanding.

The balance in the mortgage repurchase reserve at the balance sheet date reflects the estimated amount of potential loss the Corporation could incur from repurchasing a loan, as well as loss reimbursements, indemnifications, and other settlement resolutions. The mortgage repurchase reserve, included in accrued expenses and other liabilities on the consolidated balance sheets, was approximately \$680,000 at September 30, 2023 and \$1 million at December 31, 2022.

The Corporation may also sell residential mortgage loans with limited recourse (limited in that the recourse period ends prior to the loan's maturity, usually after certain time and/or loan paydown criteria have been met), whereby repurchase could be required if the loan had defined delinquency issues during the limited recourse periods. At September 30, 2023 and December 31, 2022, there were \$15 million and \$7 million, respectively, of residential mortgage loans sold with such recourse risk. There have been limited instances and immaterial historical losses on repurchases for recourse under the limited recourse criteria.

The Corporation has a subordinate position to the FHLB in the credit risk on residential mortgage loans it sold to the FHLB in exchange for a monthly credit enhancement fee. The Corporation has not sold loans to the FHLB with such credit risk retention since February 2005. At September 30, 2023 and December 31, 2022, there were \$17 million and \$19 million, respectively, of such residential mortgage loans with credit risk recourse, upon which there have been immaterial historical losses to the Corporation.

Note 12 Fair Value Measurements

Fair value represents the estimated price at which an orderly transaction to sell an asset or to transfer a liability would take place between market participants at the measurement date under current market conditions (i.e., an exit price concept).

The valuation methodologies for assets and liabilities measured at fair value on a recurring and non-recurring basis are described in the Fair Value Measurements note in the Corporation's 2022 Annual Report on Form 10-K.

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The table below presents the Corporation's financial instruments measured at fair value on a recurring basis as of September 30, 2023 and December 31, 2022, aggregated by the level in the fair value hierarchy within which those measurements fall:

(\$ in thousands)	Fair Value Hierarchy	Sep 30, 2023	Dec 31, 2022
Assets			
AFS investment securities:			
U.S. Treasury securities	Level 1 \$	109,024 \$	109,378
Agency securities	Level 2	13,590	13,532
Obligations of state and political subdivisions (municipal securities)	Level 2	210,317	230,714
Residential mortgage-related securities:			
FNMA / FHLMC	Level 2	1,436,759	1,604,610
GNMA	Level 2	1,384,670	497,596
Commercial mortgage-related securities:			
FNMA / FHLMC	Level 2	16,154	17,142
GNMA	Level 2	176,474	110,462
Asset backed securities:			
FFELP	Level 2	138,514	151,191
SBA	Level 2	3,261	4,477
Other debt securities	Level 2	2,915	2,922
Total AFS investment securities	Level 1 \$	109,024 \$	109,378
Total AFS investment securities	Level 2	3,382,655	2,632,647
Equity securities with readily determinable fair values	Level 1	6,701	5,991
Residential loans held for sale	Level 2	54,790	20,383
Mortgage servicing rights, net	Level 3	89,131	77,351
Interest rate-related instruments designated as hedging instruments ^(a)	Level 2	2,109	4,349
Foreign currency exchange forwards designated as hedging instruments ^(a)	Level 2	2,886	416
Interest rate-related and other instruments not designated as hedging instruments ^(a)	Level 2	140,414	62,401
Foreign currency exchange forwards not designated as hedging instruments ^(a)	Level 2	1,751	437
Interest rate lock commitments to originate residential mortgage loans held for sale	Level 3	407	86
Forward commitments to sell residential mortgage loans	Level 3	806	—
Liabilities			
Interest rate-related instruments designated as hedging instruments ^(a)	Level 2 \$	21,520 \$	1,260
Foreign currency exchange forwards designated as hedging instruments ^(a)	Level 2	134	972
Interest rate-related and other instruments not designated as hedging instruments ^(a)	Level 2	294,062	251,398
Foreign currency exchange forwards not designated as hedging instruments ^(a)	Level 2	1,393	402
Forward commitments to sell residential mortgage loans	Level 3	—	46

(a) Figures are presented gross before netting. See Note 9 and Note 10 for information relating to the impact of offsetting derivative assets and liabilities and cash collateral with the same counterparty where there is a legally enforceable master netting agreement in place.

The table below presents a rollforward of the consolidated balance sheets amounts for the nine months ended September 30, 2023 and the year ended December 31, 2022, for the Corporation's mortgage derivatives measured on a recurring basis and classified within Level 3 of the fair value hierarchy:

(\$ in thousands)	Interest rate lock commitments to originate residential mortgage loans held for sale	Forward commitments to sell residential mortgage loans	Total
Balance December 31, 2021	\$ 2,617	\$ (30)	\$ 2,647
New production	10,442	(2,028)	12,470
Closed loans / settlements	(913)	24,766	(25,679)
Other	(12,060)	(22,662)	10,603
Change in mortgage derivative	(2,531)	76	(2,607)
Balance December 31, 2022	\$ 86	\$ 46	\$ 40
New production	\$ 4,681	\$ (1,274)	\$ 5,955
Closed loans / settlements	(2,417)	1,969	(4,386)
Other	(1,943)	(1,547)	(396)
Change in mortgage derivative	321	(853)	1,173
Balance September 30, 2023	\$ 407	\$ (806)	\$ 1,213

The following table presents the carrying value of equity securities without readily determinable fair values still held as of September 30, 2023 that are measured under the measurement alternative and the related adjustments recorded during the periods presented for those securities with observable price changes. These securities are included in the nonrecurring fair value tables when applicable price changes are observable. Also shown are the cumulative upward and downward adjustments for the Corporation's equity securities without readily determinable fair values as of September 30, 2023:

(\$ in thousands)		
Equity securities without readily determinable fair values		
Carrying value as of December 31, 2022	\$	19,225
Purchases		10,011
Carrying value as of September 30, 2023	\$	29,236
Cumulative upward carrying value changes between January 1, 2018 and September 30, 2023	\$	19,134
Cumulative downward carrying value changes/impairment between January 1, 2018 and September 30, 2023	\$	—

The table below presents the Corporation's assets measured at fair value on a nonrecurring basis, aggregated by the level in the fair value hierarchy within which those measurements fall:

(\$ in thousands)	Fair Value Hierarchy	Fair Value	Consolidated Statements of Income Category of Adjustment Recognized in Income	Adjustment Recognized on the Consolidated Statements of Income ^(a)
September 30, 2023				
Assets				
Individually evaluated loans	Level 3	\$ 56,506	Provision for credit losses	\$ 28,926
OREO ^(b)	Level 2	1,315	Other noninterest expense / provision for credit losses ^(c)	1,124
December 31, 2022				
Assets				
Individually evaluated loans	Level 3	\$ 23,584	Provision for credit losses	\$ 4,405
OREO ^(b)	Level 2	2,196	Other noninterest expense / provision for credit losses ^(c)	971
Equity securities without readily determinable fair values	Level 3	19,134	Investment securities gains (losses), net	5,690

(a) Includes the full year impact on the consolidated statements of income.

(b) If the fair value of the collateral exceeds the carrying amount of the asset, no charge off or adjustment is necessary, the asset is not considered to be carried at fair value and is therefore not included in the table.

(c) When a property's value is written down at the time it is transferred to OREO, the charge off is booked to the provision for credit losses. When a property is already in OREO and subsequently written down, the charge off is booked to other noninterest expense.

Certain nonfinancial assets and nonfinancial liabilities measured at fair value on a nonrecurring basis include the fair value analysis in the goodwill impairment test as well as intangible assets and other nonfinancial long-lived assets measured at fair value for the purpose of impairment assessment.

The table below presents the unobservable inputs that are readily quantifiable pertaining to Level 3 measurements:

September 30, 2023	Valuation Technique	Significant Unobservable Input	Range of Inputs	Weighted Average Input Applied
Mortgage servicing rights	Discounted cash flow	Option adjusted spread	6% - 8%	6%
Mortgage servicing rights	Discounted cash flow	Constant prepayment rate	—% - 100%	6%
Individually evaluated loans	Appraisals / Discounted cash flow	Collateral / Discount factor	22% - 36%	34%
Interest rate lock commitments to originate residential mortgage loans held for sale	Discounted cash flow	Closing Ratio	48% - 100%	84%

Fair Value of Financial Instruments

The Corporation is required to disclose estimated fair values for its financial instruments.

Fair value estimates are set forth below for the Corporation's financial instruments:

(\$ in thousands)	Fair Value Hierarchy Level	Sep 30, 2023		Dec 31, 2022	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets					
Cash and due from banks	Level 1	\$ 388,694	\$ 388,694	\$ 436,952	436,952
Interest-bearing deposits in other financial institutions	Level 1	323,130	323,130	156,693	156,693
Federal funds sold and securities purchased under agreements to resell	Level 1	965	965	27,810	27,810
AFS investment securities	Level 1	109,024	109,024	109,378	109,378
AFS investment securities	Level 2	3,382,655	3,382,655	2,632,647	2,632,647
HTM investment securities, net	Level 1	999	948	999	936
HTM investment securities, net	Level 2	3,899,416	3,144,883	3,959,399	3,400,028
Equity securities with readily determinable fair values	Level 1	6,701	6,701	5,991	5,991
Equity securities without readily determinable fair values	NAV	10,000	10,000	—	—
Equity securities without readily determinable fair values	Level 3	19,236	19,236	19,225	19,225
FHLB and Federal Reserve Bank stocks	Level 2	268,698	268,698	295,496	295,496
Residential loans held for sale	Level 2	54,790	54,790	20,383	20,383
Loans, net	Level 3	29,847,392	28,705,298	28,486,849	27,481,426
Bank and corporate owned life insurance	Level 2	679,775	679,775	676,530	676,530
Mortgage servicing rights, net	Level 3	89,131	89,131	77,351	77,351
Derivatives (other assets) ^(a)	Level 2	147,160	147,160	67,603	67,603
Interest rate lock commitments to originate residential mortgage loans held for sale (other assets)	Level 3	407	407	86	86
Forward commitments to sell residential mortgage loans (other assets)	Level 3	806	806	—	—
Financial liabilities					
Noninterest-bearing demand, savings, interest-bearing demand, and money market accounts	Level 3	\$ 26,056,389	\$ 26,056,389	\$ 27,705,996	27,705,996
Brokered CDs and other time deposits ^(b)	Level 2	6,066,937	6,066,937	1,930,158	1,930,158
Short-term funding	Level 2	451,644	451,624	605,937	605,205
FHLB advances	Level 2	3,733,041	3,734,775	4,319,861	4,322,264
Other long-term funding	Level 2	529,459	519,337	248,071	242,151
Standby letters of credit ^(c)	Level 2	2,691	2,691	2,881	2,881
Derivatives (accrued expenses and other liabilities) ^(a)	Level 2	317,109	317,109	254,033	254,033
Forward commitments to sell residential mortgage loans (accrued expenses and other liabilities)	Level 3	—	—	46	46

(a) Figures are presented gross before netting. See Note 9 and Note 10 for information relating to the impact of offsetting derivative assets and liabilities and cash collateral with the same counterparty where there is a legally enforceable master netting agreement in place.

(b) When the estimated fair value is less than the carrying value, the carrying value is reported as the fair value.

(c) The commitment on standby letters of credit was \$ 247 million at September 30, 2023 and \$ 271 million at December 31, 2022. See Note 11 for additional information on the standby letters of credit and for information on the fair value of lending-related commitments.

Note 13 Retirement Plans

The Corporation has a noncontributory defined benefit RAP, covering substantially all employees who meet participation requirements. The benefits are based primarily on years of service and the employee's compensation paid. Employees of acquired entities generally participate in the RAP after consummation of the business combinations. Any retirement plans of acquired entities are typically merged into the RAP after completion of the mergers, and credit is usually given to employees for years of service at the acquired institution for vesting and eligibility purposes.

The Corporation also provides legacy healthcare access to a limited group of retired employees from a previous acquisition in the Postretirement Plan. There are no other active retiree healthcare plans.

The components of net periodic pension cost and net periodic benefit cost for the RAP and Postretirement Plan for the three and nine months ended September 30, 2023 and 2022 were as follows:

(\$ in thousands)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
RAP				
Service cost	\$ 800	\$ 906	\$ 2,392	\$ 2,752
Interest cost	2,794	1,820	8,165	5,364
Expected return on plan assets	(8,243)	(6,706)	(24,647)	(20,177)
Amortization of prior service cost	(63)	(63)	(188)	(188)
Amortization of actuarial loss	—	347	37	494
Total net periodic pension cost	\$ (4,713)	\$ (3,696)	\$ (14,241)	\$ (11,754)
Postretirement Plan				
Interest cost	\$ 20	\$ 13	\$ 59	\$ 40
Amortization of prior service cost	(19)	(19)	(56)	(56)
Amortization of actuarial (gain)	(7)	—	(22)	—
Total net periodic benefit cost	\$ (6)	\$ (6)	\$ (19)	\$ (17)

The components of net periodic pension cost and net periodic benefit cost, other than the service cost component, are included in the line item other of noninterest expense on the consolidated statements of income. The service cost components are included in personnel on the consolidated statements of income.

The Corporation's funding policy is to pay at least the minimum amount required by federal law and regulations, with consideration given to the maximum funding amounts allowed. The Corporation regularly reviews the funding of its RAP. There were no contributions during 2022 or the nine months ended September 30, 2023.

Note 14 Segment Reporting

The Corporation utilizes a risk-based internal profitability measurement system to provide strategic business unit reporting. The profitability measurement system is based on internal management methodologies designed to produce consistent results and reflect the underlying economics of the units. Certain strategic business units have been combined for segment information reporting purposes where the nature of the products and services, the type of customer, and the distribution of those products and services are similar. The three reportable segments are Corporate and Commercial Specialty; Community, Consumer, and Business; and Risk Management and Shared Services. The financial information of the Corporation's segments has been compiled utilizing the accounting policies described in the Corporation's 2022 Annual Report on Form 10-K, with certain exceptions. The more significant of these exceptions are described herein.

The reportable segment results are presented based on the Corporation's internal management accounting process. The management accounting policies and processes utilized in compiling segment financial information are highly subjective and, unlike financial accounting, are not based on authoritative guidance similar to U.S. GAAP. As a result, reported segments and the financial information of the reported segments are not necessarily comparable with similar information reported by other financial institutions. Furthermore, changes in management structure or allocation methodologies and procedures may result in changes in previously reported segment financial data. Additionally, the information presented is not indicative of how the segments would perform if they operated as independent entities.

To determine financial performance of each segment, the Corporation allocates FTP assignments, the provision for credit losses, certain noninterest expenses, income taxes, and equity to each segment. Allocation methodologies are subject to periodic adjustment as the internal management accounting system is revised, the interest rate environment evolves, and business or product lines within the segments change. Also, because the development and application of these methodologies is a dynamic process, the financial results presented may be periodically reviewed.

The Corporation allocates net interest income using an internal FTP methodology that charges users of funds (assets, primarily loans) and credits providers of funds (liabilities, primarily deposits) based on the maturity, prepayment and/or re-pricing characteristics of the assets and liabilities. The net effect of this allocation is offset in the Risk Management and Shared Services segment to ensure consolidated totals reflect the Corporation's net interest income. The net FTP allocation is reflected as net intersegment interest income (expense) in the accompanying tables.

