Section 1: 10-Q (10-Q)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

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

For the quarterly period ended June 30, 2019

Commission File Number: 001-35385

STERLING BANCORP

(Exact Name of Registrant as Specified in its Charter)

Delaware	**80-0091851**
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer ID No.)
400 Rella Boulevard, Montebello, New York	**10901**
(Address of Principal Executive Office)	(Zip Code)

(845) 369-8040
(Registrant's Telephone Number including area code)

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	STL	New York Stock Exchange
Depositary Shares, each representing 1/40 interest in a share of 6.50% Non-Cumulative Perpetual Preferred Stock, Series A	STLPRA	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding twelve 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, if any, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

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

Yes ☐ No ☒

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

Classes of Common Stock	Shares outstanding as of July 31, 2019
$0.01 per share	205,198,435

STERLING BANCORP AND SUBSIDIARIES
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QUARTERLY PERIOD ENDED JUNE 30, 2019

Part I - FINANCIAL INFORMATION
Item 1. Financial Statements

STERLING BANCORP AND SUBSIDIARIES
Consolidated Balance Sheets (Unaudited)
(Dollars in thousands, except share and per share data)

	June 30, 2019	December 31, 2018
ASSETS:		
Cash and due from banks	$ 343,368	$ 438,110
Securities:		
Available for sale, at fair value	3,843,112	3,870,563
Held to maturity, at amortized cost (fair value of $2,066,524 and $2,740,522 at June 30, 2019 and December 31, 2018, respectively)	2,015,753	2,796,617
Total securities	5,858,865	6,667,180
Loans held for sale	27,221	1,565,979
Portfolio loans	20,370,306	19,218,530
Allowance for loan losses	(104,664)	(95,677)
Portfolio loans, net	20,265,642	19,122,853
Federal Home Loan Bank (“FHLB”) and Federal Reserve Bank (“FRB”) stock, at cost	320,560	369,690
Accrued interest receivable	106,317	107,111
Premises and equipment, net	250,155	264,194
Goodwill	1,657,814	1,613,033
Other intangible assets, net	119,934	129,545
Bank owned life insurance	598,880	653,995
Other real estate owned	13,628	19,377
Other assets	675,161	432,240
Total assets	$ 30,237,545	$ 31,383,307
LIABILITIES AND STOCKHOLDERS’ EQUITY		
LIABILITIES:		
Deposits	$ 20,948,464	$ 21,214,148
FHLB borrowings	3,766,224	4,838,772
Repurchase agreements	20,901	21,338
Senior Notes	173,800	181,130
Subordinated Notes	173,061	172,943
Mortgage escrow funds	73,176	72,891
Other liabilities	622,761	453,232
Total liabilities	25,778,387	26,954,454
Commitments and Contingent liabilities (See Note 17. “Commitments and Contingencies”)		
STOCKHOLDERS’ EQUITY:		
Preferred stock (par value $0.01 per share; 10,000,000 shares authorized; 135,000 shares issued and outstanding at June 30, 2019 and December 31, 2018)	138,011	138,423
Common stock (par value $0.01 per share; 310,000,000 shares authorized at June 30, 2019 and December 31, 2018; 229,872,925 shares issued at June 30, 2019 and December 31, 2018; 205,187,243 and 216,227,852 shares outstanding at June 30, 2019 and December 31, 2018, respectively)	2,299	2,299
Additional paid-in capital	3,757,126	3,776,461
Treasury stock, at cost (24,685,682 shares at June 30, 2019 and 13,645,073 shares at December 31, 2018)	(447,748)	(213,935)
Retained earnings	969,124	791,550
Accumulated other comprehensive income (loss), net of tax expense (benefit) of $15,410 at June 30, 2019 and $(25,429) at December 31, 2018	40,346	(65,945)
Total stockholders’ equity	4,459,158	4,428,853
Total liabilities and stockholders’ equity	$ 30,237,545	$ 31,383,307

See accompanying notes to consolidated financial statements.

STERLING BANCORP AND SUBSIDIARIES

Consolidated Income Statements (Unaudited)

(Dollars in thousands, except share and per share data)

	Three months ended June 30, 2019	Three months ended June 30, 2018	Six months ended June 30, 2019	Six months ended June 30, 2018
Interest and dividend income:				
Loans and loan fees	$ 258,283	$ 254,253	$ 518,578	$ 488,868
Securities taxable	24,632	29,031	52,479	56,092
Securities non-taxable	14,423	15,403	29,280	30,715
Other earning assets	5,119	6,219	11,520	10,576
Total interest and dividend income	302,457	304,906	611,857	586,251
Interest expense:				
Deposits	48,129	28,464	94,124	52,671
Borrowings	22,489	30,226	50,388	52,996
Total interest expense	70,618	58,690	144,512	105,667
Net interest income	231,839	246,216	467,345	480,584
Provision for loan losses	11,500	13,000	21,700	26,000
Net interest income after provision for loan losses	220,339	233,216	445,645	454,584
Non-interest income:				
Deposit fees and service charges	7,098	6,985	13,310	13,988
Accounts receivable management / factoring commissions and other fees	5,794	5,337	11,217	10,696
Bank owned life insurance	4,192	4,243	7,833	7,857
Loan commissions and fees	5,308	4,566	9,146	7,973
Investment management fees	2,050	2,121	3,950	3,946
Net loss on sale of securities	(528)	(425)	(13,712)	(5,846)
Gain on sale of fixed assets	—	11,797	—	11,800
Gain on sale of residential mortgage loans	—	—	8,313	—
Other	3,144	3,244	6,598	6,161
Total non-interest income	27,058	37,868	46,655	56,575
Non-interest expense:				
Compensation and benefits	54,473	56,159	110,463	110,840
Stock-based compensation plans	4,605	3,336	9,728	6,190
Occupancy and office operations	16,106	17,939	32,641	35,399
Information technology	9,047	9,997	17,722	21,713
Amortization of intangible assets	4,785	5,865	9,611	11,917
FDIC insurance and regulatory assessments	2,994	5,495	6,332	10,841
Other real estate owned expense (income), net	458	(226)	675	138
Charge for asset write-downs, retention and severance	—	13,132	3,344	13,132
Impairment related to financial centers and real estate consolidation strategy	14,398	—	14,398	—
Other	20,074	13,231	37,018	26,505
Total non-interest expense	126,940	124,928	241,932	236,675
Income before income tax expense	120,457	146,156	250,368	274,484
Income tax expense	23,997	31,915	52,471	61,371
Net income	$ 96,460	$ 114,241	$ 197,897	$ 213,113
Preferred stock dividend	1,987	1,996	3,976	3,995
Net income available to common stockholders	$ 94,473	$ 112,245	$ 193,921	$ 209,118
Weighted average common shares:				
Basic	206,932,114	225,084,232	210,022,967	224,908,436
Diluted	207,376,239	225,621,856	210,419,425	225,444,579

Earnings per common share:				
Basic	$ 0.46	$ 0.50	$ 0.92	$ 0.93
Diluted	0.46	0.50	0.92	0.93

See accompanying notes to consolidated financial statements.

STERLING BANCORP AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income (Unaudited)

(Dollars in thousands)

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Net income	$ 96,460	$ 114,241	$ 197,897	$ 213,113
Other comprehensive income (loss), before tax:				
Change in unrealized holding gains (losses) on securities available for sale	64,176	(29,091)	139,506	(101,412)
Unrealized loss on transfer of securities held to maturity to available for sale	—	—	(11,813)	—
Reclassification adjustment for net realized losses included in net income	528	425	13,712	5,846
Accretion of net unrealized loss on securities transferred to held to maturity	122	227	2,539	460
Change in the actuarial loss of defined benefit plan and post-retirement benefit plans	66	58	2,949	736
Total other comprehensive income (loss), before tax	64,892	(28,381)	146,893	(94,370)
Deferred tax (expense) benefit related to other comprehensive (loss) income	(17,936)	7,844	(40,602)	26,084
Other comprehensive income (loss), net of tax	46,956	(20,537)	106,291	(68,286)
Comprehensive income	$ 143,416	$ 93,704	$ 304,188	$ 144,827

See accompanying notes to consolidated financial statements.

STERLING BANCORP AND SUBSIDIARIES

Consolidated Statements of Changes in Stockholders' Equity (Unaudited)

(Dollars in thousands, except share and per share data)

	Number of common shares	Preferred stock	Common stock	Additional paid-in capital	Treasury stock	Retained earnings	Accumulated other comprehensive (loss)	Total stockholders' equity
Balance at January 1, 2018	224,782,694	$ 139,220	$ 2,299	$3,780,908	$ (58,039)	$ 401,956	$ (26,166)	$ 4,240,178
Net income	—	—	—	—	—	98,872	—	98,872
Other comprehensive (loss)	—	—	—	—	—	—	(47,749)	(47,749)
Stock options & other stock transactions, net	28,794	—	—	2	375	(46)	—	331
Restricted stock awards, net	654,778	—	—	(14,630)	6,562	8,078	—	10
Cash dividends declared ($0.07 per common share)	—	—	—	—	—	(15,693)	—	(15,693)
Cash dividends declared ($16.25 per preferred share)	—	(195)	—	—	—	(1,999)	—	(2,194)
Reclassification of the stranded income tax effects from the enactment of the Tax Cuts and Jobs Act from accumulated other comprehensive (loss)	—	—	—	—	—	5,129	(5,129)	—
Balance at March 31, 2018	225,466,266	139,025	2,299	3,766,280	(51,102)	496,297	(79,044)	4,273,755
Net income	—	—	—	—	—	114,241	—	114,241
Other comprehensive (loss)	—	—	—	—	—	—	(20,537)	(20,537)
Stock options & other stock transactions, net	7,500	—	—	2	91	(18)	—	75
Restricted stock awards, net	(3,512)	—	—	3,223	(258)	168	—	3,133
Cash dividends declared ($0.07 per common share)	—	—	—	—	—	(15,739)	—	(15,739)
Cash dividends declared ($16.25 per preferred share)	—	(197)	—	—	—	(1,996)	—	(2,193)
Balance at June 30, 2018	225,470,254	$ 138,828	$ 2,299	$3,769,505	$ (51,269)	$ 592,953	$ (99,581)	$ 4,352,735

STERLING BANCORP AND SUBSIDIARIES

Consolidated Statements of Changes in Stockholders' Equity (Unaudited)

(Dollars in thousands, except share and per share data)

	Number of common shares	Preferred stock	Common stock	Additional paid-in capital	Treasury stock	Retained earnings	Accumulated other comprehensive (loss) income	Total stockholders' equity
Balance at January 1, 2019	216,227,852	$ 138,423	$ 2,299	$3,776,461	$ (213,935)	$ 791,550	$ (65,945)	$ 4,428,853
Net income	—	—	—	—	—	101,437	—	101,437
Other comprehensive income	—	—	—	—	—	—	59,335	59,335
Stock options & other stock transactions, net	3,893	—	—	—	49	6	—	55
Restricted stock awards, net	1,331,674	—	—	(24,626)	12,818	12,913	—	1,105
Cash dividends declared ($0.07 per common share)	—	—	—	—	—	(15,079)	—	(15,079)
Cash dividends declared ($16.25 per preferred share)	—	(205)	—	—	—	(1,989)	—	(2,194)
Purchase of treasury stock	(8,002,595)	—	—	—	(154,289)	—	—	(154,289)
Balance at March 31, 2019	209,560,824	$ 138,218	$ 2,299	$3,751,835	$ (355,357)	$ 888,838	$ (6,610)	$ 4,419,223
Net income	—	—	—	—	—	96,460	—	96,460
Other comprehensive income	—	—	—	—	—	—	46,956	46,956
Stock options & other stock transactions, net	168,169	—	—	—	1,410	424	—	1,834
Restricted stock awards, net	(39,697)	—	—	5,291	(887)	—	—	4,404
Cash dividends declared ($0.07 per common share)	—	—	—	—	—	(14,611)	—	(14,611)
Cash dividends declared ($16.25 per preferred share)	—	(207)	—	—	—	(1,987)	—	(2,194)
Purchase of treasury stock	(4,502,053)	—	—	—	(92,914)	—	—	(92,914)
Balance at June 30, 2019	205,187,243	$ 138,011	$ 2,299	$3,757,126	$ (447,748)	$ 969,124	$ 40,346	$ 4,459,158

See accompanying notes to consolidated financial statements.

STERLING BANCORP AND SUBSIDIARIES
Consolidated Statements of Cash Flows (Unaudited)
(Dollars in thousands)

	Six months ended June 30, 2019	Six months ended June 30, 2018
Cash flows from operating activities:		
Net income	$ 197,897	$ 213,113
Adjustments to reconcile net income to net cash provided by operating activities:		
Provisions for loan losses	21,700	26,000
Net (gain) from write-downs and sales of other real estate owned	(192)	(920)
Net (gain) on extinguishment of Senior Notes	(46)	—
Depreciation of premises and equipment	9,723	10,199
Impairment on fixed assets	10,473	—
Impairment of early termination of leases	3,925	—
Asset write-downs, retention and severance compensation and other restructuring charges	3,344	13,132
Amortization of intangible assets	9,611	11,917
Amortization of low income housing tax credits	7,883	1,995
Net loss on sale of securities	13,712	5,846
Net gain on loans held for sale	(8,313)	(22)
Net gain on sale of premises and equipment	—	(11,800)
Net amortization of premiums on securities	18,194	19,022
Amortization of premium on certificates of deposit	(2,061)	(3,302)
Net accretion of purchase discount and amortization of net deferred loan costs	(48,725)	(57,851)
Net accretion of debt issuance costs and amortization of premium on borrowings	(805)	(625)
Restricted stock compensation expense	9,728	6,186
Stock option compensation expense	—	4
Originations of loans held for sale	(4,500)	(51,460)
Proceeds from sales of loans held for sale	6,091	26,102
Increase in cash surrender value of bank owned life insurance	(7,833)	(7,857)
Deferred income tax expense	21,634	26,258
Other adjustments (principally net changes in other assets and other liabilities)	(48,238)	(50,490)
Net cash provided by operating activities	213,202	175,447
Cash flows from investing activities:		
Purchases of securities:		
Available for sale	(59,148)	(722,860)
Held to maturity	(4,032)	(100,819)
Proceeds from maturities, calls and other principal payments on securities:		
Available for sale	178,821	183,964
Held to maturity	63,423	86,533
Proceeds from sales of securities available for sale	738,751	117,810
Proceeds from sales of securities held to maturity	—	254
Portfolio loan originations, net	(518,656)	(186,510)
Proceeds from sale of residential mortgage loans	1,409,334	—
Redemptions (purchases) of FHLB and FRB stock, net	49,130	(96,292)
Proceeds from sales of other real estate owned	8,595	14,446
Purchases of premises and equipment	(10,992)	(9,120)
Proceeds from bank owned life insurance	2,457	1,858
Proceeds from sale of premises and equipment	4,835	35,261
Purchases of low income housing tax credits	(32,649)	(3,655)
Cash paid for acquisition, net	(515,692)	(481,544)
Net cash provided by (used in) investing activities	1,314,177	(1,160,674)

STERLING BANCORP AND SUBSIDIARIES
Consolidated Statements of Cash Flows (Unaudited)
(Dollars in thousands)

	Six months ended June 30, 2019	Six months ended June 30, 2018
Cash flows from financing activities:		
Net (decrease) increase in transaction, savings and money market deposits	$ (369,213)	$ 294,805
Net increase in certificates of deposit	105,590	136,182
Net (decrease) in short-term FHLB borrowings	(147,000)	(1,042,000)
Advances of term FHLB borrowings	1,325,000	2,975,000
Repayments of term FHLB borrowings	(2,250,000)	(1,375,000)
Repayment of Senior Notes	(6,954)	—
Net (decrease) in other borrowings	(437)	(11,048)
Net increase in mortgage escrow funds	285	7,988
Proceeds from stock option exercises	1,889	402
Treasury shares repurchased	(247,203)	—
Cash dividends paid - common stock	(29,690)	(31,432)
Cash dividends paid - preferred stock	(4,388)	(4,387)
Net cash (used in) provided by financing activities	(1,622,121)	950,510
Net decrease in cash and cash equivalents	(94,742)	(34,717)
Cash and cash equivalents at beginning of period	438,110	479,906
Cash and cash equivalents at end of period	$ 343,368	$ 445,189
Supplemental cash flow information:		
Interest payments	$ 144,243	$ 99,999
Income tax payments	16,118	16,622
Real estate acquired in settlement of loans	2,654	6,695
Residential mortgage loans transferred from held for sale to portfolio	127,833	—
Redemption of bank owned life insurance, pending settlement	60,491	—
Securities held to maturity transferred to available for sale	708,627	—
Operating cash flows from operating leases	8,866	—
Right-of-use assets obtained in exchange for lease liabilities	125,394	—
Acquisitions:		
Non-cash assets acquired:		
Total loans, net	$ 471,878	$ 445,725
Accrued interest receivable	1,789	—
Goodwill	44,781	33,253
Premises and equipment, net	—	379
Other assets	545	7,071
Total non-cash assets acquired	518,993	486,428
Liabilities assumed:		
Other liabilities	3,301	4,884
Total liabilities assumed	3,301	4,884
Net non-cash assets acquired	515,692	481,544
Cash and cash equivalents received in acquisitions	—	20,508
Total consideration paid	$ 515,692	$ 502,052

See accompanying notes to consolidated financial statements.

(1) Basis of Financial Statement Presentation

(a) Nature of Operations

Sterling Bancorp (the "Company," "we," "us" and "our") is a Delaware corporation, a bank holding company and a financial holding company headquartered in Montebello, New York that owns all of the outstanding shares of common stock of Sterling National Bank (the "Bank"), its principal subsidiary. The Bank is a full-service regional bank specializing in the delivery of services and solutions to business owners, their families and consumers within the communities it serves through teams of dedicated and experienced relationship managers.

(b) Basis of Presentation

The consolidated financial statements in this Quarterly Report on Form 10-Q include the accounts of the Company and all other entities in which the Company has a controlling financial interest. All significant intercompany balances and transactions have been eliminated in consolidation. The accounting and financial reporting policies we follow conform, in all material respects, to accounting principles generally accepted in the United States ("GAAP") and to general practices within the banking industry, which include regulatory reporting instructions.

The consolidated financial statements in this Quarterly Report on Form 10-Q have not been audited by an independent registered public accounting firm, but, in the opinion of management, reflect all adjustments necessary for a fair presentation of our financial position and results of operations. All such adjustments were of a normal and recurring nature. The consolidated financial statements have been prepared in accordance with GAAP and with the instructions to Form 10-Q adopted by the Securities and Exchange Commission (the "SEC"). Accordingly, the financial statements do not include all of the information and footnotes required by GAAP for complete financial statements and should be read in conjunction with our consolidated financial statements, and notes thereto, for the year ended December 31, 2018, included in our Annual Report on Form 10-K, as filed with the SEC on March 1, 2019 (the "2018 Form 10-K"). Operating results for the interim periods disclosed herein are not necessarily indicative of the results that may be expected for a full year or any future period. Certain items in prior financial statements have been reclassified to conform to the current presentation. These reclassifications had no impact on previously reported net income.

(c) Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, income, expense and contingencies at the date of the financial statements. Actual results could differ significantly from these estimates, particularly the allowance for loan losses and the status of contingencies, and are subject to change.

(d) Adoption of New Accounting Standards

We adopted ASU No. 2016-02 *"Leases (Topic 842)"*, as of January 1, 2019, which requires lessees to recognize most leases on their balance sheets as a right-of-use asset with a corresponding lease liability. The standard included additional required qualitative and quantitative disclosures. We adopted the following practical expedients and elected the following accounting policies related to the leasing standard:

- Carry over of historical lease classifications and whether existing contracts contain leases;
- Current lease classification for existing leases;
- Short-term lease accounting policy, allowing us not to recognize right-of-use assets and liabilities for leases with a term of 12 months or less; and
- Lease and non-lease components are not separated for certain leases.

Adoption of this standard resulted in the recognition of right-of-use assets of $125,394 and a lease liability of $130,860, included in other assets and other liabilities, respectively, in the consolidated balance sheet. The standard did not have a significant impact on operating results or cash flows. See Note 9. "Leases" for additional information.

We adopted ASU 2017-12, *"Derivatives and Hedging (Topic 815) - Targeted Improvements to Accounting for Hedging Activities,"* ("ASU 2017-12") which amended the hedge accounting recognition and presentation requirements in ASC 815 to improve the transparency and understandability of information conveyed to financial statement users about an entity's risk management activities to better align the entity's financial reporting for hedging relationships with those risk management activities and to reduce the complexity of and simplify the application of hedge accounting. A provision in ASU 2017-12 provides that we may reclassify a debt security from held to maturity to available for sale at the time of adoption if the debt security is eligible to be hedged under the last-of-layer method in accordance ASU 2017-12. Generally, this includes debt securities that are pre-payable, including mortgage-backed securities, and debt securities that are callable by the issuer, which are applicable to many of our state and municipal debt securities. We transferred held to maturity securities with a book value of $720,440 and a fair value of $708,627 at December 31, 2018 to available for sale effective January 1, 2019. See Note 3. “Securities” for additional information.

(Dollars in thousands, except share and per share data)

(2) Acquisitions

Commercial loan portfolio and origination platform acquired from Woodforest National Bank (“Woodforest”)

On February 28, 2019, the Bank acquired a commercial loan portfolio consisting of equipment finance loans and leases and asset-based lending loans from Woodforest (the “Woodforest Acquisition”). In addition, the Bank retained sales and relationship management personnel based in Novi, Michigan, who will continue to originate new loans and leases. The total consideration paid in cash at closing was $515,692. We acquired $166,143 of equipment finance loans, which are mainly fixed rate loans, and $331,842 of asset-based lending loans, which are mainly variable rate loans. The fair value of these loans was $471,878 at the time of acquisition. The Bank paid a premium of 3.75% on the unpaid principal balance of the loans of $18,674. The transaction was accounted for as a business combination. We recorded a $3,344 restructuring charge consisting mainly of professional fees, severance, retention, systems integration expense and facilities consolidation, which is included in charge for asset write-downs, retention and severance on the consolidated income statement. We anticipate the acquired loans and origination platform will be fully integrated into our equipment finance and asset-based lending business lines.

Acquisition of Advantage Funding Management Co., Inc. (“Advantage Funding”)

On April 2, 2018, the Bank acquired 100% of the outstanding common stock of Advantage Funding (the “Advantage Funding Acquisition”). The total consideration in the transaction was $502,052 and was paid in cash on the closing date. Advantage Funding was a provider of commercial vehicle and transportation financing services based in Lake Success, New York. Advantage Funding had total outstanding loans and leases of $457,638 on the acquisition date consisting mainly of fixed rate assets. The fair value of these loans was $439,622. The Bank paid a premium on the gross loans and leases receivable of 4.5% or $20,300. In the second quarter of 2018, we recorded a $4,396 restructuring charge consisting mainly of professional fees, severance, retention, systems integration expense and facilities consolidation, which is included in charge for asset write-downs, retention and severance on the consolidated income statement. The Advantage Funding Acquisition is consistent with our strategy of growing commercial loans and increasing the proportion of commercial loans in our loan portfolio. We anticipate that as of July 31, 2019, the operations of the business will be fully integrated into our equipment finance business line.

(3) Securities

A summary of amortized cost and estimated fair value of securities as of June 30, 2019 is presented below. The term “MBS” refers to mortgage-backed securities and the term “CMOs” refers to collateralized mortgage obligations. Both of these terms are further defined in Note 18. “Fair Value Measurements”.

