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 June 30, 2017

☐ 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	**39-1098068**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
433 Main Street Green Bay, Wisconsin	**54301**
(Address of principal executive offices)	(Zip Code)

(920) 491-7500

(Registrant's telephone number, including area code)

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

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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post such files).

Yes ☑ No ☐

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

Large accelerated filer ☑	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

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

Yes ☐ No ☑

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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. ☐

APPLICABLE ONLY TO CORPORATE ISSUERS:

The number of shares outstanding of registrant's common stock, par value $0.01 per share, at July 27, 2017, was 151,342,987.

ASSOCIATED BANC-CORP
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PART I - FINANCIAL INFORMATION

ITEM 1. Financial Statements:

ASSOCIATED BANC-CORP
Consolidated Balance Sheets

	June 30, 2017	December 31, 2016
	(Unaudited)	(Audited)
	(In Thousands, except share and per share data)	
ASSETS		
Cash and due from banks	$ 396,677	$ 446,558
Interest-bearing deposits in other financial institutions	126,232	149,175
Federal funds sold and securities purchased under agreements to resell	43,000	46,500
Investment securities held to maturity, at amortized cost	2,255,395	1,273,536
Investment securities available for sale, at fair value	3,687,470	4,680,226
Federal Home Loan Bank and Federal Reserve Bank stocks, at cost	181,180	140,001
Residential loans held for sale[(1)]	41,620	108,010
Commercial loans held for sale	4,772	12,474
Loans	20,783,069	20,054,716
Allowance for loan losses	(281,101)	(278,335)
Loans, net	20,501,968	19,776,381
Premises and equipment, net	328,404	330,315
Goodwill	972,006	971,951
Mortgage servicing rights, net	59,395	61,476
Other intangible assets	14,530	15,377
Trading assets	48,576	52,398
Other assets	1,107,800	1,074,937
Total assets	$ 29,769,025	$ 29,139,315
LIABILITIES AND STOCKHOLDERS' EQUITY		
Noninterest-bearing demand deposits	$ 5,038,162	$ 5,392,208
Interest-bearing deposits	16,580,018	16,496,240
Total deposits	21,618,180	21,888,448
Federal funds purchased and securities sold under agreements to repurchase	607,669	508,347
Other short-term funding	794,813	583,688
Long-term funding	3,262,120	2,761,795
Trading liabilities	47,143	51,103
Accrued expenses and other liabilities	247,598	254,622
Total liabilities	26,577,523	26,048,003
Stockholders' equity		
Preferred equity	159,929	159,929
Common equity:		
Common stock	1,630	1,630
Surplus	1,474,301	1,459,498
Retained earnings	1,747,632	1,695,764
Accumulated other comprehensive income (loss)	(53,470)	(54,679)
Treasury stock, at cost	(138,520)	(170,830)
Total common equity	3,031,573	2,931,383
Total stockholders' equity	3,191,502	3,091,312
Total liabilities and stockholders' equity	$ 29,769,025	$ 29,139,315
Preferred shares issued	165,000	165,000
Preferred shares authorized (par value $1.00 per share)	750,000	750,000
Common shares issued	163,030,209	163,030,209
Common shares authorized (par value $0.01 per share)	250,000,000	250,000,000
Treasury shares of common stock	9,181,834	10,909,362

(1) Effective January 1, 2017, residential loans originated for sale are accounted for under the fair value option. Prior periods have not been restated. For more information on this accounting policy change, please refer to Note 3 to the Notes to the Consolidated Financial Statements.

See accompanying notes to consolidated financial statements.

Item 1. Financial Statements Continued:

ASSOCIATED BANC-CORP
Consolidated Statements of Income (Unaudited)

	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
	(In Thousands, except per share data)			
INTEREST INCOME				
Interest and fees on loans	$ 184,246	$ 163,059	$ 357,895	$ 322,715
Interest and dividends on investment securities:				
Taxable	23,658	24,270	47,133	49,786
Tax-exempt	8,143	7,894	16,272	15,724
Other interest	1,553	1,318	3,089	2,385
Total interest income	217,600	196,541	424,389	390,610
INTEREST EXPENSE				
Interest on deposits	21,180	11,678	38,104	23,444
Interest on Federal funds purchased and securities sold under agreements to repurchase	824	378	1,339	674
Interest on other short-term funding	1,827	845	2,907	1,360
Interest on long-term funding	9,950	6,923	17,946	16,428
Total interest expense	33,781	19,824	60,296	41,906
NET INTEREST INCOME	183,819	176,717	364,093	348,704
Provision for credit losses	12,000	14,000	21,000	34,000
Net interest income after provision for credit losses	171,819	162,717	343,093	314,704
NONINTEREST INCOME				
Trust service fees	12,346	11,509	24,281	22,956
Service charges on deposit accounts	16,030	16,444	32,386	32,717
Card-based and other nondeposit fees	13,764	12,717	26,229	24,708
Insurance commissions	20,853	22,005	42,473	43,387
Brokerage and annuity commissions	4,346	4,098	8,679	7,892
Mortgage banking, net	5,027	4,067	9,606	8,271
Capital market fees, net	4,042	3,793	7,925	7,331
Bank owned life insurance income	3,899	2,973	6,514	7,743
Asset gains (losses), net	(466)	(343)	(700)	181
Investment securities gains, net	356	3,116	356	6,214
Other	2,213	1,789	4,492	3,960
Total noninterest income	82,410	82,168	162,241	165,360
NONINTEREST EXPENSE				
Personnel expense	104,683	102,129	209,102	203,527
Occupancy	12,832	13,215	28,051	27,017
Equipment	5,234	5,396	10,719	10,842
Technology	15,473	14,450	29,893	28,714
Business development and advertising	7,152	6,591	12,987	14,802
Other intangible amortization	496	539	1,009	1,043
Loan expense	2,974	3,442	5,594	6,663
Legal and professional fees	5,711	4,856	9,877	9,881
Foreclosure / OREO expense, net	1,182	1,330	2,687	3,207
FDIC expense	8,000	8,750	16,000	16,500
Other	12,579	13,662	24,088	26,135
Total noninterest expense	176,316	174,360	350,007	348,331
Income before income taxes	77,913	70,525	155,327	131,733
Income tax expense	19,930	21,434	41,074	40,108
Net income	57,983	49,091	114,253	91,625
Preferred stock dividends	2,339	2,169	4,669	4,367
Net income available to common equity	$ 55,644	$ 46,922	$ 109,584	$ 87,258
Earnings per common share:				
Basic	$ 0.36	$ 0.31	$ 0.72	$ 0.58
Diluted	$ 0.36	$ 0.31	$ 0.71	$ 0.58
Average common shares outstanding:				
Basic	151,573	148,511	151,196	148,556
Diluted	154,302	149,530	154,147	149,518

See accompanying notes to consolidated financial statements.

Item 1. Financial Statements Continued:

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	($ in Thousands)			
Net income	$ 57,983	$ 49,091	$ 114,253	$ 91,625
Other comprehensive income, net of tax:				
Investment securities available for sale:				
Net unrealized gains	15,218	22,321	18,370	82,743
Net unrealized loss on available for sale securities transferred to held to maturity securities	(9,474)	—	(14,738)	—
Amortization of net unrealized gains on available for sale securities transferred to held to maturity securities	(1,548)	(1,452)	(2,575)	(3,024)
Reclassification adjustment for net gains realized in net income [1]	—	(3,116)	—	(6,214)
Income tax expense	(1,601)	(6,773)	(406)	(28,048)
Other comprehensive income on investment securities available for sale	2,595	10,980	651	45,457
Defined benefit pension and postretirement obligations:				
Amortization of prior service cost	(37)	12	(75)	25
Amortization of actuarial loss	487	483	975	965
Income tax expense	(171)	(189)	(342)	(378)
Other comprehensive income on pension and postretirement obligations	279	306	558	612
Total other comprehensive income	2,874	11,286	1,209	46,069
Comprehensive income	$ 60,857	$ 60,377	$ 115,462	$ 137,694

(1) Includes only available for sale securities.

See accompanying notes to consolidated financial statements.

Item 1. Financial Statements Continued:

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

	Preferred Equity	Common Stock	Surplus	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total
	(In Thousands, except per share data)						
Balance, December 31, 2015	$ 121,379	$ 1,642	$ 1,458,522	$ 1,593,239	$ (32,616)	$ (204,920)	$ 2,937,246
Comprehensive income:							
Net income	—	—	—	91,625	—	—	91,625
Other comprehensive income	—	—	—	—	46,069	—	46,069
Comprehensive income							137,694
Common stock issued:							
Stock-based compensation plans, net	—	—	1,153	(17,478)	—	20,601	4,276
Purchase of common stock returned to authorized but unissued	—	(12)	(19,995)	—	—	—	(20,007)
Purchase of treasury stock	—	—	—	—	—	(4,018)	(4,018)
Cash dividends:							
Common stock, $0.22 per share	—	—	—	(33,034)	—	—	(33,034)
Preferred stock	—	—	—	(4,367)	—	—	(4,367)
Purchase of preferred stock	(1,178)	—	—	(70)	—	—	(1,248)
Stock-based compensation expense, net	—	—	13,210	—	—	—	13,210
Tax impact of stock-based compensation	—	—	395	—	—	—	395
Balance, June 30, 2016	$ 120,201	$ 1,630	$ 1,453,285	$ 1,629,915	$ 13,453	$ (188,337)	$ 3,030,147
Balance, December 31, 2016	$ 159,929	$ 1,630	$ 1,459,498	$ 1,695,764	$ (54,679)	$ (170,830)	$ 3,091,312
Comprehensive income:							
Net income	—	—	—	114,253	—	—	114,253
Other comprehensive income	—	—	—	—	1,209	—	1,209
Comprehensive income							115,462
Common stock issued:							
Stock-based compensation plans, net	—	—	1,102	(20,912)	—	40,755	20,945
Purchase of treasury stock	—	—	—	—	—	(8,445)	(8,445)
Cash dividends:							
Common stock, $0.24 per share	—	—	—	(36,804)	—	—	(36,804)
Preferred stock	—	—	—	(4,669)	—	—	(4,669)
Stock-based compensation expense, net	—	—	12,667	—	—	—	12,667
Other	—	—	1,034	—	—	—	1,034
Balance, June 30, 2017	$ 159,929	$ 1,630	$ 1,474,301	$ 1,747,632	$ (53,470)	$ (138,520)	$ 3,191,502

See accompanying notes to consolidated financial statements.

Item 1. Financial Statements Continued:

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

	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
	($ in Thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	$ 114,253	$ 91,625
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	21,000	34,000
Depreciation and amortization	23,241	22,914
Addition to valuation allowance on mortgage servicing rights, net	275	2,120
Amortization of mortgage servicing rights	5,084	5,896
Amortization of other intangible assets	1,009	1,043
Amortization and accretion on earning assets, funding, and other, net	17,889	22,045
Tax impact of stock based compensation	4,035	395
Gain on sales of investment securities, net	(356)	(6,214)
Asset (gains) losses, net	700	(181)
(Gain) loss on mortgage banking activities, net	4,287	(7,058)
Mortgage loans originated and acquired for sale	(220,284)	(517,838)
Proceeds from sales of mortgage loans held for sale	364,128	491,980
Increase in interest receivable	(757)	(4,875)
Increase (decrease) in interest payable	2,653	(4,739)
Net change in other assets and other liabilities	(38,650)	(25,836)
Net cash provided by operating activities	298,507	105,277
CASH FLOWS FROM INVESTING ACTIVITIES		
Net increase in loans	(819,198)	(1,281,291)
Purchases of:		
Available for sale securities	(417,397)	(495,453)
Held to maturity securities	(70,969)	(112,226)
Federal Home Loan Bank and Federal Reserve Bank stocks	(166,869)	(67,261)
Premises, equipment, and software, net of disposals	(19,289)	(81,461)
Other assets	(6,498)	(3,073)
Proceeds from:		
Sales of available for sale securities	—	359,484
Sales of held to maturity securities	16,059	—
Sale of Federal Home Loan Bank and Federal Reserve Bank stocks	125,690	20,000
Prepayments, calls, and maturities of available for sale investment securities	389,251	371,440
Prepayments, calls, and maturities of held to maturity investment securities	80,976	37,172
Sales, prepayments, calls, and maturities of other assets	6,353	13,362
Net cash paid in acquisition	(217)	(685)
Net cash used in investing activities	(882,108)	(1,239,992)
CASH FLOWS FROM FINANCING ACTIVITIES		
Net decrease in deposits	(270,268)	(714,815)
Net increase in short-term funding	310,447	1,077,141
Repayment of long-term funding	(12)	(430,018)
Proceeds from issuance of long-term funding	500,000	1,265,000
Proceeds from issuance of common stock for stock-based compensation plans	20,945	4,276
Purchase of preferred stock	—	(1,248)
Purchase of common stock returned to authorized but unissued	—	(20,007)
Purchase of treasury stock for tax withholding	(8,445)	(4,018)
Cash dividends on common stock	(36,804)	(33,034)
Cash dividends on preferred stock	(4,669)	(4,367)
Net cash provided (used) by financing activities	511,194	1,138,910
Net increase (decrease) in cash and cash equivalents	(72,407)	4,195
Cash and cash equivalents at beginning of period	642,233	473,685
Cash and cash equivalents at end of period	$ 569,826	$ 477,880
Supplemental disclosures of cash flow information:		
Cash paid for interest	$ 57,306	$ 46,316
Cash paid for income taxes	27,461	27,852
Loans and bank premises transferred to other real estate owned	3,267	4,704
Capitalized mortgage servicing rights	3,278	4,149
Loans transferred into held for sale from portfolio, net	62,264	130,694
Acquisition:		
Fair value of assets acquired, including cash and cash equivalents	—	522
Fair value ascribed to goodwill and intangible assets	217	4,119
Fair value of liabilities assumed	—	1,423

See accompanying notes to consolidated financial statements.

ASSOCIATED BANC-CORP
Notes to Consolidated Financial Statements

These interim consolidated financial statements have been prepared according to the rules and regulations of the Securities and Exchange Commission and, therefore, certain information and footnote disclosures normally presented in accordance with U.S. generally accepted accounting principles have been omitted or abbreviated. The information contained in the consolidated financial statements and footnotes in the Corporation's 2016 Annual Report on Form 10-K, should be referred to in connection with the reading of these unaudited interim 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 Associated Banc-Corp (individually referred to herein as the "Parent Company," and together with all of its subsidiaries and affiliates, collectively referred to herein as the "Corporation") 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 allowance for loan losses, goodwill impairment assessment, mortgage servicing rights valuation, and income taxes. Management has evaluated subsequent events for potential recognition or disclosure.

Note 2 Acquisitions

During the first quarter of 2017, the Corporation completed a small insurance acquisition to complement its existing insurance and benefits related products and services provided by Associated Benefits and Risk Consulting ("ABRC"). The Corporation recorded goodwill of $55,000 and other intangibles of $162,000 related to the insurance acquisition.

During the first quarter of 2016, the Corporation completed two small insurance acquisitions to complement its existing insurance and benefits related products and services provided by ABRC. The Corporation recorded goodwill of $3 million and other intangibles of $1 million related to these insurance acquisitions.

See Note 8 for additional information on goodwill and other intangible assets.

Note 3 Summary of Significant Accounting Policies

Accounting Policy Elections

Effective January 1, 2017, residential mortgage loans that are classified as held for sale are accounted using the fair value option method of accounting. The Corporation has elected the fair value option to mitigate accounting mismatches between held for sale loan valuations and corresponding derivative commitments. Prior to January 1, 2017, residential mortgage loans that were classified as held for sale were accounted for at the lower of cost or market method ("LOCOM") of accounting.

New Accounting Pronouncements Adopted

Standard	Description	Date of adoption	Effect on financial statements
ASU 2017-08 Receivables - Nonrefundable Fees and Other Costs (Subtopic 310-20), Premium Amortization on Purchased Callable Debt Securities	The amendments of the new standard require that certain purchased callable debt securities held at a premium be amortized to the earliest call date. The amendments do not require an accounting change for securities held at a discount, which continue to be amortized to maturity.	1st Quarter 2017	The Corporation early adopted with no material impact on results of operations, financial position, or liquidity.
ASU 2017-03 Accounting Changes and Error Corrections (Topic 250) and Investments - Equity Method and Joint Ventures (Topic 323)	The standard states that for ASUs which have not been adopted yet, the registrant needs to determine the potential effects (if material) of those ASUs on the financial statements when adopted and include the appropriate disclosures in the financial statements. If the impact of adoption is unknown or cannot be estimated, the registrant should include a statement noting this and consider adding qualitative disclosures to the financial statements to assist the reader in evaluating the impact of the ASUs, when adopted, on the financial statements.	1st Quarter 2017	No material impact on results of operations, financial position, or liquidity.
ASU 2016-17 Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control	The FASB issued an amendment to address how a reporting entity that is a single decision maker of a variable interest entity treats indirect interests in the entity held through related parties that are under common control with the reporting entity.	1st Quarter 2017	No material impact on results of operations, financial position, or liquidity.
ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting	The FASB issued an amendment involving several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Entities should apply the amendment related to the timing of when excess tax benefits are recognized, minimum statutory withholding requirements, forfeitures, and intrinsic value using a modified retrospective transition method by means of a cumulative-effect adjustment to equity as of the beginning of the period in which the guidance is adopted. Entities should apply the amendment related to the presentation of employee taxes paid on the statement of cash flows when an employer withholds shares to meet the minimum statutory withholding requirement retrospectively. The amendment requiring recognition of excess tax benefits and tax deficiencies in the income statement and the practical expedient for estimating expected term should be applied prospectively.	4th Quarter 2016	The Corporation early adopted the accounting standard and recognized a $1 million reduction in income taxes for the excess tax benefits on stock-based compensation. The remaining provisions of this accounting standard did not have a material impact.
ASU 2016-07 Investments - Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting	The FASB issued an amendment to eliminate the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an investor must adjust the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held. The amendments require that the equity method investor add the cost of acquiring the additional interest in the investee to the current basis of the investor's previously held interest and adopt the equity method of accounting as of the date the investment becomes qualified for equity method accounting. Therefore, upon qualifying for the equity method of accounting, no retroactive adjustment of the investment is required. The amendments require that an entity that has an available-for-sale equity security that becomes qualified for the equity method of accounting recognize through earnings the unrealized holding gain or loss in accumulated other comprehensive income at the date the investment becomes qualified for use of the equity method. Entities should apply the amendment prospectively to increases in the level of ownership interest or degree of influence that result in the adoption of the equity method.	1st Quarter 2017	No material impact on results of operations, financial position, or liquidity.

Note 4 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) and common stock warrants. Presented below are the calculations for basic and diluted earnings per common share.

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2017	2016	2017	2016
	(In thousands, except per share data)			
Net income	$ 57,983	$ 49,091	$ 114,253	$ 91,625
Preferred stock dividends	(2,339)	(2,169)	(4,669)	(4,367)
Net income available to common equity	$ 55,644	$ 46,922	$ 109,584	$ 87,258
Common shareholder dividends	(18,326)	(16,443)	(36,577)	(32,646)
Unvested share-based payment awards	(110)	(182)	(227)	(388)
Undistributed earnings	$ 37,208	$ 30,297	$ 72,780	$ 54,224
Undistributed earnings allocated to common shareholders	36,980	29,963	72,273	53,649
Undistributed earnings allocated to unvested share-based payment awards	228	334	507	575
Undistributed earnings	$ 37,208	$ 30,297	$ 72,780	$ 54,224
Basic				
Distributed earnings to common shareholders	$ 18,326	$ 16,443	$ 36,577	$ 32,646
Undistributed earnings allocated to common shareholders	36,980	29,963	72,273	53,649
Total common shareholders earnings, basic	$ 55,306	$ 46,406	$ 108,850	$ 86,295
Diluted				
Distributed earnings to common shareholders	$ 18,326	$ 16,443	$ 36,577	$ 32,646
Undistributed earnings allocated to common shareholders	36,980	29,963	72,273	53,649
Total common shareholders earnings, diluted	$ 55,306	$ 46,406	$ 108,850	$ 86,295
Weighted average common shares outstanding	151,573	148,511	151,196	148,556
Effect of dilutive common stock awards	1,958	1,019	2,155	962
Effect of dilutive common stock warrants	771	—	796	—
Diluted weighted average common shares outstanding	154,302	149,530	154,147	149,518
Basic earnings per common share	$ 0.36	$ 0.31	$ 0.72	$ 0.58
Diluted earnings per common share	$ 0.36	$ 0.31	$ 0.71	$ 0.58

Anti-dilutive common stock options of approximately 1 million and 4 million for the three months ended June 30, 2017 and 2016, respectively, and 900,000 and 4 million for the six months ended June 30, 2017 and 2016, respectively, were excluded from the earnings per common share calculation. Warrants to purchase approximately 4 million shares were outstanding for the three and six months ended June 30, 2016, but excluded from the calculation of diluted earnings per common shares as the effect would have been anti-dilutive.

Note 5 Stock-Based Compensation

The fair value of stock options granted is estimated on the date of grant using a Black-Scholes option pricing model, while the fair value of restricted stock awards is their fair market value on the date of grant. 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 retirement eligible colleagues, 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 in the consolidated statements of income.

Assumptions are used in estimating the fair value of stock options granted. The weighted average expected life of the stock option represents the period of time that stock options are expected to be outstanding and is estimated using historical data of stock option exercises and forfeitures. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The expected volatility is based on the implied volatility of the Corporation’s stock.

The following assumptions were used in estimating the fair value for options granted in the first six months of 2017 and full year 2016.

	2017	2016
Dividend yield	2.00%	2.50%
Risk-free interest rate	2.00%	2.00%
Weighted average expected volatility	25.00%	25.00%
Weighted average expected life	5.5 years	5.5 years
Weighted average per share fair value of options	$5.30	$3.36

A summary of the Corporation's stock option activity for the six months ended June 30, 2017 is presented below.

Stock Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (000s)
Outstanding at December 31, 2016	6,357,843	$ 17.67	6.10	$ 47,902
Granted	799,558	$ 25.61		
Exercised	(1,217,640)	16.27		
Forfeited or expired	(447,751)	33.58		
Outstanding at June 30, 2017	5,492,010	$ 18.10	6.80	$ 39,339
Options Exercisable at June 30, 2017	3,120,596	$ 16.53	5.47	$ 27,075

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 six months ended June 30, 2017, the intrinsic value of stock options exercised was approximately $11 million. For the six months ended June 30, 2016, the intrinsic value of the stock options exercised was $1 million. The total fair value of stock options vested was $4 million and $3 million, respectively, for the six months ended June 30, 2017 and June 30, 2016. The Corporation recognized compensation expense for the vesting of stock options of $2 million for both the six months ended June 30, 2017 and June 30, 2016. Included in compensation expense for 2017 was approximately $570,000 of expense for the accelerated vesting of stock options granted to retirement eligible colleagues. At June 30, 2017, the Corporation had approximately $7 million of unrecognized compensation expense related to stock options that is expected to be recognized over the remaining requisite service periods that extend predominantly through the first quarter 2021.

The following table summarizes information about the Corporation's restricted stock activity for the six months ended June 30, 2017.

Restricted Stock	Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2016	2,377,380	$ 17.40
Granted	737,080	25.58
Vested	(851,381)	17.88
Forfeited	(61,616)	18.41
Outstanding at June 30, 2017	2,201,463	$ 19.94

The Corporation amortizes the expense related to restricted stock awards as compensation expense over the vesting period specified in the grant. Performance-based restricted stock awards granted during 2016 and 2017 will vest ratably over a three year period, while service-based restricted stock awards granted during 2016 and 2017 will vest ratably over a four year period. Expense for restricted stock awards of approximately $11 million were recorded for both the six months ended June 30, 2017 and June 30, 2016. Included in compensation expense for 2017 was approximately $2 million of expense for the accelerated vesting of restricted stock awards granted to retirement eligible colleagues. The Corporation had $26 million of unrecognized compensation costs related to restricted stock awards at June 30, 2017, that is expected to be recognized over the remaining requisite service periods that extend predominantly through the first quarter 2021.

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 in the market, to be made available for issuance in connection with the Corporation's employee incentive plans and for other corporate purposes. The repurchase of shares 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 6 Investment Securities

Investment securities are generally classified as available for sale or held to maturity at the time of purchase. The majority of the Corporation's investment securities are mortgage-related securities issued by the Government National Mortgage Association ("GNMA") or government-sponsored enterprises ("GSE") such as the Federal National Mortgage Association ("FNMA") and the Federal Home Loan Mortgage Corporation ("FHLMC"). The amortized cost and fair values of securities available for sale and held to maturity were as follows.

June 30, 2017	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	($ in Thousands)			
Investment securities available for sale:				
U. S. Treasury securities	$ 1,004	$ —	$ (2)	$ 1,002
Residential mortgage-related securities:				
FNMA / FHLMC	534,058	13,873	(1,406)	546,525
GNMA	1,729,386	1,894	(17,102)	1,714,178
Private-label	1,102	—	(16)	1,086
GNMA commercial mortgage-related securities	1,443,501	74	(23,703)	1,419,872
Other securities (debt and equity)	4,718	116	(27)	4,807
Total investment securities available for sale	$ 3,713,769	$ 15,957	$ (42,256)	$ 3,687,470
Investment securities held to maturity:				
Obligations of state and political subdivisions (municipal securities)	$ 1,162,920	$ 13,766	$ (4,320)	$ 1,172,366
Residential mortgage-related securities:				
FNMA / FHLMC	43,575	430	(566)	43,439
GNMA	473,517	4,048	(3,214)	474,351
GNMA commercial mortgage-related securities	575,383	8,964	(11,181)	573,166
Total investment securities held to maturity	$ 2,255,395	$ 27,208	$ (19,281)	$ 2,263,322

December 31, 2016	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	($ in Thousands)			
Investment securities available for sale:				
U. S. Treasury securities	$ 1,000	$ —	$ —	$ 1,000
Residential mortgage-related securities:				
FNMA / FHLMC	625,234	17,298	(2,602)	639,930
GNMA	2,028,301	1,372	(25,198)	2,004,475
Private-label	1,134	1	(14)	1,121
GNMA commercial mortgage-related securities	2,064,508	356	(35,966)	2,028,898
Other securities (debt and equity)	4,718	105	(21)	4,802
Total investment securities available for sale	$ 4,724,895	$ 19,132	$ (63,801)	$ 4,680,226
Investment securities held to maturity:				
Municipal securities	$ 1,145,843	$ 3,868	$ (12,036)	$ 1,137,675
Residential mortgage-related securities:				
FNMA / FHLMC	37,697	439	(693)	37,443
GNMA	89,996	216	(656)	89,556
Total investment securities held to maturity	$ 1,273,536	$ 4,523	$ (13,385)	$ 1,264,674

The amortized cost and fair values of investment securities available for sale and held to maturity at June 30, 2017, are shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

	Available for Sale		Held to Maturity	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
	($ in Thousands)			
Due in one year or less	$ 1,500	$ 1,506	$ 41,085	$ 33,447
Due after one year through five years	4,204	4,175	239,986	246,760
Due after five years through ten years	—	—	261,149	265,255
Due after ten years	—	—	620,700	626,904
Total debt securities	5,704	5,681	1,162,920	1,172,366
Residential mortgage-related securities:				
FNMA / FHLMC	534,058	546,525	43,575	43,439
GNMA	1,729,386	1,714,178	473,517	474,351
Private-label	1,102	1,086	—	—
GNMA commercial mortgage-related securities	1,443,501	1,419,872	575,383	573,166
Equity securities	18	128	—	—
Total investment securities	$ 3,713,769	$ 3,687,470	$ 2,255,395	$ 2,263,322
Ratio of Fair Value to Amortized Cost		99.3%		100.4%

During the first six months of 2017, the Corporation reclassified approximately $1 billion of GNMA residential mortgage-related securities and GNMA commercial mortgage-related securities from available for sale to held to maturity. The GNMA residential and commercial mortgage-related securities are principally securities with a CRA component in the underlying collateral. The reclassification of these investment securities was accounted for at fair value. Management elected to transfer these investment securities as the Corporation has the positive intent and ability to hold these investment securities to maturity.