The provision for credit losses is allocated to segments based on the expected long-term annual net charge off rates attributable to the credit risk of loans managed by the segment during the period. In contrast, the level of the consolidated provision for credit losses is determined based on an ACLL model using the methodologies described in the Corporation's 2022 Annual Report on Form 10-K. The net effect of the credit provision is recorded in Risk Management and Shared Services. Indirect

expenses incurred by certain centralized support areas are allocated to segments based on actual usage (for example, volume measurements) and other criteria. Certain types of administrative expense and bank-wide expense accruals (including, when applicable, amortization of CDIs and other intangible assets associated with acquisitions, acquisition-related costs, and asset gains on disposed business units) are generally not allocated to segments. Income taxes are allocated to segments based on the Corporation's estimated effective tax rate, with certain segments adjusted for any tax-exempt income or non-deductible expenses. Equity is allocated to the segments based on regulatory capital requirements and in proportion to an assessment of the inherent risks associated with the business of the segment (including interest, credit and operating risk).

A brief description of each business segment is presented below. A more in-depth discussion of these segments can be found in the Segment Reporting note in the Corporation's 2022 Annual Report on Form 10-K.

The Corporate and Commercial Specialty segment serves a wide range of customers including larger businesses, developers, not-for-profits, municipalities, and financial institutions by providing lending and deposit solutions as well as the support to deliver, fund, and manage such banking solutions. In addition, this segment provides a variety of investment, fiduciary, and retirement planning products and services to individuals and small to mid-sized businesses. The Community, Consumer, and Business segment serves individuals, as well as small and mid-sized businesses, by providing lending and deposit solutions. The Risk Management and Shared Services segment includes key shared operational functions and also includes residual revenue and expenses, representing the difference between actual amounts incurred and the amounts allocated to operating segments, including interest rate risk residuals (FTP mismatches) and credit risk and provision residuals (long-term credit charge mismatches).

Information about the Corporation's segments is presented below:

(\$ in thousands)	Corporate and Commercial Specialty			
	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Net interest income	\$ 250,365	\$ 161,143	\$ 710,031	\$ 363,135
Net intersegment interest (expense)	(106,675)	(40,117)	(288,366)	(36,893)
Segment net interest income	143,690	121,026	421,665	326,242
Noninterest income	34,081	35,663	99,243	112,620
Total revenue	177,771	156,688	520,908	438,862
Provision for credit losses	14,066	11,904	41,523	36,803
Noninterest expense	63,207	58,934	186,351	172,141
Income before income taxes	100,498	85,851	293,034	229,918
Income tax expense	19,304	15,967	54,138	42,248
Net income	\$ 81,194	\$ 69,884	\$ 238,897	\$ 187,670
Allocated goodwill		\$	525,836	525,836

(\$ in thousands)	Community, Consumer, and Business			
	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Net interest income	\$ 67,139	\$ 87,156	\$ 219,883	\$ 233,699
Net intersegment interest income	123,900	49,437	317,820	98,907
Segment net interest income	191,039	136,593	537,703	332,606
Noninterest income	29,675	26,745	85,881	92,072
Total revenue	220,714	163,338	623,584	424,679
Provision for credit losses	7,381	5,378	21,467	14,958
Noninterest expense	108,185	107,860	328,960	311,423
Income before income taxes	105,148	50,100	273,158	98,298
Income tax expense	22,187	10,521	57,469	20,642
Net income	\$ 82,961	\$ 39,579	\$ 215,688	\$ 77,655
Allocated goodwill		\$	579,156	579,156

(\$ in thousands)	Risk Management and Shared Services			
	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Net interest income (loss)	\$ (63,260)	\$ 16,140	\$ (143,743)	\$ 71,498
Net intersegment (expense)	(17,225)	(9,320)	(29,454)	(62,014)
Segment net interest income (loss)	(80,485)	6,820	(173,197)	9,484
Noninterest income	2,823	8,381	9,071	16,021
Total revenue	(77,663)	15,201	(164,126)	25,505
Provision for credit losses	496	(283)	(975)	(38,756)
Noninterest expense	24,814	28,997	58,980	66,940
(Loss) before income taxes	(102,972)	(13,513)	(222,131)	(2,679)
Income tax expense (benefit)	(22,065)	(325)	(41,308)	5,286
Net (loss)	\$ (80,907)	\$ (13,189)	\$ (180,823)	\$ (7,965)
Allocated goodwill		\$ —	\$ —	\$ —

(\$ in thousands)	Consolidated Total			
	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Net interest income	\$ 254,244	\$ 264,439	\$ 786,171	\$ 668,332
Net intersegment interest income	—	—	—	—
Segment net interest income	254,244	264,439	786,171	668,332
Noninterest income	66,579	70,788	194,195	220,713
Total revenue	320,823	335,227	980,366	889,045
Provision for credit losses	21,943	16,998	62,014	13,006
Noninterest expense	196,205	195,791	574,291	550,503
Income before income taxes	102,674	122,438	344,061	325,536
Income tax expense	19,426	26,163	70,299	68,176
Net income	\$ 83,248	\$ 96,275	\$ 273,762	\$ 257,360
Allocated goodwill		\$ —	\$ 1,104,992	\$ 1,104,992

Note 15 Accumulated Other Comprehensive Income (Loss)

The following tables summarize the components of accumulated other comprehensive income (loss) at September 30, 2023 and 2022, including changes during the preceding three and nine month periods as well as any reclassifications out of accumulated other comprehensive income (loss):

(\$ in thousands)	AFS Investment Securities	Cash Flow Hedge Derivatives	Defined Benefit Pension and Postretirement Obligations	Accumulated Other Comprehensive Income (Loss)
Balance December 31, 2022	\$ (233,192)	\$ 3,360	\$ (42,968)	\$ (272,799)
Other comprehensive (loss) before reclassifications	(69,512)	—	—	(69,512)
Amounts reclassified from accumulated other comprehensive income (loss):				
HTM investment securities, net, at amortized cost	6,883	—	—	6,883
Other assets / accrued expenses and other liabilities	—	(33,976)	—	(33,976)
Interest income	—	9,097	—	9,097
Personnel expense	—	—	(244)	(244)
Other expense	—	—	15	15
Income tax benefit	15,879	5,488	31	21,398
Net other comprehensive loss during period	(46,751)	(19,391)	(198)	(66,340)
Balance September 30, 2023	\$ (279,943)	\$ (16,032)	\$ (43,166)	\$ (339,140)
Balance December 31, 2021	\$ (5,266)	\$ —	\$ (5,051)	\$ (10,317)
Other comprehensive (loss) before reclassifications	(268,413)	—	—	(268,413)
Unrealized (losses) on AFS securities transferred to HTM securities	(67,604)	—	—	(67,604)
Amounts reclassified from accumulated other comprehensive income (loss):				
Investment securities (gains), net	(12)	—	—	(12)
HTM investment securities, net, at amortized cost	7,269	—	—	7,269
Personnel expense	—	—	(244)	(244)
Other expense	—	—	494	494
Income tax (expense) benefit	83,906	—	(470)	83,436
Net other comprehensive (loss) during period	(244,854)	—	(221)	(245,074)
Balance September 30, 2022	\$ (250,120)	\$ —	\$ (5,272)	\$ (255,391)

(\$ in thousands)					Defined Benefit Pension and Postretirement Obligations	Accumulated Other Comprehensive Income (Loss)
	AFS Investment Securities	Cash Flow Hedge Derivatives				
Balance June 30, 2023	\$ (239,273)	\$ (9,270)	\$	(43,099)	\$	(291,642)
Other comprehensive (loss) before reclassifications	(56,924)	—		—		(56,924)
Amounts reclassified from accumulated other comprehensive income (loss):						
HTM investment securities, net, at amortized cost	2,327	—		—		2,327
Other assets / accrued expenses and other liabilities	—	(13,592)		—		(13,592)
Interest income	—	4,516		—		4,516
Personnel expense	—	—		(81)		(81)
Other expense	—	—		(7)		(7)
Income tax benefit	13,928	2,315		23		16,266
Net other comprehensive (loss) during period	(40,669)	(6,762)		(66)		(47,497)
Balance September 30, 2023	\$ (279,943)	\$ (16,032)	\$	(43,166)	\$	(339,140)
Balance June 30, 2022	\$ (177,726)	\$ —	\$	(5,062)	\$	(182,788)
Other comprehensive (loss) before reclassifications	(100,092)	—		—		(100,092)
Amounts reclassified from accumulated other comprehensive income (loss):						
HTM investment securities, net, at amortized cost	2,888	—		—		2,888
Personnel expense	—	—		(82)		(82)
Other expense	—	—		347		347
Income tax (expense) benefit	24,810	—		(474)		24,336
Net other comprehensive (loss) during period	(72,394)	—		(209)		(72,603)
Balance September 30, 2022	\$ (250,120)	\$ —	\$	(5,272)	\$	(255,391)

Note 16 Leases

The Corporation has operating leases for retail and corporate offices, land, and equipment. The Corporation also has a finance lease for retail and corporate offices.

These leases have original terms of 1 year or longer with remaining maturities up to 39 years, some of which include options to extend the lease term. An analysis of the lease options has been completed and any purchase options or optional periods that the Corporation is reasonably likely to extend have been included in the capitalization.

The discount rate used to capitalize the operating leases is the Corporation's FHLB borrowing rate on the date of lease commencement. When determining the rate to discount specific lease obligations, the repayment period and term are considered.

Operating and finance lease costs and cash flows resulting from these leases are presented below:

(\$ in thousands)	Three Months Ended Sep 30,		Nine Months Ended Sep 30,	
	2023	2022	2023	2022
Operating lease costs	\$ 1,594	\$ 1,637	\$ 4,536	\$ 5,361
Finance lease costs	23	23	69	96
Operating lease cash flows	1,917	1,880	5,442	6,614
Finance lease cash flows	23	22	69	103

The lease classifications on the consolidated balance sheets were as follows:

(\$ in thousands)	Consolidated Balance Sheets Category	Sep 30, 2023	Dec 31, 2022
Operating lease right-of-use asset	Premises and equipment	\$ 23,677	\$ 25,617
Finance lease right-of-use asset	Other assets	390	455
Operating lease liability	Accrued expenses and other liabilities	26,059	28,357
Finance lease liability	Other long-term funding	405	469

The lease payment obligations, weighted-average remaining lease term, and weighted-average original discount rate were as follows:

(\$ in thousands)	Sep 30, 2023			Dec 31, 2022		
	Lease payments	Weighted-average lease term (in years)	Weighted-average discount rate	Lease payments	Weighted-average lease term (in years)	Weighted-average discount rate
Operating leases						
Retail and corporate offices	\$ 23,662	5.44	2.81 %	\$ 26,140	5.92	2.62 %
Land	4,255	7.11	3.47 %	4,766	7.59	3.14 %
Equipment	408	2.75	4.62 %	—	0.00	— %
Total operating leases	\$ 28,325	5.64	2.93 %	\$ 30,906	6.17	2.70 %
Finance leases						
Retail and corporate offices	\$ 417	4.50	1.32 %	\$ 485	5.25	1.32 %
Total finance leases	\$ 417	4.50	1.32 %	\$ 485	5.25	1.32 %

Contractual lease payment obligations for each of the next five years and thereafter, in addition to a reconciliation to the Corporation's lease liability, were as follows:

(\$ in thousands)	Operating Leases	Finance Leases	Total Leases
Three months ended December 31, 2023	\$ 1,509	\$ 23	\$ 1,532
2024	6,124	93	6,217
2025	5,223	93	5,315
2026	4,672	93	4,765
2027	4,014	93	4,107
Beyond 2027	6,782	23	6,805
Total lease payments	\$ 28,325	\$ 417	\$ 28,742
Less: interest	2,266	12	2,278
Present value of lease payments	\$ 26,059	\$ 405	\$ 26,464

As of September 30, 2023 and December 31, 2022, additional operating leases, primarily retail and corporate offices, that had not yet commenced totaled \$4 million and \$13 million, respectively. The leases that had not yet commenced as of September 30, 2023 will commence between October 2023 and December 2024 with lease terms of 1 year to 6 years.

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**Special Note Regarding Forward-Looking Statements**

This report contains statements that may constitute forward-looking statements within the meaning of the safe-harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, such as statements other than historical facts contained or incorporated by reference into this report. These forward-looking statements include statements with respect to the Corporation's financial condition, results of operations, plans, objectives, future performance and business, including statements preceded by, followed by or that include the words "believes," "expects," or "anticipates," references to estimates or similar expressions. Future filings by the Corporation with the SEC, and future statements other than historical facts contained in written material, press releases and oral statements issued by, or on behalf of the Corporation may also constitute forward-looking statements.

All forward-looking statements contained in this report or which may be contained in future statements made for or on behalf of the Corporation are based upon information available at the time the statement is made and the Corporation assumes no obligation to update any forward-looking statements, except as required by federal securities law. Forward-looking statements are subject to significant risks and uncertainties, and the Corporation's actual results may differ materially from the expected results discussed in such forward-looking statements. Factors that might cause actual results to differ from the results discussed in forward-looking statements include, but are not limited to, the risk factors in Item 1A, Risk Factors, in the Corporation's Annual Report on Form 10-K for the year ended December 31, 2022, and as may be described from time to time in the Corporation's subsequent SEC filings.

Overview

The following discussion and analysis is presented to assist in the understanding and evaluation of the Corporation's financial condition and results of operations. It is intended to complement the unaudited consolidated financial statements, footnotes, and supplemental financial data appearing elsewhere in this Quarterly Report on Form 10-Q and should be read in conjunction therewith. Management continually evaluates strategic acquisition opportunities and various other strategic alternatives that could involve the sale or acquisition of branches or other assets, or the consolidation or creation of subsidiaries. Within the tables presented, certain columns and rows may not sum due to the use of rounded numbers for disclosure purposes.

Performance Summary

- Average loans of \$29.4 billion increased \$3.9 billion, or 15%, from the first nine months of 2022, with growth in all major loan categories. For 2023, the Corporation expects period end loan growth of 5% to 6%.
- Average deposits of \$31.1 billion increased \$2.5 billion, or 9%, from the first nine months of 2022, driven by increases in time deposits and network transaction deposits, partially offset by a decrease in noninterest-bearing deposits. For 2023, the Corporation expects end of period core customer deposit compression of 3% with growth of 2% for the second half of the year.
- Net interest income of \$786 million increased \$118 million, or 18%, from the first nine months of 2022, and net interest margin was 2.86% compared to 2.77% for the first nine months of 2022. The increase in net interest income was driven by higher interest income as a result of growth in balances across all loan categories, which also benefited from the Federal Reserve increasing the federal funds target interest rate 225 bp since September 30, 2022, partially offset by higher interest expense on deposits and borrowings. For 2023, the Corporation expects net interest income growth of 8% to 10%.
- Provision for credit losses was \$62 million, compared to a provision of \$13 million for the first nine months of 2022, driven by a mix of portfolio loan growth, nominal credit movement, and general macroeconomic trends. For 2023, the Corporation expects to adjust provision to reflect changes to risk grades, economic conditions, loan volumes, and other indications of credit quality.
- Noninterest income of \$194 million decreased \$27 million, or 12%, from the first nine months of 2022, partially driven by a decrease in service charges and deposit account fees eliminated in 2022 and a decrease in capital markets, net, as a result of lower interest rate swap revenue and syndication fees. For 2023, the Corporation expects total noninterest income to compress by 8% to 10%.
- Noninterest expense of \$574 million increased \$24 million, or 4%, from the first nine months of 2022, primarily driven by higher personnel expense largely as a result of increased FTEs due to hiring related to previously announced initiatives and continued investment in our employees, increased FDIC assessment expense driven by the FDIC assessment rate increase effective January 2023, and increased technology expense. For 2023, the Corporation expects total noninterest expense to grow by 3% to 4%.