	June 30, 2019							
	Available for Sale				Held to Maturity			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrecognized gains	Gross unrecognized losses	Fair value
Residential MBS:								
Agency-backed	$ 2,004,416	$ 15,552	$ (6,693)	$ 2,013,275	$ 183,113	$ 1,061	$ (651)	$ 183,523
CMOs/Other MBS	538,661	1,654	(1,101)	539,214	—	—	—	—
Total residential MBS	2,543,077	17,206	(7,794)	2,552,489	183,113	1,061	(651)	183,523
Other securities:								
Federal agencies	216,495	4,957	—	221,452	59,272	822	—	60,094
Corporate	391,873	14,088	(384)	405,577	19,930	315	—	20,245
State and municipal	654,018	9,980	(404)	663,594	1,740,688	49,375	(300)	1,789,763
Other	—	—	—	—	12,750	149	—	12,899
Total other securities	1,262,386	29,025	(788)	1,290,623	1,832,640	50,661	(300)	1,883,001
Total securities	$ 3,805,463	$ 46,231	$ (8,582)	$ 3,843,112	$ 2,015,753	$ 51,722	$ (951)	$ 2,066,524

(Dollars in thousands, except share and per share data)

A summary of securities classified as held to maturity at December 31, 2018 that were transferred to available for sale effective January 1, 2019 is presented below.

	Amortized cost	Fair value
Residential MBS:		
Agency-backed	$ 125,343	$ 121,510
CMOs/Other MBS	27,780	27,017
Total residential MBS	153,123	148,527
Other securities:		
Corporate	49,001	48,607
State and municipal	518,316	511,493
Total of securities transferred from held to maturity to available for sale	$ 720,440	$ 708,627

A summary of amortized cost and estimated fair value of securities as of December 31, 2018 is presented below:

	December 31, 2018							
	Available for Sale				Held to Maturity			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrecognized gains	Gross unrecognized losses	Fair value
Residential MBS:								
Agency-backed	$ 2,328,870	$ 2,347	$ (62,366)	$ 2,268,851	$ 318,590	$ 73	$ (8,605)	$ 310,058
CMOs/Other MBS	596,868	11	(22,109)	574,770	27,780	2	(765)	27,017
Total residential MBS	2,925,738	2,358	(84,475)	2,843,621	346,370	75	(9,370)	337,075
Other securities:								
Federal agencies	283,825	—	(9,852)	273,973	59,065	160	(128)	59,097
Corporate	537,210	1,162	(10,407)	527,965	68,512	431	(392)	68,551
State and municipal	227,546	302	(2,844)	225,004	2,305,420	2,654	(49,562)	2,258,512
Other	—	—	—	—	17,250	49	(12)	17,287
Total other securities	1,048,581	1,464	(23,103)	1,026,942	2,450,247	3,294	(50,094)	2,403,447
Total securities	$ 3,974,319	$ 3,822	$ (107,578)	$ 3,870,563	$ 2,796,617	$ 3,369	$ (59,464)	$ 2,740,522

The amortized cost and estimated fair value of securities at June 30, 2019 are presented below by contractual maturity. Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations. Residential MBS are shown separately since they are not due at a single maturity date.

(Dollars in thousands, except share and per share data)

	June 30, 2019			
	Available for sale		Held to maturity	
	Amortized cost	Fair value	Amortized cost	Fair value
Remaining period to contractual maturity:				
One year or less	$ 18,306	$ 18,227	$ 30,660	$ 30,719
One to five years	133,037	135,346	99,214	100,802
Five to ten years	826,552	848,228	249,734	257,946
Greater than ten years	284,491	288,822	1,453,032	1,493,534
Total securities with a stated maturity date	1,262,386	1,290,623	1,832,640	1,883,001
Residential MBS	2,543,077	2,552,489	183,113	183,523
Total securities	$ 3,805,463	$ 3,843,112	$ 2,015,753	$ 2,066,524

Sales of securities for the periods indicated below were as follows:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Available for sale:				
Proceeds from sales	$ —	$ —	$ 738,751	$ 117,810
Gross realized gains [(1)]	—	81	4,355	82
Gross realized losses [(1)]	(528)	(485)	(18,067)	(5,907)
Income tax benefit on realized net losses	(111)	(93)	(2,880)	(1,311)
Held to maturity: [(2)]				
Proceeds from sale	$ —	$ 254	$ —	$ 254
Gross realized loss [(1)]	—	(21)	—	(21)
Income tax expense on realized loss	—	(5)	—	(5)

[(1)] Gross realized gains and losses include securities called prior to maturity.

We adopted ASU 2017-12, *"Derivatives and Hedging (Topic 815) - Targeted Improvements to Accounting for Hedging Activities,"* which allowed us to reclassify a debt security from held to maturity to available for sale if the debt security is eligible to be hedged under the last-of-layer method in accordance with ASU 2017-12. Generally, this included debt securities that are pre-payable, including mortgage-backed securities, and debt securities that are callable by the issuer, which are applicable to many of our state and municipal debt securities. We transferred held to maturity securities with a book value of $720,440 and a fair value of $708,627 at December 31, 2018 to available for sale effective January 1, 2019. In the first quarter of 2019, we sold securities with a book value of $751,935 to raise liquidity for the Woodforest Acquisition, and to reduce lower yielding securities as a percentage of total assets.

At June 30, 2019 and December 31, 2018, there were no holdings of securities of any one issuer in an amount greater than 10% of stockholders' equity, other than the U.S. federal government and its agencies.

STERLING BANCORP AND SUBSIDIARIES
Notes to Consolidated Financial Statements (Unaudited)
(Dollars in thousands, except share and per share data)

The following table summarizes securities available for sale with unrealized losses, segregated by the length of time in a continuous unrealized loss position for the periods presented below:

	Continuous unrealized loss position					
	Less than 12 months		12 months or longer		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Available for sale						
June 30, 2019						
Residential MBS:						
Agency-backed	$ 59,000	$ (300)	$ 923,875	$ (6,393)	$ 982,875	$ (6,693)
CMOs/Other MBS	—	—	201,796	(1,101)	201,796	(1,101)
Total residential MBS	59,000	(300)	1,125,671	(7,494)	1,184,671	(7,794)
Other securities:						
Corporate	12,095	(51)	27,552	(333)	39,647	(384)
State and municipal	39,393	(312)	13,604	(92)	52,997	(404)
Total other securities	51,488	(363)	41,156	(425)	92,644	(788)
Total securities	$ 110,488	$ (663)	$ 1,166,827	$ (7,919)	$ 1,277,315	$ (8,582)
December 31, 2018						
Residential MBS:						
Agency-backed	$ 156,787	$ (536)	$ 1,955,056	$ (61,830)	$ 2,111,843	$ (62,366)
CMOs/Other MBS	94	(2)	574,053	(22,107)	574,147	(22,109)
Total residential MBS	156,881	(538)	2,529,109	(83,937)	2,685,990	(84,475)
Other securities:						
Federal agencies	—	—	273,973	(9,852)	273,973	(9,852)
Corporate	230,126	(4,278)	119,869	(6,129)	349,995	(10,407)
State and municipal	16,172	(64)	175,966	(2,780)	192,138	(2,844)
Total other securities	246,298	(4,342)	569,808	(18,761)	816,106	(23,103)
Total securities	$ 403,179	$ (4,880)	$ 3,098,917	$ (102,698)	$ 3,502,096	$ (107,578)

(Dollars in thousands, except share and per share data)

The following table summarizes securities held to maturity with unrecognized losses, segregated by the length of time in a continuous unrecognized loss position for the periods presented below:

	Continuous unrecognized loss position				Total	
	Less than 12 months		12 months or longer			
	Fair value	Unrecognized losses	Fair value	Unrecognized losses	Fair value	Unrecognized losses
Held to maturity						
June 30, 2019						
Residential MBS:						
Agency-backed	$ —	$ —	$ 73,066	$ (651)	$ 73,066	$ (651)
Other securities:						
State and municipal	1,464	(2)	35,589	(298)	37,053	(300)
Other	10,000	—	—	—	10,000	—
Total other securities	11,464	(2)	35,589	(298)	47,053	(300)
Total securities	$ 11,464	$ (2)	$ 108,655	$ (949)	$ 120,119	$ (951)
December 31, 2018						
Residential MBS:						
Agency-backed	$ 25,003	$ (147)	$ 273,974	$ (8,458)	$ 298,977	$ (8,605)
CMOs/Other MBS	101	(2)	25,066	(763)	25,167	(765)
Total residential MBS	25,104	(149)	299,040	(9,221)	324,144	(9,370)
Other securities:						
Federal agencies	29,485	(95)	4,908	(33)	34,393	(128)
Corporate	21,859	(137)	16,261	(255)	38,120	(392)
State and municipal	118,389	(877)	1,897,758	(48,685)	2,016,147	(49,562)
Other	9,488	(12)	—	—	9,488	(12)
Total other securities	179,221	(1,121)	1,918,927	(48,973)	2,098,148	(50,094)
Total securities	$ 204,325	$ (1,270)	$ 2,217,967	$ (58,194)	$ 2,422,292	$ (59,464)

At June 30, 2019, a total of 118 available for sale securities were in a continuous unrealized loss position for less than 12 months and 166 available for sale securities were in a continuous unrealized loss position for 12 months or longer. At June 30, 2019, a total of 8 held to maturity securities were in a continuous unrealized loss position for less than 12 months and 72 held to maturity securities were in a continuous unrealized loss position for 12 months or longer. Declines in the fair value of held to maturity and available for sale securities below their cost that are deemed to be other than temporary are reflected in earnings as realized losses to the extent the impairment is related to credit losses. The amount of the impairment related to other factors is recognized in other comprehensive income. In estimating other than temporary impairment ("OTTI") losses, management considers, among other things: (i) the length of time and the extent to which the fair value has been less than cost; (ii) the financial condition and near-term prospects of the issuer; and (iii) our intent and ability to retain the investment in the issuer for a period of time sufficient to allow for any anticipated recovery in cost.

Management has the ability and intent to hold the securities classified as held to maturity in the table above until they mature, at which time we anticipate we will receive full value for the securities. Furthermore, as of June 30, 2019, management did not have the intent to sell any of the securities classified as available for sale in the table above and believes that it is more likely than not that we will not have to sell any such securities before a recovery of cost. Any unrealized losses are largely due to increases in market interest rates over the yields available at the time the underlying securities were purchased. The fair value is expected to recover as the securities approach their maturity date or repricing date or if market yields for such investments decline. Management does not believe any of the securities are impaired due to reasons related to credit quality. As of June 30, 2019, management believes the impairments detailed in the table above are temporary.

(Dollars in thousands, except share and per share data)

Securities pledged for borrowings at the FHLB and other institutions, and securities pledged for municipal deposits and other purposes, were as follows for the periods presented below:

	June 30, 2019	December 31, 2018
Available for sale securities pledged for borrowings, at fair value	$ 20,901	$ 12,206
Available for sale securities pledged for municipal deposits, at fair value	857,778	817,306
Held to maturity securities pledged for borrowings, at amortized cost	859	34,996
Held to maturity securities pledged for municipal deposits, at amortized cost	988,309	1,338,901
Total securities pledged	$ 1,867,847	$ 2,203,409

(4) Portfolio Loans

The composition of our total portfolio loans, which excludes loans held for sale, was the following for the periods presented below:

	June 30, 2019			December 31, 2018		
	Originated loans	Acquired loans	Total	Originated loans	Acquired loans	Total
Commercial:						
Commercial & Industrial ("C&I"):						
Traditional C&I	$ 2,357,081	$ 62,533	$ 2,419,614	$ 2,321,131	$ 75,051	$ 2,396,182
Asset-based lending	854,618	278,180	1,132,798	792,935	—	792,935
Payroll finance	203,581	—	203,581	227,452	—	227,452
Warehouse lending	1,221,458	—	1,221,458	782,646	—	782,646
Factored receivables	254,786	—	254,786	258,383	—	258,383
Equipment financing	885,678	349,514	1,235,192	913,751	301,291	1,215,042
Public sector finance	1,047,405	—	1,047,405	860,746	—	860,746
Total C&I	6,824,607	690,227	7,514,834	6,157,044	376,342	6,533,386
Commercial mortgage:						
Commercial real estate ("CRE")	4,614,943	421,277	5,036,220	4,154,956	487,461	4,642,417
Multi-family	1,713,243	2,964,574	4,677,817	1,527,619	3,236,505	4,764,124
Acquisition, development and construction ("ADC")	338,973	—	338,973	267,754	—	267,754
Total commercial mortgage	6,667,159	3,385,851	10,053,010	5,950,329	3,723,966	9,674,295
Total commercial	13,491,766	4,076,078	17,567,844	12,107,373	4,100,308	16,207,681
Residential mortgage	569,637	1,966,030	2,535,667	621,471	2,083,755	2,705,226
Consumer	135,430	131,365	266,795	153,811	151,812	305,623
Total portfolio loans	14,196,833	6,173,473	20,370,306	12,882,655	6,335,875	19,218,530
Allowance for loan losses	(104,664)	—	(104,664)	(95,677)	—	(95,677)
Total portfolio loans, net	$ 14,092,169	$ 6,173,473	$ 20,265,642	$ 12,786,978	$ 6,335,875	$ 19,122,853

Acquired loans at June 30, 2019 and December 31, 2018 include loans that were acquired in the following transactions: the Woodforest Acquisition; the Advantage Funding Acquisition; the merger with Astoria Financial Corporation ("Astoria") (the "Astoria Merger"); the merger with Hudson Valley Holding Corp. (the "HVB Merger"); and the the merger between Provident New York Bancorp and legacy Sterling Bancorp (the "Provident Merger"). Under our credit administration and accounting policies, once a loan relationship reaches maturity and is re-underwritten, the loan is no longer considered an acquired loan and is included in originated loans. In addition, acquired performing loans that were subsequently subject to a credit evaluation, such as after designation as criticized or classified or placed on non-accrual since the acquisition date, are also included in originated loans.

(Dollars in thousands, except share and per share data)

Consistent with our credit and accounting policies, at June 30, 2019, there were $1,076,642 of loans with an allowance for loan loss reserve of $8,326 that were originally considered acquired loans but have since migrated to the originated loans portfolio as they have reached maturity, were re-underwritten, have been designated as criticized or classified or have been placed on non-accrual since the acquisition date. At December 31, 2018, there were $1,365,682 of loans with an allowance for loan loss reserve of $9,607 that were originally considered acquired loans but have since migrated to the originated loans portfolio as they have reached maturity, were re-underwritten, have been designated as criticized or classified or have been placed on non-accrual since the acquisition date.

Total portfolio loans include net deferred loan origination fees of $5,559 and $5,581 at June 30, 2019 and December 31, 2018, respectively.

Portfolio loans subject to purchase accounting adjustments are shown net of discounts on acquired loans, which were $94,597 at June 30, 2019 and $117,222 at December 31, 2018.

At June 30, 2019 and December 31, 2018, the Bank pledged residential mortgage and commercial real estate loans of $7,567,738 and $8,526,247, respectively, to the FHLB as collateral for certain borrowing arrangements. See Note 8. “Borrowings”.

The following tables set forth the amounts and status of our loans, troubled debt restructurings (“TDRs”) and non-performing loans at June 30, 2019 and December 31, 2018:

Originated loans:

	June 30, 2019					
	Current	30-59 days past due	60-89 days past due	90+ days past due	Non-accrual	Total
Traditional C&I	$ 2,324,354	$ 1,068	$ 1,571	$ 106	$ 29,982	$ 2,357,081
Asset-based lending	826,042	—	—	—	28,576	854,618
Payroll finance	202,874	—	—	—	707	203,581
Warehouse lending	1,221,458	—	—	—	—	1,221,458
Factored receivables	254,786	—	—	—	—	254,786
Equipment financing	850,670	9,223	5,421	116	20,248	885,678
Public sector finance	1,047,405	—	—	—	—	1,047,405
CRE	4,557,297	19,086	16,550	—	22,010	4,614,943
Multi-family	1,708,326	557	—	—	4,360	1,713,243
ADC	337,112	668	—	—	1,193	338,973
Residential mortgage	531,116	2,055	—	—	36,466	569,637
Consumer	125,305	1,015	8	—	9,102	135,430
Total loans	$ 13,986,745	$ 33,672	$ 23,550	$ 222	$ 152,644	$ 14,196,833
Total TDRs included above	$ 28,536	$ 1,961	$ —	$ —	$ 22,624	$ 53,121
Non-performing loans:						
Loans 90+ days past due and still accruing					$ 222	
Non-accrual loans					152,644	
Total originated non-performing loans					$ 152,866	

(Dollars in thousands, except share and per share data)

	December 31, 2018					
	Current	30-59 days past due	60-89 days past due	90+ days past due	Non-accrual	Total
Traditional C&I	$ 2,266,947	$ 5,747	$ 6,139	$ —	$ 42,298	$ 2,321,131
Asset-based lending	789,654	—	—	—	3,281	792,935
Payroll finance	226,571	—	—	—	881	227,452
Warehouse lending	782,646	—	—	—	—	782,646
Factored receivables	258,383	—	—	—	—	258,383
Equipment financing	879,468	20,466	1,587	9	12,221	913,751
Public sector finance	860,746	—	—	—	—	860,746
CRE	4,118,134	8,054	—	799	27,969	4,154,956
Multi-family	1,524,914	1,014	—	—	1,691	1,527,619
ADC	267,090	230	—	434	—	267,754
Residential mortgage	592,563	1,934	897	264	25,813	621,471
Consumer	143,510	1,720	1,232	271	7,078	153,811
Total loans	$ 12,710,626	$ 39,165	$ 9,855	$ 1,777	$ 121,232	$ 12,882,655
Total TDRs included above	$ 34,892	$ 215	$ 181	$ 650	$ 38,947	$ 74,885
Non-performing loans:						
Loans 90+ days past due and still accruing					$ 1,777	
Non-accrual loans					121,232	
Total originated non-performing loans					$ 123,009	

Acquired loans:

	June 30, 2019					
	Current	30-59 days past due	60-89 days past due	90+ days past due	Non-accrual	Total
Traditional C&I	$ 62,107	$ 426	$ —	$ —	$ —	$ 62,533
Asset-based lending	278,180	—	—	—	—	278,180
Equipment financing	345,841	3,673	—	—	—	349,514
CRE	417,024	—	385	—	3,868	421,277
Multi-family	2,963,219	66	2	—	1,287	2,964,574
Residential mortgage	1,921,675	12,569	411	316	31,059	1,966,030
Consumer	126,504	1,610	—	—	3,251	131,365
Total loans	$ 6,114,550	$ 18,344	$ 798	$ 316	$ 39,465	$ 6,173,473
Total TDRs included above	$ —	$ —	$ —	$ —	$ —	$ —
Non-performing loans:						
Loans 90+ days past due and still accruing					$ 316	
Non-accrual loans					39,465	
Total acquired non-performing loans					$ 39,781	

(Dollars in thousands, except share and per share data)

	December 31, 2018					
	Current	30-59 days past due	60-89 days past due	90+ days past due	Non-accrual	Total
Traditional C&I	$ 69,690	$ 5,256	$ 105	$ —	$ —	$ 75,051
Equipment financing	288,447	8,659	3,998	187	—	301,291
CRE	481,583	377	—	458	5,043	487,461
Multi-family	3,233,779	1,736	—	—	990	3,236,505
Residential mortgage	2,022,340	18,734	6,513	—	36,168	2,083,755
Consumer	146,042	1,852	951	—	2,967	151,812
Total loans	$ 6,241,881	$ 36,614	$ 11,567	$ 645	$ 45,168	$ 6,335,875
Total TDRs included above	$ —	$ —	$ —	$ —	$ —	$ —
Non-performing loans:						
Loans 90+ days past due and still accruing					$ 645	
Non-accrual loans					45,168	
Total acquired non-performing loans					$ 45,813	

The following table provides additional analysis of our non-accrual loans at June 30, 2019 and December 31, 2018:

	June 30, 2019				December 31, 2018			
	Recorded investment non-accrual loans	Recorded investment PCI non-accrual loans	Recorded investment total non-accrual loans	Unpaid principal balance non-accrual loans	Recorded investment non-accrual loans	Recorded investment PCI non-accrual loans	Recorded investment total non-accrual loans	Unpaid principal balance non-accrual loans
Traditional C&I	$ 29,309	$ 673	$ 29,982	$ 42,623	$ 41,625	$ 673	$ 42,298	$ 50,651
Asset-based lending	28,576	—	28,576	33,148	3,281	—	3,281	3,859
Payroll finance	707	—	707	707	881	—	881	881
Equipment financing	20,248	—	20,248	25,679	12,221	—	12,221	15,744
CRE	18,104	7,774	25,878	31,997	23,675	9,337	33,012	39,440
Multi-family	3,537	2,110	5,647	6,188	482	2,199	2,681	2,920
ADC	1,193	—	1,193	1,209	—	—	—	—
Residential mortgage	34,562	32,963	67,525	78,032	24,339	37,642	61,981	72,706
Consumer	7,892	4,461	12,353	14,441	6,576	3,469	10,045	12,170
Total	$ 144,128	$ 47,981	$ 192,109	$ 234,024	$ 113,080	$ 53,320	$ 166,400	$ 198,371

There were no non-accrual warehouse lending, factored receivables or public sector finance loans at June 30, 2019. There were no non-accrual ADC, warehouse lending, factored receivables or public sector finance loans at December 31, 2018.

When the ultimate collectability of the total principal of an impaired loan is in doubt and the loan is on non-accrual status, all payments are applied to principal under the cost recovery method. When the ultimate collectability of the total principal of an impaired loan is not in doubt and the loan is on non-accrual status, contractual interest is credited to interest income when received, under the cash basis method. At June 30, 2019 and December 31, 2018, the recorded investment of residential mortgage loans that were in the process of foreclosure was $42,374 and $48,107, respectively, which is included in non-accrual residential mortgage loans above.

(Dollars in thousands, except share and per share data)

The following table sets forth loans evaluated for impairment by segment and the allowance evaluated by segment at June 30, 2019:

	Loans evaluated by segment				Allowance evaluated by segment		
	Individually evaluated for impairment	Collectively evaluated for impairment	PCI loans[(1)]	Total loans	Individually evaluated for impairment	Collectively evaluated for impairment	Total allowance for loan losses
Traditional C&I	$ 32,090	$ 2,381,119	$ 6,405	$ 2,419,614	$ —	$ 17,649	$ 17,649
Asset-based lending	37,096	1,083,448	12,254	1,132,798	2,000	11,905	13,905
Payroll finance	—	203,581	—	203,581	—	1,391	1,391
Warehouse lending	—	1,221,458	—	1,221,458	—	843	843
Factored receivables	—	254,786	—	254,786	—	1,157	1,157
Equipment financing	6,580	1,226,044	2,568	1,235,192	—	14,284	14,284
Public sector finance	—	1,047,405	—	1,047,405	—	1,594	1,594
CRE	23,866	4,990,048	22,306	5,036,220	—	34,846	34,846
Multi-family	4,340	4,667,133	6,344	4,677,817	—	9,360	9,360
ADC	753	338,220	—	338,973	—	2,272	2,272
Residential mortgage	6,575	2,449,818	79,274	2,535,667	—	7,109	7,109
Consumer	2,727	256,563	7,505	266,795	—	2,254	2,254
Total portfolio loans	$ 114,027	$ 20,119,623	$ 136,656	$ 20,370,306	$ 2,000	$ 104,664	$ 106,664

[(1)] We acquired loans for which there was, at acquisition, both evidence of deterioration of credit quality since origination and the probability, at acquisition, that all contractually required payments would not be collected. These loans are classified as purchased credit impaired loans (“PCI loans”).