The proceeds from the sale of investment securities for the first six months ended June 30, 2017 and 2016 are shown below.

	Six Months Ended June 30,	
	2017	2016
	($ in Thousands)	
Gross gains on available for sale securities	$ —	$ 6,403
Gross gains on held to maturity securities	361	—
Total gains	361	6,403
Gross losses on available for sale securities	—	(189)
Gross losses on held to maturity securities	$ (5)	$ —
Total losses	$ (5)	$ (189)
Investment securities gains, net	$ 356	$ 6,214
Proceeds from sales of investment securities	$ 16,059	$ 359,484

During the first six months of 2017, the Corporation sold approximately $16 million of municipal securities classified as held to maturity due to credit concerns stemming from budgetary pressure and continued credit rating deterioration concerns in the State of Illinois. These sales resulted in a net gain of approximately $356,000.

Investment securities with a carrying value of approximately $2 billion and $1.8 billion at June 30, 2017, and December 31, 2016, respectively, were pledged to secure certain deposits or for other purposes as required or permitted by law.

The following represents gross unrealized losses and the related fair value of investment securities available for sale and held to maturity, aggregated by investment category and length of time individual securities have been in a continuous unrealized loss position, at June 30, 2017.

June 30, 2017	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
	($ in Thousands)							
Investment securities available for sale:								
U.S. Treasury securities	1	$ (2)	$ 1,002	—	$ —	$ —	$ (2)	$ 1,002
Residential mortgage-related securities:								
FNMA / FHLMC	18	(1,406)	223,326	—	—	—	(1,406)	223,326
GNMA	42	(16,220)	1,186,468	1	(882)	35,695	(17,102)	1,222,163
Private-label	—	—	—	1	(16)	1,084	(16)	1,084
GNMA commercial mortgage-related securities	54	(8,627)	850,180	31	(15,076)	496,698	(23,703)	1,346,878
Other securities (debt and equity)	3	(27)	2,173	—	—	—	(27)	2,173
Total	118	$ (26,282)	$2,263,149	33	$ (15,974)	$ 533,477	$ (42,256)	$2,796,626
Investment securities held to maturity:								
Municipal securities	301	$ (4,186)	$ 222,642	9	$ (134)	$ 4,814	$ (4,320)	$ 227,456
Residential mortgage-related securities:								
FNMA / FHLMC	18	(377)	25,507	1	(189)	5,657	(566)	31,164
GNMA	45	(3,192)	358,551	1	(22)	1,246	(3,214)	359,797
GNMA commercial mortgage-related securities	14	(3,683)	301,594	10	(7,498)	241,385	(11,181)	542,979
Total	378	$ (11,438)	$ 908,294	21	$ (7,843)	$ 253,102	$ (19,281)	$1,161,396

For comparative purposes, the following represents gross unrealized losses and the related fair value of investment securities available for sale and held to maturity, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, at December 31, 2016.

December 31, 2016	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
	($ in Thousands)							
Investment securities available for sale:								
Residential mortgage-related securities:								
FNMA / FHLMC	14	$ (2,602)	$ 244,252	—	$ —	$ —	$ (2,602)	$ 244,252
GNMA	54	(25,198)	1,723,523	—	—	—	(25,198)	1,723,523
Private-label	—	—	—	1	(14)	1,119	(14)	1,119
GNMA commercial mortgage-related securities	74	(16,445)	1,427,889	21	(19,521)	429,258	(35,966)	1,857,147
Other securities (debt and equity)	3	(21)	1,479	—	—	—	(21)	1,479
Total	145	$ (44,266)	$3,397,143	22	$ (19,535)	$ 430,377	$ (63,801)	$3,827,520
Investment securities held to maturity:								
Municipal securities	700	$ (11,937)	$ 414,186	4	$ (99)	$ 1,752	$ (12,036)	$ 415,938
Residential mortgage-related securities:								
FNMA / FHLMC	14	(441)	17,477	1	(252)	6,031	(693)	23,508
GNMA	39	(656)	64,633	—	—	—	(656)	64,633
Total	753	$ (13,034)	$ 496,296	5	$ (351)	$ 7,783	$ (13,385)	$ 504,079

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

Based on the Corporation's evaluation, management does not believe any unrealized loss at June 30, 2017, represents an other-than-temporary impairment as these unrealized losses are primarily attributable to changes in interest rates and the current market conditions, and not credit deterioration. The unrealized losses reported for municipal securities relate to various state and local political subdivisions and school districts. The Corporation currently does not intend to sell nor does it believe that it will be required to sell the securities contained in the above unrealized losses table before recovery of their amortized cost basis.

Federal Home Loan Bank ("FHLB") and Federal Reserve Bank stocks: The Corporation is required to maintain Federal Reserve stock and FHLB stock as a member 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. At June 30, 2017, and December 31, 2016, the Corporation had FHLB stock of $106 million and $65 million, respectively. The Corporation had Federal Reserve Bank stock of $76 million and $75 million at June 30, 2017 and December 31, 2016, respectively.

Note 7 Loans

The period end loan composition was as follows.

	June 30, 2017	December 31, 2016
	($ in Thousands)	
Commercial and industrial	$ 6,571,000	$ 6,489,014
Commercial real estate — owner occupied	845,336	897,724
Commercial and business lending	7,416,336	7,386,738
Commercial real estate — investor	3,329,585	3,574,732
Real estate construction	1,651,805	1,432,497
Commercial real estate lending	4,981,390	5,007,229
Total commercial	12,397,726	12,393,967
Residential mortgage	7,115,457	6,332,327
Home equity	897,111	934,443
Other consumer	372,775	393,979
Total consumer	8,385,343	7,660,749
Total loans	$ 20,783,069	$ 20,054,716

The following table presents commercial and consumer loans by credit quality indicator at June 30, 2017.

	Pass	Special Mention	Potential Problem	Nonaccrual	Total
			($ in Thousands)		
Commercial and industrial	$ 6,183,037	$ 103,881	$ 142,607	$ 141,475	$ 6,571,000
Commercial real estate - owner occupied	754,446	14,366	60,724	15,800	845,336
Commercial and business lending	6,937,483	118,247	203,331	157,275	7,416,336
Commercial real estate - investor	3,260,187	13,623	48,569	7,206	3,329,585
Real estate construction	1,621,198	19,989	8,901	1,717	1,651,805
Commercial real estate lending	4,881,385	33,612	57,470	8,923	4,981,390
Total commercial	11,818,868	151,859	260,801	166,198	12,397,726
Residential mortgage	7,060,673	1,233	1,576	51,975	7,115,457
Home equity	882,253	1,168	208	13,482	897,111
Other consumer	372,018	524	—	233	372,775
Total consumer	8,314,944	2,925	1,784	65,690	8,385,343
Total	$ 20,133,812	$ 154,784	$ 262,585	$ 231,888	$ 20,783,069

The following table presents commercial and consumer loans by credit quality indicator at December 31, 2016.

	Pass	Special Mention	Potential Problem	Nonaccrual	Total
			($ in Thousands)		
Commercial and industrial	$ 5,937,119	$ 141,328	$ 227,196	$ 183,371	$ 6,489,014
Commercial real estate - owner occupied	805,871	17,785	64,524	9,544	897,724
Commercial and business lending	6,742,990	159,113	291,720	192,915	7,386,738
Commercial real estate - investor	3,491,217	14,236	51,228	18,051	3,574,732
Real estate construction	1,429,083	105	2,465	844	1,432,497
Commercial real estate lending	4,920,300	14,341	53,693	18,895	5,007,229
Total commercial	11,663,290	173,454	345,413	211,810	12,393,967
Residential mortgage	6,275,162	1,314	5,615	50,236	6,332,327
Home equity	919,740	1,588	114	13,001	934,443
Other consumer	393,161	562	—	256	393,979
Total consumer	7,588,063	3,464	5,729	63,493	7,660,749
Total	$ 19,251,353	$ 176,918	$ 351,142	$ 275,303	$ 20,054,716

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 allowance for loan losses, allowance for unfunded commitments, nonaccrual, and charge off policies.

For commercial loans, management has determined the pass credit quality indicator to include credits that exhibit 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 that are 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 deserve management's attention. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects for the credit. 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, that may jeopardize liquidation of the debt and are characterized by the distinct possibility that the Corporation will sustain some loss if the deficiencies are not corrected. Lastly, management considers a loan to be impaired when it is probable that the Corporation will be unable to collect all amounts due according to the original contractual terms of the note agreement, including both principal and interest. Management has determined that commercial and consumer loan relationships that have nonaccrual status or have had their terms restructured in a troubled debt restructuring meet this impaired loan definition. Commercial loans classified as special mention, potential problem, and nonaccrual are reviewed at a minimum on a quarterly basis, while pass and performing rated credits are 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 June 30, 2017.

	Current	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due (a)	Nonaccrual (b)	Total
			($ in Thousands)			
Commercial and industrial	$ 6,428,022	$ 1,042	$ 213	$ 248	$ 141,475	$ 6,571,000
Commercial real estate - owner occupied	828,252	1,136	148	—	15,800	845,336
Commercial and business lending	7,256,274	2,178	361	248	157,275	7,416,336
Commercial real estate - investor	3,321,480	899	—	—	7,206	3,329,585
Real estate construction	1,649,953	40	95	—	1,717	1,651,805
Commercial real estate lending	4,971,433	939	95	—	8,923	4,981,390
Total commercial	12,227,707	3,117	456	248	166,198	12,397,726
Residential mortgage	7,054,317	8,163	1,002	—	51,975	7,115,457
Home equity	877,705	4,755	1,169	—	13,482	897,111
Other consumer	369,509	1,113	633	1,287	233	372,775
Total consumer	8,301,531	14,031	2,804	1,287	65,690	8,385,343
Total	$ 20,529,238	$ 17,148	$ 3,260	$ 1,535	$ 231,888	$ 20,783,069

(a) The recorded investment in loans past due 90 days or more and still accruing totaled $2 million at June 30, 2017 (the same as the reported balances for the accruing loans noted above).

(b) Of the total nonaccrual loans, $180 million or 78% were current with respect to payment at June 30, 2017.

The following table presents loans by past due status at December 31, 2016.

	Current	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due [(a)]	Nonaccrual [(b)]	Total
			($ in Thousands)			
Commercial and industrial	$ 6,303,994	$ 965	$ 448	$ 236	$ 183,371	$ 6,489,014
Commercial real estate - owner occupied	886,796	968	416	—	9,544	897,724
Commercial and business lending	7,190,790	1,933	864	236	192,915	7,386,738
Commercial real estate - investor	3,555,750	431	500	—	18,051	3,574,732
Real estate construction	1,431,284	264	105	—	844	1,432,497
Commercial real estate lending	4,987,034	695	605	—	18,895	5,007,229
Total commercial	12,177,824	2,628	1,469	236	211,810	12,393,967
Residential mortgage	6,273,949	7,298	844	—	50,236	6,332,327
Home equity	915,593	4,265	1,584	—	13,001	934,443
Other consumer	389,157	2,471	718	1,377	256	393,979
Total consumer	7,578,699	14,034	3,146	1,377	63,493	7,660,749
Total	$ 19,756,523	$ 16,662	$ 4,615	$ 1,613	$ 275,303	$ 20,054,716

(a) The recorded investment in loans past due 90 days or more and still accruing totaled $2 million at December 31, 2016 (the same as the reported balances for the accruing loans noted above).

(b) Of the total nonaccrual loans, $224 million or 81% were current with respect to payment at December 31, 2016.

The following table presents impaired loans at June 30, 2017.

	Recorded Investment	Unpaid Principal Balance	Related Allowance	Average Recorded Investment	Interest Income Recognized
			($ in Thousands)		
Loans with a related allowance					
Commercial and industrial	$ 89,563	$ 94,231	$ 17,882	$ 95,205	$ 635
Commercial real estate — owner occupied	7,249	9,154	526	6,086	93
Commercial and business lending	96,812	103,385	18,408	101,291	728
Commercial real estate — investor	15,832	16,111	330	15,782	767
Real estate construction	1,819	2,188	707	1,868	54
Commercial real estate lending	17,651	18,299	1,037	17,650	821
Total commercial	114,463	121,684	19,445	118,941	1,549
Residential mortgage	60,209	65,163	10,649	60,831	1,112
Home equity	20,927	22,907	9,665	21,232	484
Other consumer	1,315	1,342	229	1,335	12
Total consumer	82,451	89,412	20,543	83,398	1,608
Total loans[(a)]	$ 196,914	$ 211,096	$ 39,988	$ 202,339	$ 3,157
Loans with no related allowance					
Commercial and industrial	$ 83,452	$ 107,471	$ —	$ 104,989	$ 173
Commercial real estate — owner occupied	12,696	13,546	—	12,906	49
Commercial and business lending	96,148	121,017	—	117,895	222
Commercial real estate — investor	6,002	6,466	—	6,071	—
Real estate construction	219	222	—	222	—
Commercial real estate lending	6,221	6,688	—	6,293	—
Total commercial	102,369	127,705	—	124,188	222
Residential mortgage	9,390	10,246	—	9,461	101
Home equity	540	543	—	540	—
Other consumer	—	—	—	—	—
Total consumer	9,930	10,789	—	10,001	101
Total loans[(a)]	$ 112,299	$ 138,494	$ —	$ 134,189	$ 323
Total					
Commercial and industrial	$ 173,015	$ 201,702	$ 17,882	$ 200,194	$ 808
Commercial real estate — owner occupied	19,945	22,700	526	18,992	142
Commercial and business lending	192,960	224,402	18,408	219,186	950
Commercial real estate — investor	21,834	22,577	330	21,853	767
Real estate construction	2,038	2,410	707	2,090	54
Commercial real estate lending	23,872	24,987	1,037	23,943	821
Total commercial	216,832	249,389	19,445	243,129	1,771
Residential mortgage	69,599	75,409	10,649	70,292	1,213
Home equity	21,467	23,450	9,665	21,772	484
Other consumer	1,315	1,342	229	1,335	12
Total consumer	92,381	100,201	20,543	93,399	1,709
Total loans[(a)]	$ 309,213	$ 349,590	$ 39,988	$ 336,528	$ 3,480

(a) The net recorded investment (defined as recorded investment, net of the related allowance) of the impaired loans represented 77% of the unpaid principal balance at June 30, 2017.

The following table presents impaired loans at December 31, 2016.

	Recorded Investment	Unpaid Principal Balance	Related Allowance	Average Recorded Investment	Interest Income Recognized
			($ in Thousands)		
Loans with a related allowance					
Commercial and industrial	$ 101,770	$ 107,813	$ 21,617	$ 111,211	$ 2,512
Commercial real estate — owner occupied	6,595	8,641	295	7,111	274
Commercial and business lending	108,365	116,454	21,912	118,322	2,786
Commercial real estate — investor	27,196	27,677	3,541	31,142	2,124
Real estate construction	1,203	1,566	441	1,321	67
Commercial real estate lending	28,399	29,243	3,982	32,463	2,191
Total commercial	136,764	145,697	25,894	150,785	4,977
Residential mortgage	62,362	67,090	11,091	63,825	2,263
Home equity	20,651	22,805	9,312	21,825	1,114
Other consumer	1,235	1,284	186	1,294	29
Total consumer	84,248	91,179	20,589	86,944	3,406
Total loans[(a)]	$ 221,012	$ 236,876	$ 46,483	$ 237,729	$ 8,383
Loans with no related allowance					
Commercial and industrial	$ 113,485	$ 134,863	$ —	$ 117,980	$ 1,519
Commercial real estate — owner occupied	8,439	9,266	—	8,759	138
Commercial and business lending	121,924	144,129	—	126,739	1,657
Commercial real estate — investor	6,144	6,478	—	7,092	—
Real estate construction	—	—	—	—	—
Commercial real estate lending	6,144	6,478	—	7,092	—
Total commercial	128,068	150,607	—	133,831	1,657
Residential mortgage	5,974	6,998	—	6,610	184
Home equity	106	107	—	107	4
Other consumer	—	—	—	—	—
Total consumer	6,080	7,105	—	6,717	188
Total loans[(a)]	$ 134,148	$ 157,712	$ —	$ 140,548	$ 1,845
Total					
Commercial and industrial	$ 215,255	$ 242,676	$ 21,617	$ 229,191	$ 4,031
Commercial real estate — owner occupied	15,034	17,907	295	15,870	412
Commercial and business lending	230,289	260,583	21,912	245,061	4,443
Commercial real estate — investor	33,340	34,155	3,541	38,234	2,124
Real estate construction	1,203	1,566	441	1,321	67
Commercial real estate lending	34,543	35,721	3,982	39,555	2,191
Total commercial	264,832	296,304	25,894	284,616	6,634
Residential mortgage	68,336	74,088	11,091	70,435	2,447
Home equity	20,757	22,912	9,312	21,932	1,118
Other consumer	1,235	1,284	186	1,294	29
Total consumer	90,328	98,284	20,589	93,661	3,594
Total loans[(a)]	$ 355,160	$ 394,588	$ 46,483	$ 378,277	$ 10,228

(a) The net recorded investment (defined as recorded investment, net of the related allowance) of the impaired loans represented 78% of the unpaid principal balance at December 31, 2016.

Troubled Debt Restructurings ("Restructured Loans")

Loans are considered restructured loans if concessions have been granted to borrowers that are experiencing financial difficulty. The Corporation had a recorded investment of approximately $35 million in loans modified in troubled debt restructurings for the six months ended June 30, 2017, of which approximately $6 million was in accrual status and $29 million was in nonaccrual pending a sustained period of repayment. During the six months ended June 30, 2017, the commercial and industrial nonaccrual restructured loans increased primarily due to the restructuring of several large oil and gas loans. These loans were included in nonaccrual loans at both June 30, 2017 and December 31, 2016. The following table presents nonaccrual and performing restructured loans by loan portfolio.

	June 30, 2017		December 31, 2016	
	Performing Restructured Loans	Nonaccrual Restructured Loans[(a)]	Performing Restructured Loans	Nonaccrual Restructured Loans[(a)]
	($ in Thousands)			
Commercial and industrial	$ 31,540	$ 27,016	$ 31,884	$ 1,276
Commercial real estate — owner occupied	4,145	2,145	5,490	2,220
Commercial real estate — investor	14,628	602	15,289	924
Real estate construction	321	164	359	150
Residential mortgage	17,624	19,365	18,100	21,906
Home equity	7,985	2,401	7,756	2,877
Other consumer	1,082	22	979	32
Total	$ 77,325	$ 51,715	$ 79,857	$ 29,385

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

The following table provides the number of loans modified in a troubled debt restructuring by loan portfolio during the six months ended June 30, 2017 and 2016, respectively, and the recorded investment and unpaid principal balance as of June 30, 2017 and 2016 respectively.

	Six Months Ended June 30, 2017			Six Months Ended June 30, 2016		
	Number of Loans	Recorded Investment[(a)]	Unpaid Principal Balance[(b)]	Number of Loans	Recorded Investment[(a)]	Unpaid Principal Balance[(b)]
	($ in Thousands)					
Commercial and industrial	24	$ 30,935	$ 52,260	11	$ 2,608	$ 2,676
Commercial real estate — owner occupied	2	716	716	1	120	126
Residential mortgage	36	2,695	2,805	48	3,942	4,171
Home equity	26	674	919	37	1,433	1,554
Total	88	$ 35,020	$ 56,700	97	$ 8,103	$ 8,527

(a) Represents post-modification outstanding recorded investment.
(b) Represents pre-modification outstanding recorded investment.

Restructured loan modifications may include payment schedule modifications, interest rate concessions, maturity date extensions, modification of note structure (A/B Note), non-reaffirmed Chapter 7 bankruptcies, principal reduction, or some combination of these concessions. During the six months ended June 30, 2017, restructured loan modifications of commercial and industrial, commercial real estate, and real estate construction loans primarily included maturity date extensions and payment schedule modifications. Restructured loan modifications of home equity and residential mortgage loans primarily included maturity date extensions, interest rate concessions, non-reaffirmed Chapter 7 bankruptcies, or a combination of these concessions for the six months ended June 30, 2017.

The following table provides the number of loans modified in a troubled debt restructuring during the previous twelve months which subsequently defaulted during the six months ended June 30, 2017 and 2016, respectively, as well as the recorded investment in these restructured loans as of June 30, 2017 and 2016, respectively.

	Six Months Ended June 30, 2017		Six Months Ended June 30, 2016	
	Number of Loans	Recorded Investment	Number of Loans	Recorded Investment
	($ in Thousands)			
Commercial real estate — owner occupied	—	$ —	2	$ 168
Residential mortgage	17	941	25	2,407
Home equity	9	271	11	164
Total	26	$ 1,212	38	$ 2,739

All loans modified in a troubled debt restructuring are evaluated for impairment. The nature and extent of the impairment of restructured loans, including those which have experienced a subsequent payment default, is considered in the determination of an appropriate level of the allowance for loan losses.

Allowance for Credit Losses

A summary of the changes in the allowance for loan losses by portfolio segment for the six months ended June 30, 2017, was as follows.

$ in Thousands	Commercial and industrial	Commercial real estate - owner occupied	Commercial real estate - investor	Real estate construction	Residential mortgage	Home equity	Other consumer	Total
December 31, 2016	$ 140,126	$ 14,034	$ 45,285	$ 26,932	$ 27,046	$ 20,364	$ 4,548	$ 278,335
Charge offs	(21,912)	(83)	(803)	(62)	(1,034)	(1,196)	(2,140)	(27,230)
Recoveries	6,498	145	163	47	342	1,423	378	8,996
Net charge offs	(15,414)	62	(640)	(15)	(692)	227	(1,762)	(18,234)
Provision for loan losses	18,295	(5,551)	(3,155)	4,571	5,212	(351)	1,979	21,000
June 30, 2017	$ 143,007	$ 8,545	$ 41,490	$ 31,488	$ 31,566	$ 20,240	$ 4,765	$ 281,101
Allowance for loan losses:								
Impaired loans:								
Individually evaluated	$ 17,350	$ 187	$ 183	$ —	$ 106	$ —	$ —	$ 17,826
Collectively evaluated	532	339	147	707	10,543	9,665	229	22,162
Total impaired loans	17,882	526	330	707	10,649	9,665	229	39,988
Non-impaired loans:								
Collectively evaluated	125,125	8,019	41,160	30,781	20,917	10,575	4,536	241,113
Total	$ 143,007	$ 8,545	$ 41,490	$ 31,488	$ 31,566	$ 20,240	$ 4,765	$ 281,101
Period end loan balances:								
Impaired loans:								
Individually evaluated	$ 140,061	$ 15,303	$ 6,799	$ 220	$ 11,060	$ 643	$ —	$ 174,086
Collectively evaluated	32,954	4,642	15,035	1,818	58,539	20,824	1,315	135,127
Total impaired loans	173,015	19,945	21,834	2,038	69,599	21,467	1,315	309,213
Non-impaired loans:								
Collectively evaluated	6,397,985	825,391	3,307,751	1,649,767	7,045,858	875,644	371,460	20,473,856
Total	$ 6,571,000	$ 845,336	$ 3,329,585	$ 1,651,805	$ 7,115,457	$ 897,111	$ 372,775	$ 20,783,069

The allowance for credit losses is comprised of the allowance for loan losses and the allowance for unfunded commitments. The level of the allowance for loan losses represents management's estimate of an amount appropriate to provide for probable credit losses in the loan portfolio at the balance sheet date. The allowance for unfunded commitments is maintained at a level believed by management to be sufficient to absorb estimated probable losses related to unfunded credit facilities (including unfunded loan commitments and letters of credit) and is included in accrued expenses and other liabilities on the consolidated balance sheets. See Note 12 for additional information on the allowance for unfunded commitments.

For comparison purposes, a summary of the changes in the allowance for loan losses by portfolio segment for the year ended December 31, 2016, was as follows.

$ in Thousands	Commercial and industrial	Commercial real estate - owner occupied	Commercial real estate - investor	Real estate construction	Residential mortgage	Home equity	Other consumer	Total
December 31, 2015	$ 129,959	$ 18,680	$ 43,018	$ 25,266	$ 28,261	$ 23,555	$ 5,525	$ 274,264
Charge offs	(71,016)	(512)	(1,504)	(558)	(4,332)	(4,686)	(3,831)	(86,439)
Recoveries	14,543	74	1,624	203	755	3,491	820	21,510
Net charge offs	(56,473)	(438)	120	(355)	(3,577)	(1,195)	(3,011)	(64,929)
Provision for loan losses	66,640	(4,208)	2,147	2,021	2,362	(1,996)	2,034	69,000
December 31, 2016	$ 140,126	$ 14,034	$ 45,285	$ 26,932	$ 27,046	$ 20,364	$ 4,548	$ 278,335
Allowance for loan losses:								
Impaired loans:								
Individually evaluated	$ 20,836	$ —	$ 3,117	$ —	$ 147	$ 3	$ —	$ 24,103
Collectively evaluated	781	295	424	441	10,944	9,309	186	22,380
Total impaired loans	21,617	295	3,541	441	11,091	9,312	186	46,483
Non-impaired loans:								
Collectively evaluated	118,509	13,739	41,744	26,491	15,955	11,052	4,362	231,852
Total	$ 140,126	$ 14,034	$ 45,285	$ 26,932	$ 27,046	$ 20,364	$ 4,548	$ 278,335
Period end loan balances:								
Impaired loans:								
Individually evaluated	$ 180,965	$ 8,439	$ 17,322	$ —	$ 7,033	$ 650	$ —	$ 214,409
Collectively evaluated	34,290	6,595	16,018	1,203	61,303	20,107	1,235	140,751
Total impaired loans	215,255	15,034	33,340	1,203	68,336	20,757	1,235	355,160
Non-impaired loans:								
Collectively evaluated	6,273,759	882,690	3,541,392	1,431,294	6,263,991	913,686	392,744	19,699,556
Total	$ 6,489,014	$ 897,724	$ 3,574,732	$ 1,432,497	$ 6,332,327	$ 934,443	$ 393,979	$ 20,054,716

A summary of the changes in the allowance for unfunded commitments was as follows.