Table 1 Summary Results of Operations: Trends

(\$ in thousands, except per share data)	Nine months ended			Three months ended			
	Sep 30, 2023	Sep 30, 2022	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Net income	\$ 273,762	\$ 257,360	\$ 83,248	\$ 87,154	\$ 103,360	\$ 108,762	\$ 96,275
Net income available to common equity	265,137	248,735	80,373	84,279	100,485	105,887	93,400
Earnings per common share - basic	1.76	1.66	0.53	0.56	0.67	0.70	0.62
Earnings per common share - diluted	1.75	1.65	0.53	0.56	0.66	0.70	0.62
Effective tax rate	20.43 %	20.94 %	18.92 %	21.26 %	20.92 %	18.89 %	21.37 %

Income Statement Analysis

Net Interest Income

Table 2 Net Interest Income Analysis

(\$ in thousands)	Nine Months Ended Sep 30,					
	2023			2022		
	Average Balance	Interest Income / Expense	Average Yield / Rate	Average Balance	Interest Income / Expense	Average Yield / Rate
Assets						
Earning assets						
Loans ^{(a)(b)(c)}						
Commercial and business lending	\$ 10,835,003	\$ 546,210	6.74%	\$ 9,623,927	\$ 236,971	3.29%
Commercial real estate lending	7,286,627	381,425	7.00%	6,438,335	176,006	3.65%
Total commercial	18,121,629	927,634	6.84%	16,062,262	412,977	3.44%
Residential mortgage	8,698,542	217,410	3.33%	7,920,382	177,906	2.99%
Auto finance	1,677,838	60,233	4.80%	657,150	17,837	3.63%
Other retail	895,371	59,163	8.82%	888,241	35,900	5.40%
Total loans	29,393,380	1,264,441	5.75%	25,528,036	644,621	3.37%
Investment securities						
Taxable	5,209,845	104,197	2.67%	4,371,244	54,009	1.65%
Tax-exempt ^(a)	2,314,838	60,429	3.48%	2,416,064	61,771	3.41%
Other short-term investments	495,883	17,990	4.85%	625,748	7,696	1.64%
Investments and other	8,020,566	182,616	3.03%	7,413,056	123,477	2.22%
Total earning assets	37,413,946	\$ 1,447,057	5.17%	32,941,092	\$ 768,098	3.11%
Other assets, net	3,005,220			3,134,678		
Total assets	\$ 40,419,166			\$ 36,075,770		
Liabilities and Stockholders' Equity						
Interest-bearing liabilities						
Interest-bearing deposits						
Savings	\$ 4,743,526	\$ 43,611	1.23%	\$ 4,650,105	\$ 1,427	0.04%
Interest-bearing demand	6,819,714	106,860	2.09%	6,573,680	14,307	0.29%
Money market	6,853,545	130,201	2.54%	7,090,960	12,642	0.24%
Network transaction deposits	1,420,042	53,259	5.01%	795,059	6,460	1.09%
Time deposits	4,447,813	130,818	3.93%	1,266,116	2,754	0.29%
Total interest-bearing deposits	24,284,640	464,749	2.56%	20,375,920	37,590	0.25%
Federal funds purchased and securities sold under agreements to repurchase	344,950	8,504	3.30%	376,687	1,200	0.43%
Commercial paper	11,475	1	0.01%	23,106	2	0.01%
FHLB advances	3,834,247	147,365	5.14%	2,445,486	38,663	2.11%
Long-term funding	495,434	25,895	6.97%	249,759	8,182	4.37%
Total short and long-term funding	4,686,106	181,765	5.18%	3,095,039	48,047	2.07%
Total interest-bearing liabilities	28,970,746	\$ 646,514	2.98%	23,470,959	\$ 85,637	0.49%
Noninterest-bearing demand deposits	6,772,521			8,189,067		
Other liabilities	567,938			446,249		
Stockholders' equity	4,107,961			3,969,495		
Total liabilities and stockholders' equity	\$ 40,419,166			\$ 36,075,770		
Interest rate spread			2.19%			2.62%
Net free funds			0.67%			0.15%
Fully tax-equivalent net interest income and net interest margin	\$ 800,543	2.86%		\$ 682,461	2.77%	
Fully tax-equivalent adjustment	14,372			14,129		
Net interest income	\$ 786,171			\$ 668,332		

(a) The yield on tax-exempt loans and securities is computed on a fully tax-equivalent basis using a tax rate of 21% and is net of the effects of certain disallowed interest deductions.

(b) Nonaccrual loans and loans held for sale have been included in the average balances.

(c) Interest income includes amortization of net deferred loan origination costs and net accreted purchase loan discount.

Table 2 Net Interest Income Analysis

(\$ in thousands)	Three Months Ended,								
	Sep 30, 2023			Jun 30, 2023			Sep 30, 2022		
	Average Balance	Interest Income / Expense	Average Yield / Rate	Average Balance	Interest Income / Expense	Average Yield / Rate	Average Balance	Interest Income / Expense	Average Yield / Rate
Assets									
Earning assets									
Loans ^{(a)(b)(c)}									
Commercial and business lending	\$ 10,985,584	\$ 194,956	7.04%	\$ 10,899,337	\$ 184,080	6.77%	\$ 10,192,463	\$ 110,215	4.29%
Commercial real estate lending	7,312,645	134,370	7.29%	7,295,367	127,967	7.04%	6,768,054	78,887	4.62%
Total commercial	18,298,229	329,326	7.14%	18,194,703	312,047	6.88%	16,960,517	189,101	4.42%
Residential mortgage	8,807,157	74,643	3.39%	8,701,496	72,056	3.31%	8,223,531	64,069	3.12%
Auto finance	1,884,540	24,074	5.07%	1,654,523	19,701	4.78%	969,918	9,170	3.75%
Other retail	894,685	20,534	9.15%	887,574	20,135	9.08%	901,738	13,868	6.13%
Total loans	29,884,611	448,577	5.96%	29,438,297	423,939	5.77%	27,055,703	276,209	4.06%
Investment securities									
Taxable	5,407,299	38,210	2.83%	5,304,381	35,845	2.70%	4,328,586	19,221	1.78%
Tax-exempt ^(a)	2,300,488	20,085	3.49%	2,314,825	20,152	3.48%	2,435,957	20,838	3.42%
Other short-term investments	483,211	6,575	5.40%	511,487	6,086	4.77%	378,528	3,284	3.45%
Investments and other	8,190,998	64,870	3.16%	8,130,693	62,083	3.05%	7,143,071	43,342	2.42%
Total earning assets	38,075,608	\$ 513,447	5.36%	37,568,991	\$ 486,022	5.18%	34,198,774	\$ 319,551	3.72%
Other assets, net	3,000,371			2,989,321			3,073,005		
Total assets	\$ 41,075,980			\$ 40,558,311			\$ 37,271,779		
Liabilities and stockholders' equity									
Interest-bearing liabilities									
Interest-bearing deposits									
Savings	\$ 4,814,499	\$ 18,592	1.53%	\$ 4,749,808	\$ 15,160	1.28%	\$ 4,735,285	\$ 516	0.04%
Interest-bearing demand	6,979,071	41,980	2.39%	6,663,775	34,961	2.10%	6,587,404	10,306	0.62%
Money market	6,294,083	45,034	2.84%	6,743,810	43,529	2.59%	7,328,165	9,474	0.51%
Network transaction deposits	1,639,619	22,008	5.33%	1,468,006	18,426	5.03%	873,168	4,716	2.14%
Time deposits	5,955,741	65,517	4.36%	4,985,949	50,119	4.03%	1,230,859	989	0.32%
Total interest-bearing deposits	25,683,013	193,131	2.98%	24,611,348	162,196	2.64%	20,754,882	26,000	0.50%
Federal funds purchased and securities sold under agreements to repurchase	320,518	3,100	3.84%	285,754	2,261	3.17%	380,674	756	0.79%
Commercial paper	5,041	—	0.01%	12,179	—	0.01%	18,308	1	0.01%
FHLB advances	3,460,827	48,143	5.52%	3,796,106	49,261	5.20%	3,283,328	20,792	2.51%
Long-term funding	533,744	10,019	7.51%	543,003	9,596	7.07%	249,838	2,722	4.36%
Total short and long-term funding	4,320,130	61,263	5.63%	4,637,042	61,118	5.28%	3,932,149	24,270	2.45%
Total interest-bearing liabilities	30,003,143	\$ 254,394	3.36%	29,248,389	\$ 223,314	3.06%	24,687,031	\$ 50,270	0.81%
Noninterest-bearing demand deposits	6,318,781			6,669,787			8,119,475		
Other liabilities	622,004			511,074			480,672		
Stockholders' equity	4,132,052			4,129,061			3,984,602		
Total liabilities and stockholders' equity	\$ 41,075,980			\$ 40,558,311			\$ 37,271,779		
Interest rate spread			2.00%			2.12%			2.91%
Net free funds			0.71%			0.68%			0.22%
Fully tax-equivalent net interest income and net interest margin	\$ 259,053	2.71%		\$ 262,708	2.80%		\$ 269,281	3.13%	
Fully tax-equivalent adjustment	4,810			4,791			4,843		
Net interest income	\$ 254,244			\$ 257,917			\$ 264,439		

(a) The yield on tax-exempt loans and securities is computed on a fully tax-equivalent basis using a tax rate of 21% and is net of the effects of certain disallowed interest deductions.

(b) Nonaccrual loans and loans held for sale have been included in the average balances.

(c) Interest income includes amortization of net deferred loan origination costs and net accreted purchase loan discount.

Notable Contributions to the Change in Net Interest Income

- Fully tax-equivalent net interest income and net interest income were \$118 million, or 17%, and \$118 million, or 18%, higher than the first nine months of 2022, respectively. Average loans increased \$3.9 billion, or 15%, from the first nine months of 2022, and average investments and other short-term investments increased \$608 million, or 8%, from the first nine months of 2022. The increase in net interest income was driven by a higher federal funds target rate combined with growth in all major loan categories. Since September 30, 2022, the Federal Reserve increased the federal funds target interest rate 225 bp, which contributed to the yield on earning assets increasing by 206 bp. See sections Interest Rate Risk and Quantitative and Qualitative Disclosures about Market Risk for a discussion of interest rate risk and market risk.
- Average interest-bearing liabilities increased \$5.5 billion, or 23%, compared to the first nine months of 2022. Average interest-bearing deposits increased \$3.9 billion, or 19%, from the first nine months of 2022, primarily driven by increases in time deposits and network transaction deposits. Average noninterest-bearing demand deposits decreased \$1.4 billion, or 17%, versus the first nine months of 2022. Average FHLB advances increased \$1.4 billion, or 57%, from the first nine months of 2022, to fund balance sheet growth. The cost of interest-bearing liabilities increased 249 bp from the first nine months of 2022.

Provision for Credit Losses

The provision for credit losses is predominantly a function of the Corporation's reserving methodology and judgments as to other qualitative and quantitative factors used to determine the appropriate level of the ACLL, which focuses on changes in the size and character of the loan portfolio, changes in levels of individually evaluated and other nonaccrual loans, historical losses and delinquencies in each portfolio category, the risk inherent in specific loans, concentrations of loans to specific borrowers or industries, existing economic conditions and economic forecasts, the fair value of underlying collateral, and other factors which could affect potential credit losses. The forecast the Corporation used for September 30, 2023 was the Moody's baseline scenario from August 2023, which was reviewed against the September 2023 baseline scenario with no material updates made, over a 2 year reasonable and supportable period with straight-line reversion to historical losses over the second year of the period. See additional discussion under the sections titled Loans, Credit Risk, Nonperforming Assets, and Allowance for Credit Losses on Loans.

Noninterest Income

Table 3 Noninterest Income

(\$ in thousands, except as noted)	Nine months ended			Three months ended				Changes vs		
	Sep 30, 2023	Sep 30, 2022	YTD % Change	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022	Jun 30, 2023	Sep 30, 2022
Wealth management fees	\$ 61,499	\$ 63,719	(3) %	\$ 20,828	\$ 20,483	\$ 20,189	\$ 20,403	\$ 19,984	2 %	4 %
Service charges and deposit account fees	38,230	48,392	(21) %	12,864	12,372	12,994	13,918	15,029	4 %	(14)%
Card-based fees	33,492	32,847	2 %	11,510	11,396	10,586	11,167	11,479	1 %	— %
Other fee-based revenue	13,249	12,613	5 %	4,509	4,465	4,276	3,290	4,487	1 %	— %
Total fee-based revenue	146,470	157,571	(7) %	49,710	48,715	48,045	48,779	50,979	2 %	(2)%
Capital markets, net	15,544	24,331	(36) %	5,368	5,093	5,083	5,586	7,675	5 %	(30)%
Mortgage banking, net	17,814	16,635	7 %	6,501	7,768	3,545	2,238	2,098	(16)%	N/M
Bank and corporate owned life insurance	6,882	8,004	(14) %	2,047	2,172	2,664	3,427	1,827	(6)%	12 %
Other	6,841	6,613	3 %	2,339	2,080	2,422	4,102	2,527	12 %	(7)%
Subtotal	193,551	213,154	(9) %	65,965	65,827	61,758	64,132	65,106	— %	1 %
Asset gains (losses), net	590	1,883	(69) %	625	(299)	263	(545)	18	N/M	N/M
Investment securities gains (losses), net	55	5,676	(99) %	(11)	14	51	(1,930)	5,664	N/M	N/M
Total noninterest income	\$ 194,195	\$ 220,713	(12) %	\$ 66,579	\$ 65,543	\$ 62,073	\$ 61,657	\$ 70,788	2 %	(6)%
Mortgage loans originated for sale during period	\$ 283,469	\$ 535,694	(47) %	\$ 115,075	\$ 99,141	\$ 69,254	\$ 64,419	\$ 131,743	16 %	(13)%
Mortgage loan settlements during period	254,619	620,352	(59) %	103,452	96,514	54,652	94,682	119,942	7 %	(14)%
Assets under management, at market value ^(a)				12,543	12,995	12,412	11,843	11,142	(3)%	13 %

N/M = Not Meaningful

(a) \$ in millions. Excludes assets held in brokerage accounts.

Notable Contributions to the Change in Noninterest Income

- Service charges and deposit account fees decreased \$10 million from the first nine months of 2022, primarily due to the reduction and elimination of many deposit account fees in the third quarter of 2022.
- Capital markets, net decreased \$9 million from the first nine months of 2022, as a result of lower interest rate swap revenue and syndication fees.
- Wealth management fees decreased \$2 million from the first nine months of 2022, mainly driven by market conditions.