The following table sets forth loans evaluated for impairment by segment and the allowance evaluated by segment at December 31, 2018:

	Loans evaluated by segment				Allowance evaluated by segment		
	Individually evaluated for impairment	Collectively evaluated for impairment	PCI loans	Total loans	Individually evaluated for impairment	Collectively evaluated for impairment	Total allowance for loan losses
Traditional C&I	$ 48,735	$ 2,338,432	$ 9,015	$ 2,396,182	$ —	$ 14,201	$ 14,201
Asset-based lending	3,281	789,654	—	792,935	—	7,979	7,979
Payroll finance	—	227,452	—	227,452	—	2,738	2,738
Warehouse lending	—	782,646	—	782,646	—	2,800	2,800
Factored receivables	—	258,383	—	258,383	—	1,064	1,064
Equipment financing	3,577	1,211,465	—	1,215,042	—	12,450	12,450
Public sector finance	—	860,746	—	860,746	—	1,739	1,739
CRE	33,284	4,581,911	27,222	4,642,417	—	32,285	32,285
Multi-family	1,662	4,754,912	7,550	4,764,124	—	8,355	8,355
ADC	—	267,754	—	267,754	—	1,769	1,769
Residential mortgage	3,210	2,614,046	87,970	2,705,226	—	7,454	7,454
Consumer	7,249	290,336	8,038	305,623	—	2,843	2,843
Total portfolio loans	$ 100,998	$ 18,977,737	$ 139,795	$ 19,218,530	$ —	$ 95,677	$ 95,677

Management considers a loan to be impaired when, based on current information and events, it is determined that we will not be able to collect all amounts due according to the loan contract, including scheduled interest payments. Evaluation of impairment is generally treated the same across all classes of loans on a loan-by-loan basis. Generally loans of $750 or less are evaluated for impairment on a homogeneous pool basis. When management identifies a loan as impaired, the impairment is measured based on the present value of expected future cash flows, discounted at the loan's effective interest rate, except when the sole remaining source of repayment of the loan is the operation or liquidation of the collateral. In these cases, management uses the current fair value of the collateral, less selling costs when foreclosure or liquidation is probable, instead of discounted cash flows. If management determines that the value of the impaired loan is less than the recorded investment in the loan (net of previous charge-offs, deferred loan fees or costs and unamortized premium or discount), impairment is generally recognized through a charge-off to the allowance for loan losses.

(Dollars in thousands, except share and per share data)

The following table presents the changes in the balance of the accretable yield discount for PCI loans for the three and six months ended June 30, 2019 and 2018:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Balance at beginning of period	$ 15,847	$ 27,549	$ 16,932	$ 45,582
Balances acquired in the Woodforest Acquisition	2,093	—	2,093	—
Accretion of income	(1,811)	(895)	(3,922)	(3,924)
Charge-offs	(431)	(2,285)	(939)	(2,627)
Reclassification (to) from non-accretable difference	2,683	(2,658)	4,217	(2,248)
Other, adjustments	—	—	—	(15,072)
Balance at end of period	$ 18,381	$ 21,711	$ 18,381	$ 21,711

Income is not recognized on PCI loans unless we can reasonably estimate the cash flows that are expected to be collected over the life of the loan. The balance of PCI loans that were treated under the cost recovery method was $3,238 and $5,202 at June 30, 2019 and December 31, 2018, respectively.

The following table presents loans individually evaluated for impairment, excluding PCI loans, by segment of loans at June 30, 2019 and December 31, 2018:

	June 30, 2019		December 31, 2018	
	Unpaid principal balance	Recorded investment	Unpaid principal balance	Recorded investment
Loans with no related allowance recorded:				
Traditional C&I	$ 42,555	$ 32,090	$ 64,653	$ 48,735
Asset-based lending	28,576	28,576	3,859	3,281
Equipment financing	6,832	6,580	3,577	3,577
Commercial real estate	28,140	23,866	43,119	33,284
Multi-family	4,672	4,340	2,341	1,662
ADC	753	753	—	—
Residential mortgage	6,730	6,575	3,430	3,210
Consumer	2,727	2,727	7,249	7,249
Total	$ 120,985	$ 105,507	$ 128,228	$ 100,998

At June 30, 2019 and December 31, 2018, there were no payroll finance, warehouse lending, factored receivables or public sector finance loans that were individually evaluated for impairment.

Our policy generally requires a charge-off of the difference between the present value of the cash flows or the net collateral value of the collateral securing the loan and our recorded investment. As a result, there were no impaired loans with an allowance recorded at December 31, 2018. At June 30, 2019, there was one asset-based lending loan with an unpaid principal balance of $11,617 and a recorded investment of $8,520, which had a specific reserve of $2,000. We are in the process of evaluating several collection strategies and resolution alternatives, and currently we have not determined the specific reserve amount to be a confirmed loss.

(Dollars in thousands, except share and per share data)

The following table presents the average recorded investment and interest income recognized related to loans individually evaluated for impairment by segment for the three months ended June 30, 2019 and June 30, 2018:

	For the three months ended					
	June 30, 2019			June 30, 2018		
	QTD average recorded investment	Interest income recognized	Cash-basis interest income recognized	QTD average recorded investment	Interest income recognized	Cash-basis interest income recognized
Loans with no related allowance recorded:						
Traditional C&I	$ 35,494	$ 136	$ —	$ 34,642	$ 186	$ —
Asset-based lending	14,935	—	—	12,673	109	—
Equipment financing	4,544	—	—	1,189	—	—
CRE	22,535	88	—	19,744	182	—
Multi-family	2,987	—	—	1,808	22	—
ADC	771	—	—	3,251	—	—
Residential mortgage	4,290	—	—	5,847	—	—
Consumer	2,727	—	—	3,118	—	—
Total	$ 88,283	$ 224	$ —	$ 82,272	$ 499	$ —

For the three months ended June 30, 2019 and 2018, there were no payroll finance, warehouse lending, factored receivables or public sector finance loans that were impaired, and there was no cash-basis interest income recognized.

For the three months ended June 30, 2019, the average recorded balance of the asset-based lending loan with a specific reserve at June 30, 2019 was $8,435, there was no interest income or cash-basis interest income recognized.

The following table presents the average recorded investment and interest income recognized related to loans individually evaluated for impairment by segment for the six months ended June 30, 2019 and June 30, 2018:

	For the six months ended					
	June 30, 2019			June 30, 2018		
	YTD average recorded investment	Interest income recognized	Cash-basis interest income recognized	YTD average recorded investment	Interest income recognized	Cash-basis interest income recognized
Loans with no related allowance recorded:						
Traditional C&I	$ 34,454	$ 150	$ —	$ 34,277	$ 202	$ —
Asset-based lending	10,382	—	—	8,448	224	—
Equipment financing	3,810	—	—	1,092	—	—
CRE	22,149	260	—	15,378	215	—
Multi-family	2,545	16	—	1,738	38	—
ADC	514	13	—	3,348	—	—
Residential mortgage	3,153	—	—	3,898	—	—
Consumer	2,317	—	—	3,123	—	—
Total	$ 79,324	$ 439	$ —	$ 71,302	$ 679	$ —

For the six months ended June 30, 2019 and 2018, there were no payroll finance, warehouse lending, factored receivables, or public sector finance loans that were impaired and there was no cash-basis interest income recognized.

(Dollars in thousands, except share and per share data)

For the six months ended June 30, 2019, the average recorded balance of the asset-based lending loan with a specific reserve at June 30, 2019 was $8,463, there was no interest income or cash-basis interest income recognized.

Troubled Debt Restructurings ("TDRs")

The following tables set forth the amounts and past due status of our TDRs at June 30, 2019 and December 31, 2018:

	June 30, 2019					
	Current loans	30-59 days past due	60-89 days past due	90+ days past due	Non-accrual	Total
Traditional C&I	$ 5,387	$ 449	$ —	$ —	$ 13,573	$ 19,409
Asset-based lending	—	—	—	—	1,294	1,294
Equipment financing	4,011	1,223	—	—	1,321	6,555
CRE	8,790	—	—	—	4,251	13,041
ADC	—	—	—	—	434	434
Residential mortgage	7,817	189	—	—	1,418	9,424
Consumer	2,531	100	—	—	333	2,964
Total	$ 28,536	$ 1,961	$ —	$ —	$ 22,624	$ 53,121

There were no payroll finance, warehouse lending, factored receivables, public sector finance or multi-family loans that were TDRs for the period presented above.

	December 31, 2018					
	Current loans	30-59 days past due	60-89 days past due	90+ days past due	Non-accrual	Total
Traditional C&I	$ 9,011	$ —	$ —	$ —	$ 25,672	$ 34,683
Asset-based lending	—	—	—	—	1,276	1,276
Equipment financing	1,905	—	9	—	2,367	4,281
CRE	11,071	—	—	—	7,112	18,183
ADC	—	—	—	434	—	434
Residential mortgage	5,688	—	103	—	2,312	8,103
Consumer	7,217	215	69	216	208	7,925
Total	$ 34,892	$ 215	$ 181	$ 650	$ 38,947	$ 74,885

There were no payroll finance, warehouse lending, factored receivables, public sector finance or multi-family loans that were TDRs for the period presented above.

We did not have any outstanding commitments to lend additional amounts to customers with loans classified as TDRs as of June 30, 2019 or December 31, 2018.

(Dollars in thousands, except share and per share data)

The following table presents loans by segment modified as TDRs that occurred during the first six months of 2019 and 2018:

	June 30, 2019			June 30, 2018		
		Recorded investment			Recorded investment	
	Number	Pre-modification	Post-modification	Number	Pre-modification	Post-modification
Traditional C&I	1	$ 5,026	$ 5,026	1	$ 11,157	$ 10,028
Asset-based lending	—	—	—	1	12,766	12,766
Equipment financing	5	2,806	2,806	1	670	670
Residential mortgage	3	1,274	1,274	8	1,260	943
Total TDRs	9	$ 9,106	$ 9,106	11	$ 25,853	$ 24,407

There were no payroll finance, warehouse lending, factored receivables, public sector finance, commercial real estate, multi-family or consumer loans modified as TDRs during the first six months of 2019 or 2018.

During the six months ended June 30, 2019, there was one equipment finance loan designated as a TDR that experienced a payment default within the twelve months following the modification. During the six months ended June 30, 2018, except for certain TDRs that are included in non-accrual loans, there were no TDRs that experienced a payment default within the twelve months following a modification. A payment default is defined as missing three consecutive monthly payments or being over 90 days past due on a scheduled payment. TDRs are formal loan modifications which consist mainly of an extension of the loan maturity date, converting a loan to interest only for some defined period of time, deferral of interest payments, waiver of certain covenants, or reducing collateral requirements or interest rates. TDRs during the periods presented above did not significantly impact the determination of the allowance for loan losses.

(5) Allowance for Loan Losses

Activity in the allowance for loan losses for the three and six months ended June 30, 2019 and 2018 is summarized below:

	For the three months ended June 30, 2019					
	Beginning balance	Charge-offs	Recoveries	Net charge-offs	Provision / (credit)	Ending balance
Traditional C&I	$ 17,936	$ (754)	$ 445	$ (309)	$ 22	$ 17,649
Asset-based lending	8,573	(3,551)	—	(3,551)	6,883	11,905
Payroll finance	2,100	(84)	3	(81)	(628)	1,391
Warehouse lending	693	—	—	—	150	843
Factored receivables	1,092	(27)	4	(23)	88	1,157
Equipment financing	14,326	(1,335)	79	(1,256)	1,214	14,284
Public sector finance	1,134	—	—	—	460	1,594
CRE	33,087	(238)	649	411	1,348	34,846
Multi-family	8,659	—	6	6	695	9,360
ADC	1,912	—	—	—	360	2,272
Residential mortgage	6,925	(689)	1	(688)	872	7,109
Consumer	2,523	(467)	162	(305)	36	2,254
Total allowance for loan losses	$ 98,960	$ (7,145)	$ 1,349	$ (5,796)	$ 11,500	$ 104,664
Annualized net charge-offs to average loans outstanding:						0.12%

STERLING BANCORP AND SUBSIDIARIES
Notes to Consolidated Financial Statements (Unaudited)
(Dollars in thousands, except share and per share data)

	For the three months ended June 30, 2018					
	Beginning balance	Charge-offs	Recoveries	Net charge-offs	Provision / (credit)	Ending balance
Traditional C&I	$ 19,410	$ (1,831)	$ 225	$ (1,606)	$ 271	$ 18,075
Asset-based lending	6,327	—	9	9	(499)	5,837
Payroll finance	1,475	(314)	7	(307)	490	1,658
Warehouse lending	3,108	—	—	—	(321)	2,787
Factored receivables	1,169	(160)	2	(158)	310	1,321
Equipment financing	6,572	(2,477)	190	(2,287)	4,556	8,841
Public sector finance	1,906	—	—	—	(552)	1,354
CRE	24,222	(3,166)	74	(3,092)	5,740	26,870
Multi-family	6,747	—	—	—	642	7,389
ADC	2,032	(721)	—	(721)	861	2,172
Residential mortgage	6,019	(544)	34	(510)	408	5,917
Consumer	3,105	(491)	97	(394)	1,094	3,805
Total allowance for loan losses	$ 82,092	$ (9,704)	$ 638	$ (9,066)	$ 13,000	$ 86,026
Annualized net charge-offs to average loans outstanding:						0.18%

	For the six months ended June 30, 2019					
	Beginning balance	Charge-offs	Recoveries	Net charge-offs	Provision/ (credit)	Ending balance
Traditional C&I	$ 14,201	$ (5,593)	$ 584	$ (5,009)	$ 8,457	$ 17,649
Asset-based lending	7,979	(3,551)	—	(3,551)	7,477	11,905
Payroll finance	2,738	(84)	4	(80)	(1,267)	1,391
Warehouse lending	2,800	—	—	—	(1,957)	843
Factored receivables	1,064	(59)	125	66	27	1,157
Equipment financing	12,450	(2,584)	210	(2,374)	4,208	14,284
Public sector finance	1,739	—	—	—	(145)	1,594
CRE	32,285	(255)	658	403	2,158	34,846
Multi-family	8,355	—	109	109	896	9,360
ADC	1,769	—	—	—	503	2,272
Residential mortgage	7,454	(1,774)	2	(1,772)	1,427	7,109
Consumer	2,843	(910)	405	(505)	(84)	2,254
Total allowance for loan losses	$ 95,677	$ (14,810)	$ 2,097	$ (12,713)	$ 21,700	$ 104,664
Annualized net charge-offs to average loans outstanding:						0.13%

(Dollars in thousands, except share and per share data)

	For the six months ended June 30, 2018					
	Beginning balance	Charge-offs	Recoveries	Net charge-offs	Provision/ (credit)	Ending balance
Traditional C&I	$ 19,072	$ (5,403)	$ 439	$ (4,964)	$ 3,967	$ 18,075
Asset-based lending	6,625	—	9	9	(797)	5,837
Payroll finance	1,565	(314)	29	(285)	378	1,658
Warehouse lending	3,705	—	—	—	(918)	2,787
Factored receivables	1,395	(164)	5	(159)	85	1,321
Equipment financing	4,862	(6,676)	262	(6,414)	10,393	8,841
Public sector finance	1,797	—	—	—	(443)	1,354
CRE	24,945	(4,519)	90	(4,429)	6,354	26,870
Multi-family	3,261	—	3	3	4,125	7,389
ADC	1,680	(721)	—	(721)	1,213	2,172
Residential mortgage	5,819	(582)	49	(533)	631	5,917
Consumer	3,181	(616)	228	(388)	1,012	3,805
Total allowance for loan losses	$ 77,907	$ (18,995)	$ 1,114	$ (17,881)	$ 26,000	$ 86,026
Annualized net charge-offs to average loans outstanding:						0.18%

Credit Quality Indicators

As part of the ongoing monitoring of the credit quality of our loan portfolio, management tracks certain credit quality indicators, including trends related to: (i) the weighted-average risk grade of commercial loans; (ii) the level of classified commercial loans; (iii) the delinquency status of residential mortgage and consumer loans, including home equity lines of credit ("HELOC") and other consumer loans; (iv) net charge-offs; (v) non-performing loans (see details above); and (vi) the general economic conditions in the greater New York metropolitan region. We analyze loans individually by classifying the loans by credit risk, except residential mortgage loans, HELOC and other consumer loans, which are evaluated on a homogeneous pool basis unless the loan balance is greater than $750. This analysis is performed at least quarterly on all graded 7-Special Mention and lower loans. We use the following definitions of risk ratings:

1 and 2 - These grades include loans that are secured by cash, marketable securities or cash surrender value of life insurance policies.

3 - This grade includes loans to borrowers with strong earnings and cash flow that have the ability to service debt. The borrower's assets and liabilities are generally well-matched and are above average quality. The borrower has ready access to multiple sources of funding, including alternatives such as term loans, private equity placements or trade credit.

4 - This grade includes loans to borrowers with above average cash flow, adequate earnings and debt service coverage ratios. The borrower generates discretionary cash flow, assets and liabilities are reasonably matched, and the borrower has access to other sources of debt funding or additional trade credit at market rates.

5 - This grade includes loans to borrowers with adequate earnings and cash flow and reasonable debt service coverage ratios. Overall leverage is acceptable and there is average reliance upon trade credit. Management has a reasonable amount of experience and depth, and owners are willing to invest available outside capital, as necessary.

6 - This grade includes loans to borrowers where there is evidence of some strain, earnings are inconsistent and volatile, and the borrowers' outlook is uncertain. Generally, such borrowers have higher leverage than those with a better risk rating. These borrowers typically have limited access to alternative sources of bank debt and may be dependent upon debt funding for working capital support.

7 - Special Mention (OCC definition) - Other Assets Especially Mentioned are loans that have potential weaknesses which may, if not reversed or corrected, weaken the asset or inadequately protect the Bank's credit position at some future date. Such assets constitute an undue and unwarranted credit risk but not to the point of justifying a classification of "Substandard." The credit risk may be relatively minor yet constitute an unwarranted risk in light of the circumstances surrounding a specific asset.

8 - Substandard (OCC definition) - These loans are inadequately protected by the current sound worth and paying capacity of the obligor or of the collateral pledged, if any. Assets so classified must have a well-defined weakness that jeopardizes the liquidation of the debt. They are characterized by the distinct possibility that the Bank will sustain some losses if the deficiencies are not corrected. Loss potential, while existing in the aggregate amount of substandard assets, does not have to exist in individual assets classified as substandard.

(Dollars in thousands, except share and per share data)

9 - Doubtful (OCC definition) - These loans have all the weakness inherent in one classified as “Substandard” with the added characteristics that the weakness makes collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable. The possibility of loss is extremely high, but, because of certain important and reasonably specific pending factors which may work to the advantage and strengthening of the asset, its classification as an estimated loss is deferred until its more exact status may be determined. Pending factors may include a proposed merger, acquisition, liquidating procedures, capital injection, perfecting liens or additional collateral and refinancing plans.

10 - Loss (OCC definition) - These loans are charged-off because they are determined to be uncollectible and unbankable assets. This classification does not indicate that the asset has no absolute recovery or salvage value, but rather it is not practical or desirable to defer writing-off this asset even though partial recovery may be effected in the future. Losses should be taken in the period in which they are determined to be uncollectible.

Loans that are risk-rated 1 through 6 as defined above are considered to be pass-rated loans. As of June 30, 2019, the risk category of gross loans by segment was as follows:

	Special Mention			Substandard		
	Originated	Acquired	Total	Originated	Acquired	Total
Traditional C&I	$ 7,842	$ 69	$ 7,911	$ 45,816	$ 115	$ 45,931
Asset-based lending	20,398	29,999	50,397	42,699	—	42,699
Payroll finance	173	—	173	17,094	—	17,094
Equipment financing	13,059	7,703	20,762	31,040	—	31,040
CRE	6,287	9,775	16,062	52,154	5,425	57,579
Multi-family	20,388	2,774	23,162	33,109	1,810	34,919
ADC	—	—	—	1,193	—	1,193
Residential mortgage	—	411	411	37,103	31,375	68,478
Consumer	—	62	62	9,234	3,251	12,485
Total	$ 68,147	$ 50,793	$ 118,940	$ 269,442	$ 41,976	$ 311,418

At June 30, 2019, there were $43,771 of special mention loans and $118,987 of substandard loans that were originally considered acquired loans but were migrated to the originated loans portfolio as they have been designated criticized or classified status or have been placed on non-accrual since the acquisition date.

(Dollars in thousands, except share and per share data)

As of December 31, 2018, the risk category of gross loans by segment was as follows:

	Special Mention			Substandard		
	Originated	Acquired	Total	Originated	Acquired	Total
Traditional C&I	$ 12,003	$ 99	$ 12,102	$ 51,903	$ 128	$ 52,031
Asset-based lending	14,033	—	14,033	21,865	—	21,865
Payroll finance	9,682	—	9,682	17,766	—	17,766
Factored receivables	—	—	—	508	—	508
Equipment financing	9,966	—	9,966	21,256	—	21,256
CRE	3,852	10,160	14,012	43,336	8,126	51,462
Multi-family	33,321	10,490	43,811	20,812	3,542	24,354
ADC	—	—	—	434	—	434
Residential mortgage	5,179	2,231	7,410	29,475	36,431	65,906
Consumer	1,919	245	2,164	7,223	3,242	10,465
Total	$ 89,955	$ 23,225	$ 113,180	$ 214,578	$ 51,469	$ 266,047

At December 31, 2018, there were $51,282 of special mention loans and $95,575 of substandard loans that were originally considered acquired loans but were migrated to the originated loans portfolio as they have been designated criticized or classified status or have been placed on non-accrual since the acquisition date.

At June 30, 2019, there were no loans rated doubtful. At December 31, 2018, there were $59 of originated consumer loans rated doubtful. At June 30, 2019 and December 31, 2018 there were no warehouse lending or public sector finance loans that were rated special mention or substandard.

There were no loans rated loss at June 30, 2019 or December 31, 2018.

(6) Goodwill and Other Intangible Assets

The balance of goodwill and other intangible assets for the periods presented were as follows:

	June 30, 2019	December 31, 2018
Goodwill	$ 1,657,814	$ 1,613,033
Other intangible assets:		
Core deposits	$ 95,093	$ 104,263
Customer lists	4,341	4,740
Non-compete agreements	—	42
Trade name	20,500	20,500
Total	$ 119,934	$ 129,545

The increase in goodwill at June 30, 2019 compared to December 31, 2018 was due to the Woodforest Acquisition. See Note 2. “Acquisitions” for additional information.

The decrease in other intangible assets at June 30, 2019 compared to December 31, 2018 was due to amortization of intangibles.

(Dollars in thousands, except share and per share data)

The estimated aggregate future amortization expense for intangible assets remaining as of June 30, 2019 was as follows:

	Amortization expense
Remainder of 2019	$ 9,570
2020	16,800
2021	15,104
2022	13,703
2023	12,322
2024	10,448
Thereafter	21,487
Total	$ 99,434

(7) Deposits

Deposit balances at June 30, 2019 and December 31, 2018 were as follows:

	June 30, 2019	December 31, 2018
Non-interest bearing demand	$ 4,494,802	$ 4,241,923
Interest bearing demand	4,237,229	4,207,392
Savings	2,310,709	2,382,520
Money market	7,325,264	7,905,382
Certificates of deposit	2,580,460	2,476,931
Total deposits	$ 20,948,464	$ 21,214,148

Total municipal deposits, which are included in the deposit balances above, were $1,699,824 and $1,751,670 at June 30, 2019 and December 31, 2018, respectively. See Note 3. “Securities” for the aggregate amount of securities that were pledged as collateral for municipal deposits and other purposes.

Brokered deposits at June 30, 2019 and December 31, 2018 were as follows:

	June 30, 2019	December 31, 2018
Interest bearing demand	$ 20,203	$ 23,742
Money market	824,541	983,889
CDARs[1] and ICS[2] one way	198,332	150,192
Total brokered deposits	$ 1,043,076	$ 1,157,823

[1] CDARs are deposits generated through the certificate of deposit account registry service.
[2] ICS are deposits generated through the insured cash sweep program.