	Six Months Ended June 30, 2017	Year Ended December 31, 2016
	($ in Thousands)	
Allowance for Unfunded Commitments:		
Balance at beginning of period	$ 25,400	$ 24,400
Provision for unfunded commitments	—	1,000
Balance at end of period	$ 25,400	$ 25,400

Note 8 Goodwill and Other Intangible Assets

Goodwill

Goodwill is not amortized but, instead, is 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 2017, 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 overall bank common stock index (based on the S&P 400 Regional Bank Sub-Industry Index), as well as the Corporation's earnings per common share trend over the past year. Based on these assessments, management concluded that the 2017 annual qualitative impairment assessment indicated 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 were no events since the May 2017 impairment testing that have changed the Corporation's impairment assessment conclusion. There were no impairment charges recorded in 2016 or the first six months of 2017.

At both June 30, 2017 and December 31, 2016, the Corporation had goodwill of $972 million. Goodwill increased minimally by approximately $55,000 during the first quarter of 2017 as a result of a small insurance acquisition. See Note 2 for additional information on the Corporation's acquisitions.

Other Intangible Assets

The Corporation has other intangible assets that are amortized, consisting of core deposit intangibles, other intangibles (primarily related to customer relationships acquired in connection with the Corporation’s insurance agency acquisitions), and mortgage servicing rights. During the first quarter of 2017, the Corporation added approximately $162,000 of other intangibles relating to customer relationships associated with one small insurance acquisition. See Note 2 for additional information on the Corporation's acquisitions. For core deposit intangibles and other intangibles, changes in the gross carrying amount, accumulated amortization, and net book value were as follows.

	Six Months Ended June 30, 2017	Year Ended December 31, 2016
	($ in Thousands)	
Core deposit intangibles:		
Gross carrying amount	$ 4,385	$ 4,385
Accumulated amortization	(4,385)	(4,273)
Net book value	$ —	$ 112
Amortization during the year	$ 112	$ 281
Other intangibles:		
Gross carrying amount	$ 32,572	$ 32,410
Accumulated amortization	(18,042)	(17,145)
Net book value	$ 14,530	$ 15,265
Additions during the period	$ 162	$ 1,012
Amortization during the year	$ 897	$ 1,812

The Corporation sells residential mortgage loans in the secondary market and typically retains the right to service the loans sold. Mortgage servicing rights are amortized in proportion to and over the period of estimated net servicing income, and assessed for impairment at each reporting date.

The Corporation at minimum quarterly evaluates its mortgage servicing rights asset for impairment. Impairment is assessed based on fair value at each reporting date using estimated prepayment speeds of the underlying mortgage loans serviced and stratifications based on the risk characteristics of the underlying loans (predominantly loan type and note interest rate). As mortgage interest rates fall, prepayment speeds are usually faster and the value of the mortgage servicing rights asset generally decreases, requiring additional valuation reserve. Conversely, as mortgage interest rates rise, prepayment speeds are usually slower and the value of the mortgage servicing rights asset generally increases, requiring less valuation reserve. A valuation allowance is established, through a charge to earnings, to the extent the amortized cost of the mortgage servicing rights exceeds the estimated fair value by stratification. If it is later determined that all or a portion of the temporary impairment no longer exists for a stratification, the valuation is reduced through a recovery to earnings. An other-than-temporary impairment (i.e., recoverability is considered remote when considering interest rates and loan pay off activity) is recognized as a write-down of the mortgage servicing rights asset and the related valuation allowance (to the extent a valuation allowance is available) and then against earnings. A direct write-down permanently reduces the carrying value of the mortgage servicing rights asset and valuation allowance, precluding subsequent recoveries. See Note 12 for a discussion of the recourse provisions on sold residential mortgage loans. See Note 13 which further discusses fair value measurement relative to the mortgage servicing rights asset.

A summary of changes in the balance of the mortgage servicing rights asset and the mortgage servicing rights valuation allowance was as follows.

	Six Months Ended June 30, 2017	Year Ended December 31, 2016
	($ in Thousands)	
Mortgage servicing rights		
Mortgage servicing rights at beginning of period	$ 62,085	$ 62,150
Additions	3,278	12,262
Amortization	(5,084)	(12,327)
Mortgage servicing rights at end of period	$ 60,279	$ 62,085
Valuation allowance at beginning of period	(609)	(809)
(Additions) recoveries, net	(275)	200
Valuation allowance at end of period	(884)	(609)
Mortgage servicing rights, net	$ 59,395	$ 61,476
Fair value of mortgage servicing rights	$ 64,627	$ 73,149
Portfolio of residential mortgage loans serviced for others (“servicing portfolio”)	$ 7,768,374	$ 7,974,742
Mortgage servicing rights, net to servicing portfolio	0.76%	0.77%
Mortgage servicing rights expense [(a)]	$ 5,359	$ 12,127

(a) Includes the amortization of mortgage servicing rights and additions / recoveries to the valuation allowance of mortgage servicing rights, and is a component of mortgage banking, net in the consolidated statements of income.

The following table shows the estimated future amortization expense for amortizing intangible assets. The projections of amortization expense are based on existing asset balances, the current interest rate environment, and prepayment speeds as of June 30, 2017. The actual amortization 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.

Estimated Amortization Expense	Other Intangibles	Mortgage Servicing Rights
	($ in Thousands)	
Six months ending December 31, 2017	$ 901	$ 5,046
2018	1,771	8,897
2019	1,472	7,476
2020	1,355	6,292
2021	1,331	5,315
2022	1,308	4,515
Beyond 2022	6,392	22,738
Total Estimated Amortization Expense	$ 14,530	$ 60,279

Note 9 Short and Long-Term Funding

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) were as follows.

	June 30, 2017	December 31, 2016
	($ in Thousands)	
Short-Term Funding		
Federal funds purchased	$ 345,350	$ 208,150
Securities sold under agreements to repurchase	262,319	300,197
Federal funds purchased and securities sold under agreements to repurchase	$ 607,669	$ 508,347
FHLB advances	697,000	482,000
Commercial paper	97,813	101,688
Other short-term funding	794,813	583,688
Total short-term funding	$ 1,402,482	$ 1,092,035
Long-Term Funding		
FHLB advances	$ 2,765,176	$ 2,265,188
Senior notes, at par	250,000	250,000
Subordinated notes, at par	250,000	250,000
Other long-term funding and capitalized costs	(3,056)	(3,393)
Total long-term funding	3,262,120	2,761,795
Total short and long-term funding	$ 4,664,602	$ 3,853,830

Securities Sold Under Agreements to Repurchase ("Repurchase Agreements")

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). See Note 11 for additional disclosures on balance sheet offsetting.

The Corporation utilizes securities sold under agreements to repurchase to facilitate the needs of its customers. As of June 30, 2017, the Corporation pledged agency mortgage-related securities with a fair value of $381 million as collateral for the repurchase agreements. Securities pledged as collateral under repurchase agreements are maintained with the Corporation's safekeeping agents and are monitored on a daily basis due to the market risk of fair value changes in the underlying securities. The Corporation generally pledges excess securities to ensure there is sufficient collateral to satisfy short-term fluctuations in both the repurchase agreement balances and the fair value of the underlying securities.

The remaining contractual maturity of the securities sold under agreements to repurchase in the consolidated balance sheets as of June 30, 2017 and December 31, 2016 are presented in the following table.

	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 days	30-90 days	Greater than 90 days	Total
June 30, 2017	($ in Thousands)				
Repurchase agreements					
Agency mortgage-related securities	$ 262,319	$ —	$ —	$ —	$ 262,319
Total	$ 262,319	$ —	$ —	$ —	$ 262,319
December 31, 2016					
Repurchase agreements					
Agency mortgage-related securities	$ 300,197	$ —	$ —	$ —	$ 300,197
Total	$ 300,197	$ —	$ —	$ —	$ 300,197

Long-Term Funding

FHLB advances: At June 30, 2017, the long-term FHLB advances had a weighted average interest rate of 0.98%, compared to 0.50% at December 31, 2016. The majority of FHLB advances are indexed to the FHLB discount note and re-price at varying intervals. The advances offer flexible, low cost, long-term funding that improves the Corporation's liquidity profile.

Senior notes: In November 2014, the Corporation issued $250 million of senior notes, due November 2019, and callable October 2019. The senior notes have a fixed coupon interest rate of 2.75% and were issued at a discount.

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.

Note 10 Derivative and Hedging Activities

The Corporation facilitates customer borrowing activity by providing various interest rate risk management, commodity hedging, and foreign currency exchange solutions through its capital markets area. To date, all of the notional amounts of customer transactions have been matched with a mirror hedge with another counterparty. The Corporation has used, and may use again in the future, derivative instruments to hedge the variability in interest payments or protect the value of certain assets and liabilities recorded on its consolidated balance sheets from changes in interest rates. The predominant derivative and hedging activities include interest rate-related instruments (swaps and caps), foreign currency exchange forwards, commodity contracts, written options, purchased options, and certain mortgage banking activities.

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, interest rate and commodity-related instruments generally contain language outlining collateral pledging requirements for each counterparty. Collateral must be posted when the market value exceeds certain mutually agreed upon threshold limits. The Corporation was required to pledge $22 million of investment securities as collateral at June 30, 2017, and pledged $40 million of investment securities as collateral at December 31, 2016. Federal regulations require the Corporation to clear all LIBOR interest rate swaps through a clearing house if it can be cleared. As such, the Corporation is required to pledge cash collateral for the margin. At June 30, 2017 the Corporation posted $1 million cash collateral for the margin compared to none at December 31, 2016.

Derivatives to Accommodate Customer Needs

The Corporation enters 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, foreign currency, and commodity prices. These derivative contracts are not designated against specific assets and liabilities on the balance sheet or forecasted transactions and, therefore, do not qualify for hedge accounting treatment. Such derivative contracts are carried at fair value on the consolidated balance sheets with changes in the fair value recorded as a component of Capital market fees, net, and typically include interest rate-related instruments (swaps and caps), foreign currency exchange forwards, and commodity contracts. See Note 11 for additional information and disclosures on balance sheet offsetting.

Interest rate-related instruments: The Corporation provides interest rate risk management services to commercial customers, primarily forward 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.

Foreign currency exchange forwards: The Corporation provides foreign currency exchange services to customers, primarily forward contracts. Our 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.

Commodity contracts: Commodity contracts are entered into primarily for the benefit of commercial customers seeking to manage their exposure to fluctuating commodity prices. The Corporation mitigates its risk by then entering into an offsetting commodity derivative contract.

The table below identifies the balance sheet category and fair values of the Corporation's free standing derivative instruments, which are not designated as hedging instruments.

	June 30, 2017			December 31, 2016		
($ in Thousands)	Notional Amount	Fair Value	Balance Sheet Category	Notional Amount	Fair Value	Balance Sheet Category
Interest rate-related instruments — customer and mirror	$ 2,118,409	$ 28,105	Trading assets	$ 2,039,323	$ 33,671	Trading assets
Interest rate-related instruments — customer and mirror	2,118,409	(27,691)	Trading liabilities	2,039,323	(33,188)	Trading liabilities
Foreign currency exchange forwards	93,300	1,480	Trading assets	109,675	2,002	Trading assets
Foreign currency exchange forwards	92,969	(1,412)	Trading liabilities	106,251	(1,943)	Trading liabilities
Commodity contracts	304,554	18,991	Trading assets	127,582	16,725	Trading assets
Commodity contracts	303,790	(18,040)	Trading liabilities	128,368	(15,972)	Trading liabilities

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 is recorded on the consolidated balance sheets with the changes in fair value recorded as a component of mortgage banking, net.

Written and Purchased Options (Time Deposit)

Historically, the Corporation had entered into written and purchased option derivative instruments to facilitate an equity linked time deposit product (the "Power CD"), which the Corporation ceased offering in September 2013. The Power CD was a time deposit that provided the purchaser a guaranteed return of principal at maturity plus a potential equity return (a written option), while the Corporation received a known stream of funds based on the equity return (a purchased option). The written and purchased options are mirror derivative instruments which are carried at fair value on the consolidated balance sheets.

The table below identifies the balance sheet category and fair values of the Corporation's derivative instruments which are not designated as hedging instruments.

	June 30, 2017			December 31, 2016		
($ in Thousands)	Notional Amount	Fair Value	Balance Sheet Category	Notional Amount	Fair Value	Balance Sheet Category
Interest rate lock commitments (mortgage)	356,798	2,680	Other assets	285,345	206	Other assets
Forward commitments (mortgage)	151,500	159	Other assets	179,600	2,908	Other assets
Purchased options (time deposit)	75,899	1,531	Other assets	80,554	2,576	Other assets
Written options (time deposit)	75,899	(1,531)	Other liabilities	80,554	(2,576)	Other liabilities

The table below identifies the income statement category of the gains and losses recognized in income on the Corporation's derivative instruments not designated as hedging instruments.

($ in Thousands)	Income Statement Category of Gain / (Loss) Recognized in Income	For the Six Months Ended June 30, 2017	2016
Derivative Instruments:			
Interest rate-related instruments — customer and mirror, net	Capital market fees, net	$ (69)	$ (1,426)
Interest rate lock commitments (mortgage)	Mortgage banking, net	2,474	3,312
Forward commitments (mortgage)	Mortgage banking, net	(2,749)	(4,608)
Foreign currency exchange forwards	Capital market fees, net	9	(48)
Commodity contracts	Capital market fees, net	198	358

Note 11 Balance Sheet Offsetting

Interest Rate-Related Instruments and Commodity Contracts ("Interest and Commodity Agreements")

The Corporation enters into interest rate-related instruments to facilitate the interest rate risk management strategies of commercial customers. The Corporation also enters into commodity contracts to manage commercial customers' exposure to fluctuating commodity prices. The Corporation mitigates these risks by entering into equal and offsetting interest and commodity agreements with highly rated third party financial institutions. The Corporation is party to master netting arrangements with its financial institution counterparties that creates a single net settlement of all legal claims or obligations to pay or receive the net amount of settlement of the individual interest and commodity 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. The Corporation does not offset assets and liabilities under these arrangements for financial statement presentation purposes. See Note 10 for additional information on the Corporation's derivative and hedging activities.

Securities Sold Under Agreements to Repurchase ("Repurchase Agreements")

The Corporation enters into agreements under which it sells securities subject to an obligation to repurchase the same or similar securities. These repurchase agreements are accounted for as collateralized financing arrangements (i.e., secured borrowings) and not as a sale and subsequent repurchase of securities (i.e., there is no offsetting or netting of the investment securities assets with the repurchase agreement liabilities). The right of set-off for a repurchase agreement resembles a secured borrowing, whereby the collateral would be used to settle the fair value of the repurchase agreement should the Corporation be in default (e.g., fails to make an interest payment to the counterparty). In addition, the Corporation does not enter into reverse repurchase agreements; therefore, there is no such offsetting to be done with the repurchase agreements. See Note 9 for additional disclosures on repurchase agreements.

The following table presents the assets and liabilities subject to an enforceable master netting arrangement. The interest and commodity agreements we have with our commercial customers are not subject to an enforceable master netting arrangement, and therefore, are excluded from this table.

				Gross amounts not offset in the balance sheet		
	Gross amounts recognized	Gross amounts offset in the balance sheet	Net amounts presented in the balance sheet	Financial instruments	Collateral	Net amount
			($ in Thousands)			
June 30, 2017						
Derivative assets:						
Interest and commodity agreements	$ 24,322	$ —	$ 24,322	$ (16,517)	$ (7,805)	$ —
Derivative liabilities:						
Interest and commodity agreements	$ 16,517	$ —	$ 16,517	$ (16,517)	$ —	$ —
December 31, 2016						
Derivative assets:						
Interest and commodity agreements	$ 18,031	$ —	$ 18,031	$ (18,031)	$ —	$ —
Derivative liabilities:						
Interest and commodity agreements	$ 31,075	$ —	$ 31,075	$ (18,031)	$ (11,148)	$ 1,896

Note 12 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 10). The following is a summary of lending-related commitments.

	June 30, 2017	December 31, 2016
	($ in Thousands)	
Commitments to extend credit, excluding commitments to originate residential mortgage loans held for sale[a][b]	$ 8,063,899	$ 8,131,131
Commercial letters of credit[a]	5,839	7,923
Standby letters of credit[c]	242,144	259,632

(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 is not material at June 30, 2017 or December 31, 2016.

(b) Interest rate lock commitments to originate residential mortgage loans held for sale are considered derivative instruments and are disclosed in Note 10.

(c) The Corporation has established a liability of $2 million at June 30, 2017 and $3 million at December 31, 2016, 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 estimated probable losses related to unfunded commitments (including unfunded loan commitments and letters of credit). The allowance for unfunded commitments totaled $25 million at both June 30, 2017 and December 31, 2016, and is included in accrued expenses and other liabilities on the consolidated balance sheets.

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 on the consolidated balance sheets. The Corporation's derivative and hedging activity is further described in Note 10. 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 has principal investment commitments to provide capital-based financing to private and public companies through either direct investments in specific companies or through investment funds and partnerships. The timing of future cash requirements to fund such 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 unconsolidated projects including low-income housing, new market tax credit projects, and historic tax credit projects to promote the revitalization of primarily low-to-moderate-income neighborhoods throughout the local communities of its bank subsidiary. As a limited partner in these unconsolidated projects, the Corporation is allocated tax credits and deductions associated with the underlying projects. The aggregate carrying value of these investments at June 30, 2017, was $114 million, compared to $85 million at December 31, 2016, included in other assets on the consolidated balance sheets. Related to these investments, the Corporation had remaining commitments to fund of $84 million at June 30, 2017, and $69 million at December 31, 2016.

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, including the matters described below, and with respect to such legal proceedings, intends to continue to defend itself vigorously. The Corporation will consider settlement of cases when, in management's judgment, it is in the best interests of both 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.

A lawsuit, *R.J. ZAYED v. Associated Bank, N.A.*, was filed in the United States District Court for the District of Minnesota on January 29, 2013. The lawsuit relates to a Ponzi scheme perpetrated by Oxford Global Partners and related entities ("Oxford") and individuals and was brought by the receiver for Oxford. Oxford was a depository customer of Associated Bank (the "Bank"). The lawsuit claims that the Bank is liable for failing to uncover the Oxford Ponzi scheme, and specifically alleges the Bank aided and abetted (1) the fraudulent scheme; (2) a breach of fiduciary duty; (3) conversion; and (4) false representations and omissions. The lawsuit seeks unspecified consequential and punitive damages. The District Court granted the Bank's motion to dismiss the complaint on September 30, 2013. On March 2, 2015, the U.S. Court of Appeals for the Eighth Circuit reversed the District Court and remanded the case back to the District Court for further proceedings. On January 31, 2017, the District Court granted the Bank's motion for summary judgment. The receiver has appealed the District Court's summary judgment decision to the Eighth Circuit Court of Appeals. 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. A lawsuit by investors in the same Ponzi scheme, *Herman Grad, et al v. Associated Bank, N.A.,* brought in Brown County, Wisconsin in October 2009 was dismissed by the circuit court, and the dismissal was affirmed by the Wisconsin Court of Appeals in June 2011 in an unpublished opinion.

Two complaints were filed against the Bank on January 11, 2016 in the United States Bankruptcy Court for the Northern District of Illinois, Eastern Division in connection with the *In re: World Marketing Chicago, LLC, et al* Chapter 11 bankruptcy proceeding. In the first complaint, *The Official Committee of Unsecured Creditors of World Marketing Chicago, LLC, et al v. Associated Bank, N.A.,* the plaintiff seeks to avoid guarantees and pledges of collateral given by the debtors to secure a revolving financing commitment of $6 million to the debtors' parent company from the Bank. The plaintiff alleges a variety of legal theories under federal and state law, including fraudulent conveyance, preferential transfer and conversion, in support of its position. The plaintiff seeks return of approximately $4 million paid to the Bank and the avoidance of the security interest in the collateral securing the remaining indebtedness to the Bank. The Bank intends to vigorously defend this lawsuit. In the second complaint, *American Funds Service Company v. Associated Bank, N.A.,* the plaintiff alleges that approximately $600,000 of funds it had advanced to the World Marketing entities to apply towards future postage fees was swept by the Bank from World Marketing's bank accounts. Plaintiff seeks the return of such funds from the Bank under several theories, including Sec. 541(d) of the Bankruptcy Code, the creation of a resulting trust, and unjust enrichment. The Bank intends to vigorously defend this lawsuit. 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 these two lawsuits.

Regulatory Matters

On May 22, 2015, the Bank entered into a Conciliation Agreement ("Conciliation Agreement") with the U.S. Department of Housing and Urban Development ("HUD") which resolved the HUD investigation into the Bank's lending practices during the years 2008-2010. The Bank's commitments under the Conciliation Agreement are spread over a three-year period and include commitments to do the following in minority communities: make mortgage loans of approximately $196 million; open one branch and four loan production offices; establish special financing programs; make affordable home repair grants; engage in affirmative marketing outreach; provide financial education programs; and make grants to support community reinvestment training and education. The cost of these commitments will be spread over four calendar years and is not expected to have a material impact on the Corporation's financial condition or results of operation.

Beginning in late 2013, the Corporation began reviewing a variety of legacy products provided by third parties, including debt protection and identity protection products. In connection with this review, the Corporation has made remediation payments to affected customers and former customers, and has reserved accordingly.

A variety of consumer products, including the legacy debt protection and identity protection products referred to above, and 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 and the Bank 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. 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.

On March 27, 2017, the Bank received a Community Reinvestment Act ("CRA") rating from the Office of the Comptroller of the Currency of "Satisfactory" for the period from January 1, 2011 through July 27, 2015. As a result of this rating, the restrictions on certain of the Bank's activities that had been imposed under the previous "Needs to Improve" CRA rating are no longer applicable.

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 our 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.

As a result of make whole requests, the Corporation has repurchased loans with principal balances of approximately $367,000 and $2 million during the six months ended June 30, 2017 and the year ended December 31, 2016, respectively. The loss reimbursement and settlement claims paid for the six months ended June 30, 2017 and the year ended December 31, 2016, respectively were negligible. Make whole requests during 2016 and the first six months of 2017 generally arose from loans sold during the period of January 1, 2012 to June 30, 2017, which totaled $9.5 billion at the time of sale, and consisted primarily of loans sold to GSEs. As of June 30, 2017, approximately $6.1 billion of these sold loans 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 following summarizes the changes in the mortgage repurchase reserve.

	Six Months Ended June 30, 2017	Year Ended December 31, 2016
	($ in Thousands)	
Balance at beginning of period	$ 900	$ 1,197
Repurchase provision expense	109	456
Adjustments to provision expense	—	(750)
Charge offs, net	(18)	(3)
Balance at end of period	$ 991	$ 900

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 June 30, 2017, and December 31, 2016, there were approximately $74 million and $62 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 June 30, 2017 and December 31, 2016, there were $85 million and $98 million, respectively, of such residential mortgage loans with credit risk recourse, upon which there have been negligible historical losses to the Corporation.

Note 13 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).

Following is a description of the valuation methodologies used for the Corporation's more significant instruments measured on a recurring basis at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Investment securities available for sale: Where quoted prices are available in an active market, investment securities are classified in Level 1 of the fair value hierarchy. If quoted market prices are not available for the specific security, then fair values are estimated by using pricing models, quoted prices of securities with similar characteristics or discounted cash flows, with consideration given to the nature of the quote and the relationship of recently evidenced market activity to the fair value estimate, and are classified in Level 2 of the fair value hierarchy. Lastly, in certain cases where there is limited activity or less transparency around inputs to the estimated fair value, securities are classified within Level 3 of the fair value hierarchy. To validate the fair value estimates, assumptions, and controls, the Corporation looks to transactions for similar instruments and utilizes independent pricing provided by third party vendors or brokers and relevant market indices. While none of these sources are solely indicative of fair value, they serve as directional indicators for the appropriateness of the Corporation's fair value estimates. The Corporation has determined that the fair value measures of its investment securities are classified predominantly within Level 1 or 2 of the fair value hierarchy. See Note 6 for additional disclosure regarding the Corporation's investment securities.

Residential loans held for sale: Loans held for sale, which consist generally of current production of certain fixed-rate, first-lien residential mortgage loans, are now carried at estimated fair value. Effective January 1, 2017, management elected the fair value option to account for all newly originated mortgage loans held for sale which results in the financial impact of changing market conditions being reflected currently in earnings as opposed to being dependent upon the timing of sales. Therefore, the continually adjusted values going forward will better reflect the price the Corporation expects to receive from the sale of such loans. The estimated fair value was based on what secondary markets are currently offering for portfolios with similar characteristics, which the Corporation classifies as a Level 2 fair value measurement.

Derivative financial instruments (interest rate-related instruments): The Corporation has used, and may use again in the future, interest rate swaps to manage its interest rate risk. In addition, the Corporation offers interest rate-related instruments (swaps and caps) to service our customers' needs, for which the Corporation simultaneously enters into offsetting derivative financial instruments (i.e., mirror interest rate-related instruments) with third parties to manage its interest rate risk associated with these financial instruments. The valuation of the Corporation's derivative financial instruments is determined using discounted cash flow analysis on the expected cash flows of each derivative and, also includes a nonperformance / credit risk component (credit valuation adjustment). See Note 10 for additional disclosure regarding the Corporation's interest rate-related instruments.