Noninterest Expense

Table 4 Noninterest Expense

(\$ in thousands)	Nine months ended			Three months ended					Change vs	
	Sep 30, 2023	Sep 30, 2022	YTD % Change	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022	Jun 30, 2023	Sep 30, 2022
Personnel	\$ 347,669	\$ 335,720	4 %	\$ 117,159	\$ 114,089	\$ 116,420	\$ 118,381	\$ 118,243	3 %	(1)%
Technology	73,990	65,401	13 %	26,172	24,220	23,598	25,299	22,694	8 %	15 %
Occupancy	42,775	43,948	(3) %	14,125	13,587	15,063	15,846	13,717	4 %	3 %
Business development and advertising	20,054	17,388	15 %	7,100	7,106	5,849	8,136	6,778	— %	5 %
Equipment	14,921	14,841	1 %	5,016	4,975	4,930	4,791	4,921	1 %	2 %
Legal and professional	13,149	14,118	(7) %	4,461	4,831	3,857	4,132	4,159	(8)%	7 %
Loan and foreclosure costs	4,822	5,121	(6) %	2,049	1,635	1,138	804	1,631	25 %	26 %
FDIC assessment	25,575	16,300	57 %	9,150	9,550	6,875	6,350	5,800	(4)%	58 %
Other intangible amortization	6,608	6,608	— %	2,203	2,203	2,203	2,203	2,203	— %	— %
Other	24,726	31,057	(20) %	8,771	8,476	7,479	10,618	15,645	3 %	(44)%
Total noninterest expense	\$ 574,291	\$ 550,503	4 %	\$ 196,205	\$ 190,673	\$ 187,412	\$ 196,560	\$ 195,791	3 %	— %
Average FTEs ^(a)	4,222	4,101	3 %	4,220	4,227	4,219	4,169	4,182	— %	1 %

(a) Average FTEs without overtime

Notable Contributions to the Change in Noninterest Expense

- Personnel expense increased \$12 million from the first nine months of 2022, largely as a result of increased FTEs due to hiring related to previously announced initiatives and continued investment in our employees.
- FDIC expense increased \$9 million from the first nine months of 2022, primarily driven by the FDIC's assessment rate change on January 1, 2023. The Corporation is expecting additional FDIC assessment expense associated with the special assessment that was proposed by the FDIC in May 2023. The proposal would assess a 12.5 bp annual special assessment on the Bank's uninsured deposits reported in the Call Report for December 31, 2022, excluding the first \$5 billion of uninsured deposits, and would be in place for two years. The Bank's Call Report uninsured deposits at December 31, 2022 were \$15.7 billion. Once an assessment is approved, the full expense for the two year period will be recognized.
- Technology expense increased \$9 million from the first nine months of 2022, driven by digital investments tied to our strategic initiatives.

Income Taxes

The Corporation recognized income tax expense of \$70 million for the nine months ended September 30, 2023, compared to income tax expense of \$68 million for the nine months ended September 30, 2022. The Corporation's effective tax rate was 20.43% for the first nine months of 2023, compared to an effective tax rate of 20.94% for the first nine months of 2022. The increase in income tax expense during the first nine months of 2023 was primarily driven by an increase in income before tax. The decrease in the effective tax rate was primarily driven by a decrease in state tax expense. The Corporation expects a full year effective tax rate of 20 to 21%, assuming no change in the statutory corporate tax rate.

Income tax expense recorded on the consolidated statements of income involves the interpretation and application of certain accounting pronouncements and federal and state tax laws and regulations. The Corporation is subject to examination by various taxing authorities. Examination by taxing authorities may impact the amount of tax expense and/or the reserve for uncertainty in income taxes if their interpretations differ from those of management, based on their judgments about information available to them at the time of their examinations.

Balance Sheet Analysis

- At September 30, 2023, total assets were \$41.6 billion, up \$2.2 billion, or 6%, from December 31, 2022, and up \$3.6 billion, or 9%, from September 30, 2022.
- Interest bearing deposits in other financial institutions were \$323 million at September 30, 2023, up \$166 million, or 106%, from December 31, 2022, and up \$211 million, or 188%, from September 30, 2022.
- AFS investment securities, at fair value were \$3.5 billion at September 30, 2023, up \$750 million, or 27%, from December 31, 2022, and up \$1.0 billion, or 40%, from September 30, 2022. HTM investment securities, net, at amortized cost were \$3.9 billion at September 30, 2023, down \$60 million, or 2%, from December 31, 2022, and down \$51 million, or 1%, from September 30, 2022. See Note 5 Investment Securities of the notes to consolidated financial statements for additional details.
- Loans of \$30.2 billion at September 30, 2023 were up \$1.4 billion, or 5%, from December 31, 2022, and up \$2.4 billion, or 9%, from September 30, 2022. See Note 6 Loans of the notes to consolidated financial statements for additional details.
- At September 30, 2023, total deposits of \$32.1 billion were up \$2.5 billion, or 8%, from December 31, 2022, and were up \$2.9 billion, or 10%, from September 30, 2022. See section Deposits and Customer Funding for additional information on deposits.
- Federal funds purchased and securities sold under agreements to repurchase were \$452 million at September 30, 2023, down \$133 million, or 23%, from December 31, 2022, and up \$175 million, or 63%, from September 30, 2022. See Note 8 Short and Long-Term Funding of the notes to consolidated financial statements for additional details.
- FHLB advances were \$3.7 billion at September 30, 2023, down \$587 million, or 14%, from December 31, 2022, and down \$44 million, or 1%, from September 30, 2022. See Note 8 Short and Long-Term Funding of the notes to consolidated financial statements for additional details.
- Other long-term funding was \$529 million at September 30, 2023, up \$281 million, or 113%, from December 31, 2022, and up \$280 million, or 112%, from September 30, 2022, primarily driven by the Corporation's issuance of subordinated notes in February 2023. See Note 8 Short and Long-Term Funding of the notes to consolidated financial statements for additional details.

Loans

Table 5 Period End Loan Composition

	Sep 30, 2023		Jun 30, 2023		Mar 31, 2023		Dec 31, 2022		Sep 30, 2022	
(\$ in thousands)	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Commercial and industrial	\$ 10,099,068	33 %	\$ 10,055,487	34 %	\$ 9,869,781	34 %	\$ 9,759,454	34 %	\$ 9,571,925	34 %
Commercial real estate — owner occupied	1,054,969	3 %	1,058,237	4 %	1,050,236	4 %	991,722	3 %	999,786	4 %
Commercial and business lending	11,154,037	37 %	11,113,724	37 %	10,920,017	37 %	10,751,176	37 %	10,571,711	38 %
Commercial real estate — investor	5,218,980	17 %	5,312,928	18 %	5,094,249	17 %	5,080,344	18 %	5,064,289	18 %
Real estate construction	2,130,719	7 %	2,009,060	7 %	2,147,070	7 %	2,155,222	7 %	1,835,159	7 %
Commercial real estate lending	7,349,699	24 %	7,321,988	25 %	7,241,318	25 %	7,235,565	25 %	6,899,449	25 %
Total commercial	18,503,736	61 %	18,435,711	62 %	18,161,335	62 %	17,986,742	62 %	17,471,159	63 %
Residential mortgage	8,782,645	29 %	8,746,345	29 %	8,605,164	29 %	8,511,550	30 %	8,314,902	30 %
Auto finance	2,007,164	7 %	1,777,974	6 %	1,551,538	5 %	1,382,073	5 %	1,117,136	4 %
Home equity	623,650	2 %	615,506	2 %	609,787	2 %	624,353	2 %	612,608	2 %
Other consumer	275,993	1 %	273,367	1 %	279,248	1 %	294,851	1 %	301,475	1 %
Total consumer	11,689,451	39 %	11,413,193	38 %	11,045,737	38 %	10,812,828	38 %	10,346,121	37 %
Total loans	\$ 30,193,187	100 %	\$ 29,848,904	100 %	\$ 29,207,072	100 %	\$ 28,799,569	100 %	\$ 27,817,280	100 %

The Corporation has long-term guidelines relative to the proportion of Commercial and Business, CRE, and Consumer loan commitments within the overall loan portfolio, with each targeted to represent 30 to 40% of the overall loan portfolio. The targeted long-term guidelines were unchanged during 2022 and the first nine months of 2023. Furthermore, certain sub-asset classes within the respective portfolios are further defined and dollar limitations are placed on these sub-portfolios. These guidelines and limits are reviewed quarterly and approved annually by the Enterprise Risk Committee of the Corporation's Board of Directors. These guidelines and limits are designed to create balance and diversification within the loan portfolios.

The Corporation's loan distribution and interest rate sensitivity as of September 30, 2023 are summarized in the following table:

Table 6 Loan Distribution and Interest Rate Sensitivity

(\$ in thousands)	Within 1 Year ^(a)	1-5 Years	5-15 Years	Over 15 Years	Total	% of Total
Commercial and industrial	\$ 9,181,210	\$ 652,572	\$ 256,501	\$ 8,784	\$ 10,099,068	33 %
Commercial real estate — owner occupied	652,639	279,043	122,993	295	1,054,969	3 %
Commercial real estate — investor	4,846,003	226,962	146,015	—	5,218,980	17 %
Real estate construction	2,048,329	43,915	29,697	8,779	2,130,719	7 %
Commercial - adjustable	11,413,802	29,485	8,026	—	11,451,314	38 %
Commercial - fixed	5,314,379	1,173,006	547,180	17,857	7,052,422	23 %
Residential mortgage - adjustable	316,708	1,020,151	1,883,429	301	3,220,588	11 %
Residential mortgage - fixed	5,576	86,514	538,718	4,931,249	5,562,057	18 %
Auto finance	369	733,245	1,273,550	—	2,007,164	7 %
Home equity	564,104	11,253	39,252	9,041	623,650	2 %
Other consumer	201,452	36,438	25,150	12,953	275,993	1 %
Total loans	\$ 17,816,390	\$ 3,090,092	\$ 4,315,305	\$ 4,971,401	\$ 30,193,187	100 %
Fixed-rate	\$ 5,329,729	\$ 2,039,525	\$ 2,423,850	\$ 4,971,100	\$ 14,764,204	49 %
Floating or adjustable rate	12,486,661	1,050,567	1,891,455	301	15,428,984	51 %
Total	\$ 17,816,390	\$ 3,090,092	\$ 4,315,305	\$ 4,971,401	\$ 30,193,187	100 %

(a) Demand loans, past due loans, overdrafts, and credit cards are reported in the "Within 1 Year" category.

At September 30, 2023, \$20.8 billion, or 69%, of the loans outstanding and \$16.8 billion, or 91%, of the commercial loans outstanding were floating rate, adjustable rate, re-pricing within one year, or maturing within one year.

Credit Risk

An active credit risk management process is used for commercial loans to ensure that sound and consistent credit decisions are made. Credit risk is controlled by detailed underwriting procedures, comprehensive loan administration, and periodic review of borrowers' outstanding loans and commitments. Borrower relationships are formally reviewed and graded on an ongoing basis for early identification of potential problems. Further analysis by customer, industry, and geographic location are performed to monitor trends, financial performance, and concentrations. See Note 6 Loans of the notes to consolidated financial statements for additional information on managing overall credit quality.

The loan portfolio is widely diversified by types of borrowers, industry groups, and market areas within the Corporation's branch footprint. Significant loan concentrations are considered to exist when there are amounts loaned to numerous borrowers engaged in similar activities that would cause them to be similarly impacted by economic or other conditions. At September 30, 2023, no significant concentrations existed in the Corporation's portfolio in excess of 10% of total loan exposure.

Commercial and business lending: The commercial and business lending classification primarily includes commercial loans to large corporations, middle market companies, small businesses, and asset-based and equipment financing.

Table 7 Largest Commercial and Industrial Industry Group Exposures, by NAICS Subsector

September 30, 2023	NAICS Subsector	Outstanding Balance	Total Exposure	% of Total Loan Exposure
Real Estate ^(a)	531	\$ 1,872,397	\$ 3,482,921	8 %
Utilities ^(b)	221	2,295,402	2,690,573	6 %
Credit Intermediation and Related Activities ^(c)	522	1,019,466	1,916,996	5 %
Merchant Wholesalers, Durable Goods	423	498,039	929,829	2 %

(a) Includes REIT lines.

(b) 52% of the total exposure comes from renewable energy sources (wind, solar, hydroelectric, and geothermal).

(c) Includes mortgage warehouse lines.

The remaining commercial and industrial portfolio is spread over a diverse range of industries, none of which exceed 2% of total loan exposure.

The CRE-owner occupied portfolio is spread over a diverse range of industries, none of which exceed 2% of total loan exposure.

The credit risk related to commercial and business lending is largely influenced by general economic conditions and the resulting impact on a borrower's operations or on the value of underlying collateral, if any.

Commercial real estate - investor: CRE-investor is comprised of loans secured by various non-owner occupied or investor income producing property types.

Table 8 Largest Commercial Real Estate Investor Property Type Exposures

September 30, 2023	% of Total Loan Exposure		% of Total Commercial Real Estate - Investor Loan Exposure	
Multi-Family	5	%	35	%
Industrial	3	%	24	%
Office	3	%	21	%

The remaining CRE-investor portfolio is spread over various other property types, none of which exceed 2% of total loan exposure.

Credit risk is managed in a similar manner to commercial and business lending by employing sound underwriting guidelines, lending primarily to borrowers in local markets and businesses, periodically evaluating the underlying collateral, and formally reviewing the borrower's financial soundness and relationship on an ongoing basis.

Real estate construction: Real estate construction loans are primarily short-term or interim loans that provide financing for the acquisition or development of commercial income properties, multi-family projects, or residential development, both single family and condominium. Real estate construction loans are made to developers and project managers who are generally well known to the Corporation and have prior successful project experience. The credit risk associated with real estate construction loans is generally confined to specific geographic areas but is also influenced by general economic conditions. The Corporation controls the credit risk on these types of loans by making loans in familiar markets to developers, reviewing the merits of individual projects, controlling loan structure, and monitoring project progress and construction advances.

Table 9 Largest Real Estate Construction Property Type Exposures

September 30, 2023	% of Total Loan Exposure		% of Total Real Estate Construction Loan Exposure	
Multi-Family	5	%	43	%
Industrial	3	%	25	%

The remaining real estate construction portfolio is spread over various other property types, none of which exceed 2% of total loan exposure.

The Corporation's current lending standards for CRE and real estate construction lending are determined by property type and specifically address many criteria, including: maximum loan amounts, maximum LTV, requirements for pre-leasing and/or presales, minimum borrower equity, and maximum loan-to-cost. Currently, the maximum standard for LTV is 80%, with lower limits established for certain higher risk types, such as raw land that has a 50% LTV maximum. The Corporation's LTV guidelines are in compliance with regulatory supervisory limits. In most cases, for real estate construction loans, the loan amounts include interest reserves, which are built into the loans and sized to fund loan payments through construction and lease up and/or sell out.

Residential mortgages: Residential mortgage loans are primarily first lien home mortgages with a maximum loan-to-collateral value without credit enhancement (e.g. private mortgage insurance) of 80%. The residential mortgage portfolio is focused primarily in the Corporation's three-state branch footprint, with approximately 87% of the outstanding loan balances in the Corporation's branch footprint at September 30, 2023. The rates on adjustable rate mortgages adjust based upon the movement in the underlying index which is then added to a margin and rounded to the nearest 0.125%. That result is then subjected to any periodic caps to produce the borrower's interest rate for the coming term. Most of the adjustable rate mortgages have an initial fixed rate term of 3, 5, 7 or 10 years.