(Dollars in thousands, except share and per share data)

(8) Borrowings

Our borrowings and weighted average interest rates were as follows for the periods presented:

	June 30, 2019		December 31, 2018	
	Amount	Rate	Amount	Rate
By type of borrowing:				
FHLB borrowings	$ 3,766,224	2.37%	$ 4,838,772	2.40%
Repurchase agreements	20,901	1.23	21,338	1.20
3.50% Senior Notes	173,800	3.19	181,130	3.19
Subordinated Notes	173,061	5.45	172,943	5.45
Total borrowings	$ 4,133,986	2.54%	$ 5,214,183	2.52%
By remaining period to maturity:				
Less than one year	$ 3,235,127	2.48%	$ 3,958,635	2.48%
One to two years	725,798	2.11	831,889	2.28
Two to three years	—	—	250,716	2.04
Greater than five years	173,061	5.45	172,943	5.45
Total borrowings	$ 4,133,986	2.54%	$ 5,214,183	2.52%

FHLB borrowings. As a member of the FHLB, the Bank may borrow up to a discounted percentage of the amount of eligible mortgages and securities that have been pledged as collateral under a blanket security agreement. As of June 30, 2019 and December 31, 2018, the Bank had total residential mortgage and commercial real estate loans pledged after discount of $7,567,738 and $8,526,247, respectively. In addition to the pledged mortgages, the Bank had also pledged securities to secure borrowings, which are disclosed in Note 3. “Securities.” As of June 30, 2019, the Bank had unused borrowing capacity at the FHLB of $3,695,570 and may increase such borrowing capacity by pledging securities not required to be pledged for other purposes with a collateral value of approximately $3,630,928.

Repurchase agreements. The Bank enters into sales of securities under agreements to repurchase. These repurchase agreements facilitate the needs of our customers and a portion of our secured short-term funding needs. Securities sold under agreements to repurchase at June 30, 2019 and December 31, 2018 are secured short-term borrowings that mature in one to 45 days and are generally renewed on a continuous basis. Repurchase agreements are stated at the amount of cash received in connection with these transactions. The securities pledged under these repurchase agreements fluctuate in value due to market conditions. The Bank is obligated to promptly transfer additional securities if the market value of the securities falls below the repurchase agreement price. Securities pledged as collateral under repurchase agreements are maintained with our safekeeping agents.

3.50% Senior Notes. On October 2, 2017, in connection with the Astoria Merger, we assumed $200,000 principal amount of 3.50% fixed rate senior notes that mature on June 8, 2020 (the “3.50% Senior Notes”). The 3.50% Senior Notes were issued by Astoria on June 8, 2017 through a public offering. We recorded the 3.50% Senior Notes at an estimated fair value of 100.76% on the acquisition date, which was based on the quoted market value. The fair value adjustment, with a remaining balance of $427 at June 30, 2019, is being amortized over the remaining maturity using a level-yield methodology, which results in an effective cost of 3.19%. During the six months ended June 30, 2019, we repurchased $7,000 of the 3.50% Senior Notes and recorded a gain of $46, also during the fourth quarter of 2018, we reacquired $19,627 of the 3.50% Senior Notes.

Subordinated Notes. On March 29, 2016, the Bank issued $110,000 principal amount of 5.25% fixed-to-floating rate subordinated notes (the “Subordinated Notes”) through a private placement at a discount of 1.25%. The cost of issuance was $500. On September 2, 2016, the Bank reopened the Subordinated Notes offering and issued an additional $65,000 principal amount of Subordinated Notes. The Subordinated Notes issued September 2, 2016 are fully fungible with, rank equally in right of payment with, and form a single series with the Subordinated Notes issued in March 2016. The Subordinated Notes issued in September 2016 were issued to the purchasers at a premium of 0.50% and an underwriters discount of 1.25%. The cost of issuance was $275. At June 30, 2019, the net unamortized discount of all Subordinated Notes was $1,939, which will be accreted to interest expense over the life of the Subordinated Notes, resulting in an effective yield of 5.45%. Interest is due semi-annually in arrears on April 1 and October 1 of each year, until April 1, 2021. From and including April 1, 2021, the Subordinated Notes will bear interest at a floating rate per annum equal to three-month LIBOR plus 3.937%, payable quarterly on January 1, April 1, July 1 and October 1 of each year, beginning on

(Dollars in thousands, except share and per share data)

July 1, 2021, through maturity on April 1, 2026 or earlier redemption. The Subordinated Notes are redeemable by the Bank, in whole or in part, on April 1, 2021 and each interest payment date thereafter. The Subordinated Notes are redeemable in whole at any time upon the occurrence of certain specified events. The Subordinated Notes are unsecured, subordinated obligations of the Bank and are subordinated in right of payment to all of the Bank's existing and future senior indebtedness, including claims of depositors and general creditors. The Subordinated Notes qualify as Tier 2 capital for regulatory purposes. See Note 16. "Stockholders' Equity" for additional information.

Revolving line of credit. Effective September 2, 2018, we renewed our $35,000 revolving line of credit facility (the "Credit Facility"). The Credit Facility, which is with another financial institution, matures on September 2, 2019. The balance was zero at June 30, 2019 and December 31, 2018. The use of proceeds are for general corporate purposes. The Credit Facility and accrued interest is payable at maturity, and we are required to maintain a zero balance for at least 30 days during its term. Loans under the Credit Facility bear interest at one-month LIBOR plus 1.25%. Under the terms of the Credit Facility, we must maintain certain ratios related to capital, non-performing assets to capital, reserves to non-performing loans and debt service coverage. We were in compliance with all requirements of the Credit Facility at June 30, 2019.

(9) Leases

At June 30, 2019, operating lease right-of-use assets of $118,036 and operating lease liabilities of $124,660 were included in other assets and other liabilities, respectively, on our consolidated balance sheet. We do not have any significant finance leases in which we are the lessee. We have operating leases for financial centers, back-office operations locations, business development offices, information technology data centers and equipment. Our leases have remaining terms of one year to 16 years, some of which include options to extend the lease for up to 10 years and some of which include options to terminate the lease within two years. Sub-leases are not material to our financial statements and were not considered in the right-of-use asset or lease liability.

The components of lease expense were as follows:

	Three months ended June 30, 2019	Six months ended June 30, 2019
Operating lease expense	$ 4,839	9,782
Sub-lease income	(553)	$ (1,157)
Net lease expense	$ 4,286	8,625

Net lease expense for the three and six months ended June 30, 2018, prior to the adoption of ASU 2016-02, was $4,994 and $9,400, respectively.

Future minimum payments for operating leases with initial or remaining terms of one year or more as of June 30, 2019 were as follows:

Remainder of 2019	$ 10,095
2020	19,379
2021	17,823
2022	16,109
2023	14,504
2024	12,703
2025 and thereafter	54,229
Total lease payments	144,842
Interest	20,182
Present value of lease liabilities	$ 124,660

(Dollars in thousands, except share and per share data)

Lease Term and Discount Rate:

	June 30, 2019
Weighted average remaining lease term (years)	8.46
Weighted average remaining discount rate	3.25%

(10) Derivatives

We have entered into certain interest rate swap contracts that are not designated as hedging instruments. These derivative contracts relate to transactions in which we enter into an interest rate swap with a customer while at the same time entering into an offsetting interest rate swap with another financial institution. In connection with each swap transaction, we agree to pay interest to the customer on a notional amount at a variable interest rate and receive interest from the customer on a similar notional amount at a fixed interest rate. At the same time, we agree to pay another financial institution the same fixed interest rate on the same notional amount and receive the same variable interest rate on the same notional amount. The transaction allows our customers to effectively convert a variable rate loan to a fixed rate loan. Because we act as an intermediary for our customers, changes in the fair value of the underlying derivative contracts largely offset each other and do not materially impact our results of operations.

We have entered into interest rate swap contracts that are both over-the-counter, or OTC, and those that are exchanged on futures markets such as the Chicago Mercantile Exchange (“CME”). At June 30, 2019 and December 31, 2018, the OTC derivatives are included in our financial statements at the gross fair value amount of the asset (included in other assets) and liability (included in other liabilities), which represents the change in the fair value of the contract since inception. The CME legally characterizes variation margin payments (a payment made based on changes in the fair value of the interest rate swap contracts) as a settlement, referred to as settled-to-market (“STM”). As a result, at June 30, 2019 and December 31, 2018, we paid cash under STMs in the amounts of $43,179 and $5,214, respectively, for the net fair value of its CME interest rate swap contracts with another financial institution. The variation margin payment may change daily, positively or negatively, based on the change in the fair value of the underlying interest rate swap contracts.

We do not typically require our commercial customers to post cash or securities as collateral on its program of back-to-back swaps. However, certain language is written into the International Swaps and Derivatives Association agreement and loan documents where, in default situations, we are allowed to access collateral supporting the loan relationship to recover any losses suffered on the derivative asset or liability.

(Dollars in thousands, except share and per share data)

Summary information as of June 30, 2019 and December 31, 2018 regarding these derivatives is presented below:

	Notional amount	Average maturity (in years)	Weighted average fixed rate	Weighted average variable rate	Fair value
June 30, 2019					
Included in other assets:					
Third-party interest rate swap	$ 144,196				$ 33
Customer interest rate swap	1,306,092				64,617
Total	$ 1,450,288	5.57	4.67%	1 m Libor + 2.25%	$ 64,650
Included in other liabilities:					
Third-party interest rate swap	$ (1,306,092)				$ (20,833)
Customer interest rate swap	(144,196)				(638)
Total	$ (1,450,288)	5.57	4.67%	1 m Libor + 2.25%	$ (21,471)
December 31, 2018					
Included in other assets:					
Third-party interest rate swap	$ 516,419				$ 1,963
Customer interest rate swap	556,934				16,252
Total	$ 1,073,353	5.90	4.65%	1 m Libor + 2.29%	$ 18,215
Included in other liabilities:					
Third-party interest rate swap	$ (556,934)				$ (4,351)
Customer interest rate swap	(516,419)				(8,650)
Total	$ (1,073,353)	5.90	4.65%	1 m Libor + 2.29%	$ (13,001)

(11) Income Taxes

Actual income tax expense differs from the tax computed based on pre-tax income and the applicable statutory federal tax rate for the following reasons:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Income before income tax expense	$ 120,457	$ 146,156	$ 250,368	$ 274,484
Tax at federal statutory rate of 21%	25,296	30,693	52,577	57,641
State and local income taxes, net of federal tax benefit	6,188	7,895	12,878	13,954
Tax exempt interest, net of disallowed interest	(5,303)	(4,838)	(10,556)	(9,465)
BOLI income	(893)	(782)	(1,662)	(1,545)
Low income housing tax credits and other benefits	(4,814)	(1,375)	(9,161)	(2,502)
Low income housing investment amortization expense	4,073	—	7,883	—
Equity-based stock compensation benefit	—	(62)	(106)	(441)
FDIC insurance premium limitation	224	531	478	1,017
Other, net	(774)	(147)	140	2,712
Actual income tax expense	$ 23,997	$ 31,915	$ 52,471	$ 61,371
Effective income tax rate	19.9%	21.8%	21.0%	22.4%

Net deferred tax liabilities totaled $11,150 at June 30, 2019 compared to net deferred tax assets of $53,990 at December 31, 2018. The decline in net deferred tax assets at June 30, 2019 compared to December 31, 2018 was mainly due to the change from an unrealized loss to an unrealized gain on available for sale securities. No valuation allowance was recorded against any deferred tax assets as of those dates, based upon management's consideration of historical and anticipated future pre-tax income, and the reversal periods for the items resulting in deferred tax assets and liabilities. There were no unrecognized tax benefits during any of the reported periods.

(Dollars in thousands, except share and per share data)

Interest and/or penalties related to income taxes are reported as a component of other non-interest expense. Such amounts were not material during the reported periods.

We are generally no longer subject to examination by federal, state and local taxing authorities for tax years prior to December 31, 2015.

(12) Stock-Based Compensation

We have one active stock-based compensation plan, as described below.

Our stockholders approved the 2015 Omnibus Equity and Incentive Plan (the "2015 Plan") on May 28, 2015. The 2015 Plan permitted the grant of stock options, stock appreciation rights, restricted stock (both time-based and performance-based), restricted stock units, deferred stock and other stock-based awards. The total number of shares that could be awarded under the 2015 Plan was 2,800,000 shares, plus the remaining shares available for grant under the 2014 Stock Incentive Plan as of the date of adoption of the 2015 Plan.

On May 29, 2019, our stockholders approved the Amended and Restated 2015 Omnibus Plan (the "Amended Omnibus Plan"). The Amended Omnibus Plan increased the shares available for issuance to 7,000,000 from 4,454,318, and updated certain tax-related provisions as a result of the Tax Cuts and Jobs Act and related administrative changes. The amendment increased the number of shares reserved for issuance thereunder by 2,545,682 shares. The Amended Omnibus Plan provides for the granting of the same instruments as the 2015 Plan, and one share is deducted for every share that is awarded and delivered under the Amended Omnibus Plan.
At June 30, 2019, there were an aggregate amount of 3,354,158 shares available for future grant under the Amended Omnibus Plan.

Restricted stock awards are granted with a fair value equal to the market price of our common stock at the date of grant. Stock option awards are granted with a strike price that is equal to the market price of our common stock at the date of grant. The restricted stock awards generally vest in equal installments annually on the anniversary date of grant and have total vesting periods ranging from one year to five years, while stock options have 10-year contractual terms.

The following table summarizes the activity in our stock-based compensation plan for the six months ended June 30, 2019:

		Non-vested stock awards/stock units outstanding		Stock options outstanding	
	Shares available for grant	Number of shares	Weighted average grant date fair value	Number of shares	Weighted average exercise price
Balance at January 1, 2019	2,318,950	1,333,514	$ 22.12	686,539	$ 11.20
Amended 2015 Omnibus Equity and Incentive Plan	2,545,682	—	—	—	—
Granted	(1,501,511)	1,501,511	19.63	—	—
Stock awards vested (1)	(70,353)	(518,203)	19.57	—	—
Exercised	—	—	—	(172,062)	10.97
Forfeited	62,890	(61,390)	23.01	(1,500)	10.03
Canceled/expired	(1,500)	—	—	—	—
Balance at June 30, 2019	3,354,158	2,255,432	$ 21.02	512,977	$ 11.28
Exercisable at June 30, 2019				512,977	$ 11.28

(1) The 70,353 shares vested represents performance shares that were granted in February 2016 to certain executives with a three-year measurement period. These shares vested in the first quarter of 2019 at 150.0% of the target amount granted, which resulted in these additional shares being awarded and additional expense of $1,000 which was recorded in the first quarter of 2019.

(Dollars in thousands, except share and per share data)

The total intrinsic value of outstanding in-the-money stock options and outstanding in-the-money exercisable stock options was $5,132 at June 30, 2019.

We use an option pricing model to estimate the grant date fair value of stock options granted. There were no stock options granted during the six months ended June 30, 2019 or June 30, 2018.

Stock-based compensation expense is recognized ratably over the requisite service period for all awards. Stock-based compensation expense associated with stock options and non-vested stock awards and the related income tax benefit are presented below:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Stock options	$ —	$ 2	$ —	$ 4
Non-vested stock awards/performance units	4,605	3,334	9,728	6,186
Total	$ 4,605	$ 3,336	$ 9,728	$ 6,190
Income tax benefit	967	751	2,043	1,393
Proceeds from stock option exercises	2,268	73	1,889	402

Unrecognized stock-based compensation expense as of June 30, 2019 was as follows:

	June 30, 2019
Stock options	$ —
Non-vested stock awards/performance units	37,326
Total	$ 37,326

The weighted average period over which unrecognized non-vested stock awards/performance units expense is expected to be recognized is 2.24 years.

(13) Pension and Other Post-Retirement Benefits

Total pension and other post-retirement benefits expense is comprised of the following for the periods presented below:

	For the three months ended			
	June 30, 2019		June 30, 2018	
	Pension Benefits	Other Post Retirement Benefits	Pension Benefits	Other Post Retirement Benefits
Service cost	$ —	$ 15	$ —	$ 21
Interest cost	3,045	265	2,121	253
Expected return on plan assets	(3,865)	—	(3,352)	—
Net amortization and deferral	—	(83)	—	—
Net periodic pension and other post-retirement (benefit) expense	$ (820)	$ 197	$ (1,231)	$ 274

(Dollars in thousands, except share and per share data)

	For the six months ended			
	June 30, 2019		June 30, 2018	
	Pension Benefits	Other Post Retirement Benefits	Pension Benefits	Other Post Retirement Benefits
Service cost	$ —	$ 30	$ —	$ 42
Interest cost	5,338	570	4,243	526
Expected return on plan assets	(6,259)	—	(6,705)	—
Net amortization and deferral	—	(165)	—	—
Net periodic pension and other post-retirement (benefit) expense	$ (921)	$ 435	$ (2,462)	$ 568

Total net periodic pension and other post-retirement (benefit) expense is included as a component of other non-interest expense.

Our pension benefit plans include all of the assets and liabilities of the Astoria Bank Pension Plan, the Astoria Excess and Supplemental Benefit Plans, the Astoria Directors’ Retirement Plan, the Greater New York Savings Bank Directors’ Retirement Plan and the Long Island Bancorp Directors’ Retirement Plan, which were assumed in the Astoria Merger. We have announced plans to terminate the Astoria Bank Pension Plan in 2019, which will occur following receipt of regulatory approvals, and do not anticipate any additional contributions, or expect any significant assets to be returned from this plan.

Our other post retirement benefit plans include the Astoria Bank Retiree Health Care Plan and the Astoria Bank BOLI plan, which were assumed in the Astoria Merger, and other non-qualified Supplemental Executive Retirement Plans (“SERPs”) that provide certain directors, officers and executives with supplemental retirement benefits.

We contributed $292 and $399 to fund pension and other post retirement benefits during the three months ended June 30, 2019 and June 30, 2018, respectively, and contributed $683 and $675 to fund pension and other post retirement benefits during the six months ended June 30, 2019 and June 30, 2018, respectively. The Astoria Bank Pension Plan was overfunded by $14,605 and $13,608 at June 30, 2019 and December 31, 2018, respectively, and such overfunded amounts are included in other assets in our consolidated balance sheets. The remaining pension benefit plans and other post retirement benefit plans were underfunded by $35,131 and $35,278 at June 30, 2019 and December 31, 2018, respectively, and such underfunded amounts are included in other liabilities in our consolidated balance sheets.

(14) Non-Interest Income and Other Non-Interest Expense

(a) Non-Interest Income - Revenue from Contracts with Customers
Our significant sources of non-interest income are presented on the face of the consolidated income statements. A description of our revenue streams follows:

Deposit fees and service charges. We earn fees from our deposit customers mainly for transaction-based, account maintenance, and overdraft services. Transaction-based fees, which include services such as ATM use fees, stop payment charges, statement rendering, and ACH fees, are recognized at the time the transaction is executed as that is the point in time we fulfill the customer’s request. Account maintenance fees, which relate primarily to monthly maintenance, are earned over the course of a month, representing the period over which we satisfy the performance obligation. Overdraft fees are recognized at the point in time that the overdraft occurs. Service charges on deposits are withdrawn from the customer’s account balance.

Accounts receivable management / factoring commissions and other fees. We earn these fees / commissions from our payroll finance and factoring businesses, as described below.

Payroll finance. We provide financing and back-office support services, which include preparation of payroll, payroll tax payments, billings and collections, for clients in the temporary staffing industry. Upon completion of the back-office support services, and as payroll remittances are made on behalf of the client to fund their employee payroll, which typically occurs weekly, we recognize a portion of the total revenue generated as non-interest income. We collect invoices directly from the borrower’s customers, retain the amounts billed for the temporary staffing services provided, and remit the remaining funds to the borrower net of amounts advanced, payroll taxes withheld, our fees, and subject to a reserve to offset potential uncollectible balances.

(Dollars in thousands, except share and per share data)

Factored Receivables. We provide accounts receivable management services. The purchase of a client's accounts receivable is traditionally known as "factoring" and results in payment by the client of a factoring fee. The factoring fee included in non-interest income represents compensation to us for the bookkeeping and collection services provided. The factoring fee, which is non-refundable, is recognized at the time the receivable is assigned to us. Other revenue associated with factored receivables includes wire fees, technology fees, field examination fees and UCC fees. All such fees are recognized as income upon receipt, which is when our obligations are provided to our customers.

Investment management fees. We earn investment management fees from our contracts with customers to manage assets for investment, and / or to transact on their accounts. Advisory fees are primarily earned over time as we provide the contracted monthly or quarterly services and are generally assessed based on a tiered scale calculated on the market value of assets under management at month end. Fees that are transaction-based, including trade execution services, are recognized on the trade date.

Gains / Losses on sales of other real estate owned ("OREO"). We record a gain or loss from the sale of OREO when control of the property transfers to the buyer, which generally occurs at the time of an executed deed. When we finance the sale of OREO to the buyer, we assess whether the buyer is committed to perform its obligations under the contract and whether collectability of the transaction price is probable. Once these criteria are met, the OREO asset is derecognized and the gain or loss on sale is recorded upon the transfer of control of the property to the buyer. In determining the gain or loss on the sale, we may adjust the transaction price and related gain (loss) on sale if a significant financing component is present.

Contract Balances. A contract asset balance occurs when an entity performs a service for a customer before the customer pays consideration (resulting in a contract receivable) or before payment is due (resulting in a contract asset). A contract liability balance is an entity's obligation to transfer a service to a customer for which the entity has already received payment (or payment is due) from the customer. Our non-interest revenue streams are largely based on transactional activity, or standard month-end revenue accruals such as investment management fees based on period-end market values. Consideration is often received immediately or shortly after we satisfy our performance obligation and revenue is recognized. We do not typically enter into long-term revenue contracts with customers, and therefore, do not experience significant contract balances. As of June 30, 2019 and December 31, 2018, we did not have any significant contract balances.

(b) Other Non-Interest Expense

Other non-interest expense items for the three and six months ended June 30, 2019 and 2018, respectively, are presented in the following table:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Other non-interest expense:				
Professional fees	$ 6,380	$ 2,901	$ 10,528	$ 6,403
Advertising and promotion	1,384	1,272	2,375	2,814
Telephone	1,710	1,703	3,604	3,261
Operational losses	1,907	806	2,490	2,154
Insurance & surety bond premium	1,006	810	2,068	1,381
Other	7,687	5,739	15,953	10,492
Total other non-interest expense	$ 20,074	$ 13,231	$ 37,018	$ 26,505

(Dollars in thousands, except share and per share data)

(15) Earnings Per Common Share

The following is a summary of the calculation of earnings per common share (“EPS”):

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Net income available to common stockholders	$ 94,473	$ 112,245	$ 193,921	$ 209,118
Weighted average common shares outstanding for computation of basic EPS	206,932,114	225,084,232	210,022,967	224,908,436
Common-equivalent shares due to the dilutive effect of stock options and unvested performance share grants[1]	444,125	537,624	396,458	536,143
Weighted average common shares for computation of diluted EPS	207,376,239	225,621,856	210,419,425	225,444,579
EPS[2]:				
Basic	$ 0.46	$ 0.50	$ 0.92	$ 0.93
Diluted	0.46	0.50	0.92	0.93

[1] Represents incremental shares computed using the treasury stock method.
[2] Anti-dilutive shares are not included in determining diluted EPS. There were no anti-dilutive shares in the three or six months ended June 30, 2019 or June 30, 2018.

(16) Stockholders’ Equity

(a) Regulatory Capital Requirements

Banks and bank holding companies are subject to various regulatory capital requirements administered by the federal banking agencies. Capital adequacy guidelines, and, additionally for banks, prompt corrective action regulations, involve quantitative measures of assets, liabilities, and certain off-balance sheet items calculated under regulatory accounting practices. Capital amounts and classifications are also subject to qualitative judgments by regulators about components, risk-weighting, and other factors.

The Company’s and the Bank’s Common Equity Tier 1 capital consists of common stock and related paid-in capital, net of treasury stock, and retained earnings. In connection with the adoption of the Basel III Capital Rules, we elected to opt-out of the requirement to include most components of accumulated other comprehensive income in Common Equity Tier 1 capital. Common Equity Tier 1 capital for both the Company and the Bank is reduced by goodwill and other intangible assets, net of associated deferred tax liabilities and subject to transition provisions.