The discounted cash flow analysis component in the fair value measurements reflects the contractual terms of the derivative financial instruments, including the period to maturity, and uses observable market-based inputs, including interest rate curves and implied volatilities. More specifically, the fair values of interest rate swaps are determined using the market standard methodology of netting the discounted future fixed cash receipts (or payments), with the variable cash payments (or receipts) based on an expectation of future interest rates (forward curves) derived from observable market interest rate curves. Likewise, the fair values of interest rate options (i.e., interest rate caps) are determined using the market standard methodology of discounting the future expected cash receipts that would occur if variable interest rates fall below (or rise above) the strike rate of the floors (or caps), with the variable interest rates used in the calculation of projected receipts on the floor (or cap) based on an expectation of future interest rates derived from observable market interest rate curves and volatilities.

The Corporation also incorporates credit valuation adjustments to appropriately reflect both its own nonperformance risk and the respective counterparty's nonperformance risk in the fair value measurements. In adjusting the fair value of its derivative financial instruments for the effect of nonperformance risk, the Corporation has considered the impact of netting and any applicable credit enhancements, such as collateral postings, thresholds, mutual puts, and guarantees.

While the Corporation has determined that the majority of the inputs used to value its derivative financial instruments fall within Level 2 of the fair value hierarchy, the credit valuation adjustments utilize Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default by itself and its counterparties. The Corporation has assessed the significance of the impact of the credit valuation adjustments on the overall valuation of its derivative positions as of June 30, 2017, and December 31, 2016, and has determined that the credit valuation adjustments are not significant to the overall valuation of its derivative financial instruments. Therefore, the Corporation has determined that the fair value measures of its derivative financial instruments in their entirety are classified within Level 2 of the fair value hierarchy.

Derivative financial instruments (foreign currency exchange forwards): The Corporation provides foreign currency exchange services to customers. In addition, the Corporation may enter into a foreign currency exchange forward to mitigate the exchange rate risk attached to the cash flows of a loan or as an offsetting contract to a forward entered into as a service to our customer. The valuation of the Corporation's foreign currency exchange forwards is determined using quoted prices of foreign currency exchange forwards with similar characteristics, with consideration given to the nature of the quote and the relationship of recently evidenced market activity to the fair value estimate, and are classified in Level 2 of the fair value hierarchy. See Note 10 for additional disclosures regarding the Corporation's foreign currency exchange forwards.

Derivative financial instruments (commodity contracts): The Corporation enters into commodity contracts to manage commercial customers' exposure to fluctuating commodity prices, for which the Corporation simultaneously enters into offsetting derivative financial instruments (i.e., mirror commodity contracts) with third parties to manage its risk associated with these financial instruments. The valuation of the Corporation's commodity contracts is determined using quoted prices of the underlying instrument, and are classified in Level 2 of the fair value hierarchy. See Note 10 for additional disclosures regarding the Corporation's commodity contracts.

The table below presents the Corporation's financial instruments measured at fair value on a recurring basis as of June 30, 2017 and December 31, 2016, aggregated by the level in the fair value hierarchy within which those measurements fall.

	Fair Value Hierarchy	June 30, 2017	December 31, 2016
		($ in Thousands)	
Assets:			
Investment securities available for sale:			
U.S. Treasury securities	Level 1	$ 1,002	$ 1,000
Residential mortgage-related securities:			
FNMA / FHLMC	Level 2	546,525	639,930
GNMA	Level 2	1,714,178	2,004,475
Private-label	Level 2	1,086	1,121
GNMA commercial mortgage-related securities	Level 2	1,419,872	2,028,898
Other securities (debt and equity)	Level 1	1,634	1,602
Other securities (debt and equity)	Level 2	3,173	3,000
Other securities (debt and equity)	Level 3	—	200
Total investment securities available for sale	Level 1	2,636	2,602
Total investment securities available for sale	Level 2	3,684,834	4,677,424
Total investment securities available for sale	Level 3	—	200
Residential loans held for sale [a]	Level 2	41,620	—
Interest rate-related instruments	Level 2	28,105	33,671
Foreign currency exchange forwards	Level 2	1,480	2,002
Interest rate lock commitments to originate residential mortgage loans held for sale	Level 3	2,680	206
Forward commitments to sell residential mortgage loans	Level 3	159	2,908
Commodity contracts	Level 2	18,991	16,725
Purchased options (time deposit)	Level 2	1,531	2,576
Liabilities:			
Interest rate-related instruments	Level 2	$ 27,691	$ 33,188
Foreign currency exchange forwards	Level 2	1,412	1,943
Commodity contracts	Level 2	18,040	15,972
Written options (time deposit)	Level 2	1,531	2,576

(a) Effective January 1, 2017, residential loans originated for sale are accounted for under the fair value option. Prior periods have not been restated. For more information on this accounting policy change, please refer to Note 3.

The table below presents a rollforward of the balance sheet amounts for the six months ended June 30, 2017 and the year ended December 31, 2016, for financial instruments measured on a recurring basis and classified within Level 3 of the fair value hierarchy.

	Investment Securities Available for Sale	Derivative Financial Instruments
	($ in Thousands)	
Balance December 31, 2015	$ 200	$ 1,361
Total net gains included in income:		
Mortgage derivative gain	—	1,753
Balance December 31, 2016	$ 200	$ 3,114
Total net losses included in income:		
Mortgage derivative loss	—	(275)
Transfer out of level 3 securities[a]	(200)	—
Balance June 30, 2017	$ —	$ 2,839

(a) During the first quarter of 2017, the $200,000 level 3 investment security was transferred to level 2 based upon new pricing information.

For Level 3 assets and liabilities measured at fair value on a recurring or nonrecurring basis as of June 30, 2017, the Corporation utilized the following valuation techniques and significant unobservable inputs.

Derivative financial instruments (mortgage derivative — interest rate lock commitments to originate residential mortgage loans held for sale): The fair value is determined by the change in value from each loan's rate lock date to the expected rate lock expiration date based on the underlying loan attributes, estimated closing ratios, and investor price matrix determined to be reasonably applicable to each loan commitment. The closing ratio calculation takes into consideration historical experience and loan-level attributes, particularly the change in the current interest rates from the time of initial rate lock. The closing ratio is periodically reviewed for reasonableness and reported to the Associated Mortgage Risk Management Committee. At June 30, 2017, the closing ratio was 88%.

Derivative financial instruments (mortgage derivative—forward commitments to sell mortgage loans): Mortgage derivatives include forward commitments to deliver closed end residential mortgage loans into conforming Agency Mortgage Backed Securities (To be Announced, "TBA") or conforming Cash Forward sales. The fair value of such instruments is determined by the difference of current market prices for such traded instruments or available from forward cash delivery commitments and the original traded price for such commitments.

The Corporation also relies on an internal valuation model to estimate the fair value of its forward commitments to sell residential mortgage loans (i.e., an estimate of what the Corporation would receive or pay to terminate the forward delivery contract based on market prices for similar financial instruments), which includes matching specific terms and maturities of the forward commitments against applicable investor pricing available. While there are Level 2 and 3 inputs used in the valuation models, the Corporation has determined that the majority of the inputs significant in the valuation of both of the mortgage derivatives fall within Level 3 of the fair value hierarchy. See Note 10 for additional disclosure regarding the Corporation's mortgage derivatives.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

Following is a description of the valuation methodologies used for the Corporation's more significant instruments measured on a nonrecurring basis at the lower of amortized cost or estimated fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Commercial loans held for sale: Loans held for sale are carried at the lower of cost or estimated fair value. The estimated fair value was based on what secondary markets are currently offering for portfolios with similar characteristics, which the Corporation classifies as a Level 2 nonrecurring fair value measurement.

Other real estate owned: Certain other real estate owned, upon initial recognition, was re-measured and reported at fair value through a charge off to the allowance for loan losses based upon the estimated fair value of the other real estate owned, less estimated selling costs. The fair value of other real estate owned, upon initial recognition or subsequent impairment, was estimated using appraised values, which the Corporation classifies as a Level 2 nonrecurring fair value measurement.

For Level 3, assets and liabilities measured at fair value on a nonrecurring basis as of June 30, 2017, the Corporation utilized the following valuation techniques and significant unobservable inputs.

Impaired loans: The Corporation considers a loan impaired when it is probable that the Corporation will be unable to collect all amounts due according to the original contractual terms of the note agreement, including both principal and interest. Management has determined that commercial and consumer loan relationships that have nonaccrual status or have had their terms restructured in a troubled debt restructuring meet this impaired loan definition. For individually evaluated impaired loans, the amount of impairment is based upon the present value of expected future cash flows discounted at the loan's effective interest rate, the estimated fair value of the underlying collateral for collateral-dependent loans, or the estimated liquidity of the note. For individually evaluated impaired loans, the amount of impairment is based upon the present value of expected future cash flows discounted at the loan's effective interest rate, the estimated fair value of the underlying collateral for collateral-dependent loans, or the estimated liquidity of the note. See Note 7 for additional information regarding the Corporation's impaired loans.

Mortgage servicing rights: Mortgage servicing rights do not trade in an active, open market with readily observable prices. While sales of mortgage servicing rights do occur, the precise terms and conditions typically are not readily available to allow for a "quoted price for similar assets" comparison. Accordingly, the Corporation utilizes an independent valuation from a third party which uses a discounted cash flow model to estimate the fair value of its mortgage servicing rights. The valuation model incorporates prepayment assumptions to project mortgage servicing rights cash flows based on the current interest rate scenario, which is then discounted to estimate an expected fair value of the mortgage servicing rights. The valuation model considers portfolio characteristics of the underlying mortgages, contractually specified servicing fees, prepayment assumptions, discount rate assumptions, delinquency rates, late charges, other ancillary revenue, costs to service, and other economic factors. The Corporation periodically reviews and assesses the underlying inputs and assumptions used in the model. In addition, the Corporation compares its fair value estimates and assumptions to observable market data for mortgage servicing rights, where available, and to recent market activity and actual portfolio experience. Due to the nature of the valuation inputs, mortgage servicing rights are classified within Level 3 of the fair value hierarchy. The Corporation uses the amortization method (i.e., lower of amortized cost or estimated fair value measured on a nonrecurring basis), not fair value measurement accounting, for its mortgage servicing rights assets.

The discounted cash flow analyses that generate expected market prices utilize the observable characteristics of the mortgage servicing rights portfolio, as well as certain unobservable valuation parameters. The significant unobservable inputs used in the fair value measurement of the Corporation's mortgage servicing rights are the weighted average constant prepayment rate and weighted average discount rate. Significant increases (decreases) in any of those inputs in isolation could result in a significantly lower (higher) fair value measurement.

These parameter assumptions fall within a range that the Corporation, in consultation with an independent third party, believes purchasers of servicing would apply to such portfolios sold into the current secondary servicing market. Discussions are held with members from Treasury and the Community, Consumer, and Business segment to reconcile the fair value estimates and the key assumptions used by the respective parties in arriving at those estimates. The Associated Mortgage Risk Management Committee is responsible for providing control over the valuation methodology and key assumptions. To assess the reasonableness of the fair value measurement, the Corporation also compares the fair value and constant prepayment rate to a value calculated by an independent third party on an annual basis. See Note 8 for additional disclosure regarding the Corporation's mortgage servicing rights.

The table below presents the Corporation's loans held for sale, impaired loans, and mortgage servicing rights 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	Income Statement Category of Adjustment Recognized in Income	Adjustment Recognized in Income
June 30, 2017				
Assets:				
Commercial loans held for sale [a]	Level 2	$ 4,772	Provision for credit losses	$ —
Impaired loans [c]	Level 3	74,937	Provision for credit losses [d]	(16,462)
Other real estate owned	Level 2	1,999	Foreclosure / OREO expense, net	(621)
Mortgage servicing rights	Level 3	64,627	Mortgage banking, net	(275)
December 31, 2016				
Assets:				
Commercial loans held for sale	Level 2	$ 12,474	Provision for credit losses	$ (559)
Residential loans held for sale [b]	Level 2	108,010	Mortgage banking, net	(3,760)
Impaired loans [c]	Level 3	79,270	Provision for credit losses [d]	(75,194)
Other real estate owned	Level 2	9,752	Foreclosure / OREO expense, net	(1,091)
Mortgage servicing rights	Level 3	73,149	Mortgage banking, net	200

(a) Commercial loans held for sale are carried at the lower of cost or estimated fair value. At June 30, 2017, the estimated fair value exceeded the cost and therefore there was no adjustment recognized in Income.
(b) Effective January 1, 2017, residential loans originated for sale are accounted for under the fair value option. Prior periods have not been restated. For more information on this accounting policy change, please refer to Note 3.
(c) Represents individually evaluated impaired loans, net of the related allowance for loan losses.
(d) Represents provision for credit losses on individually evaluated impaired loans.

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

The Corporations's significant Level 3 measurements which employ unobservable inputs that are readily quantifiable pertain to mortgage servicing rights and impaired loans. The table below presents information about these inputs and further discussion is found above.

June 30, 2017	Valuation Technique	Significant Unobservable Input	Weighted Average Input Applied
Mortgage servicing rights	Discounted cash flow	Discount rate	11%
Mortgage servicing rights	Discounted cash flow	Constant prepayment rate	11%
Impaired Loans	Appraisals / Discounted cash flow	Collateral / Discount factor	20%

Fair Value of Financial Instruments

The Corporation is required to disclose estimated fair values for its financial instruments. Fair value estimates, methods, and assumptions are set forth below for the Corporation's financial instruments.

		June 30, 2017		December 31, 2016	
	Fair Value Hierarchy Level	Carrying Amount	Fair Value	Carrying Amount	Fair Value
		($ in Thousands)			
Financial assets:					
Cash and due from banks	Level 1	$ 396,677	$ 396,677	$ 446,558	$ 446,558
Interest-bearing deposits in other financial institutions	Level 1	126,232	126,232	149,175	149,175
Federal funds sold and securities purchased under agreements to resell	Level 1	43,000	43,000	46,500	46,500
Investment securities held to maturity	Level 2	2,255,395	2,263,322	1,273,536	1,264,674
Investment securities available for sale	Level 1	2,636	2,636	2,602	2,602
Investment securities available for sale	Level 2	3,684,834	3,684,834	4,677,424	4,677,424
Investment securities available for sale	Level 3	—	—	200	200
FHLB and Federal Reserve Bank stocks	Level 2	181,180	181,180	140,001	140,001
Commercial loans held for sale	Level 2	4,772	4,772	12,474	12,474
Residential loans held for sale	Level 2	41,620	41,620	108,010	108,010
Loans, net	Level 3	20,501,968	20,377,586	19,776,381	19,680,317
Bank owned life insurance	Level 2	588,440	588,440	585,290	585,290
Derivatives (trading and other assets)	Level 2	50,107	50,107	54,974	54,974
Derivatives (trading and other assets)	Level 3	2,839	2,839	3,114	3,114
Financial liabilities:					
Noninterest-bearing demand, savings, interest-bearing demand, and money market accounts	Level 3	$ 19,677,850	$ 19,677,850	$ 20,282,321	$ 20,282,321
Brokered CDs and other time deposits	Level 2	1,940,330	1,940,330	1,606,127	1,606,127
Short-term funding	Level 2	1,402,482	1,402,482	1,092,035	1,092,035
Long-term funding	Level 2	3,262,120	3,288,139	2,761,795	2,791,841
Standby letters of credit [(a)]	Level 2	2,394	2,394	2,566	2,566
Derivatives (trading and other liabilities)	Level 2	48,674	48,674	53,679	53,679

(a) The commitment on standby letters of credit was $242 million and $260 million at June 30, 2017 and December 31, 2016, respectively. See Note 12 for additional information on the standby letters of credit and for information on the fair value of lending-related commitments.

Cash and due from banks, interest-bearing deposits in other financial institutions, and federal funds sold and securities purchased under agreements to resell: For these short-term instruments, the carrying amount is a reasonable estimate of fair value.

Investment securities (held to maturity and available for sale): The fair value of investment securities is based on quoted prices in active markets, or if quoted prices are not available for a specific security, then fair values are estimated by using pricing models, quoted prices of securities with similar characteristics, or discounted cash flows.

FHLB and Federal Reserve Bank stocks: The carrying amount is a reasonable fair value estimate for the Federal Reserve Bank and FHLB stocks given their "restricted" nature (i.e., the stock can only be sold back to the respective institutions (FHLB or Federal Reserve Bank) or another member institution at par).

Loans held for sale: The fair value estimation process for the loans held for sale portfolio is segregated by loan type. The estimated fair value for residential loans held for sale was based on what secondary markets are currently offering for portfolios with similar characteristics. The estimated fair value for commercial loans held for sale was based on a discounted cash flow analysis.

Loans, net: The fair value estimation process for the loan portfolio uses an exit price concept and reflects discounts the Corporation believes are consistent with liquidity discounts in the market place. Fair values are estimated for portfolios of loans with similar financial characteristics. Loans are segregated by type such as commercial and industrial, real estate construction, commercial real estate (owner occupied and investor), residential mortgage, home equity, and other consumer. The fair value of loans is estimated by discounting the future cash flows using the current rates at which similar loans would be made to borrowers with similar credit ratings and for similar maturities. The fair value analysis also included other assumptions to estimate fair value, intended to approximate those a market participant would use in an orderly transaction, with adjustments for discount rates, interest rates, liquidity, and credit spreads, as appropriate.

Bank owned life insurance ("BOLI"): The fair value of BOLI approximates the carrying amount, because upon liquidation of these investments, the Corporation would receive the cash surrender value which equals the carrying amount.

Deposits: The fair value of deposits with no stated maturity such as noninterest-bearing demand, savings, interest-bearing demand, and money market accounts, is equal to the amount payable on demand as of the balance sheet date. The fair value of Brokered CDs and other time deposits is based on the discounted value of contractual cash flows. The discount rate is estimated using the rates currently offered for deposits of similar remaining maturities. However, if the estimated fair value of Brokered CDs and other time deposits is less than the carrying value, the carrying value is reported as the fair value.

Short-term funding: The carrying amount is a reasonable estimate of fair value for existing short-term funding.

Long-term funding: Rates currently available to the Corporation for debt with similar terms and remaining maturities are used to estimate the fair value of existing long-term funding.

Standby letters of credit: The fair value of standby letters of credit represents deferred fees arising from the related off-balance sheet financial instruments. These deferred fees approximate the fair value of these instruments and are based on several factors, including the remaining terms of the agreement and the credit standing of the customer.

Derivatives (trading and other): A detailed description of the Corporation's derivative instruments can be found under the "Assets and Liabilities Measured at Fair Value on a Recurring Basis" section of this footnote.

Limitations: Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instrument. These estimates do not reflect any premium or discount that could result from offering for sale at one time the Corporation’s entire holdings of a particular financial instrument. Because no market exists for a significant portion of the Corporation’s financial instruments, fair value estimates are based on judgments regarding future expected loss experience, current economic conditions, risk characteristics of various financial instruments, and other factors. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and, therefore, cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Note 14 Retirement Plans

The Corporation has a noncontributory defined benefit retirement plan (the Retirement Account Plan ("RAP")) covering substantially all full-time employees. 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 benefit cost for the RAP and Postretirement Plans for three and six months ended June 30, 2017 and 2016 were as follows.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	($ in Thousands)			
Components of Net Periodic Benefit Cost				
Pension Plan:				
Service cost	$ 1,782	$ 1,725	$ 3,563	$ 3,450
Interest cost	1,756	1,780	3,512	3,560
Expected return on plan assets	(4,882)	(5,065)	(9,763)	(10,130)
Amortization of prior service cost	(18)	12	(37)	25
Amortization of actuarial loss	487	483	975	965
Total net pension cost	$ (875)	$ (1,065)	$ (1,750)	$ (2,130)
Postretirement Plan:				
Interest cost	$ 24	$ 36	$ 48	$ 72
Amortization of prior service cost	(19)	—	(38)	—
Total net periodic benefit cost	$ 5	$ 36	$ 10	$ 72

Note 15 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 2016 Annual Report on Form 10-K, with certain exceptions. The more significant of these exceptions are described herein.

The Corporation allocates net interest income using an internal funds transfer pricing ("FTP") methodology that charges users of funds (assets) and credits providers of funds (liabilities, primarily deposits) based on the maturity, prepayment and / or repricing characteristics of the assets and liabilities. The net effect of this allocation is recorded in the Risk Management and Shared Services segment.

A credit provision 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 incurred loss model using the methodologies described in the Corporation's 2016 Annual Report on Form 10-K to assess the overall appropriateness of the allowance for loan losses. 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 amortization of core deposit and other intangible assets associated with acquisitions) 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).

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. generally accepted accounting principles. 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.

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 footnote in the Corporation's 2016 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. The Community, Consumer, and Business segment serves individuals, as well as small and mid-sized businesses. 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.

Segment Income Statement Data

($ in Thousands)	Corporate and Commercial Specialty	Community, Consumer, and Business	Risk Management and Shared Services	Consolidated Total
Six Months Ended June 30, 2017				
Net interest income	$ 179,259	$ 179,059	$ 5,775	$ 364,093
Noninterest income	24,490	130,679	7,072	162,241
Total revenue	203,749	309,738	12,847	526,334
Credit provision*	23,050	10,271	(12,321)	21,000
Noninterest expense	76,897	241,339	31,771	350,007
Income (loss) before income taxes	103,802	58,128	(6,603)	155,327
Income tax expense (benefit)	34,012	20,345	(13,283)	41,074
Net income	$ 69,790	$ 37,783	$ 6,680	$ 114,253
Return on average allocated capital (ROCET1)**	12.6%	13.1%	1.1%	10.6%
Six Months Ended June 30, 2016				
Net interest income	$ 159,233	$ 170,574	$ 18,897	$ 348,704
Noninterest income	22,549	128,880	13,931	165,360
Total revenue	181,782	299,454	32,828	514,064
Credit provision*	27,853	12,388	(6,241)	34,000
Noninterest expense	71,543	243,260	33,528	348,331
Income (loss) before income taxes	82,386	43,806	5,541	131,733
Income tax expense (benefit)	27,716	15,332	(2,940)	40,108
Net income	$ 54,670	$ 28,474	$ 8,481	$ 91,625
Return on average allocated capital (ROCET1)**	10.5%	9.1%	3.7%	9.2%

Segment Balance Sheet Data

($ in Thousands)	Corporate and Commercial Specialty	Community, Consumer, and Business	Risk Management and Shared Services	Consolidated Total
Average balances for YTD June 2017				
Average earning assets	$ 10,807,106	$ 9,321,564	$ 6,414,384	$ 26,543,054
Average loans	10,797,831	9,319,719	181,049	20,298,599
Average deposits	6,433,870	11,456,200	3,604,524	21,494,594
Average allocated capital (CET1)**	$ 1,120,082	$ 582,706	$ 378,104	$ 2,080,892
Average balances for YTD June 2016				
Average earning assets	$ 9,924,378	$ 9,222,677	$ 6,473,156	$ 25,620,211
Average loans	9,913,591	9,221,370	147,447	19,282,408
Average deposits	5,744,533	11,215,704	3,471,729	20,431,966
Average allocated capital (CET1)**	$ 1,049,431	$ 630,520	$ 224,910	$ 1,904,861

* The consolidated credit provision is equal to the actual reported provision for credit losses.

** The Federal Reserve establishes capital adequacy requirements for the Corporation, including common equity Tier 1. For segment reporting purposes, the ROCET1 reflects return on average allocated common equity Tier 1. 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.

Segment Income Statement Data

($ in Thousands)	Corporate and Commercial Specialty	Community, Consumer, and Business	Risk Management and Shared Services	Consolidated Total
Three Months Ended June 30, 2017				
Net interest income	$ 89,871	$ 90,131	$ 3,817	$ 183,819
Noninterest income	12,497	65,809	4,104	82,410
Total revenue	102,368	155,940	7,921	266,229
Credit provision*	11,470	5,764	(5,234)	12,000
Noninterest expense	39,418	125,242	11,656	176,316
Income (loss) before income taxes	51,480	24,934	1,499	77,913
Income tax expense (benefit)	16,363	8,727	(5,160)	19,930
Net income	$ 35,117	$ 16,207	$ 6,659	$ 57,983
Return on average allocated capital (ROCET1)**	12.5%	11.0%	4.5%	10.6%
Three Months Ended June 30, 2016				
Net interest income	$ 80,069	$ 84,969	$ 11,679	$ 176,717
Noninterest income	10,936	65,132	6,100	82,168
Total revenue	91,005	150,101	17,779	258,885
Credit provision*	15,114	6,246	(7,360)	14,000
Noninterest expense	37,140	121,965	15,255	174,360
Income (loss) before income taxes	38,751	21,890	9,884	70,525
Income tax expense (benefit)	13,137	7,662	635	21,434
Net income	$ 25,614	$ 14,228	$ 9,249	$ 49,091
Return on average allocated capital (ROCET1)**	9.7%	9.0%	13.4%	9.9%

Segment Balance Sheet Data

($ in Thousands)	Corporate and Commercial Specialty	Community, Consumer, and Business	Risk Management and Shared Services	Consolidated Total
Three Months Ended June 30, 2017				
Average earning assets	$ 10,853,881	$ 9,510,571	$ 6,380,103	$ 26,744,555
Average loans	10,841,858	9,508,683	171,449	20,521,990
Average deposits	6,447,190	11,574,028	3,501,931	21,523,149
Average allocated capital (CET1)**	$ 1,125,494	$ 588,880	$ 385,451	$ 2,099,825
Three Months Ended June 30, 2016				
Average earning assets	$ 10,128,726	$ 9,325,036	$ 6,514,287	$ 25,968,049
Average loans	10,115,959	9,323,720	202,306	19,641,985
Average deposits	5,570,919	11,331,214	3,386,820	20,288,953
Average allocated capital (CET1)**	$ 1,067,203	$ 633,829	$ 212,209	$ 1,913,241

* The consolidated credit provision is equal to the actual reported provision for credit losses.

** The Federal Reserve establishes capital adequacy requirements for the Corporation, including common equity Tier 1. For segment reporting purposes, the ROCET1 reflects return on average allocated common equity Tier 1. 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.

Note 16 Accumulated Other Comprehensive Income (Loss)

The following table summarizes the components , changes, and reclassifications out of accumulated other comprehensive income (loss).