The Corporation generally retains certain fixed-rate residential real estate mortgages in its loan portfolio, including retail and private banking jumbo mortgages and CRA-related mortgages. As part of management's historical practice of originating and servicing residential mortgage loans, generally the Corporation's 30 year, agency conforming, fixed-rate residential real estate mortgage loans have been sold in the secondary market with servicing rights retained. Subject to management's analysis of the current interest rate environment, among other market factors, the Corporation may choose to retain mortgage loan production on its balance sheet.

The Corporation's underwriting and risk-based pricing guidelines for residential mortgage loans include minimum borrower FICO score and maximum LTV of the property securing the loan. Residential mortgage products generally are underwritten using FHLMC and FNMA secondary marketing guidelines.

Home equity: Home equity consists of both home equity lines of credit and closed-end home equity loans. The Corporation's credit risk monitoring guidelines for home equity are based on an ongoing review of loan delinquency status, as well as a quarterly review of FICO score deterioration and property devaluation. The Corporation does not routinely obtain appraisals on performing loans to update LTV ratios after origination; however, the Corporation monitors the local housing markets by reviewing the various home price indices and incorporates the impact of the changing market conditions in its ongoing credit monitoring process. For junior lien home equity loans, the Corporation is unable to track the performance of the first lien loan if it does not own or service the first lien loan. However, the Corporation obtains a refreshed FICO score on a quarterly basis and monitors this as part of its assessment of the home equity portfolio.

The Corporation's underwriting and risk-based pricing guidelines for home equity lines of credit and loans consist of a combination of both borrower FICO score and the original cumulative LTV against the property securing the loan. Currently, the Corporation's policy sets the maximum acceptable LTV at 90%. The Corporation's current home equity line of credit offering is priced based on floating rate indices and generally allows 10 years of interest-only payments followed by a 20-year amortization of the outstanding balance. The loans in the Corporation's portfolio generally have an original term of 20 years with principal and interest payments required.

Indirect Auto: The Corporation currently purchases retail auto sales contracts via a network of approved auto dealerships across 14 states throughout the Northeast, Mid-Atlantic, and Midwestern United States. The auto dealerships finance the sale of automobiles as the initial lender and then assign the contracts to the Corporation pursuant to dealer agreements. The Corporation's underwriting and pricing guidelines are based on a dual risk grade derived from a combination of FICO auto score and proprietary internal custom score. Minimum grade and FICO score standards ensure the credit risk is appropriately managed to the Corporation's risk appetite. Further, the grade influences loan-specific parameters such as vehicle age, term, LTV, loan amount, mileage, payment and debt service thresholds, and pricing. Maximum loan terms offered are 84 months on select grades with vehicle age, mileage, and other limitations in place to qualify. The program is designed to capture primarily prime and super prime contracts. Over time, the Corporation expects roughly 60% of originations to be secured by used vehicles.

Other consumer: Other consumer consists of student loans, short-term personal installment loans, and credit cards. The Corporation had \$67 million and \$76 million of student loans at September 30, 2023 and December 31, 2022, respectively, the majority of which are government guaranteed. Federally guaranteed student loan payments resumed in October 2023 after over three years of payment moratoriums that began as a result of the COVID-19 pandemic. The Corporation is not originating new student loans and the student loan portfolio is in run-off. Credit risk for non-government guaranteed student loans, short-term personal installment loans, and credit cards is influenced by general economic conditions, the characteristics of individual borrowers, and the nature of the loan collateral. Risks of loss are generally on smaller average balances per loan spread over many borrowers. Once charged off, there is usually less opportunity for recovery of these smaller consumer loans. Credit risk is primarily controlled by reviewing the creditworthiness of the borrowers, monitoring payment histories, and taking appropriate collateral and guarantee positions.

Nonperforming Assets

Management is committed to a proactive nonaccrual and problem loan identification philosophy. This philosophy is implemented through the ongoing monitoring and review of all pools of risk in the loan portfolio to ensure that problem loans are identified quickly and the risk of loss is minimized. Table 10 provides detailed information regarding NPAs, which include nonaccrual loans, OREO, and repossessed assets:

Table 10 Nonperforming Assets

(\$ in thousands)	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Nonperforming assets					
Commercial and industrial	\$ 74,812	\$ 34,907	\$ 22,735	\$ 14,329	\$ 15,576
Commercial real estate — owner occupied	3,936	1,444	1,478	—	—
Commercial and business lending	78,748	36,352	24,213	14,329	15,576
Commercial real estate — investor	10,882	22,068	25,122	29,380	37,479
Real estate construction	103	125	178	105	141
Commercial real estate lending	10,985	22,193	25,300	29,485	37,620
Total commercial	89,732	58,544	49,513	43,814	53,196
Residential mortgage	66,153	61,718	58,274	58,480	55,485
Auto finance	4,533	3,065	2,436	1,490	302
Home equity	7,917	7,788	7,246	7,487	7,325
Other consumer	222	163	100	197	98
Total consumer	78,826	72,733	68,056	67,654	63,210
Total nonaccrual loans	168,558	131,278	117,569	111,467	116,406
Commercial real estate owned	1,062	1,062	3,071	325	325
Residential real estate owned	989	870	2,987	2,878	2,560
Bank properties real estate owned ^(a)	6,400	5,643	9,125	11,580	13,487
OREO	8,452	7,575	15,184	14,784	16,373
Repossessed assets	658	348	92	215	299
Total nonperforming assets	\$ 177,668	\$ 139,201	\$ 132,845	\$ 126,466	\$ 133,078
Accruing loans past due 90 days or more					
Commercial	\$ 441	\$ 366	\$ 323	\$ 282	\$ 121
Consumer	1,715	1,360	1,380	1,446	1,297
Total accruing loans past due 90 days or more	\$ 2,156	\$ 1,726	\$ 1,703	\$ 1,728	\$ 1,417
Restructured loans (accruing)^(b)					
Commercial	\$ 234	\$ 168	\$ 47	\$ 13,093	\$ 16,097
Consumer	1,855	1,271	716	19,775	19,036
Total restructured loans (accruing)	\$ 2,089	\$ 1,439	\$ 763	\$ 32,868	\$ 35,132
Nonaccrual restructured loans (included in nonaccrual loans) ^(b)	\$ 961	\$ 796	\$ 341	\$ 20,127	\$ 21,650
Ratios					
Nonaccrual loans to total loans	0.56 %	0.44 %	0.40 %	0.39 %	0.42 %
NPAs to total loans plus OREO and repossessed assets	0.59 %	0.47 %	0.45 %	0.44 %	0.48 %
NPAs to total assets	0.43 %	0.34 %	0.33 %	0.32 %	0.35 %
Allowance for credit losses on loans to nonaccrual loans	225.78 %	287.20 %	311.48 %	315.34 %	285.79 %

Table 10 Nonperforming Assets (continued)

(\$ in thousands)	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Accruing loans 30-89 days past due					
Commercial and industrial	\$ 1,507	\$ 12,005	\$ 4,239	\$ 6,283	\$ 1,861
Commercial real estate — owner occupied	1,877	1,484	2,955	230	—
Commercial and business lending	3,384	13,489	7,195	6,512	1,861
Commercial real estate — investor	10,121	—	—	1,067	—
Real estate construction	10	76	—	39	43
Commercial real estate lending	10,131	76	—	1,105	43
Total commercial	13,515	13,565	7,195	7,618	1,904
Residential mortgage	11,652	8,961	7,626	9,874	6,517
Auto finance	16,688	11,429	8,640	9,408	6,206
Home equity	3,687	4,030	4,113	5,607	4,234
Other consumer	1,880	2,025	1,723	1,610	1,592
Total consumer	33,908	26,444	22,102	26,499	18,549
Total accruing loans 30-89 days past due	\$ 47,422	\$ 40,008	\$ 29,297	\$ 34,117	\$ 20,452
Potential problem loans					
Commercial and industrial	\$ 207,237	\$ 205,228	\$ 135,047	\$ 136,549	\$ 108,556
Commercial real estate — owner occupied	27,792	29,396	32,077	34,422	28,287
Commercial and business lending	235,029	234,624	167,124	170,971	136,843
Commercial real estate — investor	148,840	106,662	89,653	92,535	117,982
Real estate construction	—	—	—	970	—
Commercial real estate lending	148,840	106,662	89,653	93,505	117,982
Total commercial	383,869	341,286	256,776	264,476	254,825
Residential mortgage	1,247	1,646	1,684	1,978	2,845
Home equity	236	240	244	197	185
Total consumer	1,483	1,886	1,928	2,175	3,030
Total potential problem loans	\$ 385,352	\$ 343,173	\$ 258,704	\$ 266,651	\$ 257,855

(a) Primarily closed branches and other bank operated real estate facilities, pending disposition.

(b) On January 1, 2023, the Corporation adopted ASU 2022-02. Under this update, TDRs were eliminated and replaced with a modified loan classification. As a result, amounts reported for March 31, 2023 and forward will not be comparable to prior period reported amounts.

Nonaccrual loans: Nonaccrual loans are considered to be one indicator of potential future loan losses. See Note 6 Loans of the notes to consolidated financial statements for additional nonaccrual loan disclosures. See also sections Credit Risk and Allowance for Credit Losses on Loans.

Accruing loans past due 90 days or more: Loans past due 90 days or more but still accruing interest are classified as such where the underlying loans are both well secured (the collateral value is sufficient to cover principal and accrued interest) and are in the process of collection.

Restructured loans: Loans are considered restructured loans if concessions have been granted to borrowers that are experiencing financial difficulty. On January 1, 2023, the Corporation adopted ASU 2022-02 prospectively. As a result, loans that were restructured prior to adoption are no longer considered TDRs, and loans restructured since January 1, 2023 are considered restructured. As a result, periods prior to 2023 are no longer comparable. See also Note 6 Loans of the notes to consolidated financial statements for additional restructured loans disclosures.

Potential problem loans: The level of potential problem loans is another predominant factor in determining the relative level of risk in the loan portfolio and in determining the appropriate level of the ACLL. Potential problem loans are generally defined by management to include loans rated as substandard by management that are collectively evaluated; however, there are circumstances present to create doubt as to the ability of the borrower to comply with present repayment terms. The decision of management to include performing loans in potential problem loans does not necessarily mean that the Corporation expects losses to occur, but that management recognizes a higher degree of risk associated with these loans.

OREO: Management actively seeks to ensure OREO properties held are monitored to minimize the Corporation's risk of loss.

Allowance for Credit Losses on Loans

Credit risks within the loan portfolio are inherently different for each loan type. Credit risk is controlled and monitored through the use of lending standards, a thorough review of potential borrowers, and ongoing review of loan payment performance. Active asset quality administration, including early problem loan identification and timely resolution of problems, aids in the management of credit risk and the minimization of loan losses. Credit risk management for each loan type is discussed in the section entitled Credit Risk. See Note 6 Loans of the notes to consolidated financial statements for additional disclosures on the ACLL.

To assess the appropriateness of the ACLL, the Corporation focuses on the evaluation of many factors, including but not limited to: evaluation of facts and issues related to specific loans, management's ongoing review and grading of the loan portfolio, credit report refreshes, consideration of historical loan loss and delinquency experience on each portfolio category, trends in past due and nonaccrual loans, the level of potential problem loans, the risk characteristics of the various classifications of loan segments, changes in the size and character of the loan portfolio, concentrations of loans to specific borrowers or industries, existing economic conditions and economic forecasts, the fair value of underlying collateral, funding assumptions on lines, and other qualitative and quantitative factors which could affect potential credit losses. The forecast the Corporation used for September 30, 2023 was the Moody's baseline scenario from August 2023, which was reviewed against the September 2023 baseline scenario with no material updates made, over a 2 year reasonable and supportable period with straight-line reversion to historical losses over the second year of the period. Assessing these factors involves significant judgment. Because each of the criteria used is subject to change, the ACLL is not necessarily indicative of the trend of future credit losses on loans in any particular segment. Therefore, management considers the ACLL a critical accounting estimate, see section Critical Accounting Estimates for additional information on the ACLL. See section Nonperforming Assets for a detailed discussion on asset quality. See also Note 6 Loans of the notes to consolidated financial statements for additional ACLL disclosures. Table 5 provides information on loan growth and period end loan composition, Table 10 provides additional information regarding NPAs, and Table 11 and Table 12 provide additional information regarding activity in the ACLL.

The loan segmentation used in calculating the ACLL at September 30, 2023 and December 31, 2022 was generally comparable. The methodology to calculate the ACLL consists of the following components: a valuation allowance estimate is established for commercial and consumer loans determined by the Corporation to be individually evaluated, using discounted cash flows, estimated fair value of underlying collateral, and/or other data available. Loans are segmented for criticized loan pools by loan type as well as for non-criticized loan pools by loan type, primarily based on risk rating rates after considering loan type, historical loss and delinquency experience, credit quality, and industry classifications. Loans that have been criticized are considered to have a higher risk of default than non-criticized loans, as circumstances were present to support the lower loan grade, warranting higher loss factors. Additionally, management allocates ACLL to absorb losses that may not be provided for by the other components due to qualitative factors evaluated by management, such as limitations within the credit risk grading process, known current economic or business conditions that may not yet show in trends, industry or other concentrations with current issues that impose higher inherent risks than are reflected in the loss factors, and other relevant considerations. The total allowance is available to absorb losses from any segment of the loan portfolio.