Tier 1 capital includes Common Equity Tier 1 capital and additional Tier 1 capital. Total capital includes Tier 1 capital and Tier 2 capital. Tier 2 capital (as defined in the regulations) for both the Bank and us includes a permissible portion of the allowance for loan losses and $173,061 and $147,456 of the Subordinated Notes, respectively. During the final five years of the term of the Subordinated Notes, the permissible portion eligible for inclusion in Tier 2 capital decreases by 20% annually.

The Common Equity Tier 1, Tier 1 and Total capital ratios are calculated by dividing the respective capital amounts by risk-weighted assets (“RWA”). RWA is calculated based on regulatory requirements and includes total assets, excluding goodwill and other intangible assets, allocated by risk weight category, and certain off-balance-sheet items, among other items.

The following tables present actual and required capital ratios as of June 30, 2019 and December 31, 2018 for us and the Bank under the Basel III Capital Rules. The Basel III Capital Rules became fully phased-in on January 1, 2019. The minimum required capital amounts presented as of June 30, 2019 and December 31, 2018 based on the fully phased-in provisions of the Basel III Capital Rules. Capital levels required to be considered well-capitalized are based upon prompt corrective action regulations, as amended to reflect the changes under the Basel III Capital Rules.

(Dollars in thousands, except share and per share data)

	Actual		Minimum capital required - Basel III		Required to be considered well-capitalized	
	Capital amount	Ratio	Capital amount	Ratio	Capital amount	Ratio
June 30, 2019						
Common equity tier 1 to RWA:						
Sterling National Bank	$ 2,786,060	12.67%	$ 1,539,192	7.00%	$ 1,429,250	6.50%
Sterling Bancorp	2,536,205	11.52	1,540,479	7.00	N/A	N/A
Tier 1 capital to RWA:						
Sterling National Bank	2,786,060	12.67%	1,869,019	8.50%	1,759,077	8.00%
Sterling Bancorp	2,674,214	12.15	1,870,581	8.50	N/A	N/A
Total capital to RWA:						
Sterling National Bank	3,064,439	13.94%	2,308,788	10.50%	2,198,846	10.00%
Sterling Bancorp	2,926,988	13.30	2,310,718	10.50	N/A	N/A
Tier 1 leverage ratio:						
Sterling National Bank	2,786,060	9.98%	1,117,062	4.00%	1,396,328	5.00%
Sterling Bancorp	2,674,214	9.57	1,117,991	4.00	N/A	N/A

	Actual		Minimum capital required - Basel III phase-in schedule		Minimum capital required - Basel III fully phased-in		Required to be considered well-capitalized	
	Capital amount	Ratio	Capital amount	Ratio	Capital amount	Ratio	Capital amount	Ratio
December 31, 2018								
Common equity tier 1 to RWA:								
Sterling National Bank	$ 2,915,484	13.55%	$ 1,371,480	6.375%	$ 1,505,939	7.00%	$ 1,398,372	6.50%
Sterling Bancorp	2,649,593	12.31	1,372,457	6.375	1,507,011	7.00	N/A	N/A
Tier 1 capital to RWA:								
Sterling National Bank	2,915,484	13.55%	1,694,181	7.875%	1,828,640	8.50%	1,721,073	8.00%
Sterling Bancorp	2,788,016	12.95	1,695,388	7.875	1,829,942	8.50	N/A	N/A
Total capital to RWA:								
Sterling National Bank	3,184,758	14.80%	2,124,450	9.875%	2,258,908	10.50%	2,151,341	10.00%
Sterling Bancorp	3,027,124	14.06	2,125,963	9.875	2,260,517	10.50	N/A	N/A
Tier 1 leverage ratio:								
Sterling National Bank	2,915,484	9.94%	1,172,964	4.00%	1,172,964	4.00%	1,466,206	5.00%
Sterling Bancorp	2,788,016	9.50	1,173,883	4.00	1,173,883	4.00	N/A	N/A

The Bank and the Company are subject to the regulatory capital requirements administered by the FRB, and, for the Bank, the Office of the Comptroller of the Currency. Regulatory authorities can initiate certain mandatory actions if the Bank or the Company fails to meet the minimum capital requirements, which could have a direct material effect on our financial statements. As of June 30, 2019, and December 31, 2018, the most recent regulatory notifications categorized the Company and the Bank as well capitalized under the regulatory framework for prompt corrective action. There are no conditions or events since that notification that management believes have changed the classification.

(Dollars in thousands, except share and per share data)

(b) Dividend Restrictions

We are mainly dependent on dividends from the Bank to provide funds for the payment of dividends to stockholders and to provide for other cash requirements. Banking regulations may limit the amount of dividends that may be paid. Approval by regulatory authorities is required if the effect of dividends declared would cause the regulatory capital of the Bank to fall below specified minimum levels. Approval is also required if dividends declared exceed the net profits for that fiscal year combined with the retained net profits for the preceding two fiscal years. Under the foregoing dividend restrictions and while maintaining its “well-capitalized” status, at June 30, 2019, the Bank had capacity to pay aggregate dividends of up to $165,000 to us without prior regulatory approval.

(c) Stock Repurchase Plans

From time to time, our Board of Directors has authorized stock repurchase plans. Repurchases may be made at management’s discretion through open market purchases and block trades in accordance with SEC and regulatory requirements. Any common shares purchased will be held as Treasury stock and made available for general corporate purposes. In the six months ended June 30, 2019, there were 12,504,648 shares repurchased under the repurchase program and none during the six months ended June 30, 2018. On April 24, 2019, our Board of Directors increased the number of shares authorized for repurchase from 10,000,000 common shares to 20,000,000 common shares. As of June 30, 2019, there was remaining capacity of 8,380,581 shares for repurchase under our current approved program.

(17) Commitments and Contingencies

(a) Off-Balance Sheet Financial Instruments

In the normal course of business, we enter into various transactions, which, in accordance with GAAP, are not included in our consolidated balance sheets. We enter into these transactions to meet the financing needs of our customers. These transactions include commitments to extend credit and standby letters of credit, which involve, to varying degrees, elements of credit risk and interest rate risk in excess of the amounts recognized in the consolidated balance sheets. We minimize our exposure to losses under these commitments by subjecting them to credit approval and monitoring procedures.

We enter into contractual commitments to extend credit, normally with fixed expiration dates or termination clauses, at specified rates and for specific purposes. Substantially all of our commitments to extend credit are contingent upon customers maintaining specific credit standards at the time of loan funding. Standby letters of credit are written conditional commitments issued by us to guarantee the performance of a customer to a third-party. In the event the customer does not perform in accordance with the terms of the agreement with the third-party, we would be required to fund the commitment. The maximum potential amount of future payments we could be required to make is represented by the contractual amount of the commitment. If the commitment were funded, we would be entitled to seek recovery from the customer. Based on our credit risk exposure assessment of its standby letter of credit arrangements, the arrangements contain security and debt covenants similar to those contained in loan agreements.

The contractual or notional amounts of these instruments, which reflect the extent of our involvement in particular classes of off-balance sheet financial instruments, are summarized as follows:

	June 30, 2019	December 31, 2018
Loan origination commitments	$ 486,481	$ 417,027
Unused lines of credit	1,996,252	1,737,315
Letters of credit	305,928	287,779

(b) Litigation

We and the Bank are involved in a number of judicial proceedings concerning matters arising from their business activities. These include routine legal proceedings arising in the ordinary course of business. These proceedings also include actions brought against us and the Bank with respect to corporate matters and transactions in which we and the Bank are or were involved.

There can be no assurance as to the ultimate outcome of a legal proceeding; however, we and the Bank have generally denied liability in all significant litigation pending against us and intend to defend vigorously each case, other than matters that are determined appropriate to be settled. We and the Bank accrue a liability for legal claims when payments associated with the claims become probable and the costs can be reasonably estimated. The actual costs of resolving legal claims may be substantially higher or lower than the amounts accrued for those claims. At June 30, 2019 and December 31, 2018, we have no amounts accrued for litigation.

(18) Fair Value Measurements

Fair value is the exchange price that would be received for an asset or paid to transfer a liability (exit price) in an orderly transaction occurring in the principal or most advantageous market for such asset or liability between market participants on the measurement date. In estimating fair value, we use valuation techniques that are consistent with the market approach, the income approach and/or the cost approach. Such valuation techniques are consistently applied. GAAP establishes a fair value hierarchy comprised of three levels of inputs that may be used to measure fair values.

Level 1 Inputs – Unadjusted quoted prices in active markets for identical assets and liabilities that the reporting entity has the ability to access at the measurement date.

Level 2 Inputs – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risk, etc.) or inputs that are derived principally from, or corroborated by, market data by correlation or other means.

Level 3 Inputs – Unobservable inputs for determining the fair value of assets or liabilities that reflect an entity’s own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

In general, fair value is based on quoted market prices, when available. If quoted market prices in active markets are not available, fair value is based on internally developed models that primarily use, as inputs, observable market-based parameters. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value. These adjustments may include amounts to reflect counterparty credit quality and our creditworthiness, among other things, as well as unobservable parameters. Any such valuation adjustments are applied consistently over time. Our valuation methodologies may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. While management believes its valuation methodologies are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. Furthermore, the reported fair value amounts have not been comprehensively revalued since the presentation dates, and therefore, estimates of fair value after the balance sheet date may differ significantly from the amounts presented herein. A more detailed description of the valuation methodologies used for assets and liabilities measured at fair value is set forth below. Transfers between levels of the fair value hierarchy are recognized on the actual date of the event or circumstances that caused the transfer, which generally coincide with our monthly and/or quarterly valuation process.

Investment Securities Available for Sale
The majority of our available for sale investment securities are reported at fair value utilizing Level 2 inputs. For these securities, we obtain fair value measurements from an independent pricing service. The fair value measurements consider observable data that may include dealer quotes, market spreads, cash flows, the U.S. Treasury yield curve, live trading levels, trade execution data, market consensus prepayment speeds, credit information and the securities’ terms and conditions, among other things.

We review the prices supplied by the independent pricing service, as well as their underlying pricing methodologies, for reasonableness and to ensure such prices are aligned with traditional pricing matrices. In general, we do not purchase investment securities that have a complicated structure. Our entire portfolio consists of traditional investments, nearly all of which are mortgage pass-through securities, state and municipal general obligation or revenue bonds, U.S. agency bullet and callable securities and corporate bonds. Pricing for such instruments is fairly generic and is easily obtained. From time to time, we validate, on a sample basis, prices supplied by the independent pricing service by comparison to prices obtained from third-party sources or derived using internal models.

As of June 30, 2019, management did not believe any of our securities are OTTI; however, management reviews all of our securities on at least a quarterly basis to assess whether impairment, if any, is OTTI.

Derivatives
The fair values of derivatives are based on valuation models using current observable market data (including interest rates and fees), the remaining terms of the agreements and the credit worthiness of the counterparty as of the measurement date, which are considered

(Dollars in thousands, except share and per share data)

Level 2 inputs. Our derivatives are traded in an over-the-counter market where quoted market prices are not always available. Our derivatives at June 30, 2019 and December 31, 2018 consisted of interest rate swaps. (See Note 10. "Derivatives.")

A summary of assets and liabilities at June 30, 2019 and December 31, 2018, respectively, measured at estimated fair value on a recurring basis, is as follows:

	June 30, 2019			
	Fair value	Level 1 inputs	Level 2 inputs	Level 3 inputs
Assets:				
Investment securities available for sale:				
Residential MBS[1]:				
Agency-backed	$ 2,013,275	$ —	$ 2,013,275	$ —
CMOs[2]/Other MBS	539,214	—	539,214	—
Total residential MBS	2,552,489	—	2,552,489	—
Other securities:				
Federal agencies	221,452	—	221,452	—
Corporate	405,577	—	405,577	—
State and municipal	663,594	—	663,594	—
Total other securities	1,290,623	—	1,290,623	—
Total available for sale securities	3,843,112	—	3,843,112	—
Swaps	64,650	—	64,650	—
Total assets	$ 3,907,762	$ —	$ 3,907,762	$ —
Liabilities:				
Swaps	$ (21,471)	$ —	$ (21,471)	$ —
Total liabilities	$ (21,471)	$ —	$ (21,471)	$ —

(Dollars in thousands, except share and per share data)

	December 31, 2018			
	Fair value	Level 1 inputs	Level 2 inputs	Level 3 inputs
Assets:				
Investment securities available for sale:				
Residential MBS[1]:				
Agency-backed	$ 2,268,851	$ —	$ 2,268,851	$ —
CMOs[2]/Other MBS	574,770	—	574,770	—
Total residential MBS	2,843,621	—	2,843,621	—
Federal agencies	273,973	—	273,973	—
Corporate bonds	527,964	—	527,964	—
State and municipal	225,004	—	225,004	—
Total other securities	1,026,942	—	1,026,942	—
Total available for sale securities	3,870,563	—	3,870,563	—
Swaps	18,215	—	18,215	—
Total assets	$ 3,888,778	$ —	$ 3,888,778	$ —
Liabilities:				
Swaps	$ (13,001)	$ —	$ (13,001)	$ —
Total liabilities	$ (13,001)	$ —	$ (13,001)	$ —

[1] Residential MBS are debt securities whose cash flows come from residential mortgage and consumer loans, such as mortgages and HELOCs. A residential MBS is comprised of a pool of mortgage loans created by financial institutions, including governmental agencies. The cash flows from each mortgage loan included in the pool are structured through a special purpose entity into various classes and tranches, which then issues securities backed by those cash flows to investors.

[2] CMOs are debt securities that are collateralized by a specific pool of residential mortgage loans, in which the issuer of the CMOs can direct the payments of principal and interest received on the underlying collateral to achieve specific investor cash flow objectives. The Bank generally acquires planned-amortization class securities and CMOs with a sequential pay structure in order to manage the duration and extension risk inherent in these securities.

The following categories of financial assets are not measured at fair value on a recurring basis, but are subject to fair value adjustments in certain circumstances.

Loans Held for Sale

The estimated fair value of commercial loans originated and intended for sale approximates their carrying value as these loans are variable-rate loans that reprice frequently with no significant change in credit risk since origination. Residential loans held for sale are carried at the lower of cost or fair value, which is evaluated on a pool-level basis. Fair value is determined using quoted prices for similar assets, adjusted for specific attributes of that loan or other observable market data, such as outstanding commitments from third party investors.

Impaired Loans

We may record adjustments to the carrying value of loans based on fair value measurements, generally as partial charge-offs of the uncollectible portions of these loans. These adjustments also include certain impairment amounts for collateral dependent loans calculated in accordance with GAAP. Impairment amounts are generally based on the fair value of the underlying collateral supporting the loan and, as a result, the carrying value of the loan less the calculated impairment amount applicable to that loan generally approximates the fair value of the loan. Real estate collateral is valued using independent appraisals or other indications of value based on recent comparable sales of similar properties or assumptions generally observable by market participants. However, due to the substantial judgment applied and limited volume of activity as compared to other assets, fair value is based on Level 3 inputs.

(Dollars in thousands, except share and per share data)

Estimates of fair value used for collateral supporting commercial loans not collateralized by real estate generally are based on assumptions not observable in the market place and are also based on Level 3 inputs. Impaired loans subject to non-recurring fair value measurements were $114,027 and $100,998 at June 30, 2019 and December 31, 2018, respectively. Changes in fair value recognized as a charge-off on loans held by us were $6,860 and $7,567 for the six months ended June 30, 2019 and 2018, respectively.

When an impaired loan is collateral dependent, we generally charge-off the difference between the recorded investment in the loan and the appraised value less cost to sell. A discount for estimated costs to dispose of the asset and overall marketability is used when estimating the amount of impairment.

A summary of impaired loans by type that resulted in a charge-off at June 30, 2019 and December 31, 2018, respectively, is set forth below:

	June 30, 2019			
	Fair value	Level 1 inputs	Level 2 inputs	Level 3 inputs
Traditional C&I	$ 14,719	$ —	$ —	$ 14,719
Asset-based lending	11,154	—	—	11,154
Equipment financing	752	—	—	752
Commercial real estate	11,470	—	—	11,470
Multi-family	1,162	—	—	1,162
Residential mortgage	1,133	—	—	1,133
Total impaired loans measured at fair value	$ 40,390	$ —	$ —	$ 40,390

	December 31, 2018			
	Fair value	Level 1 inputs	Level 2 inputs	Level 3 inputs
Traditional C&I	$ 28,780	$ —	$ —	$ 28,780
Commercial real estate	10,725	—	—	10,725
Multi-family	1,210	—	—	1,210
Residential mortgage	769	—	—	769
Total impaired loans measured at fair value	$ 41,484	$ —	$ —	$ 41,484

Mortgage Servicing Rights

We utilize the amortization method to account for mortgage servicing rights, which are amortized on a periodic basis, and reported with other assets in the consolidated balance sheet at the lower of amortized cost or fair value. To estimate the fair value of servicing rights, we utilize a third-party that considers the market prices for similar assets and the present value of expected future cash flows associated with the mortgage servicing rights. Mortgage servicing rights are evaluated for impairment based upon the fair value of the rights as compared to the carrying amount. If the carrying amount of an individual tranche exceeds fair value, impairment is recorded on that tranche so that the servicing asset is carried at fair value. Assumptions utilized to calculate fair value include estimates of the cost of servicing, loan default rates, an appropriate discount rate and prepayment speeds. The determination of fair value of servicing rights relies upon Level 3 inputs.

At June 30, 2019, the assumption for constant prepayment rates (“CPR”) ranged from 9.43% to 19.78%, with a weighted average CPR of 9.90%, and the assumption for market discount rate ranged from 9.06% to 20.00%, with a weighted average market discount rate of 9.54%. At December 31, 2018, the CPR assumption ranged from 7.98% to 24.07% with a weighted average CPR of 8.54%, and the assumption for market discount rate ranged from 9.00% to 20.00% with a weighted average market discount rate of 9.60% The fair value of mortgage servicing rights at June 30, 2019 and December 31, 2018 was $9,667 and $11,715, respectively.

Other Real Estate Owned (Assets Taken in Foreclosure of Defaulted Loans)

Other real estate owned is initially recorded at fair value less costs to sell when acquired, which establishes a new cost basis. These assets are subsequently accounted for at the lower of cost or fair value, less costs to sell, and are primarily comprised of commercial and residential real estate property. Upon initial recognition, other real estate owned is re-measured and reported at fair value through a charge-off to the allowance for loan losses based on the fair value of the underlying collateral. The fair value is generally determined using appraisals or other indications of value based on recent comparable sales of similar properties or assumptions generally observable in the market place. Adjustments are routinely made in the appraisal process by the independent appraisers to adjust for differences between comparable sales and income data available. The fair value is derived using Level 3 inputs. All appraisals are reviewed by officers in our credit department; appraisals related to commercial properties are also reviewed by an external appraisal review consultant.

At June 30, 2019 and December 31, 2018, appraisals were discounted by 22.0%, which considers estimated costs to sell and overall marketability of the properties. OREO, subject to non-recurring fair value measurement, was $13,628 and $19,377 at June 30, 2019 and December 31, 2018, respectively. There were $550 and $363 of write-downs related to changes in fair value of OREO during the six months ended June 30, 2019 and June 30, 2018, respectively.

Fair Value of Financial Instruments

GAAP requires disclosure of fair value information for those financial instruments for which it is practicable to estimate fair value, whether or not such financial instruments are recognized in the consolidated financial statements for interim and annual periods.

Quoted market prices are used to estimate fair values when those prices are available, although active markets do not exist for many types of financial instruments. Fair values for these instruments must be estimated by management using techniques such as discounted cash flow analysis and comparison to similar instruments. These estimates are highly subjective and require judgments regarding significant matters, such as the amount and timing of future cash flows and the selection of discount rates that appropriately reflect market and credit risks. Changes in these judgments often have a material effect on the fair value estimates. Since these estimates are made as of a specific point in time, they are susceptible to material near-term changes. Fair values disclosed in accordance with GAAP do not reflect any premium or discount that could result from the sale of a large volume of a particular financial instrument, nor do they reflect possible tax ramifications or estimated transaction costs.

(Dollars in thousands, except share and per share data)

The following is a summary of the carrying amounts and estimated fair value of financial assets and liabilities (none of which were held for trading purposes) as of June 30, 2019:

	June 30, 2019			
	Carrying amount	Level 1 inputs	Level 2 inputs	Level 3 inputs
Financial assets:				
Cash and cash equivalents	$ 343,368	$ 343,368	$ —	$ —
Securities available for sale	3,843,112	—	3,843,112	—
Securities held to maturity	2,015,753	—	2,066,524	—
Loans held for sale	27,221	—	27,221	—
Portfolio loans, net	20,265,642	—	—	20,351,206
Accrued interest receivable on securities	34,603	—	34,603	—
Accrued interest receivable on loans	71,714	—	—	71,714
FHLB stock and FRB stock	320,560	—	—	—
Swaps	64,650	—	64,650	—
Financial liabilities:				
Non-maturity deposits	(18,368,004)	(18,368,004)	—	—
Certificates of deposit	(2,580,460)	—	(2,572,785)	—
FHLB borrowings	(3,766,224)	—	(3,764,895)	—
Other borrowings	(20,901)	—	(20,899)	—
Senior Notes	(173,800)	—	(173,662)	—
Subordinated Notes	(173,061)	—	(181,284)	—
Mortgage escrow funds	(73,176)	—	(73,175)	—
Accrued interest payable on deposits	(4,222)	—	(4,222)	—
Accrued interest payable on borrowings	(14,751)	—	(14,751)	—
Swaps	(21,471)	—	(21,471)	—

(Dollars in thousands, except share and per share data)

The following is a summary of the carrying amounts and estimated fair value of financial assets and liabilities (none of which were held for trading purposes) as of December 31, 2018:

	December 31, 2018			
	Carrying amount	Level 1 inputs	Level 2 inputs	Level 3 inputs
Financial assets:				
Cash and cash equivalents	$ 438,110	$ 438,110	$ —	$ —
Securities available for sale	3,870,563	—	3,870,563	—
Securities held to maturity	2,796,617	—	2,740,522	—
Loans held for sale	1,565,979	—	1,565,979	—
Portfolio loans, net	19,122,853	—	—	19,033,743
Accrued interest receivable on securities	38,722	—	38,722	—
Accrued interest receivable on loans	68,389	—	—	68,389
FHLB stock and FRB stock	369,690	—	—	—
Swaps	18,215	—	18,215	—
Financial liabilities:				
Non-maturity deposits	(18,737,217)	(18,737,217)	—	—
Certificates of deposit	(2,476,931)	—	(2,447,534)	—
FHLB borrowings	(4,838,772)	—	(4,821,652)	—
Other borrowings	(21,338)	—	(21,337)	—
Senior Notes	(181,130)	—	(179,786)	—
Subordinated Notes	(172,943)	—	(177,481)	—
Mortgage escrow funds	(72,891)	—	(64,074)	—
Accrued interest payable on deposits	(3,191)	—	(3,191)	—
Accrued interest payable on borrowings	(11,823)	—	(11,823)	—
Swaps	(13,001)	—	(13,001)	—

(19) Accumulated Other Comprehensive Income (Loss)

Components of accumulated other comprehensive income (loss) were as follows as of the dates shown below:

	June 30, 2019	December 31, 2018
Net unrealized holding gain (loss) on available for sale securities	$ 37,649	$ (103,756)
Related income tax (expense) benefit	(10,406)	28,679
Available for sale securities, net of tax	27,243	(75,077)
Net unrealized holding loss on securities transferred to held to maturity	(980)	(3,518)
Related income tax benefit	271	972
Securities transferred to held to maturity, net of tax	(709)	(2,546)
Net unrealized holding gain on retirement plans	19,087	15,900
Related income tax expense	(5,275)	(4,222)
Retirement plans, net of tax	13,812	11,678
Accumulated other comprehensive income (loss)	$ 40,346	$ (65,945)

(Dollars in thousands, except share and per share data)

The following table presents the changes in each component of accumulated other comprehensive income loss ("AOCI") for the three and six months ended June 30, 2019 and 2018:

	Net unrealized holding gain (loss) on available for sale securities	Net unrealized holding (loss) gain on securities transferred to held to maturity	Net unrealized holding gain (loss) on retirement plans	Total
For the three months ended June 30, 2019				
Balance beginning of the period	$ (19,577)	$ (797)	$ 13,764	$ (6,610)
Other comprehensive gain before reclassification	46,438	—	—	46,438
Amounts reclassified from AOCI	382	88	48	518
Total other comprehensive income	46,820	88	48	46,956
Balance at end of period	$ 27,243	$ (709)	$ 13,812	$ 40,346
For the three months ended June 30, 2018				
Balance beginning of the period	$ (75,109)	$ (3,034)	$ (901)	$ (79,044)
Other comprehensive (loss) before reclassification	(21,168)	—	—	(21,168)
Amounts reclassified from AOCI	425	164	42	631
Total other comprehensive (loss) income	(20,743)	164	42	(20,537)
Balance at end of period	$ (95,852)	$ (2,870)	$ (859)	$ (99,581)
Location in consolidated income statements where reclassification from accumulated other comprehensive loss is included	Net loss on sale of securities	Interest income on securities	Other non-interest expense	

	Net unrealized holding gain (loss) on available for sale securities	Net unrealized holding (loss) gain on securities transferred to held to maturity	Net unrealized holding gain (loss) on retirement plans	Total
For the six months ended June 30, 2019				
Balance beginning of the period	$ (75,077)	$ (2,546)	$ 11,678	$ (65,945)
Other comprehensive gain before reclassification	100,946	—	—	100,946
Securities reclassified from held to maturity to available for sale	(8,548)	—	—	(8,548)
Amounts reclassified from AOCI	9,922	1,837	2,134	13,893
Total other comprehensive income	102,320	1,837	2,134	106,291
Balance at end of period	$ 27,243	$ (709)	$ 13,812	$ 40,346
For the six months ended June 30, 2018				
Balance beginning of the period	$ (22,324)	$ (2,678)	$ (1,164)	$ (26,166)
Reclassification of the stranded income tax effects from the enactment of the Tax Cuts and Jobs Act of 2017 from accumulated other comprehensive loss	(4,376)	(525)	(228)	(5,129)
Other comprehensive loss before reclassification	(74,998)	—	—	(74,998)
Amounts reclassified from AOCI	5,846	333	533	6,712
Total other comprehensive loss	(73,528)	(192)	305	(73,415)
Balance at end of period	$ (95,852)	$ (2,870)	$ (859)	$ (99,581)
Location in consolidated income statements where reclassification from AOCI is included	Net loss on sale of securities	Interest income on securities	Other non-interest expense	

(20) Recently Issued Accounting Standards Not Yet Adopted

ASU 2016-13, *"Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments"* (ASU 2016-13"). ASU 2016-13 requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts and requires enhanced disclosures related to the significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of our loan portfolio. In addition, ASU 2016-13 amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. ASU 2016-13 will be effective for us on January 1, 2020.