($ in Thousands)	Investments Securities Available For Sale	Defined Benefit Pension and Post Retirement Obligations	Accumulated Other Comprehensive Income (Loss)
Balance January 1, 2017	$ (20,079)	$ (34,600)	$ (54,679)
Other comprehensive income before reclassifications	3,632	—	3,632
Amounts reclassified from accumulated other comprehensive income:			
Personnel expense	—	900	900
Interest income (Amortization of net unrealized gains on available for sale securities transferred to held to maturity securities)	(2,575)	—	(2,575)
Income tax expense	(406)	(342)	(748)
Net other comprehensive income during period	651	558	1,209
Balance June 30, 2017	$ (19,428)	$ (34,042)	$ (53,470)
Balance January 1, 2016	$ 459	$ (33,075)	$ (32,616)
Other comprehensive income before reclassifications	82,743	—	82,743
Amounts reclassified from accumulated other comprehensive income (loss):			
Investment securities gain, net	(6,214)	—	(6,214)
Personnel expense	—	990	990
Interest income (Amortization of net unrealized gains on available for sale securities transferred to held to maturity securities)	(3,024)	—	(3,024)
Income tax expense	(28,048)	(378)	(28,426)
Net other comprehensive income during period	45,457	612	46,069
Balance June 30, 2016	$ 45,916	$ (32,463)	$ 13,453

	Investments Securities Available For Sale	Defined Benefit Pension and Post Retirement Obligations	Accumulated Other Comprehensive Income (Loss)
Balance April 1, 2017	$ (22,023)	$ (34,321)	$ (56,344)
Other comprehensive income before reclassifications	5,744	—	5,744
Amounts reclassified from accumulated other comprehensive income:			
Personnel expense	—	450	450
Interest income (Amortization of net unrealized gains on available for sale securities transferred to held to maturity securities)	(1,548)	—	(1,548)
Income tax expense	(1,601)	(171)	(1,772)
Net other comprehensive income during period	2,595	279	2,874
Balance June 30, 2017	$ (19,428)	$ (34,042)	$ (53,470)
Balance April 1, 2016	$ 34,936	$ (32,769)	$ 2,167
Other comprehensive income before reclassifications	22,321	—	22,321
Amounts reclassified from accumulated other comprehensive income (loss):			
Investment securities gain, net	(3,116)	—	(3,116)
Personnel expense	—	495	495
Interest income (Amortization of net unrealized gains on available for sale securities transferred to held to maturity securities)	(1,452)	—	(1,452)
Income tax expense	(6,773)	(189)	(6,962)
Net other comprehensive income during period	10,980	306	11,286
Balance June 30, 2016	$ 45,916	$ (32,463)	$ 13,453

Note 17 Recent Developments

On July 20, 2017, the Corporation announced the signing of a definitive merger agreement with Bank Mutual Corporation ("Bank Mutual") in an all-stock stock transaction. Bank Mutual Corporation is a bank holding company and the parent for BankMutual, an Office of the Comptroller of the Currency ("OCC") Chartered national bank. Based in Milwaukee, with consolidated assets of approximately $2.7 billion and deposits of approximately $1.9 billion as of June 30, 2017, BankMutual was the third largest bank, by deposit market share, headquartered in Wisconsin.

Under the terms of the agreement, shareholders of Bank Mutual will receive 0.422 shares of the Corporation's common stock for each share of Bank Mutual common stock. The transaction is valued at approximately $482 million based on the closing stock price on the day preceding the announcement. The transaction is expected to be completed in early 2018, subject to the customary closing conditions, regulatory approvals, and the approval of Bank Mutual's shareholders.

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 Securities and Exchange Commission, 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, 2016, 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 Form 10-Q and should be read in conjunction therewith. Management continually evaluates strategic acquisition opportunities and other various strategic alternatives that could involve the sale or acquisition of branches or other assets, or the consolidation or creation of subsidiaries.

Performance Summary

- Average loans of $20.3 billion increased $1.0 billion, or 5%, from the first six months of 2016, and residential mortgage lending accounted for 73% of average loan growth. Average deposits of $21.5 billion increased $1.1 billion, or 5%, from the first six months of 2016. For the remainder of 2017, the Corporation expects mid-to-high single digit annual average loan growth and to maintain the loan to deposit ratio under 100%.
- Net interest income of $364 million increased $15 million, or 4%, from the first six months of 2016. Net interest margin was 2.83% compared to 2.81% in the first six months of 2016. For the remainder of 2017, the Corporation expects an improving net interest margin trend.
- Provision for credit losses of $21 million decreased $13 million, or 38%, from the first six months of 2016. For the remainder of 2017, the Corporation expects the provision for loan losses will change based on changes in risk grade or other indicators of credit quality, and loan volume.
- Noninterest income of $162 million was down 2% from the first six months of 2016 and reflected lower investment securities gains. For the remainder of 2017, the Corporation expects improving fee-based revenues and declining mortgage banking revenue.
- Noninterest expense of $350 million was essentially flat from the second quarter of 2016. For the remainder of 2017, the Corporation expects noninterest expense to be approximately 1% higher than the prior year; however, the Corporation also expects continued improvement in the efficiency ratio due to increasing revenue.

Table 1 Summary Results of Operations: Trends

($ in thousands, except per share data)	YTD Jun 2017	YTD Jun 2016	2Q17	1Q17	4Q16	3Q16	2Q16
Net income	$ 114,253	$ 91,625	$ 57,983	$ 56,270	$ 54,833	$ 53,816	$ 49,091
Net income available to common equity	109,584	87,258	55,644	53,940	52,485	51,628	46,922
Earnings per common share - basic	0.72	0.58	0.36	0.36	0.35	0.34	0.31
Earnings per common share - diluted	0.71	0.58	0.36	0.35	0.34	0.34	0.31
Effective tax rate	26.44%	30.45%	25.58%	27.31%	30.07%	30.52%	30.39%

Income Statement Analysis

Net Interest Income

Table 2 Net Interest Income Analysis

	Six months ended June 30,					
	2017			2016		
	Average Balance	Interest Income / Expense	Average Yield / Rate	Average Balance	Interest Income / Expense	Average Yield / Rate
	($ in Thousands)					
ASSETS						
Earning assets:						
Loans:[1][2][3]						
Commercial and business lending	$ 7,260,839	$ 126,187	3.50%	$ 7,297,847	$ 116,380	3.21%
Commercial real estate lending	4,982,027	92,697	3.75%	4,561,821	79,158	3.49%
Total commercial	12,242,866	218,884	3.60%	11,859,668	195,538	3.31%
Residential mortgage	6,762,319	109,404	3.24%	6,025,102	96,130	3.19%
Retail	1,293,414	31,497	4.88%	1,397,638	32,984	4.73%
Total loans	20,298,599	359,785	3.56%	19,282,408	324,652	3.38%
Investment securities:						
Taxable	4,805,819	47,133	1.96%	5,000,754	49,786	1.99%
Tax-exempt[1]	1,140,889	24,897	4.36%	1,054,731	24,057	4.56%
Other short-term investments	297,747	3,089	2.09%	282,318	2,385	1.70%
Investments and other	6,244,455	75,119	2.41%	6,337,803	76,228	2.41%
Total earning assets	26,543,054	$ 434,904	3.29%	25,620,211	$ 400,880	3.14%
Other assets, net	2,447,719			2,450,451		
Total assets	$ 28,990,773			$ 28,070,662		
LIABILITIES AND STOCKHOLDERS' EQUITY						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Savings	$ 1,503,678	$ 389	0.05%	$ 1,406,333	$ 464	0.07%
Interest-bearing demand	4,262,047	9,716	0.46%	3,430,571	4,176	0.24%
Money market	9,116,719	21,150	0.47%	9,062,514	12,753	0.28%
Time	1,683,177	6,849	0.82%	1,549,351	6,051	0.79%
Total interest-bearing deposits	16,565,621	38,104	0.46%	15,448,769	23,444	0.31%
Federal funds purchased and securities sold under agreements to repurchase	492,425	1,339	0.55%	617,007	674	0.22%
Other short-term funding	763,245	2,907	0.77%	993,704	1,360	0.28%
Total short-term funding	1,255,670	4,246	0.68%	1,610,711	2,034	0.25%
Long-term funding	2,847,570	17,946	1.27%	2,817,560	16,428	1.17%
Total short and long-term funding	4,103,240	22,192	1.09%	4,428,271	18,462	0.84%
Total interest-bearing liabilities	20,668,861	$ 60,296	0.59%	19,877,040	$ 41,906	0.42%
Noninterest-bearing demand deposits	4,928,973			4,983,197		
Other liabilities	248,559			230,528		
Stockholders' equity	3,144,380			2,979,897		
Total liabilities and stockholders' equity	$ 28,990,773			$ 28,070,662		
Interest rate spread			2.70%			2.72%
Net free funds			0.13%			0.09%
Fully tax-equivalent net interest income and net interest margin		$ 374,608	2.83%		$ 358,974	2.81%
Fully tax-equivalent adjustment		10,515			10,270	
Net interest income		$ 364,093			$ 348,704	

(1) The yield on tax-exempt loans and securities is computed on a fully tax-equivalent basis using a tax rate of 35% for all periods presented and is net of the effects of certain disallowed interest deductions.
(2) Nonaccrual loans and loans held for sale have been included in the average balances.
(3) Interest income includes net loan fees.

Table 2 Net Interest Income Analysis Continued

	Quarter ended								
	June 30, 2017			March 31, 2017			June 30, 2016		
	Average Balance	Interest Income / Expense	Average Yield / Rate	Average Balance	Interest Income / Expense	Average Yield / Rate	Average Balance	Interest Income / Expense	Average Yield / Rate
	($ in Thousands)								
ASSETS									
Earning assets:									
Loans:[1][2][3]									
Commercial and business lending	$ 7,321,523	$ 65,507	3.59%	$ 7,199,481	$ 60,680	3.42%	$ 7,474,633	$ 59,088	3.18%
Commercial real estate lending	4,964,257	47,562	3.84%	4,999,994	45,135	3.66%	4,654,111	40,169	3.47%
Total commercial	12,285,780	113,069	3.69%	12,199,475	105,815	3.52%	12,128,744	99,257	3.29%
Residential mortgage	6,957,865	56,097	3.23%	6,564,600	53,306	3.25%	6,129,924	48,382	3.16%
Retail	1,278,345	16,048	5.03%	1,308,650	15,450	4.74%	1,383,317	16,378	4.74%
Total loans	20,521,990	185,214	3.62%	20,072,725	174,571	3.51%	19,641,985	164,017	3.35%
Investment securities:									
Taxable	4,781,488	23,658	1.98%	4,830,421	23,475	1.94%	4,967,437	24,270	1.95%
Tax-exempt[1]	1,143,736	12,459	4.36%	1,138,010	12,438	4.37%	1,064,252	12,077	4.54%
Other short-term investments	297,341	1,553	2.09%	298,158	1,536	2.08%	294,375	1,318	1.80%
Investments and other	6,222,565	37,670	2.42%	6,266,589	37,449	2.39%	6,326,064	37,665	2.38%
Total earning assets	26,744,555	$ 222,884	3.34%	26,339,314	$ 212,020	3.24%	25,968,049	$ 201,682	3.12%
Other assets, net	2,454,351			2,441,013			2,674,427		
Total assets	$ 29,198,906			$ 28,780,327			$ 28,642,476		
LIABILITIES AND STOCKHOLDERS' EQUITY									
Interest-bearing liabilities:									
Interest-bearing deposits:									
Savings	$ 1,541,129	$ 201	0.05%	$ 1,465,811	$ 188	0.05%	$ 1,445,020	$ 228	0.06%
Interest-bearing demand	4,272,620	5,506	0.52%	4,251,357	4,210	0.40%	3,640,733	2,144	0.24%
Money market	9,064,874	11,763	0.52%	9,169,141	9,388	0.42%	8,692,782	6,309	0.29%
Time	1,752,255	3,710	0.85%	1,613,331	3,138	0.79%	1,540,424	2,997	0.78%
Total interest-bearing deposits	16,630,878	21,180	0.51%	16,499,640	16,924	0.42%	15,318,959	11,678	0.31%
Federal funds purchased and securities sold under agreements to repurchase	489,571	824	0.67%	495,311	515	0.42%	674,360	378	0.23%
Other short-term funding	842,305	1,827	0.87%	683,306	1,080	0.64%	1,209,511	845	0.28%
Total short-term funding	1,331,876	2,651	0.80%	1,178,617	1,595	0.55%	1,883,871	1,223	0.26%
Long-term funding	2,932,348	9,950	1.36%	2,761,850	7,996	1.17%	3,052,581	6,923	0.91%
Total short and long-term funding	4,264,224	12,601	1.18%	3,940,467	9,591	0.98%	4,936,452	8,146	0.66%
Total interest-bearing liabilities	20,895,102	$ 33,781	0.65%	20,440,107	$ 26,515	0.52%	20,255,411	$ 19,824	0.39%
Noninterest-bearing demand deposits	4,892,271			4,966,082			4,969,994		
Other liabilities	246,395			250,747			228,027		
Stockholders' equity	3,165,138			3,123,391			3,189,044		
Total liabilities and stockholders' equity	$ 29,198,906			$ 28,780,327			$ 28,642,476		
Interest rate spread			2.69%			2.72%			2.73%
Net free funds			0.14%			0.12%			0.08%
Fully tax-equivalent net interest income and net interest margin		$ 189,103	2.83%		$ 185,505	2.84%		$ 181,858	2.81%
Fully tax-equivalent adjustment		5,284			5,231			5,141	
Net interest income		$ 183,819			$ 180,274			$ 176,717	

(1) The yield on tax-exempt loans and securities is computed on a fully tax-equivalent basis using a tax rate of 35% for all periods presented and is net of the effects of certain disallowed interest deductions.
(2) Nonaccrual loans and loans held for sale have been included in the average balances.
(3) Interest income includes net loan fees.

Notable Contributions to the Change in Net Interest Income

- Net interest income in the consolidated statements of income (which excludes the fully tax-equivalent adjustment) was $364 million for the first six months of 2017 compared to $349 million for the first six months of 2016. See sections "Interest Rate Risk" and "Quantitative and Qualitative Disclosures about Market Risk," for a discussion of interest rate risk and market risk.

- Fully tax-equivalent net interest income of $375 million for the first six months of 2017 was $16 million higher than the first six months of 2016.

- Average earning assets of $26.5 billion for the first six months of 2017 were $923 million, or 4%, higher than the first six months of 2016. Average loans increased $1.0 billion, or 5%, primarily due to a $737 million increase in residential mortgage loans and a $420 million increase in commercial real estate lending, partially offset by a $104 million decrease in other retail loans.

- Average interest-bearing liabilities of $20.7 billion for the first six months of 2017 were up $792 million, or 4%, versus the first six months of 2016. On average, interest-bearing deposits increased $1.1 billion and short-term funding decreased $355 million to $1.3 billion from the first six months of 2016.

- The net interest margin for the first six months of 2017 was 2.83%, compared to 2.81% for the first six months of 2016.

- For the first six months of 2017, loan yields increased 18 bp to 3.56% compared to the first six months of 2016. The yield on investment securities and other short-term investments remained flat at 2.41%.

- The cost of interest-bearing liabilities was 0.59% for the first six months of 2017, 17 bp higher than the first six months of 2016. The increase was primarily due to a 15 bp increase in the cost of average interest-bearing deposits (to 0.46%) and a 43 bp increase in the cost of short-term funding (to 0.68%), both primarily due to increases in the Federal Reserve interest rate.

- The Federal Reserve increased the targeted federal funds rate on June 14, 2017, to a range of 1.00%-1.25% from 0.75%-1.00%. The Federal Reserve expects gradual increases in the Federal Funds rate, however, the timing and magnitude of any such increases are uncertain and will depend on domestic and global economic conditions.

Provision for Credit Losses

The provision for credit losses (which includes the provision for loan losses and the provision for unfunded commitments) for the six months ended June 30, 2017 was $21 million, compared to $34 million for the six months ended June 30, 2016. Net charge offs were $18 million (representing 0.18% of average loans) for the six months ended June 30, 2017, compared to $37 million (representing 0.39% of average loans) for the six months ended June 30, 2016. The ratio of the allowance for loan losses to total loans was 1.35% for both June 30, 2017 and 2016.

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 allowance for loan losses and the allowance for unfunded commitments, which focuses on changes in the size and character of the loan portfolio, changes in levels of impaired and other nonaccrual loans, historical losses and delinquencies in each portfolio category, the level of loans sold or transferred to held for sale, the risk inherent in specific loans, concentrations of loans to specific borrowers or industries, existing economic conditions, the fair value of underlying collateral, and other factors which could affect potential credit losses. See additional discussion under sections, Loans, Credit Risk, Nonperforming Assets, and Allowance for Credit Losses.

Noninterest Income

Table 3 Noninterest Income

($ in Thousands)	YTD 2017	YTD 2016	YTD % Change	2Q17	1Q17	4Q16	3Q16	2Q16	2Q17 Change vs 1Q17	2Q17 Change vs 2Q16
Trust service fees	$ 24,281	$ 22,956	6 %	$ 12,346	$ 11,935	$ 12,211	$ 11,700	$ 11,509	3 %	7 %
Service charges on deposit accounts	32,386	32,717	(1)%	16,030	16,356	16,447	17,445	16,444	(2)%	(3)%
Card-based and other nondeposit fees	26,229	24,708	6 %	13,764	12,465	12,592	12,777	12,717	10 %	8 %
Insurance commissions	42,473	43,387	(2)%	20,853	21,620	17,977	19,431	22,005	(4)%	(5)%
Brokerage and annuity commissions	8,679	7,892	10 %	4,346	4,333	4,188	4,155	4,098	— %	6 %
Subtotal ("fee-based revenue")	134,048	131,660	2 %	67,339	66,709	63,415	65,508	66,773	1 %	1 %
Mortgage banking income	14,965	16,287	(8)%	7,692	7,273	12,058	21,903	8,300	6 %	(7)%
Mortgage servicing rights expense	5,359	8,016	(33)%	2,665	2,694	499	3,612	4,233	(1)%	(37)%
Mortgage banking, net	9,606	8,271	16 %	5,027	4,579	11,559	18,291	4,067	10 %	24 %
Capital market fees, net	7,925	7,331	8 %	4,042	3,883	7,716	7,012	3,793	4 %	7 %
Bank owned life insurance income	6,514	7,743	(16)%	3,899	2,615	3,338	3,290	2,973	49 %	31 %
Other	4,492	3,960	13 %	2,213	2,279	2,379	2,180	1,789	(3)%	24 %
Subtotal (“fee income”)	162,585	158,965	2 %	82,520	80,065	88,407	96,281	79,395	3 %	4 %
Asset gains (losses), net	(700)	181	N/M	(466)	(234)	767	(1,034)	(343)	99 %	36 %
Investment securities gains (losses), net	356	6,214	(94)%	356	—	3,115	(13)	3,116	N/M	(89)%
Total noninterest income	$ 162,241	$ 165,360	(2)%	$ 82,410	$ 79,831	$ 92,289	$ 95,234	$ 82,168	3 %	— %
Mortgage loans originated for sale during period	$220,284	$517,838	(57)%	$119,004	$101,280	$287,194	$466,092	$323,989	18 %	(63)%
Mortgage loan settlements during period	$364,128	$491,980	(26)%	$167,550	$196,578	$395,382	$655,298	$270,216	(15)%	(38)%
Trust assets under management, at market value	$8,997,305	$7,944,187	13 %	$8,997,305	$8,715,965	$8,301,564	$8,178,839	$7,944,187	3 %	13 %
Fee income ratio	31%	31%		31%	31%	32%	35%	31%		

N/M = Not Meaningful

Notable Contributions to the Change in Noninterest Income

- Fee-based revenue was $134 million, an increase of $2 million (2%) compared to the six months ended June 30, 2016. Within fee based revenue, card-based and other nondeposit fees increased $2 million.
- Net mortgage banking income for the first half of 2017 was $10 million, an increase of $1 million compared to the first half of 2016 due to a favorable change in the mortgage servicing rights valuation, reflecting higher interest rates at June 30, 2017.
- Net investment securities gains were down $6 million for the six months ended June 30, 2017, due to $6 million gain on the sales of FNMA and FHLMC securities in the six months ended June 30, 2016. During the first six months ended June 30, 2017, net securities gains were approximately $356,000.

Noninterest Expense

Table 4 Noninterest Expense

($ in Thousands)	YTD 2017	YTD 2016	YTD % Change	2Q17	1Q17	4Q16	3Q16	2Q16	2Q17 Change vs 1Q17	2Q17 Change vs 2Q16
Personnel expense	$ 209,102	$ 203,527	3 %	$104,683	$104,419	$107,491	$103,819	$102,129	— %	3 %
Occupancy	28,051	27,017	4 %	12,832	15,219	13,690	15,362	13,215	(16)%	(3)%
Equipment	10,719	10,842	(1)%	5,234	5,485	5,328	5,319	5,396	(5)%	(3)%
Technology	29,893	28,714	4 %	15,473	14,420	14,413	14,173	14,450	7 %	7 %
Business development and advertising	12,987	14,802	(12)%	7,152	5,835	6,298	5,251	6,591	23 %	9 %
Other intangible amortization	1,009	1,043	(3)%	496	513	525	525	539	(3)%	(8)%
Loan expense	5,594	6,663	(16)%	2,974	2,620	3,443	3,535	3,442	14 %	(14)%
Legal and professional fees	9,877	9,881	— %	5,711	4,166	5,184	4,804	4,856	37 %	18 %
Foreclosure / OREO expense	2,687	3,207	(16)%	1,182	1,505	677	960	1,330	(21)%	(11)%
FDIC expense	16,000	16,500	(3)%	8,000	8,000	9,250	9,000	8,750	— %	(9)%
Other expense	24,088	26,135	(8)%	12,579	11,509	12,616	12,566	13,662	9 %	(8)%
Total noninterest expense	$ 350,007	$ 348,331	— %	$176,316	$173,691	$178,915	$175,314	$174,360	2 %	1 %
Personnel expense to total noninterest expense	60%	58%		59%	60%	60%	59%	59%		
Average full-time equivalent employees	4,361	4,394		4,352	4,370	4,439	4,477	4,415		

Notable Contributions to the Change in Noninterest Expense

- Personnel expense (which includes salary-related expenses and fringe benefit expenses) was $209 million for the six months ended June 30, 2017, up $6 million (3%) from the six months ended June 30, 2016. The increase was primarily due to a $4 million increase in incentive plan expense, along with $2 million increase in health insurance costs.
- Nonpersonnel noninterest expense on a combined basis were $141 million, down $4 million (3%) compared to the first half of 2016. Technology expense was up $1 million (4%) from the six months ended June 30, 2016, due to continual investment in solutions to drive operational efficiency. Business development and advertising was down $2 million from the first half of 2016 due to a shift in the Corporation's advertising strategy from television to digital advertising.

Income Taxes

The Corporation recognized income tax expense of $41 million for the six months ended June 30, 2017 compared to income tax expense of $40 million for six months ended June 30, 2016. The change in income tax expense was due primarily to an increase in pre-tax book income off-set by tax benefits from stock-based compensation booked during the first six months of 2017 and a partial release of a state tax reserve. The effective tax rate was 26.44% for the first six months of 2017, compared to an effective tax rate of 30.45% for the first six months of 2016.

Income tax expense recorded in the consolidated statements of income involves the interpretation and application of certain accounting pronouncements and federal and state tax laws and regulations, and is, therefore, considered a critical accounting policy. The Corporation is subject to examination by various taxing authorities. Examination by taxing authorities may impact the amount of tax expense and / or 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. See section “Critical Accounting Policies," in the Corporation’s 2016 Annual Report on Form 10-K for additional information on income taxes.

Balance Sheet Analysis

- At June 30, 2017, total assets were $29.8 billion, up $630 million (2%) from December 31, 2016 and up $730 million (3%) from June 30, 2016.
- Loans of $20.8 billion at June 30, 2017 were up $728 million (4%) from December 31, 2016 and were up $968 million (5%) from June 30, 2016. See section "Loans" for additional information on loans.
- Investment securities were $5.9 billion at June 30, 2017, relatively unchanged from year-end 2016 and down $95 million (2%) from June 30, 2016.
- At June 30, 2017, total deposits of $21.6 billion were down $270 million (1%) from December 31, 2016 and were up $1.3 billion (7%) from June 30, 2016. See section "Deposits and Customer Funding" for additional information on deposits.
- Short and long-term funding of $4.7 billion at June 30, 2017 were up $811 million (21%) from year-end 2016 and down $758 million (14%) from June 30, 2016.

Loans

Table 5 Period End Loan Composition

	June 30, 2017		March 31, 2017		December 31, 2016		September 30, 2016		June 30, 2016	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
					($ in Thousands)					
Commercial and industrial	$ 6,571,000	32%	$ 6,300,646	31%	$ 6,489,014	32%	$ 6,721,557	34%	$ 6,701,986	34%
Commercial real estate — owner occupied	845,336	4%	878,391	4%	897,724	5%	892,678	4%	921,736	5%
Commercial and business lending	7,416,336	36%	7,179,037	35%	7,386,738	37%	7,614,235	38%	7,623,722	39%
Commercial real estate — investor	3,329,585	16%	3,415,355	17%	3,574,732	18%	3,530,370	18%	3,495,791	18%
Real estate construction	1,651,805	8%	1,553,205	8%	1,432,497	7%	1,314,431	7%	1,285,573	6%
Commercial real estate lending	4,981,390	24%	4,968,560	25%	5,007,229	25%	4,844,801	25%	4,781,364	24%
Total commercial	12,397,726	60%	12,147,597	60%	12,393,967	62%	12,459,036	63%	12,405,086	63%
Residential mortgage	7,115,457	34%	6,715,282	33%	6,332,327	31%	6,034,166	30%	6,035,720	30%
Home equity	897,111	4%	911,969	5%	934,443	5%	951,594	5%	968,771	5%
Other consumer	372,775	2%	372,835	2%	393,979	2%	399,209	2%	405,709	2%
Total consumer	8,385,343	40%	8,000,086	40%	7,660,749	38%	7,384,969	37%	7,410,200	37%
Total loans	$20,783,069	100%	$20,147,683	100%	$20,054,716	100%	$19,844,005	100%	$19,815,286	100%

Consumer loans were $8.4 billion and represented 40% of total loans at June 30, 2017, an increase of $725 million (9%) from December 31, 2016 and an increase of $975 million (13%) from June 30, 2016.

The Corporation has long-term guidelines relative to the proportion of Commercial and Business, Commercial Real Estate, and Consumer loans within the overall loan portfolio, with each targeted to represent 30-40% of the overall loan portfolio. The targeted long-term guidelines were unchanged during 2016 and the first six months of 2017. Furthermore, certain sub-asset classes within the respective portfolios were further defined and dollar limitations were 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.

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 7 Loans, for additional information on managing overall credit quality.

The loan portfolio is widely diversified by types of borrowers, industry groups, and market areas within our 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 June 30, 2017, no significant concentrations existed in the Corporation’s portfolio in excess of 10% of total loans.