Table 11 Allowance for Credit Losses on Loans

(\$ in thousands)	YTD		Quarter Ended					
	Sep 30, 2023	Sep 30, 2022	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022	
Allowance for loan losses								
Balance at beginning of period	\$ 312,720	\$ 280,015	\$ 338,750	\$ 326,432	\$ 312,720	\$ 292,904	\$ 280,771	
Provision for loan losses	66,000	13,000	25,500	23,500	17,000	21,000	14,000	
Charge offs	(40,891)	(7,165)	(20,535)	(14,855)	(5,501)	(2,982)	(3,346)	
Recoveries	7,965	7,054	2,079	3,674	2,212	1,798	1,478	
Net (charge offs) recoveries	(32,925)	(111)	(18,455)	(11,181)	(3,289)	(1,183)	(1,867)	
Balance at end of period	\$ 345,795	\$ 292,904	\$ 345,795	\$ 338,750	\$ 326,432	\$ 312,720	\$ 292,904	
Allowance for unfunded commitments								
Balance at beginning of period	\$ 38,776	\$ 39,776	\$ 38,276	\$ 39,776	\$ 38,776	\$ 39,776	\$ 36,776	
Provision for unfunded commitments	(4,000)	—	(3,500)	(1,500)	1,000	(1,000)	3,000	
Balance at end of period	\$ 34,776	\$ 39,776	\$ 34,776	\$ 38,276	\$ 39,776	\$ 38,776	\$ 39,776	
Allowance for credit losses on loans	\$ 380,571	\$ 332,680	\$ 380,571	\$ 377,027	\$ 366,208	\$ 351,496	\$ 332,680	
Provision for credit losses on loans	62,000	13,000	22,000	22,000	18,000	20,000	17,000	
Net loan (charge offs) recoveries								
Commercial and industrial	(29,494)	512	(16,558)	(11,177)	(1,759)	278	(897)	
Commercial real estate — owner occupied	8	10	2	3	3	3	3	
Commercial and business lending	(29,487)	523	(16,556)	(11,174)	(1,756)	281	(894)	
Commercial real estate — investor	2,547	—	272	2,276	—	—	—	
Real estate construction	18	43	18	(18)	18	16	9	
Commercial real estate lending	2,565	43	290	2,257	18	16	9	
Total commercial	(26,921)	565	(16,266)	(8,917)	(1,738)	297	(885)	
Residential mortgage	(358)	465	(22)	(283)	(53)	(125)	(42)	
Auto finance	(3,273)	(175)	(1,269)	(1,048)	(957)	(768)	(165)	
Home equity	652	675	128	183	340	123	(101)	
Other consumer	(3,025)	(1,642)	(1,027)	(1,117)	(881)	(711)	(675)	
Total consumer	(6,004)	(676)	(2,189)	(2,264)	(1,550)	(1,480)	(983)	
Total net (charge offs) recoveries	\$ (32,925)	\$ (111)	\$ (18,455)	\$ (11,181)	\$ (3,289)	\$ (1,183)	\$ (1,867)	
Ratios								
Allowance for credit losses on loans to total loans			1.26 %	1.26 %	1.25 %	1.22 %	1.20 %	
Allowance for credit losses on loans to net charge offs (annualized)	8.6x	N/M	5.2x	8.4x	27.5x	74.9x	44.9x	
Loan evaluation method for ACLL								
Individually evaluated for impairment		\$ 11,033	\$ 12,268	\$ 11,585	\$ 10,324	\$ 15,739		
Collectively evaluated for impairment		369,538	364,759	354,623	341,172	316,942		
Total ACLL		\$ 380,571	\$ 377,027	\$ 366,208	\$ 351,496	\$ 332,680		
Loan balance								
Individually evaluated for impairment		\$ 86,195	\$ 58,109	\$ 48,934	\$ 76,577	\$ 87,712		
Collectively evaluated for impairment		30,106,993	29,790,795	29,158,138	28,722,992	27,729,568		
Total loan balance		\$ 30,193,187	\$ 29,848,904	\$ 29,207,072	\$ 28,799,569	\$ 27,817,280		

N/M = Not Meaningful

Table 12 Annualized Net (Charge Offs) Recoveries^(a)

(In basis points)	YTD		Quarter Ended				
	Sep 30, 2023	Sep 30, 2022	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Net loan (charge offs) recoveries							
Commercial and industrial	(40)	1	(66)	(46)	(7)	1	(4)
Commercial real estate — owner occupied	—	—	—	—	—	—	—
Commercial and business lending	(36)	1	(60)	(41)	(7)	1	(3)
Commercial real estate — investor	7	—	2	18	—	—	—
Real estate construction	—	—	—	—	—	—	—
Commercial real estate lending	5	—	2	12	—	—	—
Total commercial	(20)	—	(35)	(20)	(4)	1	(2)
Residential mortgage	(1)	1	—	(1)	—	(1)	—
Auto finance	(26)	(4)	(27)	(25)	(26)	(24)	(7)
Home equity	14	15	8	12	22	8	(7)
Other consumer	(145)	(74)	(148)	(163)	(125)	(95)	(89)
Total consumer	(7)	(1)	(7)	(8)	(6)	(6)	(4)
Total net (charge offs) recoveries	(15)	—	(25)	(15)	(5)	(2)	(3)

(a) Annualized ratio of net charge offs to average loans by loan type.

Notable Contributions to the Change in the Allowance for Credit Losses on Loans

- Total loans increased \$1.4 billion, or 5%, from December 31, 2022, and increased \$2.4 billion, or 9%, from September 30, 2022. The increase from September 30, 2022 was driven by growth across nearly all major loan portfolios resulting from the Corporation's strategic initiatives. See also Note 6 Loans of the notes to consolidated financial statements for additional information on loans.
- Potential problem loans increased \$119 million, or 45%, from December 31, 2022, and increased \$127 million, or 49%, from September 30, 2022. The increases from both December 31, 2022 and September 30, 2022 were primarily driven by increases in potential problem loans within commercial and industrial and CRE-investor lending. See Table 10 for additional information regarding potential problem loans.
- Total nonaccrual loans increased \$57 million, or 51%, from December 31, 2022, and increased \$52 million, or 45%, from September 30, 2022. The increases from both December 31, 2022 and September 30, 2022 were primarily due to increases in nonaccrual loans within commercial and industrial lending and residential mortgage lending, partially offset by decreases within CRE-investor lending. See Note 6 Loans of the notes to consolidated financial statements and Table 10 for additional disclosures on the changes in asset quality.
- YTD net charge offs increased \$33 million from September 30, 2022, primarily driven by an increase in net charge offs within commercial and industrial lending. See Table 11 and Table 12 for additional information on the activity in the ACLL.

Management believes the level of ACLL to be appropriate at September 30, 2023.

Deposits and Customer Funding

The following table summarizes the composition of our deposits and customer funding:

Table 13 Period End Deposit and Customer Funding Composition

	Sep 30, 2023		Jun 30, 2023		Mar 31, 2023		Dec 31, 2022		Sep 30, 2022	
(\$ in thousands)	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Noninterest-bearing demand	\$ 6,422,994	20 %	\$ 6,565,666	21 %	\$ 7,328,689	24 %	\$ 7,760,811	26 %	\$ 8,224,579	28 %
Savings	4,836,735	15 %	4,777,415	15 %	4,730,472	16 %	4,604,848	16 %	4,708,720	16 %
Interest-bearing demand	7,528,154	23 %	7,037,959	22 %	6,977,121	23 %	7,100,727	24 %	7,122,218	24 %
Money market	7,268,506	23 %	7,521,930	23 %	8,357,625	28 %	8,239,610	28 %	7,909,232	27 %
Brokered CDs	3,351,399	10 %	3,818,325	12 %	1,185,565	4 %	541,916	2 %	—	— %
Other time deposits	2,715,538	8 %	2,293,114	7 %	1,752,351	6 %	1,388,242	5 %	1,233,833	4 %
Total deposits	\$ 32,123,326	100 %	\$ 32,014,409	100 %	\$ 30,331,824	100 %	\$ 29,636,154	100 %	\$ 29,198,581	100 %
Other customer funding ^(a)	151,644		170,873		226,258		261,767		283,856	
Total deposits and other customer funding	\$ 32,274,971		\$ 32,185,282		\$ 30,558,081		\$ 29,897,921		\$ 29,482,437	
Network transaction deposits ^(b)	\$ 1,649,389		\$ 1,600,619		\$ 1,273,420		\$ 979,003		\$ 864,086	
Net deposits and other customer funding^(c)	27,274,183		26,766,338		28,099,096		28,377,001		28,618,351	
Time deposits of more than \$250,000	533,853		465,446		345,169		282,206		222,318	

(a) Includes repurchase agreements and commercial paper.

(b) Included above in interest-bearing demand and money market.

(c) Total deposits and other customer funding, excluding brokered CDs and network transaction deposits.

- Total deposits, which are the Corporation's largest source of funds, increased \$2.5 billion, or 8%, from December 31, 2022, and increased \$2.9 billion, or 10%, from September 30, 2022, primarily due to increases in brokered CDs, other time deposits, and network transaction deposits, partially offset by a decrease in noninterest-bearing demand deposit accounts.
- Estimated uninsured and uncollateralized deposits, excluding intercompany deposits, were 22.4% of total deposits at September 30, 2023, compared to 26.4% at December 31, 2022 and 29.1% at September 30, 2022.

Liquidity

The objective of liquidity risk management is to ensure that the Corporation has the ability to generate sufficient cash or cash equivalents in a timely and cost effective manner to satisfy the cash flow requirements of depositors and borrowers and to meet its other commitments as they become due. The Corporation's liquidity risk management process is designed to identify, measure, and manage the Corporation's funding and liquidity risk to meet its daily funding needs in the ordinary course of business, as well as to address expected and unexpected changes in its funding requirements. The Corporation engages in various activities to manage its liquidity risk, including diversifying its funding sources, stress testing, and holding readily-marketable assets which can be used as a source of liquidity, if needed.

The Corporation performs dynamic scenario analysis in accordance with industry best practices. Measures have been established to ensure the Corporation has sufficient high quality short-term liquidity to meet cash flow requirements under stressed scenarios. In addition, the Corporation also reviews static measures such as deposit funding as a percentage of total assets and liquid asset levels. Strong capital ratios, credit quality, and core earnings are also essential to maintaining cost effective access to wholesale funding markets. At September 30, 2023, the Corporation was in compliance with its internal liquidity objectives and had sufficient asset-based liquidity to meet its obligations even under a stressed scenario.

The Corporation maintains diverse and readily available liquidity sources, including:

- Lines of credit with the Federal Reserve Bank and FHLB, which require eligible loan and investment collateral to be pledged. Based on the amount of collateral pledged, the FHLB established a collateral value from which the Bank may draw advances, and issue letters of credit in favor of public fund depositors, against the collateral. As of September 30, 2023, the Bank had \$5.4 billion available for future funding. The Federal Reserve Bank also establishes a collateral value of assets to support borrowings from the discount window. As of September 30, 2023, the Bank had \$1.3 billion available for discount window borrowings.
- The BTFP, against which the Corporation can borrow with qualifying investment securities as collateral, valued at par as permitted by the terms of the program. As of September 30, 2023, the Bank had up to \$619 million available for borrowing under the BTFP.

- A \$200 million Parent Company commercial paper program, of which there was none outstanding as of September 30, 2023.
- Dividends and service fees from subsidiaries, as well as the proceeds from issuance of capital, which are also funding sources for the Parent Company.
- Acquisition related equity issuances by the Parent Company; the Corporation has filed a shelf registration statement with the SEC under which the Parent Company may, from time to time, offer shares of the Corporation's common stock in connection with acquisitions of businesses, assets, or securities of other companies.
- Other issuances by the Parent Company; the Corporation maintains on file with the SEC a universal shelf registration statement, under which the Parent Company may offer the following securities, either separately or in units: debt securities, preferred stock, depositary shares, common stock, and warrants.
- Bank issuances; the Bank may also issue institutional CDs, network transaction deposits, and brokered CDs.
- Global Bank Note Program issuances; the Bank has implemented a program pursuant to which it may from time to time offer up to \$2.0 billion aggregate principal amount of its unsecured senior and subordinated notes.

The following table presents secured and total available liquidity sources, estimated uninsured and uncollateralized deposits (excluding intercompany deposits), and coverage of estimated uninsured and uncollateralized deposits:

Table 14 Liquidity Sources and Uninsured Deposit Coverage Ratio

(\$ in thousands)	September 30, 2023		June 30, 2023		March 31, 2023	
Federal Reserve Bank balance	\$	314,287	\$	178,983	\$	504,169
Available FHLB Chicago capacity		5,377,628		5,148,360		3,453,813
Available Federal Reserve Bank discount window capacity		1,335,938		1,635,140		1,799,453
Available BTFP capacity		618,829		633,817		644,915
Funding available within one business day ^(a)		7,646,682		7,596,300		6,402,351
Available federal funds lines		2,518,000		2,623,000		2,773,000
Available brokered deposits capacity ^(b)		1,240,488		761,301		3,646,393
Unsecured debt capacity ^(c)		1,000,000		1,000,000		1,000,000
Total available liquidity	\$	12,405,170	\$	11,980,601	\$	13,821,744
Uninsured and uncollateralized deposits	\$	7,200,701	\$	6,674,744	\$	7,337,286
Coverage ratio of uninsured and uncollateralized deposits with secured funding		106 %		114 %		87 %
Coverage ratio of uninsured and uncollateralized deposits with total funding		172 %		179 %		188 %

(a) Estimated based on normal course of operations with indicated institution.

(b) Availability based on internal policy limitations. The Corporation includes outstanding deposits that have received a primary purpose exemption in the brokered deposit classification as they have similar funding characteristics and risk as brokered deposits.

(c) Availability based on internal policy limitations.

Based on contractual obligations and ongoing operations, the Corporation's sources of liquidity are sufficient to meet present and future liquidity needs. See Table 17 for information about the Corporation's contractual obligations and other commitments. See section Deposits and Customer Funding for information about uninsured deposits and concentrations.

Credit ratings impact the Corporation's ability to issue debt securities and the cost to borrow money. Adverse changes in credit ratings impact not only the ability to raise funds in the capital markets but also the cost of these funds. For additional information regarding risks related to adverse changes in our credit ratings, see Part II, Item 1A, Risk Factors.

For the nine months ended September 30, 2023, net cash provided by operating and financing activities was \$378 million and \$1.9 billion, respectively, while net cash used in investing activities was \$2.2 billion, for a net increase in cash and cash equivalents of \$91 million since year-end 2022. At September 30, 2023, assets of \$41.6 billion increased \$2.2 billion, or 6%, from year-end 2022, primarily due to loan growth and increases in AFS securities. On the funding side, deposits of \$32.1 billion increased \$2.5 billion, or 8%, from year-end 2022, FHLB advances decreased \$587 million, or 14%, while other long-term funding increased \$281 million, or 113%, the latter due to the issuance of subordinated debt.

For the nine months ended September 30, 2022, net cash provided by operating and financing activities was \$722 million and \$2.7 billion, respectively, while net cash used in investing activities was \$4.0 billion, for a net decrease in cash and cash equivalents of \$523 million since year-end 2021. At September 30, 2022, assets of \$38.0 billion increased \$2.9 billion, or 8%, from year-end 2021, primarily due to loan growth. On the funding side, deposits of \$29.2 billion increased \$732 million, or 3%, from year-end 2021 and FHLB advances increased \$2.2 billion, or 133%, to fund loan growth.

Quantitative and Qualitative Disclosures about Market Risk

Market risk and interest rate risk are managed centrally. Market risk is the potential for loss arising from adverse changes in the fair value of fixed-income securities, equity securities, other earning assets, and derivative financial instruments as a result of changes in interest rates or other factors. Interest rate risk is the potential for reduced net interest income resulting from adverse changes in the level of interest rates. As a financial institution that engages in transactions involving an array of financial products, the Corporation is exposed to both market risk and interest rate risk. In addition to market risk, interest rate risk is measured and managed through a number of methods. The Corporation uses financial modeling simulation techniques that measure the sensitivity of future earnings due to changing rate environments to measure interest rate risk.

Policies established by the Corporation's ALCO and approved by the Board of Directors are intended to limit these risks. The Board has delegated day-to-day responsibility for managing market and interest rate risk to ALCO. The primary objectives of market risk management are to minimize any adverse effect that changes in market risk factors may have on net interest income and to offset the risk of price changes for certain assets recorded at fair value.

Interest Rate Risk

The primary goal of interest rate risk management is to control exposure to interest rate risk within policy limits approved by the Board of Directors. These limits and guidelines reflect the Corporation's risk appetite for interest rate risk over both short-term and long-term horizons.

The major sources of the Corporation's non-trading interest rate risk are timing differences in the maturity and re-pricing characteristics of assets and liabilities, changes in the shape of the yield curve, and the potential exercise of explicit or embedded options. We measure these risks and their impact by identifying and quantifying exposures through the use of sophisticated simulation and valuation models which are employed by management to understand interest rate sensitive EAR and MVE at risk. The Corporation's interest rate risk profile is such that, generally, a higher yield curve adds to income while a lower yield curve has a negative impact on earnings. The Corporation's EAR profile is asset sensitive at September 30, 2023.