We have engaged various third parties to assist us in the development of models that we intend to utilize to calculate current expected credit losses ("CECL") estimates, model validation and overall CECL implementation preparedness. We have also identified the key controls that we intend to incorporate into our CECL estimation process.

We expect to prepare preliminary CECL estimates during the third quarter of 2019, based on our current loan portfolio composition and expectations for future economic conditions. The impact of adoption, which will be recorded as a cumulative-effect adjustment to reflect any adjustment to our reserves through retained earnings, will be significantly influenced by the composition, characteristics and quality of our loan and securities portfolios as well as the prevailing economic conditions and forecasts as of the adoption date. Although we anticipate the allowance for loan losses will be greater under CECL compared to the current loss incurred model, we do not anticipate the change will have a material impact to our long-term capital ratios or target.

ASU 2018-13, *"Fair Value Measurement (Topic 820) - Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement"* ("ASU 2018-13"). ASU 2018-13 modifies the disclosure requirements on fair value measurements in Topic 820. The amendments in this update remove disclosures that no longer are considered cost beneficial, modify/clarify the specific requirements of certain disclosures, and add disclosure requirements identified as relevant. ASU 2018-13 will be effective for us on January 1, 2020, and is not expected to have a significant impact on our financial statements.

ASU 2018-14, *"Compensation - Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20)"* ("ASU 2018-14"). ASU 2018-14 amends and modifies the disclosure requirements for employers that sponsor defined benefit pension or other post-retirement plans. The amendments in this update remove disclosures that are no longer considered cost beneficial, clarify the specific requirements of disclosures, and add disclosure requirements identified as relevant. ASU 2018-14 will be effective for us on January 1, 2021, with early adoption permitted, and is not expected to have a significant impact on our financial statements.

ASU 2018-15, *"Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40) - Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract"* ("ASU 2018-15"). ASU 2018-15 clarifies certain aspects of ASU 2015-05,"Customer's Accounting for Fees Paid in a Cloud Computing Arrangement," which was issued in April 2015. Specifically, ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). ASU 2018-15 does not affect the accounting for the service element of a hosting arrangement that is a service contract. ASU 2018-15 will be effective for us on January 1, 2020, and is not expected to have a significant impact on our financial statements.

ASU 2019-05, *"Financial Instruments - Credit Losses (Topic 326); Targeted Transition Relief"* ("ASU 2019-05"). ASU 2019-05 allows us to irrevocably elect, upon adoption of ASU 2016-13, the fair value option on financial instruments that (1) were previously recorded at amortized cost and (2) are within the scope of Topic 326 if the instruments are eligible for the fair value option under authoritative guidance for fair value. The fair value option election does not apply to held-to-maturity debt securities. We are required to make this election on an instrument-by-instrument basis. ASU 2019-05 is effective with CECL on January 1, 2020. We do not expect to elect the fair value option, and therefore, ASU 2019-05 is not expected to impact our financial statements.

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

We make statements in this report, and we may from time to time make other statements, regarding our outlook or expectations for earnings, revenues, expenses and/or other financial, business or strategic matters regarding or affecting us that are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are typically identified by words such as "believe," "expect," "anticipate," "intend," "outlook," "target," "estimate," "forecast," "project," by future conditional verbs such as "will," "should," "would," "could" or "may," or by variations of such words or by similar expressions. These statements are not historical facts, but instead represent our current expectations, plans or forecasts and are based on the beliefs and assumptions of management and the information available to management at the time that these disclosures were prepared.

Forward-looking statements are subject to numerous assumptions, risks (both known and unknown) and uncertainties, and other factors which change over time. Forward-looking statements speak only as of the date they are made. We do not assume any duty and do not undertake to update our forward-looking statements. Because forward-looking statements are subject to assumptions, risks, uncertainties, and other factors, actual results or future events could differ, possibly materially, from those that we anticipated in our forward-looking statements, and future results could differ materially from our historical performance.

The factors described herein in Part II. Item 1A. Risk Factors or otherwise described in our filings with the SEC, provide examples of risks, uncertainties and events that may cause our actual results to differ materially from the expectations expressed in our forward-looking statements, including, but not limited to:

- our ability to successfully implement growth and strategic initiatives, and to integrate and fully realize cost savings and other benefits we estimate in connection with acquisitions and limit business disruption arising therefrom;
- oversight of the Bank by the Consumer Financial Protection Bureau;
- adverse publicity, regulatory actions or litigation with respect to us or other well-known companies and the financial services industry in general and a failure to satisfy regulatory standards;
- the effects of and changes in monetary and policies of the Board of Governors of the Federal Reserve System and the U.S. Government, respectively;
- our ability to make accurate assumptions and judgments about an appropriate level of allowance for loan losses and the collectability of our loan portfolio, including changes in the level and trend of loan delinquencies and write-offs that may

lead to increased losses and non-performing assets in our loan portfolio, result in our allowance for loan losses not being adequate to cover actual losses, and/or require us to materially increase our reserves;

- our use of estimates in determining the fair value of certain of our assets, which estimates may prove to be incorrect and result in significant declines in valuation;
- our ability to manage changes in market interest rates, which could adversely affect our financial condition and results of operations;
- our ability to capitalize on our substantial investments in our information technology and operational infrastructure and systems;
- changes in other economic, competitive, governmental, regulatory and technological factors affecting our markets, operations, pricing, products, services and fees; and
- our success at managing the risks involved in the foregoing and managing our business.

These risks and uncertainties should be considered in evaluating forward-looking statements, and undue reliance should not be placed on such statements.

LIBOR Transition and Phase-Out

We have a significant amount of loans, borrowings and swaps that are tied to LIBOR benchmark interest rates. It is anticipated that the LIBOR index will be phased out by the end of 2021 and the Federal Reserve Bank of New York has established the Secured Overnight Financing Rate ("SOFR") as its recommended alternative to LIBOR. We have created a sub-committee of our Asset Liability Management Committee to address LIBOR transition and phase-out issues. This committee includes personnel from legal, loan operations, risk, IT, credit, business intelligence, treasury, corporate banking, marketing, audit, accounting and corporate development. We are currently reviewing loan documentation, technology systems and procedures we will need to implement for the transition.

General

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to assist the reader in understanding our financial condition and results of operations. The following discussion and analysis should be read in conjunction with our unaudited consolidated financial statements and the accompanying notes included in Part I, Item 1 of this report and with our audited consolidated financial statements, including the accompanying notes, and Management's Discussion and Analysis of Financial Condition and Results of Operations included in our 2018 Form 10-K. Operating results discussed herein are not necessarily indicative of the results of any future period.

Tax equivalent adjustments are the result of increasing income from tax exempt securities by an amount equal to the federal taxes that would be paid if the income were fully taxable based on a 21% effective income tax rate.

Dollar amounts in tables and the accompanying discussion that follows are stated in thousands, except for share and per share amounts and ratios.

Overview and Management Strategy

The Bank operates as a regional bank providing a broad offering of deposit, lending and wealth management products to commercial, consumer and municipal clients in our market area.

Our primary strategic objective is to drive positive operating leverage, which we believe will allow us to generate sustainable growth in revenues and earnings over time. We define operating leverage as the ratio of growth in adjusted total revenue divided by growth in adjusted total operating expenses (a reconciliation of non-GAAP financial measures is included beginning on page 73). To achieve this goal, we focus on the following initiatives:

- Target specific "high value" client segments and geographic markets in which we have competitive advantages.
- Deploy a single point of contact, relationship-based distribution strategy through our commercial banking teams and financial centers.
- Continuously expand and refine our delivery and distribution channels by rationalizing our investments in businesses that do not meet our risk-adjusted return targets and re-allocating our capital and resources to other businesses that are in-line with our commercial banking strategy and risk-adjusted return targets.
- Maximize efficiency through a technology enabled, low-cost operating platform and by controlling operating costs.
- Create a high productivity culture through differentiated compensation programs based on a pay-for-performance philosophy.
- Maintain strong risk management systems and proactively manage enterprise risk.

The Bank targets the following geographic markets: (i) the New York Metro Market, which includes Manhattan and Long Island; and (ii) the New York Suburban Market, which includes Rockland, Orange, Sullivan, Ulster, Putnam and Westchester Counties in New York and Bergen County in New Jersey. The Bank also originates loans and deposits in select markets nationally through our asset-based lending, payroll finance, warehouse lending, factored receivables, equipment finance and public sector finance businesses (collectively, our commercial finance businesses). We believe the Bank operates in an attractive footprint that presents us with significant opportunities to execute our strategy of targeting small and middle market commercial clients and affluent consumers.

We deploy a team-based distribution strategy in which clients are served by a focused and experienced group of relationship managers who are responsible for all aspects of the client relationship and delivery of our products and services. While the Astoria Merger resulted in substantial growth in 2018, our commercial banking teams also generated significant originations of loans and deposits. As of June 30, 2019, we had 30 commercial banking teams and 97 full service financial centers. We currently anticipate that we will increase our number of commercial banking teams by three to five annually, while reducing our financial centers as we continue to execute our real estate and financial center consolidation strategy.

Recent Developments

In the second quarter of 2019, we continued our balance sheet transition and generated strong commercial loan growth. Since December 31, 2018, we grew spot commercial loan balances by $1,360,163, which includes organic commercial loan originations of $888,285 and the fair value of commercial loans acquired in the Woodforest Acquisition of $471,878. The increase in commercial loans was offset by substantial run-off of residential mortgage loans. We plan to remain disciplined on new loan originations and portfolio acquisitions, focusing on diversified commercial asset classes where we can achieve our target risk-adjusted returns.

We have continued to generate a substantial amount of capital through retained earnings and have had limited balance sheet growth year to date given our balance sheet transition. In the second quarter of 2019, we repurchased 4,502,053 shares of common stock at a weighted average price of $20.64 per share, for total consideration of $92,914. Under our approved repurchase program, we have 8,380,581 shares remaining for repurchase at June 30, 2019. We anticipate completing the repurchase program in the second half of 2019 subject to market conditions.

Our earnings performance for the second quarter of 2019 included reported net income available to common stockholders of $94,473, or $0.46 per diluted share, and adjusted net income available to common stockholders of $105,124, or $0.51 per diluted share. Our reported operating efficiency ratio was 49.0% and our adjusted operating efficiency ratio was 40.9%. Our continued balance sheet transition and strong operating efficiency resulted in a reported return on average tangible assets of 1.36% and an adjusted return on average tangible assets of 1.51%, and a reported return on average tangible common stockholders' equity of 15.13% and an adjusted return on average tangible common stockholders' equity of 16.83%. Adjusted net income available to common stockholders, adjusted diluted EPS, reported operating efficiency ratio, adjusted operating efficiency ratio, reported return on average tangible assets, adjusted return on average tangible assets, reported return on average tangible common equity and adjusted return on average tangible common stockholders' equity are non-GAAP financial measures that are reconciled to our GAAP results beginning on page 73.

A significant component of our strategy includes repositioning our earning assets to create a more optimal balance sheet. As of June 30, 2019, our total loan portfolio was $20,370,306, of which 49.4% were commercial mortgages consisting of commercial real estate loans, multi-family loans and ADC loans; 36.9% were C&I loans, which includes our traditional C&I and our commercial finance business lines; and 13.8% consisted of residential mortgage and consumer loans. Residential mortgage portfolio balances declined $298,392 in the first six months of 2019 due mainly to increased loan prepayment activity; this decrease was offset by the reclassification of $128,833 of residential mortgage loans we transferred from held for sale to portfolio loans. We intend to replace the run-off of residential mortgage loans with more diversified commercial loans originated through our commercial banking teams, our commercial finance business lines, and through acquisitions. Longer- term, we are targeting a loan composition of approximately 45% C&I loans, 45% commercial mortgage loans, and 10% residential mortgage and consumer loans, which includes HELOCs and other loans to individuals. To accelerate the transition and growth of our balance sheet, we will continue to evaluate potential acquisitions of commercial loan portfolios and other assets that meet our risk-adjusted return criteria, similar to the Woodforest Acquisition. As potential acquisition opportunities arise, we may reduce or divest a portion of our residential mortgage loans and investment securities.

We have consolidated 24 financial centers and two back-office locations over the past twelve months, including nine financial centers in the first six months of 2019. At June 30, 2019, we operated 97 financial centers. We anticipate we will consolidate 10 financial centers during the remainder of 2019, and are targeting a total financial center count below 85 over the next 12 to 18 months. We are also executing a back-office real estate consolidation strategy with the objective of reducing our real estate footprint and consolidating personnel into centralized locations. We anticipate the consolidation of three back-office real estate locations in the second half of 2019. Through further rationalization of our real estate and reduced FTE count, we anticipate achieving an annual operating expense run-rate, excluding the impact of amortization of intangible assets, of approximately $415,000 to $425,000 for the full year 2019.

Critical Accounting Policies

Our accounting and reporting policies are prepared in accordance with GAAP and conform to general practices within the banking industry. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. While we base estimates on historical experience, current information and other factors deemed to be relevant, actual results could differ from those estimates. We consider accounting estimates to be critical to reported financial results if (i) the accounting estimate requires management to make assumptions about matters that are highly uncertain; and (ii) different estimates that management reasonably could have used for the accounting estimate in the current period, or changes in the accounting estimate that are reasonably likely to occur from period to period, could have a material impact on our financial statements. Accounting policies related to the allowance for loan losses, business combinations, goodwill, trade names and other intangible assets, and deferred income taxes are considered to be critical, as these policies involve considerable subjective judgment and estimation by management. For additional information regarding critical accounting policies, refer to Note 1. “Basis of Financial Statement Presentation” in the notes to consolidated financial statements included elsewhere in this report and the sections captioned “Critical Accounting Policies” and “Allowance for Loan Losses” in Management’s Discussion and Analysis of Financial Condition and Results of Operations included in the 2018 Form 10-K. There have been no significant changes in our application of critical accounting policies for the six months ended June 30, 2019.

Financial Impact of Recent Acquisitions

The balances of Advantage Funding were included in our balance sheet as of April 2, 2018, and the operating results of Advantage Funding were included in our results of operations from that day forward.

The balances of the commercial loan portfolio acquired from Woodforest National Bank were included in our balance sheet as of February 28, 2019, and the operating results from those assets were included in our results of operations from that day forward.

Selected financial condition data, statement of operations data, per share data, performance ratios, capital ratios, and asset quality data and ratios for the comparable periods are presented as follows:

	At or for the three months ended June 30,		At or for the six months ended June 30,	
	2019	2018	2019	2018
End of period balances:				
Total securities	$ 5,858,865	$ 6,789,246	$ 5,858,865	$ 6,789,246
Portfolio loans	20,370,306	20,674,493	20,370,306	20,674,493
Total assets	30,237,545	31,463,077	30,237,545	31,463,077
Non-interest bearing deposits	4,494,802	4,153,701	4,494,802	4,153,701
Interest bearing deposits	16,453,662	16,812,188	16,453,662	16,812,188
Total deposits	20,948,464	20,965,889	20,948,464	20,965,889
Borrowings	4,133,986	5,537,537	4,133,986	5,537,537
Stockholders’ equity	4,459,158	4,352,735	4,459,158	4,352,735
Tangible common stockholders’ equity (“TCE”)[1]	2,543,399	2,459,489	2,543,399	2,459,489
Average balances:				
Total securities	$ 5,883,269	$ 6,751,528	$ 6,107,734	$ 6,677,264
Total loans[2]	19,912,839	20,339,964	20,161,178	19,989,877
Total assets	29,666,951	30,994,904	30,201,974	30,509,306
Non-interest bearing deposits	4,218,000	3,960,683	4,232,613	3,965,852
Interest bearing deposits	16,930,872	16,807,986	16,999,424	16,762,778
Total deposits and mortgage escrow	21,148,872	20,768,669	21,232,037	20,728,630
Borrowings	3,544,661	5,432,582	4,002,872	5,017,548
Stockholders’ equity	4,423,910	4,305,928	4,419,703	4,275,097
TCE[1]	2,504,883	2,409,674	2,512,695	2,391,846
Selected operating data:				
Total interest and dividend income	$ 302,457	$ 304,906	$ 611,857	$ 586,251
Total interest expense	70,618	58,690	144,512	105,667
Net interest income	231,839	246,216	467,345	480,584
Provision for loan losses	11,500	13,000	21,700	26,000
Net interest income after provision for loan losses	220,339	233,216	445,645	454,584
Total non-interest income	27,058	37,868	46,655	56,575
Total non-interest expense	126,940	124,928	241,932	236,675
Income before income tax expense	120,457	146,156	250,368	274,484
Income tax expense	23,997	31,915	52,471	61,371
Net income	$ 96,460	$ 114,241	$ 197,897	$ 213,113
Per share data:				
Reported basic EPS (GAAP)	$ 0.46	$ 0.50	$ 0.92	$ 0.93
Reported diluted EPS (GAAP)	0.46	0.50	0.92	0.93
Adjusted diluted EPS[1] (non-GAAP)	0.51	0.50	1.01	0.95
Dividends declared per common share	0.07	0.07	0.14	0.14
Book value per share	21.06	18.69	21.06	18.69
Tangible book value per common share[1]	12.40	10.91	12.40	10.91

See legend on following page.

	At or for the three months ended June 30,		At or for the six months ended June 30,	
	2019	2018	2019	2018
Common shares outstanding:				
Shares outstanding at period end	205,187,243	225,470,254	205,187,243	225,470,254
Weighted average shares basic	206,932,114	225,084,232	210,022,967	224,908,436
Weighted average shares diluted	207,376,239	225,621,856	210,419,425	225,444,579
Other data:				
Full time equivalent employees at period end	1,820	2,037	1,820	2,037
Financial centers at period end	97	121	97	121
Performance ratios:				
Return on average assets	1.28%	1.45%	1.29%	1.38%
Return on average equity	8.57	10.46	8.85	9.86
Reported return on average tangible assets[1]	1.36	1.54	1.38	1.47
Adjusted return on average tangible assets[1]	1.51	1.55	1.51	1.51
Reported return on average TCE[1]	15.13	18.68	15.56	17.63
Adjusted return on average TCE[1]	16.83	18.79	17.05	18.11
Reported operating efficiency[1]	49.0	44.0	47.1	44.1
Adjusted operating efficiency[1]	40.9	38.3	40.7	39.2
Net interest margin-GAAP	3.53	3.56	3.50	3.55
Net interest margin-tax equivalent[3]	3.58	3.62	3.56	3.61
Capital ratios (Company):				
Tier 1 leverage ratio	9.57%	9.32%	9.57%	9.32%
Common equity Tier 1 capital ratio	11.52	12.32	11.52	12.32
Tier 1 risk-based capital ratio	12.15	12.98	12.15	12.98
Total risk-based capital ratio	13.30	14.06	13.30	14.06
Tangible equity to tangible assets	9.42	8.75	9.42	8.75
Tangible common equity to tangible assets[1]	8.94	8.28	8.94	8.28
Regulatory capital ratios (Bank):				
Tier 1 leverage ratio	9.98%	9.48%	9.98%	9.48%
Tier 1 risk-based capital ratio and common equity Tier 1 capital ratio	12.67	13.71	12.67	13.71
Total risk-based capital ratio	13.94	14.94	13.94	14.94
Asset quality data and ratios:				
Allowance for loan losses	$ 104,664	$ 86,026	$ 104,664	$ 86,026
Non-performing loans (“NPLs”)	192,647	190,975	192,647	190,975
Non-performing assets (“NPAs”)	206,275	211,239	206,275	211,239
Net charge-offs	5,796	9,066	12,713	17,881
NPAs to total assets	0.68%	0.67%	0.68%	0.67%
NPLs to total loans[4]	0.95	0.92	0.95	0.92
Allowance for loan losses to non-performing loans	54.33	45.05	54.33	45.05
Allowance for loan losses to total loans[4]	0.51	0.42	0.51	0.42
Annualized net charge-offs to average loans	0.12	0.18	0.13	0.18

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1 See a reconciliation of as reported financial measures to as adjusted (non-GAAP) financial measures beginning on page 73 below under the caption “Supplemental Reporting of Non-GAAP Financial Measures.”

2 Includes loans held for sale but excludes the allowance for loan losses.

3 Tax equivalent basis represents interest income earned on municipal securities divided by the applicable Federal tax rate of 21%.

4 Total loans excludes loans held for sale.

Results of Operations
For the three months ended June 30, 2019, we reported net income available to common stockholders of $94,473, or $0.46 per diluted common share, compared to net income available to common stockholders of $112,245, or $0.50 per diluted common share, for the three months ended June 30, 2018. The change in our results between the periods was mainly due to the following:

- commercial loans were $17,567,844 at June 30, 2019, representing an increase of 12.0% over June 30, 2018;

- in the second quarter of 2018, we sold the Lake Success facility and realized a pre tax gain of $11,797;

- in connection with our financial center and real estate consolidation strategy, we recorded an impairment charge in the second quarter of 2019 of $14,398 to write-off leasehold improvements, land and buildings, and the early termination of several leases; and

- average earning assets decreased by $1,380,327 due to loans and securities sales that were completed in the first quarter of 2019, which also resulted in a corresponding decrease in total borrowings.