Commercial and business lending: The commercial and business lending classification primarily includes commercial loans to large corporations, middle market companies and small businesses and lease financing. At June 30, 2017, the largest industry group within the commercial and business lending category was the manufacturing sector which represented 6% of total loans and 17% of the total commercial and business lending portfolio. The next largest industry group within the commercial and business lending category included the power and utilities portfolio, which represented 5% of total loans and represented 14% of the total commercial and business lending portfolio at June 30, 2017. The remaining commercial and business lending portfolio is spread over a diverse range of industries, none of which exceed 5% of total loans. The credit risk related to commercial loans 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. Currently, a higher risk segment of the commercial and business lending portfolio is loans to borrowers supporting oil and gas exploration and production, which are further discussed under “Oil and gas lending” below.

Oil and gas lending: The Corporation provides reserve based loans to oil and gas exploration and production firms. The Corporation's oil and gas lending team is based in Houston and focuses on serving the funding needs of small and mid-sized companies in the upstream oil and gas business. The oil and gas loans are generally first lien, reserve-based, and borrowing base dependent lines of credit. A small portion of the portfolio is in a second lien position to which the Corporation also holds the first lien position. The portfolio is diversified across all major U.S. geographic basins. The portfolio is diverse by product line with approximately 50% in oil and 50% in gas at June 30, 2017. Borrowing base re-determinations for the portfolio are completed at least twice a year and are based on detailed engineering reports and discounted cash flow analysis.

The following table summarizes information about the Corporation's oil and gas loan portfolio.

Table 6 Oil and Gas Loan Portfolio

	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
			($ in Millions)		
Pass	$ 411	$ 405	$ 426	$ 351	$ 387
Special mention	39	8	20	47	64
Potential problem	37	78	75	171	176
Nonaccrual	114	134	147	127	129
Total Oil and gas related loans	$ 601	$ 625	$ 668	$ 696	$ 756
Quarter net charge offs	$ 12	$ 6	$ 6	$ 22	$ 19
Oil and gas related allowance	$ 33	$ 42	$ 38	$ 38	$ 42
Oil and gas related allowance ratio	5.4%	6.7%	5.7%	5.5%	5.6%

The Corporation proactively risk grades and reserves accordingly against the oil and gas loan portfolio. Lower market pricing and increased market volatility has led to downward migration within the portfolio. At June 30, 2017, nonaccrual oil and gas related loans totaled approximately $114 million, representing 19% of the oil and gas loan portfolio, a decrease of $33 million from December 31, 2016.

Commercial real estate - investor: Commercial real estate-investor is comprised of loans secured by various non-owner occupied or investor income producing property types. At June 30, 2017, the largest property type exposures within the commercial real estate-investor portfolio were loans secured by retail properties which represented 5% of total loans and 29% of the total commercial real estate-investor portfolio and loans secured by multi-family properties which represented 5% of total loans and 28% of the total commercial real estate-investor portfolio. The remaining commercial real estate-investor portfolio is spread over various other property types, none of which exceed 5% of total loans. Of the exposure in the Corporation's commercial real estate retailer portfolio, our largest tenant exposure is less than 5%, spread over five loans, to a national investment grade grocer. 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.

The Corporation's current lending standards for commercial real estate and real estate construction lending are determined by property type and specifically address many criteria, including: maximum loan amounts, maximum loan-to-value ("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 which 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.

Table 7 Commercial Loan Distribution and Interest Rate Sensitivity

June 30, 2017	Within 1 Year [(a)]	1-5 Years	After 5 Years	Total	% of Total
			($ in Thousands)		
Commercial and industrial	$ 5,785,922	$ 549,498	$ 235,580	$ 6,571,000	53%
Commercial real estate — investor	2,342,608	920,458	66,519	3,329,585	27%
Commercial real estate — owner occupied	401,051	323,533	120,752	845,336	7%
Real estate construction	1,501,478	122,820	27,507	1,651,805	13%
Total	$ 10,031,059	$ 1,916,309	$ 450,358	$ 12,397,726	100%
Fixed rate	$ 4,319,243	$ 773,527	$ 309,504	$ 5,402,274	44%
Floating or adjustable rate	5,711,816	1,142,782	140,854	6,995,452	56%
Total	$ 10,031,059	$ 1,916,309	$ 450,358	$ 12,397,726	100%
Percent by maturity distribution	81%	15%	4%	100%	

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

The total commercial loans that were floating or adjustable rate was $7.0 billion (56%) at June 30, 2017. Including the $4.3 billion of fixed rate loans due within one year, 91% of the commercial loan portfolio noted above matures, re-prices, or resets within one year.

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%. At June 30, 2017, the residential mortgage portfolio was comprised of $2.3 billion of fixed-rate residential real estate mortgages and $4.8 billion of variable-rate residential real estate mortgages, compared to $1.8 billion of fixed-rate mortgages and $4.5 billion variable-rate mortgages at December 31, 2016. The residential mortgage portfolio is focused primarily in our three-state branch footprint, with approximately 88% of the outstanding loan balances in our branch footprint at June 30, 2017. 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 are sold in the secondary market with servicing rights retained. During the first half of 2017, the Corporation retained substantially all of its 30 year production through May. Beginning in June, the Corporation resumed originating for sale. The majority of the on balance sheet residential mortgage portfolio consists of hybrid, adjustable rate mortgage loans with initial fixed rate terms of 3, 5, 7, or 10 years. The Corporation also 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 were 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 30 year mortgage loan production on its balance sheet.

The Corporation's underwriting and risk-based pricing guidelines for residential mortgage loans include minimum borrower FICO 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, approximately 24% are first lien positions. Home equity loans and lines in a junior position at June 30, 2017 included approximately 40% for which the Corporation also owned or serviced the related first lien loan and approximately 60% where the Corporation did not service the related first lien loan.

The Corporation's credit risk monitoring guidelines for home equity is 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 and loans consist of a combination of both borrower FICO and the original cumulative LTV against the property securing the loan. Currently, our policy sets the maximum acceptable LTV at 90% and the minimum acceptable FICO at 670. 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 Corporation has significantly curtailed its offerings of fixed-rate, closed end home equity loans. The loans in the Corporation's portfolio generally have an original term of 20 years with principal and interest payments required.

Based upon outstanding balances at June 30, 2017, the following table presents the periods when home equity lines of credit revolving periods are scheduled to end.

Table 8 Home Equity Line of Credit - Revolving Period End Dates

	$ in Thousands	% to Total
Less than 5 years	$ 53,394	6%
5 — 10 years	216,968	27%
Over 10 years	545,185	67%
Total home equity revolving lines of credit	$ 815,547	100%

Other consumer: Other consumer consists of student loans, as well as short-term and other personal installment loans and credit cards. The Corporation had $197 million and $214 million of student loans at June 30, 2017, and December 31, 2016, respectively, the majority of which are government guaranteed. Credit risk for non-government guaranteed student, short-term and 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. The student loan portfolio is in run-off and no new student loans are being originated.

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 9 provides detailed information regarding nonperforming assets, which include nonaccrual loans and other real estate owned, and other nonperforming assets.

Table 9 Nonperforming Assets

	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
			($ in Thousands)		
Nonperforming assets:					
Commercial and industrial	$ 141,475	$ 164,891	$ 183,371	$ 205,902	$ 193,439
Commercial real estate — owner occupied	15,800	17,925	9,544	6,995	9,635
Commercial and business lending	157,275	182,816	192,915	212,897	203,074
Commercial real estate — investor	7,206	8,273	18,051	8,028	11,528
Real estate construction	1,717	1,247	844	864	957
Commercial real estate lending	8,923	9,520	18,895	8,892	12,485
Total commercial	166,198	192,336	211,810	221,789	215,559
Residential mortgage	51,975	54,183	50,236	53,475	52,300
Home equity	13,482	13,212	13,001	14,347	14,363
Other consumer	233	260	256	300	380
Total consumer	65,690	67,655	63,493	68,122	67,043
Total nonaccrual loans	231,888	259,991	275,303	289,911	282,602
Commercial real estate owned	4,825	5,599	7,176	9,758	7,473
Residential real estate owned	2,957	1,941	3,098	3,006	4,391
Bank properties real estate owned	—	—	—	1,735	1,805
Other real estate owned (“OREO”)	7,782	7,540	10,274	14,499	13,669
Other nonperforming assets	7,418	7,418	7,418	—	—
Total nonperforming assets (“NPAs”)	$ 247,088	$ 274,949	$ 292,995	$ 304,410	$ 296,271
Accruing loans past due 90 days or more:					
Commercial	$ 248	$ 258	$ 236	$ 254	$ 248
Consumer	1,287	1,462	1,377	1,257	1,246
Total accruing loans past due 90 days or more	$ 1,535	$ 1,720	$ 1,613	$ 1,511	$ 1,494
Restructured loans (accruing):					
Commercial	$ 50,634	$ 51,274	$ 53,022	$ 53,410	$ 57,251
Consumer	26,691	27,785	26,835	26,660	26,175
Total restructured loans (accruing)	$ 77,325	$ 79,059	$ 79,857	$ 80,070	$ 83,426
Nonaccrual restructured loans (included in nonaccrual loans)	$ 51,715	$ 78,902	$ 29,385	$ 31,758	$ 34,841
Ratios:					
Nonaccrual loans to total loans	1.12%	1.29%	1.37%	1.46%	1.43%
NPAs to total loans plus OREO	1.19%	1.36%	1.46%	1.53%	1.49%
NPAs to total assets	0.83%	0.94%	1.01%	1.04%	1.02%
Allowance for loan losses to nonaccrual loans	121.22%	108.72%	101.10%	92.97%	94.76%

Table 9 Nonperforming Assets (continued)

	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
			($ in Thousands)		
Accruing loans 30-89 days past due:					
Commercial and industrial	$ 1,255	$ 1,675	$ 1,413	$ 950	$ 2,124
Commercial real estate — owner occupied	1,284	970	1,384	869	193
Commercial and business lending	2,539	2,645	2,797	1,819	2,317
Commercial real estate — investor	899	1,122	931	630	2,715
Real estate construction	135	431	369	402	524
Commercial real estate lending	1,034	1,553	1,300	1,032	3,239
Total commercial	3,573	4,198	4,097	2,851	5,556
Residential mortgage	9,165	7,243	8,142	6,697	7,382
Home equity	5,924	4,512	5,849	5,473	7,730
Other consumer	1,746	1,658	3,189	2,046	1,895
Total consumer	16,835	13,413	17,180	14,216	17,007
Total accruing loans 30-89 days past due	$ 20,408	$ 17,611	$ 21,277	$ 17,067	$ 22,563
Potential problem loans:					
Commercial and industrial	$ 142,607	$ 218,930	$ 227,196	$ 351,290	$ 379,818
Commercial real estate — owner occupied	60,724	58,994	64,524	47,387	45,671
Commercial and business lending	203,331	277,924	291,720	398,677	425,489
Commercial real estate — investor	48,569	49,217	51,228	36,765	25,081
Real estate construction	8,901	10,141	2,465	1,929	2,117
Commercial real estate lending	57,470	59,358	53,693	38,694	27,198
Total commercial	260,801	337,282	345,413	437,371	452,687
Residential mortgage	1,576	2,155	5,615	3,226	3,953
Home equity	208	220	114	78	94
Total consumer	1,784	2,375	5,729	3,304	4,047
Total potential problem loans	$ 262,585	$ 339,657	$ 351,142	$ 440,675	$ 456,734

Nonaccrual loans: Nonaccrual loans are considered to be one indicator of potential future loan losses. See Note 7 Loans, of the notes to consolidated financial statements for additional nonaccrual loan disclosures. The ratio of nonaccrual loans to total loans at June 30, 2017 was 1.12%, as compared to 1.37% at December 31, 2016 and 1.43% at June 30, 2016. See also sections Credit Risk and Allowance for Credit Losses.

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. Accruing loans 90 days or more past due at June 30, 2017 were relatively unchanged from both December 31, 2016 and June 30, 2016.

Restructured loans: Loans are considered restructured loans if concessions have been granted to borrowers that are experiencing financial difficulty. See also Note 7 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 allowance for loan losses. Potential problem loans are generally defined by management to include loans rated as substandard by management but that are not considered impaired (i.e., nonaccrual loans and accruing troubled debt restructurings); 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. The decrease is primarily due to the improvement of general commercial related credits and oil and gas related credits.

Other real estate owned ("OREO"): OREO decreased to $8 million at June 30, 2017, compared to $10 million at December 31, 2016 and $14 million at June 30, 2016. Management actively seeks to ensure properties held are monitored to minimize the Corporation's risk of loss.

Other nonperforming assets: Other nonperforming assets were $7 million at both June 30, 2017 and December 31, 2016. The asset represents the Bank's ownership interest in a profit participation agreement in an entity created to own certain oil and gas assets obtained as a result of bankruptcy and liquidation of borrower in partial satisfaction of their loan.

Allowance for Credit Losses

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 minimization of loan losses. Credit risk management for each loan type is discussed in the section entitled Credit Risk. See Note 7 Loans, for additional disclosures on the allowance for credit losses.

To assess the appropriateness of the allowance for loan losses, an allocation methodology is applied by the Corporation which focuses on 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, 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 loans, changes in the size and character of the loan portfolio, concentrations of loans to specific borrowers or industries, existing economic conditions, the fair value of underlying collateral, and other qualitative and quantitative factors which could affect potential credit losses. Assessing these factors involves significant judgment. Because each of the criteria used is subject to change, the allowance for loan losses is not necessarily indicative of the trend of future loan losses in any particular category. Therefore, management considers the allowance for loan losses a critical accounting policy—See section Critical Accounting Policies, in the Corporation's 2016 Annual Report on Form 10-K for additional information on the allowance for loan losses. See section, Nonperforming Assets, for a detailed discussion on asset quality. See also Note 7 Loans, of the notes to consolidated financial statements for additional allowance for loan losses disclosures. Table 5 provides information on loan growth and period end loan composition, Table 9 provides additional information regarding nonperforming assets, and Table 10 and Table 11 provide additional information regarding activity in the allowance for loan losses.

The methodology used for the allocation of the allowance for loan losses at June 30, 2017 and December 31, 2016 was generally comparable, whereby the Corporation segregated its loss factors (used for both criticized and non-criticized loans) into a component primarily based on historical loss rates and a component primarily based on other qualitative factors that are probable to affect loan collectability. The allocation methodology consists of the following components: First, a valuation allowance estimate is established for specifically identified commercial and consumer loans determined by the Corporation to be impaired, using discounted cash flows, estimated fair value of underlying collateral, and / or other data available. Second, management allocates the allowance for loan losses with loss factors, for criticized loan pools by loan type as well as for non-criticized loan pools by loan type, primarily based on historical loss rates after considering loan type, historical loss and delinquency experience, and industry statistics. 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. The loss factors applied in the methodology are periodically re-evaluated and adjusted to reflect changes in historical loss levels or other risks. Lastly, management allocates allowance for loan losses to absorb unrecognized losses that may not be provided for by the other components due to other 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 10 Allowance for Credit Losses

	YTD 2017	YTD 2016	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
	($ in Thousands)						
Allowance for Loan Losses:							
Balance at beginning of period	$ 278,335	$ 274,264	$ 282,672	$ 278,335	$ 269,540	$ 267,780	$ 277,370
Provision for loan losses	21,000	31,000	11,000	10,000	18,000	20,000	11,000
Charge offs	(27,230)	(45,866)	(15,376)	(11,854)	(11,609)	(28,964)	(24,621)
Recoveries	8,996	8,382	2,805	6,191	2,404	10,724	4,031
Net charge offs	(18,234)	(37,484)	(12,571)	(5,663)	(9,205)	(18,240)	(20,590)
Balance at end of period	$ 281,101	$ 267,780	$ 281,101	$ 282,672	$ 278,335	$ 269,540	$ 267,780
Allowance for Unfunded Commitments:							
Balance at beginning of period	$ 25,400	$ 24,400	$ 24,400	$ 25,400	$ 28,400	$ 27,400	$ 24,400
Provision for unfunded commitments	—	3,000	1,000	(1,000)	(3,000)	1,000	3,000
Balance at end of period	$ 25,400	$ 27,400	$ 25,400	$ 24,400	$ 25,400	$ 28,400	$ 27,400
Allowance for credit losses[a]	$ 306,501	$ 295,180	$ 306,501	$ 307,072	$ 303,735	$ 297,940	$ 295,180
Provision for credit losses[b]	$ 21,000	$ 34,000	$ 12,000	$ 9,000	$ 15,000	$ 21,000	$ 14,000
Net loan (charge offs) recoveries:							
Commercial and industrial	$ (15,414)	$ (33,500)	$ (11,046)	$ (4,368)	$ (6,566)	$ (16,407)	$ (18,564)
Commercial real estate — owner occupied	62	(63)	43	19	(221)	(154)	(20)
Commercial and business lending	(15,352)	(33,563)	(11,003)	(4,349)	(6,787)	(16,561)	(18,584)
Commercial real estate — investor	(640)	679	(126)	(514)	5	(564)	(560)
Real estate construction	(15)	(247)	(26)	11	(86)	(22)	(219)
Commercial real estate lending	(655)	432	(152)	(503)	(81)	(586)	(779)
Total commercial	(16,007)	(33,131)	(11,155)	(4,852)	(6,868)	(17,147)	(19,363)
Residential mortgage	(692)	(1,989)	(564)	(128)	(1,048)	(540)	(757)
Home equity	227	(829)	54	173	(491)	125	317
Other consumer	(1,762)	(1,535)	(906)	(856)	(798)	(678)	(787)
Total consumer	(2,227)	(4,353)	(1,416)	(811)	(2,337)	(1,093)	(1,227)
Total net charge offs	$ (18,234)	$ (37,484)	$ (12,571)	$ (5,663)	$ (9,205)	$ (18,240)	$ (20,590)
Ratios:							
Allowance for loan losses to total loans	1.35%	1.35%	1.35%	1.40%	1.39%	1.36%	1.35%
Allowance for loan losses to net charge offs (Annualized)	7.6x	3.6x	5.6x	12.3x	7.6x	3.7x	3.2x

(a) Includes the allowance for loan losses and the allowance for unfunded commitments.
(b) Includes the provision for loan losses and the provision for unfunded commitments.

Table 11 Annualized net (charge offs) recoveries[(a)]

(in basis points)	YTD 2017	YTD 2016	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
Net loan (charge offs) recoveries:							
Commercial and industrial	(49)	(106)	(69)	(28)	(40)	(98)	(114)
Commercial real estate — owner occupied	1	(1)	2	1	(10)	(7)	(1)
Commercial and business lending	(43)	(92)	(60)	(24)	(36)	(87)	(100)
Commercial real estate — investor	(4)	4	(2)	(6)	N/M	(6)	(7)
Real estate construction	N/M	(4)	(1)	N/M	(3)	(1)	(7)
Commercial real estate lending	(3)	2	(1)	(4)	(1)	(5)	(7)
Total commercial	(26)	(56)	(36)	(16)	(22)	(55)	(64)
Residential mortgage	(2)	(7)	(3)	(1)	(7)	(3)	(5)
Home equity	5	(17)	2	8	(21)	5	13
Other consumer	(94)	(75)	(98)	(90)	(80)	(67)	(78)
Total consumer	(6)	(12)	(7)	(4)	(12)	(6)	(7)
Total net charge offs	(18)	(39)	(25)	(11)	(18)	(36)	(42)

(a) Annualized ratio of net charge offs to average loans by loan type.
N/M = Not Meaningful

At June 30, 2017, the allowance for credit losses was $307 million, compared to $304 million at December 31, 2016 and $295 million at June 30, 2016. At June 30, 2017, the allowance for loan losses to total loans was 1.35% and covered 121% of nonaccrual loans, compared to 1.39% and 101%, respectively, at December 31, 2016 and 1.35% and 95%, respectively, at June 30, 2016. Management believes the level of allowance for loan losses to be appropriate at June 30, 2017.

Notable Contributions to the Change in Allowance for Credit Loss

- Total loans increased $728 million (4%) during the first half of 2017, including a $725 million (9%) increase in total consumer. Compared to June 30, 2016, total loans increased $968 million (5%), including a $975 million (13%) increase in total consumer and a $200 million (4%) increase in commercial real estate lending, which was partially offset by a $207 million (3%) decrease in commercial and business lending. See section Loans for additional information on the changes in the loan portfolio and see section Credit Risk for discussion about credit risk management for each loan type.

- Total nonaccrual loans decreased $43 million during the first half of 2017 and decreased $51 million from June 30, 2016, primarily due to the migration of general commercial related credits and oil and gas related credits, respectively. See also Note 7 Loans, of the notes to consolidated financial statements and section Nonperforming Assets for additional disclosures on the changes in asset quality.

- Potential problem loans decreased $89 million from December 31, 2016 and decreased $194 million from June 30, 2016, primarily due to the migration of general commercial related credits and oil and gas related credits, respectively. See Table 9, for additional information on the changes in potential problem loans.

- Net charge offs decreased $19 million from the first half of 2016, primarily due to the charge off of oil and gas credits. See Table 10 and Table 11 for additional information regarding the activity in the allowance for loan losses.

- The allowance for loan losses attributable to oil and gas related credits (included within the commercial and industrial allowance for loan losses) was $33 million at June 30, 2017, compared to $38 million at December 31, 2016 and $42 million at June 30, 2016. See also Oil and gas lending within the Credit Risk section for additional disclosure.

Deposits and Customer Funding

Table 12 Period End Deposit and Customer Funding Composition

($ in Thousands)	June 30, 2017		March 31, 2017		December 31, 2016		September 30, 2016		June 30, 2016	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Noninterest-bearing demand	$ 5,038,162	23%	$ 5,338,212	25%	$ 5,392,208	25%	$ 5,337,677	24%	$ 5,039,336	25%
Savings	1,552,820	7%	1,530,155	7%	1,431,494	7%	1,441,187	7%	1,451,801	7%
Interest-bearing demand	3,858,739	18%	4,736,236	22%	4,687,656	21%	4,548,390	21%	3,789,138	19%
Money market	9,228,129	43%	8,608,523	39%	8,770,963	40%	8,894,357	41%	8,448,543	42%
Brokered CDs	131,184	1%	54,993	—%	52,725	—%	44,373	—%	46,268	—%
Other time	1,809,146	8%	1,559,916	7%	1,553,402	7%	1,481,728	7%	1,517,764	7%
Total deposits	$21,618,180	100%	$21,828,035	100%	$21,888,448	100%	$21,747,712	100%	$20,292,850	100%
Customer funding[(a)]	262,318		326,823		300,197		477,607		464,880	
Total deposits and customer funding	$21,880,498		$22,154,858		$22,188,645		$22,225,319		$20,757,730	
Network transaction deposits[(b)]	$ 3,220,956		$ 3,417,380		$ 3,895,467		$ 3,730,513		$ 3,141,214	
Total deposits and customer funding, excluding Brokered CDs and network transaction deposits	$18,528,358		$18,682,485		$18,240,453		$18,450,433		$17,570,248	
Time deposits of more than $250,000	$ 477,043		$ 244,641		$ 234,537		$ 149,214		$ 151,133	

(a) Repurchase sweep agreements with customers from deposit accounts.
(b) Included above in interest-bearing demand and money market.

- Deposits are the Corporation's largest source of funds.
- Total deposits decreased $270 million (1%) from December 31, 2016, and increased $1.3 billion (7%) from June 30, 2016, primarily in money market deposits.
- Non-maturity deposit accounts, comprised of savings, money market, and demand (both interest and noninterest-bearing demand) accounts accounted for 91% of our total deposits at June 30, 2017.
- Included in the above amounts were $3.2 billion of network deposits, primarily sourced from other financial institutions and intermediaries. These represented 15% of our total deposits at June 30, 2017.
- Other time deposits increased $256 million (16%) from December 31, 2016. This was primarily due to an increase to CDs issued to Public Entities effectively extending out the maturity of the deposits in anticipation of higher short term borrowing rates.
- During the second quarter, the Corporation experiences seasonal deposit outflows. Typically, this outflow is funded with short-term borrowings, FHLB advances, and / or network deposits.

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 percent 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 June 30, 2017, the Corporation was in compliance with its internal liquidity objectives and has sufficient asset-based liquidity to meet its obligations under a stressed scenario.

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

- Investment securities are an important tool to the Corporation's liquidity objective, and can be pledged or sold to enhance liquidity, if necessary. See also Note 6 Investment Securities of the notes to consolidated financial statements for additional information on the Corporation's investment securities portfolio, including investment securities pledged.
- The Bank pledges eligible loans to both the Federal Reserve Bank and the FHLB as collateral to establish lines of credit and borrow from these entities. Based on the amount of collateral pledged, the FHLB established a collateral value from which the Bank may draw advances against the collateral. Also, the collateral is used to enable the FHLB to issue letters of credit in favor of public fund depositors of the Bank. As of June 30, 2017, the Bank had $2.1 billion available for future advances. The Federal Reserve Bank also establishes a collateral value of assets to support borrowings from the discount window. As of June 30, 2017, the Bank had $2.1 billion available for discount window borrowings.
- The Parent Company has a $200 million commercial paper program, of which, $98 million was outstanding as of June 30, 2017.
- Dividends and service fees from subsidiaries, as well as the proceeds from issuance of capital are also funding sources for the Parent Company.
- The Parent Company 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.
- The Parent Company also has filed a universal shelf registration statement with the SEC, 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.
- The Bank may also issue institutional certificates of deposit, network transaction deposits, and brokered certificates of deposit.

Credit ratings relate to the Corporation's ability to issue debt securities and the cost to borrow money, and should not be viewed as an indication of future stock performance or a recommendation to buy, sell, or hold securities. Adverse changes in these factors could result in a negative change in credit ratings and impact not only the ability to raise funds in the capital markets but also the cost of these funds. The credit ratings of the Parent Company and the Bank at June 30, 2017 are displayed below.

Table 13 Credit Ratings

	Moody's	S&P*
Associated Bank short-term deposits	P-1	-
Associated Bank long-term	A1	BBB+
Corporation short-term	P-2	-
Corporation long-term	Baa1	BBB
Outlook	Negative	Stable

* Standard and Poor's

For the six months ended June 30, 2017, net cash provided by operating activities and financing activities was $299 million and $511 million, respectively, while investing activities used net cash of $882 million, for a net decrease in cash and cash equivalents of $72 million since year-end 2016. During the first half of 2017, assets of $29.8 billion increased $630 million compared to year-end 2016. On the funding side, deposits of $21.6 billion decreased by $270 million when compared to year-end 2016.