For further discussion of the Corporation's interest rate risk and corresponding key assumptions, see the Interest Rate Risk section of Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Corporation's 2022 Annual Report on Form 10-K.

The sensitivity analysis included below is measured as a percentage change in EAR due to gradual moves in benchmark interest rates from a baseline scenario over 12 months. We evaluate the sensitivity using: 1) a dynamic forecast incorporating expected growth in the balance sheet, and 2) a static forecast where the current balance sheet is held constant.

While a gradual shift in interest rates was used in this analysis to provide an estimate of exposure under a probable scenario, an instantaneous shift in interest rates would have a more significant impact. No EAR breaches occurred during the first nine months of 2023.

Table 15 Estimated % Change in Rate Sensitive Earnings at Risk Over 12 Months

	Sep 30, 2023		Dec 31, 2022	
	Dynamic Forecast	Static Forecast	Dynamic Forecast	Static Forecast
Gradual Rate Change				
100 bp increase in interest rates	2.0 %	2.2 %	3.9 %	3.4 %
200 bp increase in interest rates	4.0 %	4.4 %	7.8 %	6.8 %
100 bp decrease in interest rates	(0.6) %	(0.9) %	(3.4) %	(2.9) %
200 bp decrease in interest rates	(0.8) %	(1.3) %	(6.7) %	(5.7) %

At September 30, 2023, the MVE profile indicates a decrease in net balance sheet value due to instantaneous upward changes in rates and an increase in net balance sheet value due to instantaneous downward changes in rates.

Table 16 Market Value of Equity Sensitivity

	Sep 30, 2023	Dec 31, 2022
Instantaneous Rate Change		
100 bp increase in interest rates	(9.1)%	(4.2)%
200 bp increase in interest rates	(18.0)%	(8.2)%
100 bp decrease in interest rates	9.2 %	4.3 %
200 bp decrease in interest rates	17.8 %	8.0 %

Since MVE measures the discounted present value of cash flows over the estimated lives of instruments, the change in MVE does not directly correlate to the degree that earnings would be impacted over a shorter time horizon (i.e., the current year). Further, MVE does not take into account factors such as future balance sheet growth, changes in product mix, changes in yield curve relationships, and changes in product spreads that could mitigate the adverse impact of changes in interest rates. The MVE measure in the 200 bp increase in interest rates scenario is outside of the policy limit, which has been reported to the Corporation's Board.

The above EAR and MVE measures do not include all actions that management may undertake to manage this risk in response to anticipated changes in interest rates.

Contractual Obligations, Commitments, Off-Balance Sheet Arrangements, and Contingent Liabilities

The following table summarizes significant contractual obligations and other commitments at September 30, 2023, at those amounts contractually due to the recipient, including any unamortized premiums or discounts, hedge basis adjustments, or other similar carrying value adjustments.

Table 17 Contractual Obligations and Other Commitments

(\$ in thousands)	Note Reference	One Year or Less	One to Three Years	Three to Five Years	Over Five Years	Total
Time deposits		\$ 5,816,730	\$ 228,851	\$ 21,350	\$ 5	\$ 6,066,937
Short-term funding	8	451,644	—	—	—	451,644
FHLB advances	8	2,545,633	990,845	195,009	1,554	3,733,041
Other long-term funding	8	88	246,660	138	282,574	529,459
Operating leases	16	5,614	9,230	7,117	4,099	26,059
Total		\$ 8,819,709	\$ 1,475,586	\$ 223,613	\$ 288,232	\$ 10,807,141

The Corporation also has obligations under its derivatives, lending-related commitments, and retirement plans as described in Note 9 Derivative and Hedging Activities, Note 11 Commitments, Off-Balance Sheet Arrangements, Legal Proceedings, and Regulatory Matters, and Note 13 Retirement Plans of the notes to consolidated financial statements, respectively. Further discussion of the nature of each obligation is included in the referenced note to the consolidated financial statements.

Capital

Management actively reviews capital strategies for the Corporation and each of its subsidiaries in light of perceived business risks, future growth opportunities, industry standards, and compliance with regulatory requirements. The assessment of overall capital adequacy depends on a variety of factors, including asset quality, liquidity, stability of earnings, changing competitive forces, economic conditions in markets served, and strength of management. At September 30, 2023, the capital ratios of the Corporation and its banking subsidiaries were in excess of regulatory minimum requirements. The Corporation's capital ratios are summarized in the following table.

Compliance with regulatory minimum capital requirements is a tool used in assessing the Corporation's capital adequacy, but not determinative of how the Corporation would fare under extreme stress. Factors that may affect the adequacy of the Corporation's capital include the inherent limitations of fair value estimates and the assumptions thereof, the inherent limitations of the regulatory risk-weights assigned to various asset types, the inherent limitations of accounting classifications of certain investments and the effect on their measurement, external macroeconomic conditions and their effects on capital and the Corporation's ability to raise capital or refinance capital commitments, and the extent of steps taken by state or federal government authorities in periods of extreme stress.

For additional information regarding the potential for additional regulation and supervision, see Part II, Item 1A, Risk Factors in the Corporation's quarterly report on Form 10-Q for the quarter ended March 31, 2023.

Table 18 Capital Ratios

(\$ in thousands)	YTD		Quarter Ended				
	Sep 30, 2023	Sep 30, 2022	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Risk-based Capital^(a)							
CET1			\$ 3,197,445	\$ 3,143,131	\$ 3,085,618	\$ 3,035,578	\$ 2,955,710
Tier 1 capital			3,391,557	3,337,243	3,279,730	3,229,690	3,149,822
Total capital			4,103,998	4,051,096	3,990,606	3,680,227	3,582,099
Total risk-weighted assets			33,497,484	33,146,137	32,648,115	32,472,008	31,405,843
Modified CECL transitional amount			44,851	44,851	44,851	67,276	67,276
CET1 capital ratio			9.55 %	9.48 %	9.45 %	9.35 %	9.41 %
Tier 1 capital ratio			10.12 %	10.07 %	10.05 %	9.95 %	10.03 %
Total capital ratio			12.25 %	12.22 %	12.22 %	11.33 %	11.41 %
Tier 1 leverage ratio			8.42 %	8.40 %	8.46 %	8.59 %	8.66 %
Selected Equity and Performance Ratios							
Total stockholders' equity / total assets			9.91 %	10.00 %	10.14 %	10.19 %	10.39 %
Dividend payout ratio ^(b)	35.80 %	36.14 %	39.62 %	37.50 %	31.34 %	30.00 %	32.26 %
Return on average assets	0.91 %	0.95 %	0.80 %	0.86 %	1.06 %	1.12 %	1.02 %
Annualized noninterest expense / average assets	1.90 %	2.04 %	1.90 %	1.89 %	1.92 %	2.03 %	2.08 %

(a) The Federal Reserve establishes regulatory capital requirements, including well-capitalized standards for the Corporation. The Corporation follows Basel III, subject to certain transition provisions. These regulatory capital measurements are used by management, regulators, investors, and analysts to assess, monitor, and compare the quality and composition of the Corporation's capital with the capital of other financial services companies.

(b) Ratio is based upon basic earnings per common share.

See Part II, Item 2, Unregistered Sales of Equity Securities and Use of Proceeds, for information on the shares repurchased during the third quarter of 2023.

Non-GAAP Measures

Table 19 Non-GAAP Measures

(\$ in thousands)	YTD		Quarter Ended				
	Sep 30, 2023	Sep 30, 2022	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022	Sep 30, 2022
Selected equity and performance ratios^{(a)(b)(c)}							
Tangible common equity / tangible assets			6.88 %	6.94 %	7.03 %	6.97 %	7.06 %
Return on average equity	8.91 %	8.67 %	7.99 %	8.47 %	10.32 %	10.81 %	9.59 %
Return on average tangible common equity	13.07 %	12.96 %	11.67 %	12.38 %	15.26 %	16.15 %	14.32 %
Return on average CET1	11.41 %	11.60 %	10.08 %	10.88 %	13.38 %	14.04 %	12.69 %
Return on average tangible assets	0.95 %	1.00 %	0.84 %	0.90 %	1.11 %	1.18 %	1.08 %
Average stockholders' equity / average assets	10.16 %	11.00 %	10.06 %	10.18 %	10.26 %	10.40 %	10.69 %
Tangible common equity reconciliation^(a)							
Common equity			\$ 3,933,531	\$ 3,928,762	\$ 3,931,551	\$ 3,821,378	\$ 3,759,840
Goodwill and other intangible assets, net			(1,147,666)	(1,149,869)	(1,152,072)	(1,154,274)	(1,156,477)
Tangible common equity			\$ 2,785,865	\$ 2,778,893	\$ 2,779,480	\$ 2,667,104	\$ 2,603,363
Tangible assets reconciliation^(a)							
Total assets			\$ 41,637,381	\$ 41,219,473	\$ 40,702,519	\$ 39,405,727	\$ 38,049,607
Goodwill and other intangible assets, net			(1,147,666)	(1,149,869)	(1,152,072)	(1,154,274)	(1,156,477)
Tangible assets			\$ 40,489,715	\$ 40,069,604	\$ 39,550,448	\$ 38,251,453	\$ 36,893,130
Average tangible common equity and average CET1 reconciliation^(a)							
Common equity	\$ 3,913,850	\$ 3,776,296	\$ 3,937,940	\$ 3,934,949	\$ 3,867,890	\$ 3,797,568	\$ 3,791,396
Goodwill and other intangible assets, net	(1,151,039)	(1,159,982)	(1,148,951)	(1,151,039)	(1,153,173)	(1,155,408)	(1,157,754)
Tangible common equity	2,762,811	2,616,314	2,788,989	2,783,910	2,714,716	2,642,160	2,633,642
Modified CECL transitional amount	44,851	67,276	44,851	44,851	44,851	67,276	67,276
Accumulated other comprehensive loss	270,989	147,258	302,043	251,624	258,827	254,178	189,935
Deferred tax assets, net	27,853	36,085	27,694	27,714	28,157	29,248	29,875
Average CET1	\$ 3,106,504	\$ 2,866,934	\$ 3,163,577	\$ 3,108,099	\$ 3,046,551	\$ 2,992,862	\$ 2,920,729
Average tangible assets reconciliation^(a)							
Total assets	\$ 40,419,166	\$ 36,075,770	\$ 41,075,980	\$ 40,558,311	\$ 39,607,065	\$ 38,385,436	\$ 37,271,779
Goodwill and other intangible assets, net	(1,151,039)	(1,159,982)	(1,148,951)	(1,151,039)	(1,153,173)	(1,155,408)	(1,157,754)
Tangible assets	\$ 39,268,127	\$ 34,915,788	\$ 39,927,029	\$ 39,407,273	\$ 38,453,892	\$ 37,230,028	\$ 36,114,025
Adjusted net income reconciliation^(b)							
Net income	\$ 273,762	\$ 257,360	\$ 83,248	\$ 87,154	\$ 103,360	\$ 108,762	\$ 96,275
Other intangible amortization, net of tax	4,956	4,956	1,652	1,652	1,652	1,652	1,652
Adjusted net income	\$ 278,718	\$ 262,316	\$ 84,900	\$ 88,806	\$ 105,012	\$ 110,414	\$ 97,927
Adjusted net income available to common equity reconciliation^(b)							
Net income available to common equity	\$ 265,137	\$ 248,735	\$ 80,373	\$ 84,279	\$ 100,485	\$ 105,887	\$ 93,400
Other intangible amortization, net of tax	4,956	4,956	1,652	1,652	1,652	1,652	1,652
Adjusted net income available to common equity	\$ 270,093	\$ 253,691	\$ 82,025	\$ 85,931	\$ 102,137	\$ 107,539	\$ 95,052
Core customer deposit reconciliation							
Total deposits			\$ 32,123,326	\$ 32,014,409	\$ 30,331,824	\$ 29,636,154	\$ 29,198,581
Network transaction deposits			(1,649,389)	(1,600,619)	(1,273,420)	(979,003)	(864,086)
Brokered CDs			(3,351,399)	(3,818,325)	(1,185,565)	(541,916)	—
Core customer deposits			\$ 27,122,539	\$ 26,595,465	\$ 27,872,839	\$ 28,115,235	\$ 28,334,495
Efficiency ratio reconciliation^(a)							
Federal Reserve efficiency ratio	58.17 %	62.32 %	60.06 %	58.49 %	56.07 %	55.47 %	60.32 %
Fully tax-equivalent adjustment	(0.84)%	(0.98)%	(0.89)%	(0.85)%	(0.79)%	(0.77)%	(0.87)%
Other intangible amortization	(0.67)%	(0.75)%	(0.69)%	(0.68)%	(0.66)%	(0.62)%	(0.67)%
Fully tax-equivalent efficiency ratio	56.67 %	60.60 %	58.50 %	56.96 %	54.64 %	54.08 %	58.79 %

(a) Tangible common equity and tangible assets exclude goodwill and other intangible assets, net.

- (b) Adjusted net income and adjusted net income available to common equity, which are used in the calculation of return on average tangible assets and return on average tangible common equity, respectively, add back other intangible amortization, net of tax.
- (c) These capital measurements are used by management, regulators, investors, and analysts to assess, monitor, and compare the quality and composition of our capital with the capital of other financial services companies.
- (d) The efficiency ratio as defined by the Federal Reserve guidance is noninterest expense (which includes the provision for unfunded commitments) divided by the sum of net interest income plus noninterest income, excluding investment securities gains (losses), net. The fully tax-equivalent efficiency ratio is noninterest expense (which includes the provision for unfunded commitments), excluding other intangible amortization, divided by the sum of fully tax-equivalent net interest income plus noninterest income, excluding investment securities gains (losses), net.

Sequential Quarter Results

The Corporation reported net income of \$83 million for the third quarter of 2023, compared to net income of \$87 million for the second quarter of 2023. Net income available to common equity was \$80 million for the third quarter of 2023, or \$0.53 for both basic and diluted earnings per common share. Comparatively, net income available to common equity for the second quarter of 2023 was \$84 million, or \$0.56 for both basic and diluted earnings per common share (see Table 1).

Fully tax-equivalent net interest income for the third quarter of 2023 was \$259 million, \$4 million, or 1%, lower than the second quarter of 2023. The net interest margin in the third quarter of 2023 was down 9 bp to 2.71%. The decreases in net interest income and net interest margin were due to increased interest-bearing liability costs. Average earning assets increased \$507 million, or 1%, to \$38.1 billion in the third quarter of 2023. Average loans increased \$446 million, or 2%, driven by growth across all loan categories. On the funding side, average total interest-bearing deposits increased \$1.1 billion, or 4%, due to increases in time deposits, interest-bearing demand, network transaction deposits, and savings, partially offset by a decrease in money market. Average FHLB advances decreased \$335 million, or 9%, due to deposit growth during the quarter (see Table 2).

The provision for credit losses was \$22 million for both the third quarter and second quarter of 2023 (see Table 11). See discussion under sections: Provision for Credit Losses, Nonperforming Assets, and Allowance for Credit Losses on Loans.

Noninterest income for the third quarter of 2023 was \$67 million, up \$1 million, or 2%, from the second quarter of 2023 (see Table 3).

Noninterest expense for the third quarter of 2023 was \$196 million, up \$6 million, or 3%, from the second quarter of 2023, driven primarily by increases in personnel and technology expenses (see Table 4).