For the six months ended June 30, 2019, we reported net income available to common stockholders of $193,921, or $0.92 per diluted common share, compared to net income available to common stockholders of $209,118, or $0.93 per diluted common share, for the six months ended June 30, 2018. The change in our results between the periods was mainly due to inclusion of the Advantage Funding acquisition on April 2, 2018 and the Woodforest Acquisition on February 28, 2019 in addition to the factors discussed above.

Details of the changes in the various components of net income available to common stockholders are further discussed below.

Net Interest Income is the difference between interest income on earning assets, such as loans and securities, and interest expense on liabilities, such as deposits and borrowings, which are used to fund those assets. Net interest income is our largest source of revenue, representing 89.5% and 86.7% of total revenue in the three months ended June 30, 2019 and 2018, respectively. Net interest margin is the ratio of taxable equivalent net interest income to average earning assets for the period. The level of interest rates and the volume and mix of earning assets and interest bearing liabilities impact net interest income and net interest margin.

We are primarily funded by core deposits. Core deposits include retail, commercial and municipal transaction deposits, money market and savings accounts and certificates of deposit including reciprocal brokered deposits through the Promontory Interfinancial Network, including ICS and CDAR balances, but excluding brokered and wholesale deposits. As of June 30, 2019, we considered 95.0% of our total deposits to be core deposits compared to 94.8% at June 30, 2018. Non-interest bearing demand deposits were $4,494,802 of our total deposits at June 30, 2019, compared to $4,153,701 at June 30, 2018. We believe that our low cost deposit funding base, combined with the continued transition of our loan portfolio and earning assets, will have a positive impact on our net interest income and net interest margin over time.

The following tables set forth average balance sheets, interest, average yields and costs, and certain other information for the periods indicated. All average balances are daily average balances. Non-accrual loans were included in the computation of average balances, but have been reflected in the table as loans carrying a zero yield. The yields set forth below include the effect of deferred fees, discounts and premiums that are amortized or accreted to interest income or expense.

	For the three months ended June 30,					
	2019			2018		
	Average balance	Interest	Yield/Rate	Average balance	Interest	Yield/Rate
Interest earning assets:						
Traditional C&I and commercial finance loans	$ 7,203,215	$ 97,260	5.42%	$ 5,846,588	$ 78,004	5.35%
Commercial real estate (includes multi-family)	9,486,333	115,759	4.89	9,100,098	107,930	4.76
ADC	307,290	4,664	6.09	247,500	3,430	5.56
Commercial loans	16,996,838	217,683	5.14	15,194,186	189,364	5.00
Consumer loans	280,098	4,013	5.75	344,183	5,114	5.96
Residential mortgage loans	2,635,903	36,587	5.55	4,801,595	59,775	4.98
Total net loans[1]	19,912,839	258,283	5.20	20,339,964	254,253	5.01
Securities taxable	3,453,858	24,632	2.86	4,130,949	29,031	2.82
Securities tax exempt	2,429,411	18,257	3.01	2,620,579	19,497	2.98
Interest earning deposits	289,208	1,295	1.80	292,862	784	1.07
FRB and FHLB stock	291,737	3,824	5.26	373,026	5,435	5.84
Total securities and other earning assets	6,464,214	48,008	2.98	7,417,416	54,747	2.96
Total interest earning assets	26,377,053	306,291	4.66	27,757,380	309,000	4.47
Non-interest earning assets	3,289,898			3,237,524		
Total assets	$ 29,666,951			$ 30,994,904		
Interest bearing liabilities:						
Interest bearing demand deposits	$ 4,399,296	$ 11,884	1.08%	$ 4,024,972	$ 6,928	0.69%
Savings deposits[2]	2,448,132	1,883	0.31	2,916,755	1,472	0.20
Money market deposits	7,538,890	23,020	1.22	7,337,904	12,869	0.70
Certificates of deposit	2,544,554	11,342	1.79	2,528,355	7,195	1.14
Total interest bearing deposits	16,930,872	48,129	1.14	16,807,986	28,464	0.68
Senior Notes	173,901	1,365	3.14	278,128	2,787	4.01
Other borrowings	3,197,738	18,768	2.35	4,981,663	25,086	2.02
Subordinated Notes	173,022	2,356	5.45	172,791	2,353	5.45
Total borrowings	3,544,661	22,489	2.54	5,432,582	30,226	2.23
Total interest bearing liabilities	20,475,533	70,618	1.38	22,240,568	58,690	1.06
Non-interest bearing deposits	4,218,000			3,960,683		
Other non-interest bearing liabilities	549,508			487,725		
Total liabilities	25,243,041			26,688,976		
Stockholders' equity	4,423,910			4,305,928		
Total liabilities and stockholders' equity	$ 29,666,951			$ 30,994,904		
Net interest rate spread[3]			3.28%			3.41%
Net interest earning assets[4]	$ 5,901,520			$ 5,516,812		
Net interest margin - tax equivalent		235,673	3.58%		250,310	3.62%
Less tax equivalent adjustment		(3,834)			(4,094)	
Net interest income		$ 231,839			$ 246,216	
Accretion income on acquired loans		23,745			28,010	
Tax equivalent net interest margin excluding accretion income on acquired loans		$ 211,928	3.22%		$ 222,300	3.21%
Ratio of interest earning assets to interest bearing liabilities	128.8%			124.8%		

See legend on following page.

STERLING BANCORP AND SUBSIDIARIES

	For the six months ended June 30,					
	2019			2018		
	Average balance	Interest	Yield/Rate	Average balance	Interest	Yield/Rate
Interest earning assets:						
Traditional C&I and commercial finance loans	$ 6,887,429	$ 186,171	5.45%	$ 5,425,867	138,880	5.16%
Commercial real estate (includes multi-family)	9,436,156	230,610	4.93	9,064,670	211,211	4.70
ADC	295,858	9,004	6.14	257,513	7,101	5.56
Commercial loans	16,619,443	425,785	5.17	14,748,050	357,192	4.88
Consumer loans	287,721	8,110	5.68	352,919	9,523	5.44
Residential mortgage loans	3,254,014	84,683	5.20	4,888,908	122,154	5.00
Total net loans[1]	20,161,178	518,578	5.19	19,989,877	488,869	4.93
Securities taxable	3,642,724	52,479	2.91	4,064,614	56,092	2.78
Securities tax exempt	2,465,010	37,063	3.01	2,612,650	38,879	2.98
Interest earning deposits	310,463	2,796	1.82	299,032	1,611	1.09
FRB and FHLB stock	313,399	8,724	5.61	332,029	8,965	5.44
Total securities and other earning assets	6,731,596	101,062	3.03	7,308,325	105,547	2.91
Total interest earning assets	26,892,774	619,640	4.65	27,298,202	594,416	4.39
Non-interest earning assets	3,309,200			3,211,104		
Total assets	$ 30,201,974			$ 30,509,306		
Interest bearing liabilities:						
Interest bearing demand deposits	$ 4,366,961	$ 23,528	1.09%	$ 3,983,590	$ 12,552	0.64%
Savings deposits[2]	2,454,156	3,666	0.30	2,917,188	3,022	0.21
Money market deposits	7,657,039	45,635	1.20	7,365,466	23,781	0.65
Certificates of deposit	2,521,268	21,294	1.70	2,496,534	13,316	1.08
Total interest bearing deposits	16,999,424	94,123	1.12	16,762,778	52,671	0.63
Senior Notes	176,655	2,777	3.17	278,154	5,527	4.01
Other borrowings	3,653,224	42,900	2.37	4,566,631	42,763	1.89
Subordinated Notes	172,993	4,712	5.45	172,763	4,706	5.45
Total borrowings	4,002,872	50,389	2.54	5,017,548	52,996	2.13
Total interest bearing liabilities	21,002,296	144,512	1.39	21,780,326	105,667	0.98
Non-interest bearing deposits	4,232,613			3,965,852		
Other non-interest bearing liabilities	547,362			488,031		
Total liabilities	25,782,271			26,234,209		
Stockholders' equity	4,419,703			4,275,097		
Total liabilities and stockholders' equity	$ 30,201,974			$ 30,509,306		
Net interest rate spread[3]			3.26%			3.41%
Net interest earning assets[4]	$ 5,890,478			$ 5,517,876		
Net interest margin - tax equivalent		475,128	3.56%		488,749	3.61%
Less tax equivalent adjustment		(7,783)			(8,165)	
Net interest income		$ 467,345			$ 480,584	
Accretion income on acquired loans		49,325			58,351	
Tax equivalent net interest margin excluding accretion income on acquired loans		$ 425,803	3.19%		$ 430,398	3.18%
Ratio of interest earning assets to interest bearing liabilities	128.0%			125.3%		

[1] Average balances include loans held for sale and non-accrual loans. Includes the effect of net deferred loan origination fees, amortization of premiums, accretion of discounts and costs and non-accrual loans. Interest includes prepayment fees and late charges.

2 Includes club accounts and interest bearing mortgage escrow balances.

3 Net interest rate spread represents the difference between the tax equivalent yield on average interest earning assets and the cost of average interest bearing liabilities.

4 Net interest earning assets represents total interest earning assets less total interest bearing liabilities.

The following tables present the dollar amount of changes in interest income (on a fully tax equivalent basis) and interest expense for the major categories of our interest earning assets and interest bearing liabilities for the periods indicated. Information is provided for each category of interest earning assets and interest bearing liabilities with respect to (i) changes attributable to changes in volume (*i.e.*, changes in average balances multiplied by the prior period average rate); and (ii) changes attributable to changes in rate (*i.e.*, changes in average rate multiplied by prior period average balances). For purposes of this table, changes attributable to both rate and volume, which cannot be segregated, have been allocated proportionately to the change due to volume and the change due to rate.

	For the three months ended June 30, 2019 vs 2018		
	Increase / (Decrease) due to		Total increase / (decrease)
	Volume	Rate	
Interest earning assets:			
Traditional C&I and commercial finance loans	$ 18,228	$ 1,028	$ 19,256
Commercial real estate (includes multi-family)	4,764	3,065	7,829
ADC	885	349	1,234
Commercial loans	23,877	4,442	28,319
Consumer loans	(926)	(175)	(1,101)
Residential mortgage loans	(29,380)	6,192	(23,188)
Total loans	(6,429)	10,459	4,030
Securities taxable	(4,807)	408	(4,399)
Securities tax exempt	(1,434)	194	(1,240)
Interest earning deposits	(10)	521	511
FRB and FHLB stock	(1,107)	(504)	(1,611)
Total interest earning assets	(13,787)	11,078	(2,709)
Interest bearing liabilities:			
Interest bearing demand deposits	700	4,256	4,956
Savings deposits[1]	(269)	680	411
Money market deposits	361	9,790	10,151
Certificates of deposit	46	4,101	4,147
Total interest bearing deposits	838	18,827	19,665
Senior Notes	(901)	(521)	(1,422)
Other borrowings	(9,994)	3,676	(6,318)
Subordinated Notes	3	—	3
Total borrowings	(10,892)	3,155	(7,737)
Total interest bearing liabilities	(10,054)	21,982	11,928
Change in tax equivalent net interest income	(3,733)	(10,904)	(14,637)
Less tax equivalent adjustment	(261)	—	(261)
Change in net interest income	$ (3,472)	$ (10,904)	$ (14,376)

See legend on following page.

	For the six months ended June 30, 2019 vs 2018		
	Increase / (Decrease) due to		Total increase /
	Volume	Rate	(decrease)
Interest earning assets:			
Traditional C&I and commercial finance loans	$ 39,127	$ 8,164	$ 47,291
Commercial real estate (includes multi-family)	8,841	10,558	19,399
ADC	1,119	784	1,903
Commercial loans	49,087	19,506	68,593
Consumer loans	(1,819)	406	(1,413)
Residential mortgage loans	(42,201)	4,730	(37,471)
Total loans	5,067	24,642	29,709
Securities taxable	(6,103)	2,490	(3,613)
Securities tax exempt	(2,202)	385	(1,817)
Interest earning deposits	64	1,121	1,185
FRB and FHLB stock	(515)	274	(241)
Total interest earning assets	(3,689)	28,912	25,223
Interest bearing liabilities:			
Interest bearing demand deposits	1,322	9,654	10,976
Savings deposits[1]	(530)	1,174	644
Money market deposits	977	20,877	21,854
Certificates of deposit	135	7,843	7,978
Total interest bearing deposits	1,904	39,548	41,452
Senior Notes	(1,749)	(1,001)	(2,750)
Other borrowings	(9,547)	9,684	137
Subordinated Notes	6	—	6
Total borrowings	(11,290)	8,683	(2,607)
Total interest bearing liabilities	(9,386)	48,231	38,845
Change in tax equivalent net interest income	5,697	(19,319)	(13,622)
Less tax equivalent adjustment	(502)	119	(383)
Change in net interest income	$ 6,199	$ (19,438)	$ (13,239)

[1] Includes club accounts and interest bearing mortgage escrow balances.

Tax equivalent net interest income decreased $14,637 to $235,673 for the three months ended June 30, 2019, compared to $250,310 for the three months ended June 30, 2018. The decrease was mainly due to a decrease in average interest earning assets of $1,380,327, which was mainly due to the sale of residential mortgage loans and investment securities in the first quarter of 2019. The tax equivalent net interest margin decreased four basis points to 3.58% in the second quarter of 2019 from 3.62% in the second quarter of 2018. The yield on interest earning assets was 4.66% compared to 4.47% for the three months ended June 30, 2018, which was mainly due to our balance sheet transition as higher yielding commercial loans comprise a larger percentage of total loans than the prior year. The percentage of loans to average earning assets increased to 75.5% for the three months ended June 30, 2019 compared to 73.3% for the three months ended June 30, 2018. The cost of interest bearing liabilities increased to 1.38% for the three months ended June 30, 2019 compared to 1.06% for the three months ended June 30, 2018, which was due mainly to higher interest rates paid on deposits and borrowings due to increases in market interest rates.

Tax equivalent net interest income decreased $13,621 to $475,128 for the six months ended June 30, 2019, compared to $488,749 for the six months ended June 30, 2018. The decrease was mainly due to an increase in interest expense on interest bearing liabilities, which was $144,512 for the six months ended June 30, 2019 compared to $105,667 for the six months ended June 30, 2018, and a decrease of $405,428 in average interest earning assets. The tax equivalent net interest margin decreased five basis points to 3.56% for the six months ended June 30, 2019 from 3.61% in the six months ended June 30, 2018. The yield on interest earning assets was 4.65% compared to 4.39% for the six months ended June 30, 2018, which was mainly due to a greater proportion of higher yielding commercial loans to total loans. The percentage of loans to average earning assets increased to 75.0% for the six months ended June 30, 2019 compared to 73.2% for the six months ended June 30, 2018. The cost of interest bearing liabilities increased to 1.39% for the six months ended June 30, 2019 compared to 0.98% for the six months ended June 30, 2018, mainly due to increases in market interest rates between the periods.

The average balance of loans outstanding decreased $427,125 for the three months ended June 30, 2019 compared to the three months ended June 30, 2018. The decrease was mainly due to the sale and repayments of residential mortgage loans, which resulted in a decline of $2,165,692 between the periods. This was substantially offset by organic growth generated by our commercial banking teams and acquisitions, which resulted in an increase in the average balance of commercial loans of $1,802,652 between the periods. The average yield on loans was 5.20% compared to 5.01% in the comparable year ago period. The increase in the yield on loans was mainly due to the increase in market interest rates and the mix of business as a greater percentage of the portfolio is comprised of commercial loans.

The average balance of loans outstanding increased $171,301 in the six months ended June 30, 2019, compared to the six months ended June 30, 2018. The growth in average balance of commercial loans was greater than the decline in the average balance of residential mortgage loans between the periods. The average yield on loans was 5.19% in the six months ended June 30, 2019 compared to 4.93% in the comparable year ago period. The increase was mainly due to the greater percentage of commercial loans in the loan portfolio.

Interest income on traditional C&I and commercial finance loans increased $19,256 and was $97,260 for the three months ended June 30, 2019 compared to $78,004 for the three months ended June 30, 2018. This increase was mainly due to organic loan growth and loan portfolio acquisitions. The yield on traditional C&I and commercial finance loans increased to 5.42% compared to 5.35% for the three months ended June 30, 2018. The increase in yield was mainly due to floating rate loans that have reset to higher interest rate levels given increases in market interest rates.

Interest income on traditional C&I and commercial finance loans increased $47,291 and was $186,171 in the six months ended June 30, 2019 compared to $138,880 for the six months ended June 30, 2018. This increase was mainly due to organic loan growth and the loan portfolio acquisitions. The yield on traditional C&I and commercial finance loans increased to 5.45% compared to 5.16% in the six months ended June 30, 2018. The increase in yield was mainly due to repricing of floating rate loans to higher rates given increases in market interest rates.

Interest income on commercial real estate loans and multi-family loans increased $7,829 to $115,759 for the three months ended June 30, 2019 compared to $107,930 for the three months ended June 30, 2018. The increase was mainly due to organic growth in commercial real estate loans between the periods. The yield on commercial real estate and multi-family loans was 4.89% compared to 4.76% for the three months ended June 30, 2018. The increase in yield was mainly due to increases in market interest rates for new originations and run-off of lower yielding multi-family loans.

Interest income on commercial real estate loans and multi-family loans increased $19,399 to $230,610 in the six months ended June 30, 2019 compared to $211,211 for the six months ended June 30, 2018. The increase was mainly due to organic loan growth. The yield on commercial real estate and multi-family loans was 4.93% in the six months ended June 30, 2019 compared to 4.70% in the six months ended June 30, 2018. The increase in yield was mainly due to changes in market rates of interest and run-off of lower yielding multi-family loans.

Interest income on residential mortgage loans declined $23,188 to $36,587 for the three months ended June 30, 2019 compared to $59,775 for the three months ended June 30, 2018. The decrease was mainly due to a $2,165,692, or 45.1%, decline in the average daily balance of residential mortgage loans. As we are actively reducing this loan portfolio. The yield on residential mortgage loans increased 57 basis points to 5.55% compared to 4.98% for the three months ended June 30, 2018, mainly due to the sale of lower yielding, fixed rate loans. Accretion income on acquired residential mortgage loans was $8,410 for the three months ended June 30, 2019 compared to $12,924 for the three months ended June 30, 2018. In the three months ended June 30, 2019, accretion income on acquired loans included $2,814 of income related to the repayment of certain purchased credit impaired residential mortgage loans.

Interest income on residential mortgage loans decreased $37,471 to $84,683 in the six months ended June 30, 2019 compared to $122,154 for the six months ended June 30, 2018. The decrease was mainly due to the $1,634,894 decline in the average balance of residential mortgage loans between the periods. The yield on residential mortgage loans increased to 5.20% compared to 5.00% for the six months ended June 30, 2018. Accretion income on acquired residential mortgage loans was $16,709 for the six months ended June 30, 2019 compared to $28,222 for the six months ended June 30, 2018. The yield on residential mortgage loans increased due to changes in market rates of interest on adjustable mortgage loans and the level of repayments associated with certain purchased credit impaired mortgage loans in the second quarter of 2019 as discussed above.

Tax equivalent interest income on securities decreased $5,639 to $42,889 for the three months ended June 30, 2019, compared to $48,528 for the three months ended June 30, 2018. This was mainly the result of a decrease of $868,259 in the average balance of securities between the periods. The tax equivalent yield on securities increased to 2.92% compared to 2.88% for the year earlier period; the increase was mainly due to higher market rates of interest on securities. The average balance of tax-exempt securities declined to $2,429,411, compared to $2,620,579 in the second quarter of 2018.

Tax equivalent interest income on securities decreased $5,429 to $89,542 in the six months ended June 30, 2019, compared to $94,971 for the six months ended June 30, 2018. This was mainly the result of a decrease of $569,530 in the average balance of securities between the periods. The tax equivalent yield on securities was 2.96% in the six months ended June 30, 2019, compared to 2.87% in the six months ended June 30, 2018. The increase in tax equivalent yield on securities was due to higher market rates of interest on securities.

Average total deposits and mortgage escrow increased $380,203 to $21,148,872 in the three months ended June 30, 2019, compared to $20,768,669 for the three months ended June 30, 2018. Average interest bearing deposits increased $122,886 compared to the second quarter of 2018. Average non-interest bearing deposits increased to $4,218,000 in the three months ended June 30, 2019, compared to $3,960,683 in the three months ended June 30, 2018. These increases were mainly due to organic growth generated by our commercial banking teams and financial centers. The average cost of interest bearing deposits was 1.14% in the second quarter of 2019 compared to 0.68% in the second quarter of 2018. The average cost of total deposits was 0.91% compared to 0.55% in the second quarter of 2018. The increase in the cost of deposits was mainly due to the increase in market interest rates and the competitive environment for deposits in the greater New York Metropolitan region.

Average total deposits and mortgage escrow increased $503,407 to $21,232,037 in the six months ended June 30, 2019, compared to $20,728,630 in the six months ended June 30, 2018. Average interest bearing deposits increased $236,646 in the six months ended June 30, 2019 compared to the six months ended June 30, 2018. Average non-interest bearing deposits increased $266,761 to $4,232,613 in the six months ended June 30, 2019, compared to $3,965,852 in the six months ended June 30, 2018. These increases were mainly due to organic growth generated by our commercial banking teams and financial centers. The average cost of interest bearing deposits was 1.12% in the six months ended June 30, 2019 compared to 0.63% in the six months ended June 30, 2018. The average cost of total deposits was 0.89% in the six months ended June 30, 2019 compared to 0.51% in the six months ended June 30, 2018. The increase in the cost of deposits was mainly due to the same factors discussed in the three-month period.

Average borrowings declined $1,887,921 to $3,544,661 in the three months ended June 30, 2019, compared to $5,432,582 in the same period a year ago. The decrease in average borrowings was mainly the result of the decline in residential mortgage loan balances and investment securities between the periods, as proceeds from the sales were used mainly to payoff borrowings. The average cost of borrowings was 2.54% for the second quarter of 2019, compared to 2.23% for the second quarter of 2018. Market interest rates on borrowings increased relative to the same quarter a year ago, which resulted in the increase in the cost of borrowings.

Average borrowings decreased $1,014,676 to $4,002,872 in the six months ended June 30, 2019, compared to $5,017,548 in the same period a year ago. The decrease in average borrowings was due to the same factors as discussed above. The average cost of borrowings was 2.54% for the six months ended June 30, 2019 compared to 2.13% in the six months ended June 30, 2018. The increase was mainly due to the same factors as discussed in the three-month period.

Provision for Loan Losses. The provision for loan losses is determined as the amount to be added to the allowance for loan losses after net charge-offs have been deducted to bring the allowance to a level that is our best estimate of probable incurred credit losses inherent in the outstanding loan portfolio. For the three months ended June 30, 2019 and June 30, 2018, the provision for loan losses was $11,500 and $13,000, respectively. See the section captioned “Delinquent Loans, Troubled Debt Restructuring, Impaired Loans, Other Real Estate Owned and Classified Assets - Provision for Loan Losses” later in this discussion for further analysis of the provision for loan losses.