For the six months ended June 30, 2016, net cash provided by operating and financing activities was $105 million and $1.1 billion, respectively, while investing activities used net cash of $1.2 billion, for a net increase in cash and cash equivalents of $4 million since year-end 2015. During the first half of 2016, assets increased to $29.0 billion (up $1.3 billion or 5%) compared to year-end 2015, primarily due to $1.1 billion increase in loans. On the funding side, deposits decreased $715 million while short-term and long-term funding increased $1.1 billion and $835 million, respectively.

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 Asset / Liability Committee ("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 is 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 our risk appetite for interest rate risk over both short-term and long-term horizons. No limit breaches occurred during the first half of 2017.

The major sources of our 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 net interest income (NII) at risk, interest rate sensitive earnings at risk (EAR), and market value of equity (MVE) at risk. These measures show that our interest rate risk profile was slightly asset sensitive at June 30, 2017.

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 2016 Annual Report on Form 10-K.

The sensitivity analysis included below is measured as a percentage change in NII and EAR due to instantaneous moves in benchmark interest rates from a baseline scenario. 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.

Table 14 Estimated % Change in Net Interest Income Over 12 Months

	Estimated % Change in Rate Sensitive Earnings at Risk (EAR) Over 12 Months			
	Dynamic Forecast June 30, 2017	Static Forecast June 30, 2017	Dynamic Forecast December 31, 2016	Static Forecast December 31, 2016
Instantaneous Rate Change				
100 bp increase in interest rates	2.1%	1.9%	1.4%	1.5%
200 bp increase in interest rates	4.0%	3.4%	2.7%	2.9%

At June 30, 2017, the MVE profile indicates a decline in net balance sheet value due to instantaneous upward changes in rates.

Table 15 Market Value of Equity Sensitivity

	June 30, 2017	December 31, 2016
Instantaneous Rate Change		
100 bp increase in interest rates	(3.3)%	(2.9)%
200 bp increase in interest rates	(7.0)%	(6.0)%

While an instantaneous and severe shift in interest rates was used in this analysis to provide an estimate of exposure under an extremely adverse scenario, the Corporation believes that a gradual shift in interest rates would have a much more modest impact. 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 changing product spreads that could mitigate the adverse impact of changes in interest rates.

The above NII, 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

Table 16 Contractual Obligations and Other Commitments

June 30, 2017	One Year or Less	One to Three Years	Three to Five Years	Over Five Years	Total
			($ in Thousands)		
Time deposits	$ 1,285,501	$ 495,148	$ 156,413	$ 3,268	$ 1,940,330
Short-term funding	1,402,482	—	—	—	1,402,482
Long-term funding	365,000	1,999,285	150,000	747,835	3,262,120
Operating leases	9,711	18,780	15,469	20,940	64,900
Commitments to extend credit	4,077,097	2,755,762	1,432,240	155,598	8,420,697
Total	$ 7,139,791	$ 5,268,975	$ 1,754,122	$ 927,641	$ 15,090,529

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 commitments and derivative instruments. A discussion of the Corporation's derivative instruments at June 30, 2017, is included in Note 10, Derivative and Hedging Activities, of the notes to consolidated financial statements. A discussion of the Corporation's lending-related commitments is included in Note 12, Commitments, Off-Balance Sheet Arrangements, Legal Proceedings and Regulatory Matters , of the notes to consolidated financial statements. See also Note 9, Short and Long-Term Funding, of the notes to consolidated financial statements for additional information on the Corporation's short-term and long-term funding.

Table 16 summarizes significant contractual obligations and other commitments at June 30, 2017, at those amounts contractually due to the recipient, including any premiums or discounts, hedge basis adjustments, or other similar carrying value adjustments.

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 condition in markets served, and strength of management. At June 30, 2017, the capital ratios of the Corporation and its banking subsidiary were in excess of regulatory minimum requirements. The Corporation's capital ratios are summarized in Table 17.

Table 17 Capital Ratios

	2Q17	1Q17	4Q16	3Q16	2Q16
			($ in Thousands)		
Risk-based Capital (1)					
Common equity Tier 1	$ 2,130,238	$ 2,085,309	$ 2,032,587	$ 1,983,770	$ 1,940,704
Tier 1 capital	2,289,831	2,244,863	2,191,798	2,142,779	2,059,661
Total capital	2,808,049	2,757,310	2,706,760	2,656,648	2,573,941
Total risk-weighted assets	21,590,134	21,128,672	21,340,951	21,264,972	21,168,161
Common equity Tier 1 capital ratio	9.87%	9.87%	9.52%	9.33%	9.17%
Tier 1 capital ratio	10.61%	10.62%	10.27%	10.08%	9.73%
Total capital ratio	13.01%	13.05%	12.68%	12.49%	12.16%
Tier 1 leverage ratio	8.09%	8.05%	7.83%	7.64%	7.43%
Selected Equity and Performance Ratios					
Total stockholders' equity / assets	10.72%	10.80%	10.61%	10.62%	10.43%
Dividend payout ratio (2)	33.33%	33.33%	34.29%	32.35%	35.48%

(1) 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 our capital with the capital of other financial services companies. See Table 18 for a reconciliation of common equity Tier 1 and average common equity Tier 1.

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

Non-GAAP Measures

Table 18 Non-GAAP Measures

	YTD		Quarter Ended				
	June 30, 2017	June 30, 2016	June 30, 2017	March 31, 2017	December 31, 2016	September 30, 2016	June 30, 2016
			($ in Thousands, except per share data)				
Selected Equity and Performance Ratios (1) (2)							
Tangible common equity / tangible assets			7.11%	7.10%	6.91%	6.92%	6.85%
Return on average equity	7.33%	6.18%	7.35%	7.31%	7.07%	7.03%	6.19%
Return on average tangible common equity	11.06%	9.38%	11.06%	11.07%	10.78%	10.68%	10.04%
Return on average Common equity Tier 1	10.62%	9.21%	10.63%	10.61%	10.45%	10.52%	9.86%
Return on average assets	0.79%	0.66%	0.80%	0.79%	0.75%	0.74%	0.69%
Average stockholders' equity / average assets	10.85%	10.62%	10.84%	10.85%	10.67%	10.52%	11.13%
Tangible Common Equity and Common Equity Tier 1 Reconciliation (1)(2)							
Common equity			$ 3,031,573	$ 2,984,865	$ 2,931,383	$ 2,937,186	$ 2,909,946
Goodwill and other intangible assets, net			(986,536)	(987,032)	(987,328)	(987,853)	(988,378)
Tangible common equity			$ 2,045,037	$ 1,997,833	$ 1,944,055	$ 1,949,333	$ 1,921,568
Less: Accumulated other comprehensive income / loss			53,470	56,344	54,679	1,254	(13,453)
Less: Deferred tax assets/deferred tax liabilities, net			31,731	31,132	33,853	33,183	32,589
Common equity Tier 1			$ 2,130,238	$ 2,085,309	$ 2,032,587	$ 1,983,770	$ 1,940,704
Tangible Assets Reconciliation (1)							
Total assets			$ 29,769,025	$ 29,109,857	$ 29,139,315	$ 29,152,764	$ 29,038,699
Goodwill and other intangible assets, net			(986,536)	(987,032)	(987,328)	(987,853)	(988,378)
Tangible assets			$ 28,782,489	$ 28,122,825	$ 28,151,987	$ 28,164,911	$ 28,050,321
Average Tangible Common Equity and Average Common Equity Tier 1 Reconciliation (1) (2)							
Common equity	$ 2,984,451	$ 2,859,077	$ 3,005,209	$ 2,963,462	$ 2,924,831	$ 2,910,691	$ 2,868,772
Goodwill and other intangible assets, net	(986,980)	(988,913)	(986,826)	(987,135)	(987,640)	(988,171)	(988,699)
Tangible common equity	1,997,471	1,870,164	2,018,383	1,976,327	1,937,191	1,922,520	1,880,073
Less: Accumulated other comprehensive income / loss	52,179	2,343	50,148	54,234	27,922	(2,616)	1,365
Less: Deferred tax assets/deferred tax liabilities, net	31,242	32,354	31,294	31,188	33,340	32,712	31,803
Average common equity Tier 1	$ 2,080,892	$ 1,904,861	$ 2,099,825	$ 2,061,749	$ 1,998,453	$ 1,952,616	$ 1,913,241
Efficiency Ratio Reconciliation (3)							
Federal Reserve efficiency ratio	66.54 %	69.18 %	66.69 %	66.39 %	65.35 %	64.40 %	69.34 %
Fully tax-equivalent adjustment	(1.30)%	(1.36)%	(1.30)%	(1.30)%	(1.25)%	(1.21)%	(1.36)%
Other intangible amortization	(0.19)%	(0.21)%	(0.18)%	(0.20)%	(0.20)%	(0.19)%	(0.21)%
Fully tax-equivalent efficiency ratio	65.05 %	67.61 %	65.21 %	64.89 %	63.90 %	63.00 %	67.77 %

(1) The ratio tangible common equity to tangible assets excludes goodwill and other intangible assets, net, which is a non-GAAP financial measure. This financial measure has been included as it is considered to be a critical metric with which to analyze and evaluate financial condition and capital strength.

(2) 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 our capital with the capital of other financial services companies.

(3) 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. Management believes the fully tax-equivalent efficiency ratio, which adjusts net interest income for the tax-favored status of certain loans and investment securities, to be the preferred industry measurement as it enhances the comparability of net interest income arising from taxable and tax-exempt sources.

See Part II, Item 2, “Unregistered Sales of Equity Securities and Use of Proceeds,” for additional information on the shares repurchased during the second quarter of 2017.

Sequential Quarter Results

The Corporation reported net income of $58 million for the second quarter of 2017, compared to net income of $56 million for the first quarter of 2017. Net income available to common equity was $56 million for the second quarter of 2017 or net income of $0.36 for both basic and diluted earnings per common share. Comparatively, net income available to common equity for the first quarter of 2017, was $54 million, or net income of $0.36 for basic and $0.35 for diluted earnings per common share, respectively (see Table 1).

Fully tax-equivalent net interest income for the second quarter of 2017 was $189 million, $4 million higher from the first quarter of 2017. The Federal funds target rate increased to 1.25%, compared to 1.00% in first quarter of 2017. The net interest margin in the second quarter of 2017 was down 1 bp, to 2.83%. Average earning assets increased $405 million to $26.7 billion in the second quarter of 2017, with average loans up $449 million, while average investments and other short-term investments were down $44 million (primarily in mortgage related securities). On the funding side, average interest-bearing deposits were up $131 million while noninterest-bearing demand deposits were down $74 million. Average short and long-term funding increased $324 million (primarily short-term and long-term FHLB advances) (see Table 2).

The provision for credit losses was $12 million for the second quarter of 2017, up $3 million from the first quarter of 2017 (see Table 10). See discussion under sections, Provision for Credit Losses, Nonperforming Assets, and Allowance for Credit Losses.

Noninterest income for the second quarter of 2017 increased $3 million (3%) to $82 million versus the first quarter of 2017. Fee-based revenue increased $1 million (1%) from the first quarter of 2017, primarily due to an increase in card interchange fees. BOLI was $4 million, an increase of $1 million (49%) from the first quarter of 2017, primarily due to proceeds from BOLI policy claims during the second quarter of 2017 (see Table 3).

Noninterest expense increased $3 million (2%) to $176 million. Personnel expense was $105 million for the second quarter of 2017, relatively flat from the first quarter of 2017. Legal and professional fees were $6 million, up $2 million from the first quarter of 2017, primarily driven by higher consulting fees. Technology expense was up $1 million from the first quarter of 2017 due to continued investment in solutions to drive operational efficiency. Occupancy expense decreased $2 million, primarily due to decreased snow plowing and less rent during second quarter related to lease terminations and adjustments in the first quarter of 2017. All remaining noninterest expense categories on a combined basis were up $2 million (6%) compared to the first quarter of 2017 (see Table 4).

For the second quarter of 2017, the Corporation recognized income tax expense of $20 million, compared to income tax expense of $21 million for the first quarter of 2017. The effective tax rate was 25.58% and 27.31% for the second quarter of 2017 and the first quarter of 2017, respectively. See Income Taxes section for detailed discussion on taxes.

Comparable Quarter Results

The Corporation reported net income of $58 million for the second quarter of 2017, compared to $49 million for the second quarter of 2016. Net income available to common equity was $56 million for the second quarter of 2017, or net income of $0.36 for both basic and diluted earnings per common share, respectively. Comparatively, net income available to common equity for the second quarter of 2016, was $47 million, or net income of $0.31 for both basic and diluted earnings per common share (see Table 1).

Fully tax-equivalent net interest income for the second quarter of 2017 was $189 million, $7 million higher than the second quarter of 2016. The Federal funds target rate was 1.25% in second quarter of 2017 compared to 0.50% for second quarter of 2016. The net interest margin between the comparable quarters was up 2 bp, to 2.83% in the second quarter of 2017. Average earning assets increased $777 million to $26.7 billion in the second quarter of 2017, with average loans up $880 million (predominantly due to increases in residential mortgage loans). On the funding side, average interest-bearing deposits increased $1.3 billion, while noninterest-bearing demand deposits decreased $78 million from the second quarter of 2016. Average short and long-term funding decreased $672 million (primarily short-term FHLB advances) (see Table 2).

The provision for credit losses was $12 million for the second quarter of 2017, down $2 million from the second quarter of 2016 (see Table 10). See discussion under sections, Provision for Credit Losses, Nonperforming Assets, and Allowance for Credit Losses.

Noninterest income for the second quarter of 2017 remained relatively flat at $82 million compared to second quarter of 2016. Investment securities gains decreased $3 million due to gains on sales of FNMA and FHLMC mortgage-related securities in the second quarter of 2016. Net mortgage banking income increased $1 million, predominantly due to a favorable change in the mortgage servicing rights valuation. Fee-based revenue increased $1 million primarily in card-based and other nondeposit fees (see Table 3).

On a comparable quarter basis, noninterest expense increased $2 million (1%) to $176 million for the second quarter of 2017. Personnel expense was $105 million for the second quarter of 2017, up $3 million (3%) from the second quarter of 2016 primarily driven by increases in health insurance costs. Technology expense increased $1 million (7%) due to continued investment in solutions to drive operational efficiency. All remaining noninterest expense categories on a combined were down $2 million (3%) compared to second quarter of 2016 (see Table 4).

The Corporation recognized income tax expense of $20 million for the second quarter of 2017, compared to income tax expense of $21 million for second quarter of 2016. The effective tax rate was 25.58% and 30.39% for the second quarter of 2017 and 2016, respectively.

Segment Review

As discussed in Note 15 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.

FTP is an important tool for managing the Corporation's balance sheet structure and measuring risk-adjusted profitability. By appropriately allocating the cost of funding and contingent liquidity to business units, the FTP process improves product pricing which influences the volume and terms of new business and helps to optimize the risk / reward profile of the balance sheet. This process helps align the Corporation's funding and contingent liquidity risk with its risk appetite and complements broader liquidity and interest rate risk management programs. FTP methodologies are designed to promote more resilient, sustainable business models and centralize the management of funding and contingent liquidity risks. Through FTP, the Corporation transfers these risks to a central management function that can take advantage of natural off-sets, centralized hedging activities, and a broader view of these risks across business units.

Year to Date Segment Review

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. The Corporate and Commercial Specialty segment had net income of $70 million for the first six months of 2017, up $15 million compared to $55 million for the first six months of 2016. Segment revenue increased $22 million to $204 million for the first six months of 2017 compared to $182 million for the first six months of 2016, primarily due to growth in average loan balances and interest rate increases at the end of 2016 and in 2017. The credit provision decreased $5 million to $23 million during the first six months of 2017 due to the migration of general commercial related credits and oil and gas related credits. Average loan balances were $10.8 billion for the first six months of 2017, up $884 million from the first six months of 2016. Average deposit balances were $6.4 billion for the first six months of 2017, up $689 million from the first six months of 2016. Average allocated capital increased $71 million to $1.1 billion for the first six months of 2017 reflecting the increase in the segment's loan balances.

The Community, Consumer, and Business segment consists of lending and deposit solutions to individuals and small to mid-sized businesses and also provides a variety of investment and fiduciary products and services. The Community, Consumer, and Business segment had net income of $38 million for the first six months of 2017, up $9 million from the first six months of 2016. Segment revenue increased $10 million to $310 million for the first six months of 2017, primarily due to growth in average loan balances and interest rate increases. Noninterest expense decreased $2 million to $241 million for the first six months of 2017, primarily due to a $1 million decrease in legal and professional fees. Average loan balances were $9.3 billion for the first six months of 2017, up $98 million from the first six months of 2016. Average deposits were $11.5 billion for the first six months of 2017, up $240 million from the first six months of 2016. Average allocated capital decreased $48 million to $583 million for the first six months of 2017.

The Risk Management and Shared Services segment had net income of $7 million for the first six months of 2017, down $2 million compared to the first six months of 2016. Net interest income decreased $13 million. Noninterest income decreased $7 million primarily due to $6 million gain on the sales of FNMA and FHLMC securities in the six months ended June 30, 2016. During the first six months ended June 30, 2017, net securities gains were approximately $356,000. The credit provision improved $6 million. Average earning asset balances were $6.4 billion for the first six months of 2017, down $59 million from an average balance of $6.5 billion for the first six months of 2016, primarily in investment securities. Average deposits were $3.6 billion for the first six months of 2017, up $133 million from the first six months of 2016. Average allocated capital increased to $378 million for the first six months of 2017.

Comparable Quarter Segment Review

The Corporate and Commercial Specialty segment had net income of $35 million for the second quarter of 2017, up $10 million from the comparable quarter in 2016. Segment revenue increased $11 million compared to second quarter of 2016, primarily due to growth in average loan balances and interest rate increases at the end of 2016 and in 2017. The credit provision decreased $4 million to $11 million for the second quarter of 2017, due to the migration of general commercial related credits and oil and gas related credits. Average loan balances were $10.8 billion for the second quarter of 2017, up $726 million from an average balance of $10.1 billion for second quarter of 2016. Average deposit balances were $6.4 billion for the second quarter of 2017, up $876 million from the comparable quarter of 2016. Average allocated capital increased $58 million to $1.1 billion for second quarter of 2017.

The Community, Consumer, and Business Banking segment had net income of $16 million for the second quarter of 2017, up $2 million compared to second quarter of 2016. Segment revenue increased $6 million to $156 million for the second quarter of 2017. Total noninterest expense for second quarter of 2017 was $125 million, up $3 million from the comparable quarter of 2016. Average loan balances were $9.5 billion for the second quarter of 2017, up $185 million from the comparable quarter of 2016. Average deposits were $11.6 billion for the second quarter of 2017, up $243 million from average deposits of $11.3 billion for the comparable quarter of 2016. Average allocated capital decreased approximately $45 million during for the second quarter of 2017 compared to the second quarter of 2016.

The Risk Management and Shared Services segment had revenue of $8 million in the second quarter of 2017, a decrease of $10 million from the comparable quarter of 2016. The decrease in noninterest income was primarily due to $3 million less net investment securities gains from the comparable quarter of 2016. The credit provision increased $2 million. Average deposits were $3.5 billion for second quarter of 2017, up $115 million versus the comparable quarter of 2016. Average allocated capital increased $173 million to $385 million for second quarter of 2017.

Critical Accounting Policies

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 allowance for loan losses, goodwill impairment assessment, mortgage servicing rights valuation, and income taxes. A discussion of these policies can be found in the "Critical Accounting Policies" section in Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Corporation's 2016 Annual Report on Form 10-K. There have been no changes in the Corporation's application of critical accounting policies since December 31, 2016.

Future Accounting Pronouncements

New accounting policies adopted by the Corporation are discussed in Note 3 Summary of Significant Accounting Policies, of the notes to consolidated financial statements. The expected impact of accounting pronouncements recently issued or proposed but not yet required to be adopted are displayed in the table below.

Standard	Description	Date of adoption	Effect on financial statements
ASU 2017-07 Compensation — Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost	The FASB issued the update to improve the presentation of net periodic pension cost and net periodic postretirement benefit cost, including a requirement that employers disaggregate the service cost component from the other components of net benefit cost. In addition, the amendments provide explicit guidance on how to present the service cost component and the other components of net benefit cost in the income statement and allow only the service cost component of net benefit cost to be eligible for capitalization. This amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Entities should apply the amendment retrospectively to each period presented and prospectively only for the capitalization component. Early adoption is permitted, but should be within the first interim period if interim financial statements are issued.	1st Quarter 2018	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.

Standard	Description	Date of adoption	Effect on financial statements
ASU 2017-04 Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment	The FASB issued an amendment to simplify the subsequent quantitative measurement of goodwill by eliminating step two from the goodwill impairment test. Instead, an entity will perform only step one of its quantitative goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and then recognizing an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. An entity will still have the option to perform a qualitative assessment for a reporting unit to determine if the quantitative step one impairment test is necessary. This amendment is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Entities should apply the amendment prospectively. Early adoption is permitted, including in an interim period, for impairment tests performed after January 1, 2017. The Corporation has not had to perform a step one quantitative analysis since 2012, which concluded no impairment was necessary.	2nd Quarter 2020, consistent with the Corporation's annual impairment test in May of each year.	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.
ASU 2017-01 Business Combinations (Topic 805): Clarifying the Definition of a Business	The FASB issued amendments to clarify the definition of a business in order to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets versus businesses. The new standard narrows the definition of a business by adding three principal clarifications: (1) If substantially all the fair value of the gross assets in the asset group is concentrated in either a single identifiable asset or group of similar identifiable assets the transaction does not involve a business (2) If the asset group does not include a minimum of an input and a substantive process, it does not represent a business (3) If the integrated set of activities (including its inputs and processes) does not create, or have the ability to create, goods or services to customers, investment income (e,g. dividends or interest) or other revenues, it is not a business. The overall intention is to provide consistency in applying the guidance, reduce the costs of application, and make the definition of a business more operable.	1st Quarter 2018	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.
ASU 2016-18 Statement of Cash Flows (Topic 230): Restricted Cash	The FASB issued an amendment to improve GAAP by providing guidance on the presentation of restricted cash or restricted cash equivalents in the statement of cash flows, in order to reduce diversity in practice. The amendment requires that a statement of cash flow explain the change during the period in the total cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included in cash and cash equivalents when reconciling the beginning and end of period total amounts shown on the statement of cash flow. This amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Entities should apply the amendment retrospectively to each period presented. Early adoption is permitted, including in an interim period.	1st Quarter 2018	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.
ASU 2016-16 Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory	The FASB issued an amendment requiring an entity to recognize income tax consequences on an intra-entity transfer of an asset other than inventory at the time the transaction occurs. This amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Entities should apply the amendment by means of a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. Early adoption is permitted for all entities in the first interim period if an entity issues interim financial statements.	1st Quarter 2018	No material impact expected on our results of operations, financial position, and liquidity.
ASU 2016-15 Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments	The FASB issued an amendment to provide clarification on where to classify cash flows involving certain cash receipts and cash payments. Under the new guidance, cash payments for debt prepayment or debt extinguishment costs should be classified as cash outflows for financing activities. The new guidance also details the specific classification of contingent consideration cash payments made after a business combination depending on the timing of payments. Lastly, cash proceeds received from corporate owned life insurance policies (including BOLI) should be classified as cash inflows from investing, while the cash payments for the premiums may be classified as cash outflows for investing, operating, or a combination of both. This amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Entities should apply the amendment retrospectively to each period presented. Early adoption is permitted, including in an interim period; however, all of the amendments must be adopted in the same period.	1st Quarter 2018	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.
ASU 2016-13 Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments	The FASB issued an amendment to replace the current incurred loss impairment methodology. Under the new guidance, entities will be required to measure expected credit losses by utilizing forward-looking information to assess an entity's allowance for credit losses. The guidance also requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The measurement of expected credit losses is based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. An entity must use judgment in determining the relevant information and estimation methods that are appropriate in its circumstances. This amendment is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Entities should apply the amendment by means of a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. Early adoption is permitted.	1st Quarter 2020	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.

Standard	Description	Date of adoption	Effect on financial statements
ASU 2016-02 Leases (Topic 842)	The FASB issued an amendment to provide transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This amendment will require lessees to recognize the following for all leases (with the exception of short-term leases) at the commencement date: 1) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and 2) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged. This amendment is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2018. Entities are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply. These practical expedients relate to the identification and classification of leases that commenced before the effective date, initial direct costs for leases that commenced before the effective date, and the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset. Early adoption is permitted.	1st Quarter 2019	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.
ASU 2016-01 Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities	The FASB issued an amendment to address certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. This amendment supersedes the guidance to classify equity securities with readily determinable fair values into different categories, requires equity securities to be measured at fair value with changes in the fair value recognized through net income, and simplifies the impairment assessment of equity investments without readily determinable fair values. The amendment requires public business entities that are required to disclose the fair value of financial instruments measured at amortized cost on the balance sheet to measure that fair value using the exit price notion. The amendment requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option. The amendment requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset on the balance sheet or in the accompanying notes to the financial statements. The amendment reduces diversity in current practice by clarifying that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available for sale securities in combination with the entity's other deferred tax assets. This amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Entities are required to apply the amendment by means of a cumulative-effect adjustment as of the beginning of the fiscal year of adoption, with the exception of the amendment related to equity securities without readily determinable fair values, which should be applied prospectively to equity investments that exist as of the date of adoption.	1st Quarter 2018	The Corporation is currently evaluating the impact on its results of operations, financial position, and liquidity.
ASU 2014-09 Revenue from Contracts with Customers (Topic 606)	The FASB issued an amendment to clarify the principles for recognizing revenue and to develop a common revenue standard. The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that "an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services." In applying the revenue model to contracts within its scope, an entity should apply the following steps: (1) Identify the contract(s) with a customer, (2) Identify the performance obligations in the contract, (3) Determine the transaction price, (4) Allocate the transaction price to the performance obligations in the contract, and (5) Recognize revenue when (or as) the entity satisfies a performance obligation. The standard applies to all contracts with customers except those that are within the scope of other topics in the FASB Codification. The standard also requires significantly expanded disclosures about revenue recognition. The FASB continues to release new accounting guidance related to the adoption of this standard, which could impact the Corporation's preliminary materiality analysis and may change the conclusions reached as to the application of this new guidance. The amendment was originally to be effective for annual reporting periods beginning after December 15, 2016 (including interim reporting periods within those periods); however, in July 2015, the FASB approved a one year deferral of the effective date to December 31, 2017. Early application is not permitted.	1st Quarter 2018	More than 69% of the Corporation's revenue comes from net interest income, and is explicitly out of scope of the guidance. The primary contracts in-scope of the guidance is expected to be service charges on deposit accounts, card-based and other nondeposit fees, trust service fees, brokerage and annuity commissions, and insurance commissions among others. The Corporation continues to evaluate noninterest income contracts pertaining to the guidance by analyzing contracts and current accounting practices to determine if a change is appropriate. This comprehensive review is expected to be completed in the third quarter of 2017. The Corporation's preliminary analysis suggests the adoption of this accounting standard is not expected to have a material impact on the Corporation's consolidated financial statements or accounting policies. The new standard is largely consistent with existing guidance and current practices applied by our businesses. The Corporation is also evaluating where expanded disclosures are necessary. We plan to adopt this guidance using the modified retrospective approach and are extensively into our implementation plan.