For the third quarter of 2023, the Corporation recognized income tax expense of \$19 million, compared to income tax expense of \$24 million for the second quarter of 2023. See Income Taxes section for a detailed discussion on income taxes.

Comparable Quarter Results

The Corporation reported net income of \$83 million for the third quarter of 2023 compared to net income of \$96 million for the third quarter of 2022. Net income available to common equity was \$80 million for the third quarter of 2023, or \$0.53 for both basic and diluted earnings per common share. Comparatively, net income available to common equity for the third quarter of 2022 was \$93 million, or \$0.62 for both basic and diluted earnings per share (see Table 1).

Fully tax-equivalent net interest income for the third quarter of 2023 was \$259 million, \$10 million, or 4%, lower than the third quarter of 2022. The net interest margin between the comparable quarters was down 42 bp, to 2.71% in the third quarter of 2023. The decreases in net interest income and net interest margin were due to interest-bearing liability costs rising at a faster rate of growth than earning asset revenues as a result of deposit funding pressures. Average earning assets increased \$3.9 billion, or 11%, to \$38.1 billion in the third quarter of 2023, as average loans increased \$2.8 billion, or 10%, driven by growth across nearly all loan categories, and investments and other increased \$1.0 billion, or 15%. On the funding side, average interest-bearing deposits increased \$4.9 billion, or 24%, from the third quarter of 2022, due to increases in time deposits, network transaction deposits, interest-bearing demand, and savings, partially offset by a decrease in money market. Average short and long-term funding increased \$388 million, or 10% (see Table 2), primarily driven by the issuance of subordinated debt in the first quarter of 2023.

The provision for credit losses was \$22 million for the third quarter of 2023, compared to a provision of \$17 million for the third quarter of 2022 (see Table 11). See discussion under sections: Provision for Credit Losses, Nonperforming Assets, and Allowance for Credit Losses on Loans.

Noninterest income for the third quarter of 2023 was \$67 million, down \$4 million, or 6%, compared to the third quarter of 2022, primarily due to lower investment securities gains (losses), net; capital markets, net; and service charges and deposit account fees; partially offset by higher mortgage banking, net income. (see Table 3).

Noninterest expense was effectively flat at \$196 million for both the third quarters of 2023 and 2022 (see Table 4).

The Corporation recognized income tax expense of \$19 million for the third quarter of 2023, compared to an income tax expense of \$26 million for the third quarter of 2022. See section Income Taxes for a detailed discussion on income taxes.

Segment Review

As discussed in Note 14 Segment Reporting of the notes to consolidated financial statements, the Corporation's reportable segments have been determined based upon its internal profitability reporting system, which is organized by strategic business unit. Certain strategic business units have been combined for segment information reporting purposes where the nature of the products and services, the type of customer, and the distribution of those products and services are similar. The reportable segments are Corporate and Commercial Specialty; Community, Consumer and Business; and Risk Management and Shared Services.

Table 20 Selected Segment Financial Data

(\$ in thousands)	Three Months Ended Sep 30,			Nine Months Ended Sep 30,		
	2023	2022	% Change	2023	2022	% Change
Corporate and Commercial Specialty						
Total revenue	\$ 177,771	\$ 156,688	13%	\$ 520,908	\$ 438,862	19%
Provision for credit losses	14,066	11,904	18%	41,523	36,803	13%
Noninterest expense	63,207	58,934	7%	186,351	172,141	8%
Income tax expense	19,304	15,967	21%	54,138	42,248	28%
Net income	81,194	69,884	16%	238,897	187,670	27%
Average earning assets	17,623,106	16,123,187	9%	17,393,044	15,213,821	14%
Average loans	17,615,560	16,118,417	9%	17,379,628	15,210,316	14%
Average deposits	8,828,634	9,256,598	(5)%	9,101,585	9,139,639	—%
Average allocated capital (Average CET1) ^(a)	1,719,300	1,606,052	7%	1,712,290	1,514,786	13%
Return on average allocated capital ^(a)	18.74 %	17.26 %	148 bp	18.65 %	16.56 %	N/M
Community, Consumer, and Business						
Total revenue	\$ 220,714	\$ 163,338	35%	\$ 623,584	\$ 424,679	47%
Provision for credit losses	7,381	5,378	37%	21,467	14,958	44%
Noninterest expense	108,185	107,860	—%	328,960	311,423	6%
Income tax expense	22,187	10,521	111%	57,469	20,642	178%
Net income	82,961	39,579	110%	215,688	77,655	178%
Average earning assets	11,737,319	10,416,253	13%	11,496,144	9,796,760	17%
Average loans	11,737,319	10,416,253	13%	11,496,144	9,796,760	17%
Average deposits	18,224,072	18,636,223	(2)%	18,137,460	18,532,576	(2)%
Average allocated capital (Average CET1) ^(a)	750,457	640,571	17%	731,486	583,265	25%
Return on average allocated capital ^(a)	43.86 %	24.51 %	N/M	39.42 %	17.80 %	N/M
Risk Management and Shared Services						
Total revenue	\$ (77,663)	\$ 15,201	N/M	\$ (164,126)	\$ 25,505	N/M
Provision for credit losses	496	(283)	N/M	(975)	(38,756)	(97)%
Noninterest expense	24,814	28,997	(14)%	58,980	66,940	(12)%
Income tax expense (benefit)	(22,065)	(325)	N/M	(41,308)	5,286	N/M
Net (loss)	(80,907)	(13,189)	N/M	(180,823)	(7,965)	N/M
Average earning assets	8,715,183	7,659,334	14%	8,524,759	7,930,511	7%
Average loans	531,731	521,033	2%	517,609	520,961	(1)%
Average deposits	4,949,087	981,535	N/M	3,818,115	892,773	N/M
Average allocated capital (Average CET1) ^(a)	693,819	674,106	3%	662,728	768,883	(14)%
Return on average allocated capital ^(a)	(47.91)%	(9.45)%	N/M	(38.22)%	(2.88)%	N/M
Consolidated Total						
Total revenue	\$ 320,823	\$ 335,227	(4)%	\$ 980,366	\$ 889,045	10%
Return on average allocated capital ^(a)	10.08 %	12.69 %	N/M	11.41 %	11.60 %	-19 bp

N/M = Not meaningful

(a) The Federal Reserve establishes capital adequacy requirements for the Corporation, including CET1. For segment reporting purposes, the ROCET1 reflects return on average allocated CET1. The ROCET1 for the Risk Management and Shared Services segment and the Consolidated Total is inclusive of the annualized effect of the preferred stock dividends.

Notable Changes in Segment Financial Data

The Corporate and Commercial Specialty segment consists of lending and deposit solutions to larger businesses, developers, not-for-profits, municipalities, and financial institutions, and the support to deliver, fund, and manage such banking solutions. In addition, this segment provides a variety of investment, fiduciary, and retirement planning products and services to individuals and small to mid-sized businesses.

- Total revenue increased \$82 million from the nine months ended September 30, 2022 and increased \$21 million from the three months ended September 30, 2022, primarily attributable to higher loan volumes and interest rates driving net interest income higher.
- Noninterest expense increased \$14 million from the nine months ended September 30, 2022 and increased \$4 million from the three months ended September 30, 2022, primarily due to higher personnel costs and allocated corporate overhead.
- Average loans increased \$2.2 billion from the nine months ended September 30, 2022 and increased \$1.5 billion from the three months ended September 30, 2022, primarily driven by growth in commercial and business lending and CRE lending.
- Average deposits decreased \$428 million from the three months ended September 30, 2022, driven by decreases in noninterest-bearing demand deposits and money market deposits, partially offset by an increase in interest-bearing demand deposits.

The Community, Consumer, and Business segment consists of lending and deposit solutions to individuals and small to mid-sized businesses.

- Total revenue increased \$199 million from the nine months ended September 30, 2022 and increased \$57 million from the three months ended September 30, 2022, primarily attributable to receiving net FTP credit for providing funding for the Corporation and higher interest rates.
- Noninterest expense increased \$18 million from the nine months ended September 30, 2022, driven by higher allocated corporate overhead and increased technology expense, as the Corporation continues to invest in digital investments tied to its strategic initiatives.
- Average loans increased \$1.7 billion from the nine months ended September 30, 2022 and increased \$1.3 billion from the three months ended September 30, 2022, primarily driven by growth in auto finance lending and residential mortgage lending.
- Average deposits decreased \$395 million from the nine months ended September 30, 2022 and decreased \$412 million from the three months ended September 30, 2022, driven by decreases in noninterest bearing demand deposits and money market deposits, partially offset by an increase in time deposits.

The Risk Management and Shared Services segment includes key shared Corporate functions, Parent Company activity, intersegment eliminations, and residual revenues and expenses.

- Total revenue decreased \$190 million from the nine months ended September 30, 2022 and decreased \$93 million from the three months ended September 30, 2022, primarily driven by increased interest expense as a result of holding more brokered CDs and other short term funding.
- Provision for credit losses increased \$38 million from the nine months ended September 30, 2022, driven by loan growth, nominal credit movement, and general macroeconomic trends.
- Average earning assets increased \$594 million from the nine months ended September 30, 2022 and increased \$1.1 billion from the three months ended September 30, 2022, primarily driven by higher balances of AFS investment securities in the portfolio.
- Average deposits increased \$2.9 billion from the nine months ended September 30, 2022 and increased \$4.0 billion from the three months ended September 30, 2022, primarily driven by increases in brokered CDs and network deposits.

Critical Accounting Estimates

In preparing the consolidated financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the balance sheet and revenues and expenses for the period. Actual results could differ significantly from those estimates. The determination of the ACLL is particularly susceptible to significant change. A discussion of these estimates can be found in the Critical Accounting Estimates section in Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Corporation's 2022 Annual Report on Form 10-K. There have been no changes in the Corporation's application of critical accounting estimates since December 31, 2022.

Recent Developments

On October 24, 2023, the Corporation's Board of Directors declared a regular quarterly cash dividend of \$0.22 per common share, payable on December 15, 2023 to shareholders of record at the close of business on December 1, 2023. This is an increase of \$0.01 from the previous quarterly dividend of \$0.21 per common share. The Board of Directors also declared a regular quarterly cash dividend of \$0.3671875 per depositary share on Associated's 5.875% Series E Perpetual Preferred Stock, payable on December 15, 2023 to shareholders of record at the close of business on December 1, 2023. The Board of Directors also declared a regular quarterly cash dividend of \$0.3515625 per depositary share on Associated's 5.625% Series F Perpetual Preferred Stock, payable on December 15, 2023 to shareholders of record at the close of business on December 1, 2023.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

Information required by this item is set forth in Item 2 under the captions Quantitative and Qualitative Disclosures about Market Risk and Interest Rate Risk.

ITEM 4. Controls and Procedures

The Corporation maintains disclosure controls and procedures as required under Rule 13a-15 promulgated under the Securities Exchange Act of 1934, as amended, that are designed to ensure that information required to be disclosed in the Corporation's Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Corporation's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of September 30, 2023, the Corporation's management carried out an evaluation, under the supervision and with the participation of the Corporation's Chief Executive Officer and Chief Financial Officer, of the effectiveness of its disclosure controls and procedures. Based on the foregoing, its Chief Executive Officer and Chief Financial Officer concluded that the Corporation's disclosure controls and procedures were effective as of September 30, 2023.

No changes were made to the Corporation's internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act of 1934) during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. Legal Proceedings

The information required by this item is set forth in Part I, Item 1 under Note 11 Commitments, Off-Balance Sheet Arrangements, Legal Proceedings, and Regulatory Matters of the notes to consolidated financial statements.

ITEM 1A. Risk Factors

There have been no material changes in the Risk Factors described in the Corporation's 2022 Annual Report on Form 10-K other than as set out in the Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, in Item 1A of Part II.

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

During the third quarter of 2023, the Corporation repurchased approximately \$261,000 of common stock, all of which were repurchases related to tax withholding on equity compensation with no open market purchases during the quarter. The repurchase details are presented in the table below:

Common Stock Purchases

Period	Total Number of Shares Purchased ^(a)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs ^(b)
July 1, 2023 - July 31, 2023	6,763	\$ 18.17	—	—
August 1, 2023 - August 31, 2023	7,163	18.47	—	—
September 1, 2023 - September 30, 2023	356	17.66	—	—
Total	14,282	\$ 18.31	—	4,654,934

(a) During the third quarter of 2023, all common shares repurchased were for minimum tax withholding settlements on equity compensation. These purchases do not count against the maximum value of shares remaining available for purchase under the Board of Directors' authorization.

(b) At September 30, 2023, there remained \$80 million authorized to be repurchased under the Board of Directors' 2021 authorization. The maximum number of shares that may yet be purchased under this authorization is based on the closing share price on September 30, 2023.

Repurchases under Board authorized repurchase programs are subject to any necessary regulatory approvals and other limitations and may occur from time to time in open market purchases, block transactions, private transactions, accelerated share repurchases, or similar facilities.

ITEM 5. Other Information

During the three months ended September 30, 2023, no director or "officer" of the Corporation adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

ITEM 6. Exhibits

(a) Exhibits:

[Exhibit \(31.1\), Certification Under Section 302 of Sarbanes-Oxley by Andrew J. Harmening, Chief Executive Officer.](#)

[Exhibit \(31.2\), Certification Under Section 302 of Sarbanes-Oxley by Derek S. Meyer, Chief Financial Officer.](#)

[Exhibit \(32\), Certification by the Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of Sarbanes-Oxley.](#)

Exhibit (101), Interactive data files pursuant to Rule 405 of Regulation S-T: (i) Unaudited Consolidated Balance Sheets, (ii) Unaudited Consolidated Statements of Income, (iii) Unaudited Consolidated Statements of Comprehensive Income, (iv) Unaudited Consolidated Statements of Changes in Stockholders' Equity, (v) Unaudited Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements.

Exhibit (104), The cover page from the Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 has been formatted in Inline XBRL (Inline Extensible Business Reporting Language) and contained in Exhibits in 101.

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 hereunto duly authorized.

ASSOCIATED BANC-CORP

(Registrant)

Date: October 26, 2023

/s/ Andrew J. Harmening

Andrew J. Harmening

President and Chief Executive Officer

Date: October 26, 2023

/s/ Derek S. Meyer

Derek S. Meyer

Chief Financial Officer

Date: October 26, 2023

/s/ Tammy C. Stadler

Tammy C. Stadler

Chief Accounting Officer

Exhibit 31.1

**CERTIFICATION UNDER SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

CERTIFICATIONS

I, Andrew J. Harmening, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Associated Banc-Corp;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 26, 2023

/s/ Andrew J. Harmening

Andrew J. Harmening

President and Chief Executive Officer

Exhibit 31.2

**CERTIFICATION UNDER SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

CERTIFICATIONS

I, Derek S. Meyer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Associated Banc-Corp;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 26, 2023

/s/ Derek S. Meyer

Derek S. Meyer

Chief Financial Officer

Exhibit 32

**Certification by the Chief Executive Officer and Chief Financial
Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant
to Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of Associated Banc-Corp, a Wisconsin corporation (the "Company"), does hereby certify that:

1. The accompanying Quarterly Report of the Company on Form 10-Q for the quarter ended September 30, 2023 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Andrew J. Harmening

Andrew J. Harmening

Chief Executive Officer

October 26, 2023

/s/ Derek S. Meyer

Derek S. Meyer

Chief Financial Officer

October 26, 2023