Recent Developments

On July 20, 2017, the Corporation and Bank Mutual Corporation ("Bank Mutual") jointly announced that they had entered into a definitive merger agreement under which Bank Mutual will merge with and into the Corporation. Under the terms of the merger agreement, Bank Mutual shareholders will receive 0.422 shares of Corporation common stock for each share of Bank Mutual common stock. Subject to customary closing conditions, including regulatory approvals and approval by the Bank Mutual shareholders, the transaction is expected to close in the first quarter of 2018.

On July 25, 2017, the Corporation's Board of Directors declared a regular quarterly cash dividend of $0.12 per common share, payable on September 15, 2017 to shareholders of record at the close of business on September 1, 2017. The Board of Directors also declared a regular quarterly cash dividend of $0.3828125 per depositary share on the Corporation's 6.125% Series C Perpetual Preferred Stock, payable on September 15, 2017 to shareholders of record at the close of business on September 1, 2017. The Board of Directors also declared a regular quarterly cash dividend of $0.3359375 per depositary share on the Corporation's 5.375% Series D Perpetual Preferred Stock, payable on September 15, 2017 to shareholders of record at the close of business on September 1, 2017. The Board also authorized the repurchase of up to $15 million of the Corporation's 5.375% Series D Perpetual Preferred Stock. Repurchases under such programs are subject to regulatory approval and may occur from time to time in open market purchases, block transactions, private transactions, accelerated share repurchase programs or similar facilities.

During July 2017, the Corporation repurchased approximately 1 million shares of common stock in open market purchases at an average purchase price of $23.56 per share. After these common stock repurchases, the Corporation has approximately $63 million remaining under repurchase authorizations previously approved by the Board of Directors.

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 (the “Exchange Act”), that are designed to ensure that information required to be disclosed in our 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 June 30, 2017 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 June 30, 2017.

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 12 Commitments, Off-Balance Sheet Arrangements, Legal Proceedings and Regulatory Matters .

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

Other than 28,130 shares of common stock repurchased to satisfy minimum tax withholding on settlements of equity compensation awards, the Corporation did not make any common stock or depositary share repurchases during the second quarter of 2017. On April 21, 2015, the Board of Directors authorized the repurchase of up to $125 million of the Corporation's common stock, of which approximately $88 million remained available to repurchase as of June 30, 2017. On August 28, 2015, the Board of Directors authorized the repurchase of up to $10 million of the Series C Preferred Stock, of which all remained available to repurchase as of June 30, 2017. See Recent Developments for repurchase information subsequent to June 30, 2017. The repurchase of shares 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.

ITEM 6. Exhibits

(a) Exhibits:

Exhibit (10.1), Form of 2013 Incentive Compensation Plan Restricted Stock Unit Agreement.

Exhibit (10.2), Form of Amendment to 2013 Incentive Compensation Plan Restricted Stock Unit Agreement.

Exhibit (11), Statement regarding computation of per share earnings. The information required by this item is set forth in Part 1, Item 1 under Note 4 Earnings Per Common Share.

Exhibit (31.1), Certification Under Section 302 of Sarbanes-Oxley by Philip B. Flynn, Chief Executive Officer.

Exhibit (31.2), Certification Under Section 302 of Sarbanes-Oxley by Christopher J. Del Moral-Niles, 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.

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: July 28, 2017	/s/ Philip B. Flynn Philip B. Flynn President and Chief Executive Officer
Date: July 28, 2017	/s/ Christopher J. Del Moral-Niles Christopher J. Del Moral-Niles Chief Financial Officer
Date: July 28, 2017	/s/ Tammy C. Stadler Tammy C. Stadler Principal Accounting Officer

Exhibit 31.1

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

CERTIFICATIONS

I, Philip B. Flynn, 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: July 28, 2017

/s/ Philip B. Flynn

Philip B. Flynn
President and Chief Executive Officer

Exhibit 31.2

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

CERTIFICATIONS

I, Christopher J. Del Moral-Niles, 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: July 28, 2017

/s/ Christopher J. Del Moral-Niles

Christopher J. Del Moral-Niles

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 June 30, 2017 (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/ Philip B. Flynn
Philip B. Flynn
Chief Executive Officer
July 28, 2017

/s/ Christopher J. Del Moral-Niles
Christopher J. Del Moral-Niles
Chief Financial Officer
July 28, 2017

Exhibit 10.1

ASSOCIATED BANC-CORP
2013 INCENTIVE COMPENSATION PLAN
RESTRICTED STOCK UNIT AGREEMENT

In accordance with and subject to the terms of the Associated Banc-Corp 2013 Incentive Compensation Plan (the "**Plan**") and this Agreement, the Committee granted to the person named as grantee (the "**Grantee"**) on the cover page delivered simultaneously with this Restricted Stock Unit Agreement (the "**Cover Page**") an award of Restricted Stock Units (the Cover Page and this Restricted Stock Unit Agreement hereinafter referred to as this "**Agreement**").

To evidence such award and to set forth its terms, Associated Banc-Corp (the "**Company**") and the Grantee agree as follows.

All capitalized terms not otherwise defined in this Agreement shall have the meaning set forth in the Plan.

1. Grant of Restricted Stock Units. Subject to, and upon the terms and conditions set forth in this Agreement and the Plan, the Committee granted to the Grantee the number of restricted stock units set forth on the Cover Page (the "**RSUs**"), effective as of the grant date set forth on the Cover Page (the "**Grant Date**"), and the Grantee hereby accepts the grant of the RSUs, as set forth herein.

2. Crediting of RSUs. The RSUs shall be credited to an account on the Company's books as of the Grant Date. Such account shall be maintained for recordkeeping purposes only, and the Company is not obligated to segregate or set aside assets representing the amounts credited to such account. The obligation to settle such account shall be an unfunded, unsecured obligation of the Company.

3. Dividend Equivalents. Whenever dividends are paid or distributions made with respect to Shares, Dividend Equivalents shall be credited to the Grantee's RSU Account on all Restricted Stock Units credited thereto as of the record date for such dividend or distribution. Such Dividend Equivalents shall be credited to the RSU Account in the form of additional Restricted Stock Units in a number determined by dividing the aggregate value of such Dividend Equivalents by the Fair Market Value of a Share at the payment date of such dividend or distribution. Additional RSUs received by the Grantee pursuant to this Paragraph 3 shall be subject to the terms of this Agreement, including the vesting and settlement provisions of Paragraphs 5 and 8 below.

4. Limitations on Transferability. At any time prior to vesting in accordance with Paragraph 5, 6 or 7 below, the RSUs cannot be directly or indirectly transferred, sold, assigned, encumbered or otherwise disposed.

5. Date of Vesting. Subject to the provisions of Paragraphs 6 and 7 below, the RSUs shall become vested in accordance with the following schedule:

Vesting Date	**Percentage of Restricted Stock Units To Vest**
[Insert Date]	25%
[Insert Date]	25%
[Insert Date]	25%
[Insert Date]	25%

Notwithstanding the foregoing, and subject to Paragraphs 6 and 7 below, in the event that the Grantee incurs a Termination of Service prior to the Vesting Date, any RSUs that were unvested on the date of such Termination of Service shall be immediately forfeited to the Company.

In addition, in the event that the Grantee has satisfied the requisite age and years of service criteria for Early Retirement or Normal Retirement prior to any of the Vesting Dates set forth herein but the Grantee has not incurred a Termination of Service, the Vesting Date for a portion of the RSUs shall be December 15 of the same year during which the Grantee meets the applicable age and years of service requirements, such portion limited to the amount necessary to satisfy the employment tax withholding obligations as set forth in Paragraph 27.

6. Termination of Service. Subject to Paragraph 7 below, the provisions of this Paragraph 6 shall apply in the event the Grantee incurs a Termination of Service at any time prior to all the RSUs vesting pursuant to Paragraph 5 above:

(a) If the Grantee incurs a Termination of Service because of his or her death or Disability or due to Early Retirement or Normal Retirement, any RSUs that had not vested prior to the date of such Termination of Service shall vest upon the date of Termination of Service.

(b) If the Grantee incurs a Termination of Service for any reason other than his or her death, Disability, Early Retirement or Normal Retirement, then any RSUs that had not vested prior to the date of such Termination of Service shall be immediately forfeited to the Company.

7. Change in Control. Notwithstanding Paragraph 6 above, if the Grantee incurs an involuntary Termination of Service (other than due to Cause) (a) during the two year period immediately following a Change in Control that occurred after the Grant Date, and (b) before the Vesting Date, any RSUs that had not vested prior to the date of such Termination of Service shall vest. In addition, upon a Change in Control, the Grantee will have such rights with respect to the RSUs as are provided for in the Plan.

8. Settlement of RSUs. A vested RSU shall be settled as soon as administratively practicable after it vests, but in no event later than thirty (30) days after the date it vests. Each vested RSU shall be settled by ascribing to the Grantee (or, in the event of the Grantee's death, to

his or her Beneficiary) a Share in a book entry on the records kept by the Company's transfer agent or such other method of delivering Shares subject to this Award, as determined appropriate by the Committee. Notwithstanding the foregoing, in the event a Grantee's Termination of Service is due to Early Retirement or Normal Retirement, if the Grantee is a "specified employee" (within the meaning of Treasury Regulations Section 1.409A-1(i)) and the RSU is Deferred Compensation, then the vested RSUs (other than any portion that will vest sooner to settle employment tax obligations in accordance with Section 5 above) shall be settled as soon as administratively practicable after the date that is six (6) months after the date of such Termination of Service (or earlier, such Grantee's death).

9. Restrictive Covenants.

(a) *Trade Secrets*. The parties hereto acknowledge that the Company has taken and will continue to take actions to protect that information which qualifies as a trade secret under applicable law (a "**Trade Secret**"). Accordingly, the Grantee agrees that during the term of Grantee's employment with the Company, and thereafter for so long as such information remains a Trade Secret, Grantee shall not directly or indirectly use or disclose any Trade Secret of the Company. With respect to the disclosure of a Trade Secret and in accordance with 18 U.S.C. § 1833, Grantee shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a Trade Secret that (i) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, provided that, the information is disclosed solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding filed under seal so that it is not disclosed to the public. Grantee is further notified that if Grantee files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Grantee may disclose the Company's Trade Secrets to Grantee's attorney and use the Trade Secret information in the court proceeding, provided that, Grantee files any document containing the Trade Secret under seal so that it is not disclosed to the public, and does not disclose the Trade Secret, except pursuant to court order.

(b) *Confidential Information*. The parties hereto acknowledge that the Company has created and maintains at great expense strategic plans, sales data and sales strategy, methods, products, procedures, processes, techniques, financial information, customer and supplier lists, personal customer data, pricing policies, personnel data and other similar confidential and proprietary information, and has received from its customers certain non-Trade Secret confidential and proprietary information (collectively, the "**Confidential Information**"). The parties hereto further acknowledge that the Company has taken and will continue to take actions to protect the Confidential Information. Accordingly, the Grantee agrees that during the term of the Grantee's employment with the Company, and until the sooner of (i) such time as the Confidential Information becomes generally available to the public through no fault of the Grantee or other person under the duty of confidentiality to the Company, (ii) such time as the Confidential Information no longer provides a benefit to the Company, or (iii) two (2) years after the termination of the Grantee's employment with the Company, the Grantee will not, in any capacity, use or disclose, or cause to be used or disclosed, any Confidential Information the Grantee acquired while employed by the Company. The requirements of confidentiality and the limitations on use and disclosure described in this Agreement shall not apply to Confidential Information that the Grantee can demonstrate by clear and convincing evidence, at the time of disclosure by the Company to the Grantee, was known to the Grantee as evidenced by the Grantee's contemporaneous written records.

(c) *Preservation of Rights*. The parties hereto agree that nothing in this Agreement shall be construed to limit or negate the law of torts or trade secrets where it provides the Company with broader protection than that provided herein.

(d) *Return of Company Property*. The parties hereto acknowledge that any material (in computerized or written form) that the Grantee obtained in the course of performing the Grantee's employment duties are the sole and exclusive property of the Company, the Grantee agrees to immediately return any and all records, files, computerized data, documents, confidential or proprietary information, or any other property owned or belonging to the Company in the Grantee's possession or under his or her control, without any originals or copies being kept by the Grantee or conveyed to any other person, upon the Grantee's separation from employment or upon the Company's request.

(e) *Non-Interference with Customers*. For a period of twelve (12) months following the termination of the Grantee's employment with the Company for any reason, the Grantee will not, directly or indirectly, on behalf of him/herself or any other person, entity or enterprise, do any of the following:

(i) solicit or accept business from any person or entity who is an Active Customer (as defined below) of the Company, a Subsidiary, or any of their affiliates, with whom the Grantee has had business contact during the twelve (12) month period prior to the termination of the Grantee's employment with the Company (the "**Reference Period**") for the purpose of providing competitive products or services similar to those provided by the Grantee during the Reference Period; or

(ii) request or advise any of the Active Customers, suppliers or other business contacts of the Company who have business relationships with the Company and with whom the Grantee had business contact during his or her employment with the Company to withdraw, curtail or cancel any of their business relations with the Company.

"**Active Customer**" shall mean any customer or prospective customer of the Company which, within the Reference Period, either received any products or services supplied by or on behalf of the Company or was the recipient of at least two (2) business contacts by any personnel of the Company (including the Grantee).

(f) *Non-Interference with Company Employees*. For a period of twelve (12) months following the termination of the Grantee's employment with the Company for any reason, the Grantee will not, directly or indirectly, on behalf of him/herself or any other person, entity or enterprise, do any of the following:

(i) directly or indirectly solicit any Restricted Person (as defined below) to provide services to any person or entity in a manner reasonably likely to pose a competitive threat to the Company; or

(ii) directly or indirectly solicit any Restricted Person to provide services to any person or entity in a manner reasonably likely to have a material negative effect on the Company's business.

"**Restricted Person**" shall mean any Company employee who (1) has been entrusted with the Company's Confidential Information or Trade Secrets in connection with his/her employment with the Company and (2) with whom Grantee directly worked at any point during the twelve (12) month period immediately preceding the end, for whatever reason, of Grantee's employment with the Company.

(g) *Remedies*. Notwithstanding any other provision of this Agreement, if the Grantee breaches any provision of this Paragraph 9, any RSUs shall be immediately forfeited to the Company. In addition, the Company shall be entitled to injunctive and other equitable relief (without the necessity of showing actual monetary damages or of posting any bond or other security): (i) restraining and enjoining any act which would constitute a breach, or (ii) compelling the performance of any obligation which, if not performed, would constitute a breach, as well as any other remedies available to the Company, including monetary damages. Upon the Company's request, the Grantee shall provide reasonable assurances and evidence of compliance with the restrictive covenants set forth in this Paragraph 9. If any court of competent jurisdiction shall deem any provision in this Paragraph 9 too restrictive, the other provisions shall stand, and the court shall modify the unduly restrictive provision to the point of greatest restriction permissible by law. The restrictive covenants set forth in this Paragraph 9 shall survive the termination of this Agreement, the forfeiture of any RSUs, and the Grantee's termination of employment for any reason, and the Grantee shall continue to be bound by the terms of this Paragraph 9 as if this Agreement was still in effect.

10. Liability of Company. The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be necessary to the lawful issuance and transfer of any Shares pursuant to this Agreement shall relieve the Company of any liability with respect to the non-issuance or transfer of the Shares as to which such approval shall not have been obtained. However, the Company shall use commercially reasonable efforts to obtain all such approvals.

11. Adjustment of Award. This Award is subject to adjustment as provided under Section 4.2 of the Plan.

12. Plan and Agreement Amendment.

(a) No discontinuation, modification, or amendment of the Plan may, without the written consent of the Grantee, adversely affect the rights of the Grantee under this Agreement, except as otherwise provided under the Plan.

(b) This Agreement may be amended as provided under the Plan, but no such amendment shall adversely affect the Grantee's rights under this Agreement without the Grantee's written consent, unless otherwise permitted by the Plan.

13. Shareholder Rights. The Grantee will have no rights as a shareholder with respect to any RSU unless and until it is settled pursuant to Paragraph 8 above. As of the date that a Share is ascribed or otherwise delivered pursuant to Paragraph 8 above, the Grantee shall have rights as a shareholder in the Company with respect to such Share.

14. Employment Rights. This Agreement is not a contract of employment, and the terms of employment of the Grantee or other relationship of the Grantee with an Employer shall not be affected in any way by this Agreement except as specifically provided herein. The execution of this Agreement shall not be construed as conferring any legal rights upon the Grantee for a continuation of an employment or other relationship with an Employer, nor shall it interfere with the right of an Employer to discharge the Grantee and to treat him or her without regard to the effect which such treatment might have upon him or her as a Grantee.

15. Disclosure Rights. Except as required by applicable law, the Company (or any of its affiliates) shall not have any duty or obligation to disclose affirmatively to a record or beneficial holder of Shares or RSUs, and such holder shall have no right to be advised of, any material information regarding the Company at any time prior to, upon or in connection with receipt of Shares.

16. Governing Law. This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of the State of Wisconsin. This Agreement, subject to the terms and conditions of the Plan, represents the entire agreement between the parties with respect to this Award. The parties hereto each submit and consent to the jurisdiction of the courts in the State of Wisconsin, Brown County, in any action brought to enforce or otherwise relating to this Agreement.

17. Compliance with Laws and Regulations. Notwithstanding anything herein to the contrary:

(a) the Company shall not be obligated to credit a book entry related to the RSUs on the records of the Company's transfer agent, unless and until the Company is advised by its counsel that such book entry is in compliance with all applicable laws, regulations of governmental authority, and the requirements of any exchange upon which Shares are traded;

(b) the Company may require, as a condition of such a book entry, and in order to ensure compliance with such laws, regulations and requirements, that the Grantee make whatever covenants, agreements, and representations, or execute whatever documents or instruments, the Company, in its sole discretion, considers necessary or desirable;

(c) no payment or benefit under this Agreement shall be provided to the Grantee if it would violate any applicable Compensation Limitation; and

(d) notwithstanding anything to the contrary in this Agreement, the RSUs (including any proceeds, gains, or other economic benefit actually or constructively received by the Grantee thereof upon the receipt, vesting, or settlement thereof, or resale of the Shares received pursuant hereto upon or after settlement of this Award) shall be subject to the provisions of any clawback or recoupment policy adopted by the Board and/or the Committee, including any such policy adopted to comply with the Dodd-Frank Wall Street Reform and Consumer Protection Act, any rules or regulations promulgated and in effect thereunder, or any SEC or securities exchange rule.

18. Successors and Assigns. Except as otherwise expressly set forth in this Agreement, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the succeeding administrators, heirs and legal representatives of the Grantee and the successors and assigns of the Company.

19. No Limitation on Rights of the Company. This Agreement shall not in any way affect the right of the Company to adjust, reclassify, reorganize or otherwise make changes in its capital or business structure, or to merge, consolidate, dissolve, liquidate, sell or transfer all or any part of its business or assets.

20. Notices. Any communication or notice required or permitted to be given hereunder shall be in writing, and, if to the Company, to its principal place of business, attention: Secretary, and, if to the Grantee, to the address appearing on the records of the Company. Such communication or notice shall be delivered personally or sent by certified, registered, or express mail, postage prepaid, return receipt requested, or by a reputable overnight delivery service. Any such notice shall be deemed given when received by the intended recipient.

21. Construction. Notwithstanding any other provision of this Agreement, this Agreement is made and the RSUs are granted pursuant to the Plan and are in all respects limited by and subject to the express provisions of the Plan, as amended from time to time. This Agreement does not modify or amend the terms of the Plan. To the extent any provision of this Agreement is inconsistent or in conflict with any term or provision of the Plan, the Plan shall govern. The interpretation and construction by the Committee of the Plan, this Agreement and any such rules and regulations adopted by the Committee for purposes of administering the Plan shall be final and binding upon the Grantee and all other persons.

22. Entire Agreement. This Agreement, together with the Plan, constitutes the entire obligation of the parties hereto with respect to the subject matter hereof and shall supersede any prior expressions of intent or understanding with respect to this transaction.

23. Waiver; Cumulative Rights. The failure or delay of either party to require performance by the other party of any provision hereof shall not affect its right to require performance of such provision unless and until such performance has been waived in writing. Each and every right hereunder is cumulative and may be exercised in part or in whole from time to time.

24. Counterparts. This Agreement may be signed in two counterparts, each of which shall be an original, but both of which shall constitute but one and the same instrument.

25. Headings. The headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

26. Severability. If any provision of this Agreement shall for any reason be held to be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid or unenforceable provision were omitted.

27. Tax Consequences. The Grantee acknowledges and agrees that the Grantee is responsible for all taxes and tax consequences with respect to the grant or settlement of the RSUs awarded hereunder. The Grantee further acknowledges that it is the Grantee's responsibility to obtain any advice that the Grantee deems necessary or appropriate with respect to any and all tax matters that may exist as a result of the grant or settlement of the RSUs awarded hereunder. Notwithstanding any other provision of this Agreement, the RSUs shall not be settled unless, as provided in Section 17 of the Plan, the Grantee shall have paid to the Company, or made arrangements satisfactory to the Company regarding the payment of, any federal, state, local or foreign income or employment taxes required by law to be withheld with respect to the grant or settlement of the RSUs or the lapse of restrictions otherwise imposed by this Agreement.

28. Receipt of Plan. The Grantee acknowledges receipt of a copy of the Plan, and represents that the Grantee is familiar with the terms and provisions thereof, and hereby accepts the RSUs subject to all the terms and provisions of this Agreement and of the Plan. The Shares are granted pursuant to the terms of the Plan, the terms of which are incorporated herein by reference, and the RSUs shall in all respects be interpreted in accordance with the Plan. The Committee shall interpret and construe the Plan and this Agreement, and its interpretation and determination shall be conclusive and binding upon the parties hereto and any other person claiming an interest hereunder, with respect to any issue arising hereunder or thereunder.

29. Condition to Accept Agreement. This Agreement shall be null and void unless the Grantee accepts this Agreement via the Online Grant Agreement portal of Fidelity's website, indicating Grantee's acceptance of these Restricted Stock Units pursuant to the terms and conditions of this Agreement, on or before the date listed at the end of the Cover Page.

By accepting this Agreement via the Online Grant Agreement portal of Fidelity's website, Grantee acknowledges and agrees to the terms and conditions of this Restricted Stock Agreement, Cover Page, and the Plan, including, but not limited to, the terms of the Restrictive Covenants contained in Paragraph 9 of this Agreement.

Exhibit 10.2

AMENDMENT TO RESTRICTED STOCK UNIT AGREEMENT

THIS AMENDMENT TO RESTRICTED STOCK UNIT AGREEMENT (this "**Amendment**") between Associated Banc-Corp and the Grantee is effective upon the Grantee's (as defined on the cover page delivered simultaneously with this Amendment) consent hereto.

WHEREAS, Associated Banc-Corp previously awarded the Grantee under the Associated Banc-Corp 2013 Incentive Compensation Plan (the "**Plan**") an award of Restricted Stock Units on [Insert Date] (the "**Grant Date**");

WHEREAS, such award of Restricted Stock Units is evidenced by and subject to the terms of that certain Restricted Stock Unit Agreement (the "**Agreement**") and certain cover page delivered simultaneously therewith, both of which the Grantee accepted;

WHEREAS, the Agreement provided that dividend equivalents would be credited to Grantee's RSU Account as additional Restricted Stock Units; and

WHEREAS, Associated Banc-Corp intended that dividend equivalents credited to Grantee be payable in cash.

NOW, THEREFORE, effective upon the Grantee's consent to this Amendment to Restricted Stock Unit Agreement, Associated Banc-Corp and the Grantee agree that the following terms shall apply to the Restricted Stock Units awarded to Grantee on the Grant Date.

All capitalized terms not otherwise defined in this Amendment shall have the meaning set forth in the Plan.

1. Amendments.

1.1 Paragraph 3 of the Agreement shall be deleted in its entirety and replaced by the following:

3. Dividend Equivalents. Prior to settlement of the RSUs pursuant to Paragraph 8 below, the Company shall establish an account (a "**Dividend Equivalent Account**") on its books for Grantee. Grantee's Dividend Equivalent Account shall be credited with Dividend Equivalents based on the dividends paid or distributions made with respect to Shares. The amount of Dividend Equivalents credited to the Dividend Equivalent Account shall be determined by multiplying (a) by (b), where (a) is the total amount of dividends or distributions (as applicable) paid on a Share between the Grant Date and the date of settlement of the RSUs, and (b) is the number of RSUs vested on the Vesting Date. The Grantee's Dividend Equivalent Account established pursuant to this Paragraph 3 shall be subject to the terms of this Agreement, including the vesting and settlement provisions of Paragraphs 5

and 8 below. A Dividend Equivalent Account shall be maintained for recordkeeping purposes only and the Company shall not be obligated to segregate or set aside assets representing amounts credited to the Dividend Equivalent Account. The obligation to make distributions of amounts credited to the Dividend Equivalent Account shall be an unfunded, unsecured obligation of the Company.

1.2 The Agreement is hereby amended such that all vesting and forfeiture terms, payment terms, restrictions, and any other conditions that apply to RSUs prior to settlement shall apply in the same manner to Dividend Equivalents prior to settlement, in the same proportions that apply to RSUs, except that Dividend Equivalents credited to the Dividend Equivalent Account shall be settled by a cash payment to the Grantee rather than in Shares, paid to Grantee at the same time as RSUs under Section 8 of the Agreement.

2. Full Force and Effect. The remaining terms of the Agreement, except as specifically amended herein, shall remain in full force and effect.

3. Condition to Accept Agreement. This Amendment shall not apply to the Agreement unless the Grantee consents to this Amendment via the Online Grant Agreement portal of Fidelity's website, indicating Grantee's acceptance of the terms and conditions of this Amendment. By consenting to this Amendment via the Online Grant Agreement portal of Fidelity's website, the Grantee acknowledges and agrees to the terms and conditions of this Amendment, the cover page delivered simultaneously herewith, and the Plan.