Non-interest income. The components of non-interest income were as follows for the periods presented below:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Deposit fees and service charges	$ 7,098	$ 6,985	$ 13,310	$ 13,988
Accounts receivable management / factoring commissions and other related fees	5,794	5,337	11,217	10,696
Bank owned life insurance	4,192	4,243	7,833	7,857
Loan commissions and fees	5,308	4,566	9,146	7,973
Investment management fees	2,050	2,121	3,950	3,946
Net (loss) on sale of securities	(528)	(425)	(13,712)	(5,846)
Gain on sale of residential mortgage loans	—	—	8,313	—
Gain on sale of fixed assets	—	11,797	—	11,800
Other	3,144	3,244	6,598	6,161
Total non-interest income	$ 27,058	$ 37,868	$ 46,655	$ 56,575

Non-interest income was $27,058 for the three months ended June 30, 2019, compared to $37,868 in the same period a year ago. Included in non-interest income is net loss on sale of securities, which was $528 for the three months ended June 30, 2019 compared to $425 for the three months ended June 30, 2018, and gain on sale of fixed assets of $0 for the three months ended June 30, 2019 and $11,797 for the three months ended June 30, 2018. Net loss on sale of securities is impacted significantly by changes in market interest rates and strategies we use to manage yield, liquidity and interest rate risk, and it is difficult to forecast the amount of net losses or gains consistently. When we analyze the results of our non-interest income, we exclude certain items including gains and losses on sales of securities, gains on sale of fixed assets and the gain on bulk sale of residential mortgage loans. Excluding net loss on sale of securities and gain on sale of fixed assets, non-interest income was $27,586 for the second quarter of 2019 compared to $26,496 for the second quarter of 2018. We anticipate the main drivers of growth in non-interest income will be other loan fees, loan swap fees, loan syndication fees and deposit fees and service charges generated by commercial treasury management services.We continue to evaluate potential acquisitions of commercial finance businesses that are also fee income generators. Changes in the components of non-interest income are discussed below.

Deposit fees and service charges were $7,098 for the second quarter of 2019, which represented a $113 increase from the second quarter of 2018. In the six months ended June 30, 2019, deposit fees and charges were $13,310, which represented a $678 decline compared to the same period a year ago. We implemented a client retention strategy in connection with the Astoria deposit systems conversion which included a temporary waiver of fees post-conversion. The systems conversion was completed in August 2018 and the temporary waiver of fees concluded during the first quarter of 2019.

Accounts receivable management / factoring commissions and other related fees represents fees generated in our factoring and payroll finance businesses. A portion of the fees generated in the factoring and payroll finance businesses are allocated to interest income on loans and the remainder is recognized as fee income. In our factored receivables business, we receive a nonrefundable factoring fee, which is generally a percentage of the factored receivables or sales volume, and is designed to compensate us for the bookkeeping and collection services provided and, if applicable, the credit review of the client’s customer and assumption of customer credit risk. In payroll finance, we provide outsourcing support services for clients in the temporary staffing industry. We generate fee income in exchange for providing full back-office, payroll, tax and accounting services to independently-owned temporary staffing companies. Total fee income in these businesses increased $457 to $5,794 for the three months ended June 30, 2019, compared to $5,337 for the year ago period. In the six months ended June 30, 2019, total fee income increased $521. The increase between the periods was mainly due to revenue generated from factored receivables through a combination of higher volumes and an increase in interest rates.

Bank owned life insurance (“BOLI”) income represents the change in the cash surrender value of life insurance policies owned by us. BOLI income was $4,192 for the second quarter of 2019, compared to $4,243 in the same period a year ago, and was $7,833 for the six months ended June 30, 2019, compared to $7,857 in the same period a year ago. A significant portion of our BOLI is invested in shorter duration mortgage-backed securities, which have experienced a decline in yields and accelerated repayments due to market conditions. We are evaluating alternatives to restructure a significant portion of our BOLI portfolio.

Loan commissions and fee income includes fees on lines of credit, loan servicing fees, loan syndication fees, collateral monitoring, and other loan related fees that are not included in interest income. Loan commissions and fees were $5,308 for the three months ended June 30, 2019, compared to $4,566 for the three months ended June 30, 2018, and were $9,146 for the six months ended June 30, 2019, compared to $7,973 in the same period a year ago. The increase was mainly due to higher letter of credit fees and other loan fees generated by our commercial banking teams.

Investment management fees represent fees from the sale of mutual funds, annuities and insurance commissions. These revenues were $2,050 in the second quarter of 2019 and $2,121 in the same period a year ago, and were $3,950 for the first six months of 2019, compared to $3,946 in the same period a year ago.

Net (loss) on sale of securities represents net losses incurred on the sale of securities from our available for sale investment securities portfolio. We realized a net loss on sale of securities of $528 in the three months ended June 30, 2019 compared to $425 in the three months ended June 30, 2018. The net loss on sale of securities of $13,712 in the six months ended June 30, 2019 was mainly due to the sale of $738,751 of available for sale securities in the first quarter of 2019. The proceeds were used to fund a portion of the Woodforest Acquisition and to reduce higher cost wholesale funding. In the six months ended June 30, 2018, the loss on sale of securities was $5,846 and was mainly due to the sale of $117,810 of available for sale securities; the proceeds were used to fund a portion of the purchase of Advantage Funding in April 2018.

Gain on sale of residential mortgage loans represents the net gain we realized on the sale of residential mortgage loans held for sale in the first quarter of 2019. The sale was part of our strategy of increasing the percentage of commercial loans to total loans in our loan portfolio.

Gain on sale of fixed assets was $11,797 for the three months ended June 30, 2018 and $11,800 for the six months ended June 30, 2018. This gain represented income from the sale of the Lake Success facility, which previously was Astoria’s headquarters. The sales price was, $36,000, which we received in cash at closing. We fully exited this location in the first quarter of 2019.

Other non-interest income principally includes fees for loan swaps, safe deposit rentals and foreign exchange fees. Other non-interest income decreased to $3,144 for the second quarter of 2019 from $3,244 for the same period a year ago. The decrease was mainly due to lower safe deposit rental income. Other non-interest income was $6,598 for the six months ended June 30, 2019, compared to $6,161 for the six months ended June 30, 2018. The increase was mainly due to higher loan swap fees between the periods.

Non-interest expense. The components of non-interest expense were as follows for the periods presented below:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
Compensation and benefits	$ 54,473	$ 56,159	$ 110,463	$ 110,840
Stock-based compensation plans	4,605	3,336	9,728	6,190
Occupancy and office operations	16,106	17,939	32,641	35,399
Information technology	9,047	9,997	17,722	21,713
Amortization of intangible assets	4,785	5,865	9,611	11,917
FDIC insurance and regulatory assessments	2,994	5,495	6,332	10,841
Other real estate owned expense, net	458	(226)	675	138
Impairment related to financial centers and real estate consolidation strategy	14,398	—	14,398	—
Charge for asset write-downs, retention and severance	—	13,132	3,344	13,132
Other non-interest expense	20,074	13,231	37,018	26,505
Total non-interest expense	$ 126,940	$ 124,928	$ 241,932	$ 236,675

Non-interest expense for the three months ended June 30, 2019 was $126,940, a $2,012 increase from $124,928 for the three months ended June 30, 2018. The increase between the periods was mainly a result of the impairment related to our financial centers and real estate consolidation strategy and an increase in other non-interest expense. Non-interest expense for the six months ended June 30, 2019 was $241,932 compared to $236,675 for the six months ended June 30, 2018. The increase was due to the same factors as described above. Changes in the components of non-interest expense are discussed below.

Compensation and benefits expense was $54,473 for the three months ended June 30, 2019, compared to $56,159 for the three months ended June 30, 2018. The decrease was mainly due to a decline in our full-time equivalent employees. As of June 30, 2019, our full-time equivalent employees were 1,820 compared to 2,037 at June 30, 2018, which was mainly due to the completion of the Astoria Merger integration and ongoing financial center consolidation strategy. For the six months ended June 30, 2019, compensation and employee benefits expense was $110,463 compared to $110,840 for the six months ended June 30, 2018. The decline in the six-month period is less than the decline in the quarterly period mainly due to the hiring of commercial banking, business development and risk management personnel.

Stock-based compensation plans expense was $4,605 in the second quarter of 2019, compared to $3,336 in the second quarter of 2018. The increase was due to a greater percentage of compensation paid to our executive management and senior personnel in stock awards to better align the interests of management and employees to those of our stockholders. For the six months ended June 30, 2019, stock-based compensation expense was $9,728 compared to $6,190 for the six months ended June 30, 2018. The increase was due to the same factors discussed above. Performance-based stock awards granted in February 2016 with a three-year measurement period vested in the first quarter of 2019 at 150% of the target amount granted, which resulted in additional expense of $1,000. For additional information related to our employee benefit plans and stock-based compensation, see Note 12. “Stock-Based Compensation” in the notes to consolidated financial statements included elsewhere in this report.

Occupancy and office operations expense was $16,106 in the second quarter of 2019, compared to $17,939 in the second quarter of 2018. At June 30, 2019, we had 97 financial center locations, compared to 121 financial centers at June 30, 2018. For the six months ended June 30, 2019, occupancy and office operations expense was $32,641, compared to $35,399 for the six months ended June 30, 2018. The decrease in occupancy and office operations expense is part of our plan to improve operational efficiency. We will continue to reduce our total number of financial centers and back-office locations over time.

Information technology expense, which mainly includes the cost of our loan and deposit operating systems and contracted service and maintenance associated with other data processing systems, was $9,047 in the second quarter of 2019, compared to $9,997 in the second quarter of 2018. For the six months ended June 30, 2019, information technology expense was $17,722, compared to $21,713 for the six months ended June 30, 2018. The decrease in information technology expense was mainly due to the completion of the conversion of Astoria’s legacy deposit system in the third quarter of 2018.

Amortization of intangible assets expense mainly includes amortization of core deposit intangible assets, customer lists and non-compete agreements. Amortization of intangible assets was $4,785 in the three months ended June 30, 2019, compared to $5,865 for the three months ended June 30, 2018. Amortization of intangible assets was $9,611 for the six months ended June 30, 2019, compared to $11,917 for the six months ended June 30, 2018. The decrease in amortization expense was mainly due to the accelerated amortization of the core deposit intangible assets that were recorded in the Astoria Merger and other acquisitions. For additional information, see Note 6. “Goodwill and Other Intangible Assets” in the notes to the consolidated financial statements included elsewhere in this report.

FDIC insurance and regulatory assessments expense was $2,994 for the second quarter of 2019, compared to $5,495 for the second quarter of 2018. FDIC insurance and regulatory assessments expense was $6,332 for the six months ended June 30, 2019, compared to $10,841 for the six months ended June 30, 2018. The decrease was a result of a reduction in FDIC deposit insurance assessments, which was mainly due to the termination of the quarterly Deposit Insurance Fund surcharge that was assessed to institutions with $10 billion or more in assets in 2018.

Other real estate owned expense, net includes property taxes, maintenance costs, insurance, write-downs (subsequent to any write-down at the time of foreclosure or transfer to OREO), and gains and losses from the disposition of OREO. OREO includes real estate assets that have been foreclosed and owned financial center locations that have been closed and are held for sale. OREO expense, net, included the following:

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
(Gain) on sale, net	$ (285)	$ (811)	$ (742)	$ (1,283)
Direct property write-downs	409	163	550	362
Rental income	(34)	(38)	(74)	(79)
Property tax	45	90	239	234
Other expenses	323	370	702	904
OREO expense, net	$ 458	$ (226)	$ 675	$ 138

OREO expense, net, was $458 for the three months ended June 30, 2019, compared to a gain of $226 for the three months ended June 30, 2018. OREO expense, net, was $675 for the six months ended June 30, 2019, compared to $138 for the six months ended June 30, 2018. The balance of OREO declined by $5,749 to $13,628 at June 30, 2019 compared to $19,377 at December 31, 2018.

Impairment related to financial centers and real estate consolidation strategy was $14,398 for the three and six months ended June 30, 2019 compared to $0 in the year earlier periods. This charge includes a write-off of leasehold improvements, land and buildings, and the early termination of several long-term leases.

Charge for asset write-downs, severance and retention expense was $3,344 for the six months ended June 30, 2019, which we incurred in connection with the commercial loan portfolio and origination platform acquired from Woodforest National Bank in February 2019. The charge included components related to professional fees, retention and severance, systems integration costs and an impairment of a lease assumed in the transaction. Charge for asset write-downs, severance and retention expense was $13,132 for the three and six months ended June 30, 2018. In the three months ended June 30, 2018, we incurred a charge of $8,736 due to the consolidation and exit of one back-office location. The balance of the charge recorded in three months ended June 30, 2018, of $4,396, was related to the Advantage Funding Acquisition. The charge included professional fees, retention and severance, systems integration costs and an impairment of a lease assumed in the transaction.

Other non-interest expense mainly includes professional fees, advertising and promotion, communications and operational losses. Also included in other non-interest expense are loan processing expenses, pension and post retirement plans, recruitment fees, taxes not included in income tax expense, travel and client entertainment, and training expense. For the three months ended June 30, 2019, other non-interest expense was $20,074, compared to $13,231 for the three months ended June 30, 2018 and was $37,018 for the six months ended June 30, 2019, compared to $26,505 for the same period a year ago. The increase was mainly due to a legal settlement charge of $1.1 million related to a troubled loan relationship that was acquired in a prior merger, and an increase in operational losses, which were $1.9 million and mainly related to check fraud and ATM losses. Other items that resulted in the increase in other expenses in the three and six months ended June 30, 2019, were increases of $1,531 and $2,356, respectively, in consulting expense related to various automation projects and an increase in defined benefit pension plan expense. We anticipate terminating the legacy Astoria defined benefit pension plan in late 2019 or 2020, once regulatory approvals are received. See Note 14. “Non-Interest Income and Other Non-Interest Expense” in the notes to the consolidated financial statements included elsewhere in this report for details on significant components.

Income tax expense was $23,997 for the three months ended June 30, 2019 compared to $31,915 for the three months ended June 30, 2018. We recorded income tax expense at an estimated effective income tax rate of 19.9% and 21.8% for the three months ended June 30, 2019 and 2018, respectively. We lowered our estimated effective income tax rate for the three months ended June 30, 2019 to record income tax at an estimated effective income tax rate of 21.0% for the six months ended June 30, 2019, which we anticipate will be our effective income tax rate for the full year of 2019. The reason for the decrease in our estimated effective income tax rate is that our proportion of tax exempt interest income to total income is greater than planned.

Income tax expense was $52,471 for the six months ended June 30, 2019 and $61,371 for the six months ended June 30, 2018, which represented an effective income tax rate of 21.0% and 22.4%, respectively. See Note 11. “Income Taxes” in the notes to the consolidated financial statements included elsewhere in this report for additional information.

Portfolio Loans

The following table sets forth the composition of our loan portfolio, excluding loans held for sale, by type of loan at the periods indicated.

	June 30, 2019		December 31, 2018	
	Amount	%	Amount	%
Commercial:				
C&I:				
Traditional C&I	$ 2,419,614	11.9%	$ 2,396,182	12.5%
Asset-based lending	1,132,798	5.6	792,935	4.1
Payroll finance	203,581	1.0	227,452	1.2
Warehouse lending	1,221,458	6.0	782,646	4.1
Factored receivables	254,786	1.3	258,383	1.3
Equipment financing	1,235,192	6.1	1,215,042	6.3
Public sector finance	1,047,405	5.0	860,746	4.5
Total C&I	7,514,834	36.9	6,533,386	34.0
Commercial mortgage:				
Commercial real estate	5,036,220	24.7	4,642,417	24.2
Multi-family	4,677,817	23.0	4,764,124	24.7
ADC	338,973	1.7	267,754	1.4
Total commercial mortgage	10,053,010	49.4	9,674,295	50.3
Total commercial	17,567,844	86.3	16,207,681	84.3
Residential mortgage	2,535,667	12.4	2,705,226	14.1
Consumer	266,795	1.3	305,623	1.6
Total portfolio loans	20,370,306	100.0%	19,218,530	100.0%
Allowance for loan losses	(104,664)		(95,677)	
Total portfolio loans, net	$ 20,265,642		$ 19,122,853	

Note: the percentages in the table above are rounded to the nearest tenth of a percent.

Overview. Total portfolio loans, net, increased $1,142,789, to $20,265,642 at June 30, 2019, compared to $19,122,853 at December 31, 2018. This was mainly dut to an increase in total commercial loans of $1,360,163, which was offset by a decline in residential mortgage loans of $169,559. This is consistent with our strategy of transitioning our loan portfolio composition to reduce non-relationship, residential mortgage loans, and increase the proportion of commercial loans originated through our commercial banking teams. Growth in commercial loans was the result of $888,285 of organic loan originations and $471,878 from acquired loans, which represented the fair value of the loans acquired in the Woodforest Acquisition.

At June 30, 2019, total C&I loans comprised 36.9% of the total loan portfolio, compared to 34.0% at December 31, 2018. Commercial mortgage loans comprised 49.4% and 50.3% of the total loan portfolio at June 30, 2019 and December 31, 2018, respectively. Residential mortgage loans comprised 12.4% of the total loan portfolio at June 30, 2019, compared to 14.1% at December 31, 2018. Our goal, over time, is for our loan portfolio to consist of 45.0% traditional C&I and commercial finance; 45.0% commercial real estate; and 10.0% consumer and residential mortgage loans.

In the six months ended June 30, 2019, equipment finance loans grew $20,150 and asset-based lending loans grew $339,863, which includes the commercial loans acquired from Woodforest National Bank. Also in the six months ended June 30, 2019, warehouse lending loans grew $438,812, traditional C&I loans grew $23,432 and public sector finance loans grew $186,659. These increases were partially offset by declines of $23,871 in payroll finance loans and $3,597 in factored receivables. The increase in warehouse lending loans was mainly due to the decline in residential mortgage interest rates during the first half of the year, which resulted in an increase in mortgage refinancing volumes. The increase in public sector finance loans was due to our continued investment in growing our public sector finance banking team. We believe these loans have attractive risk-adjusted returns relative to other asset classes.

Commercial real estate loans increased $393,803 in the six months ended June 30, 2019. Multi-family loans declined in the first six months of 2019 by $86,307 mainly due to repayments of multi-family loans acquired in the Astoria Merger.

ADC loans, which are a component of commercial mortgage loans, increased $71,219 in the six months ended June 30, 2019. This increase is mainly due to construction loans related to our low income and affordable housing tax credit investments. We generally originate construction loans to select clients, mostly within our immediate footprint. The majority of our ADC originations in 2019 were associated with our low income and affordable housing tax credit business.

Residential mortgage loans were $2,535,667 at June 30, 2019 compared to $2,705,226 at December 31, 2018. The decline is net of $128,833 of residential mortgage loans that were classified as held for sale at December 31, 2018, which were transferred to portfolio loans in the second quarter of 2019. The carrying value of the loans approximated their fair value. Total repayments of residential mortgage portfolio loans were $298,392 in the six months ended 2019.

Included in our residential mortgage portfolio are loans that were originated in 2010 or earlier as interest-only adjustable rate mortgages (“ARM loans”) with terms of up to forty years, which have an initial fixed rate for five, seven or 10 years and convert into one year interest-only ARM loans at the end of the initial fixed rate period. Interest-only ARM loans require the borrower to pay interest only during the first ten years of the loan term, which typically results in a material increase in the borrower’s monthly payments upon conversion. After the tenth anniversary of the loan, principal and interest payments are required to amortize the loan over the remaining term. There were $978,353 of residential mortgage loans that were originated as interest only ARM loans at June 30, 2019 compared to $1,129,023 at December 31, 2018.

Acquired loans. The table below presents the unpaid principal balance, remaining purchase accounting adjustments and carrying value of acquired loans as of the dates indicated. Generally, loans acquired in a business combination transaction are identified as acquired loans. After an acquired loan matures or is subject to review by our credit administration department, we generally transfer that loan to originated loans, as that loan will be individually underwritten by our credit personnel at the time it is renewed or evaluated.

	June 30, 2019	December 31, 2018
Commercial loans acquired from Woodforest National Bank	$ 398,649	$ —
Advantage Funding Acquisition	229,045	298,684
Astoria Merger	5,301,260	5,717,901
HVB Merger	244,519	291,793
Provident Merger	—	27,497
Unpaid principal balance	6,173,473	6,335,875
Remaining purchase accounting discount	(94,597)	(117,222)
Carrying value	$ 6,078,876	$ 6,218,653

In the three months ended June 30, 2019, the unpaid principal balance of acquired loans declined to $6,173,473 compared to $6,335,875 at December 31, 2018. The decline in the unpaid principal balance of acquired loans was mainly due to repayments of residential mortgage loans acquired in the Astoria Merger and the migration of loans to originated portfolio at maturity or based on a credit evaluation. These decreases were partially offset by the commercial loans acquired from Woodforest National Bank. See Note 2. “Acquisitions” in the notes to consolidated financial statements for additional information regarding this acquisition.

Delinquent Loans, Troubled Debt Restructuring, Impaired Loans, Other Real Estate Owned and Classified Assets

Past Due, Non-Performing Loans, Non-Performing Assets (Risk Elements). The table below sets forth the amounts and categories of our NPAs at the dates indicated. There were no warehouse lending, factored receivables or public sector finance loans that were non-performing at such dates.

	June 30, 2019	December 31, 2018
Non-accrual loans:		
Traditional C&I	$ 29,982	$ 42,298
Asset-based lending	28,576	3,281
Payroll finance	707	881
Equipment financing	20,248	12,221
Commercial real estate	25,878	33,012
Multi-family	5,647	2,681
ADC	1,193	—
Residential mortgage	67,525	61,981
Consumer	12,353	10,045
Total non-accrual loans	192,109	166,400
Accruing loans past due 90 days or more	538	2,422
Total NPLs	192,647	168,822
OREO	13,628	19,377
Total NPAs	$ 206,275	$ 188,199
TDRs accruing and not included above	$ 30,497	$ 35,288
Ratios:		
NPLs to total loans	0.95%	0.88%
NPAs to total assets	0.68	0.60

NPAs and NPLs. NPLs include non-accrual loans and accruing loans past due 90 days or more. NPAs include NPLs and OREO. At June 30, 2019, total NPLs increased $23,825 to $192,647 compared to $168,822 at December 31, 2018. Non-accrual loans were $192,109 and loans 90 days past due and still accruing interest which were well secured and in the process of collection, were $538 as of June 30, 2019. Non-accrual loans increased by $25,709 to $192,109 at June 30, 2019 from $166,400 at December 31, 2018. The increase was mainly due to two asset-based lending relationships, which have been charged-down to the estimated value of the collateral. Other increases in non-accrual loans occurred in equipment finance, multi-family, equipment financing, residential mortgage and consumer loans. These increases were offset by a reduction in non-accrual traditional C&I loans, mainly related to a decline in taxi medallion relationships, discussed further below, and commercial real estate loans. Loans past due 90 days or more and still accruing declined $1,884 between the periods. This was mainly due to a decline in loans that were in the process of being renewed at respective period ends.

TDRs. TDRs still accruing interest income are loans modified for borrowers that have experienced financial difficulties but are performing in accordance with the terms of their loan and were performing prior to the modification. Loan modification concessions may include actions such as an extension of the maturity date or the lowering of interest rates and monthly payments. At June 30, 2019, accruing TDRs were $30,497 compared to $35,288 at December 31, 2018. The decrease was mainly due to repayments. Total TDRs were $53,121 at June 30, 2019, of which $22,624 were non-accrual. Total TDRs were $74,885 at December 31, 2018, of which $38,947 were non-accrual. The decrease in non-accrual TDRs was mainly the result of the work-out of one taxi medallion relationship and other repayments. Total charge-offs of TDR loans in the period was $554. TDR balances are detailed in the TDR section of Note 4. “Portfolio Loans” in the notes to the consolidated financial statements included elsewhere in this report. As of June 30, 2019, there were no commitments to lend additional funds to borrowers with loans that have been classified as TDRs.

OREO. Real estate acquired as a result of foreclosure or by deed in lieu of foreclosure is classified as OREO until such time as it is sold. In addition, financial centers that were closed or consolidated that are held for sale are also classified as OREO. When real estate is transferred to OREO, it is recorded at fair value less costs to sell. If the fair value less cost to sell is less than the loan balance, the difference is charged against the allowance for loan losses. If the fair value of a financial center that we hold for sale is less than its prior carrying value, we recognize a charge included in other operating expense to reduce the recorded value of the investment to fair value, less costs to sell. After transfer to OREO, we regularly update the fair value of the properties. Subsequent declines in fair value are charged to current earnings and included in other non-interest expense as part of OREO expense. At

June 30, 2019, we had OREO properties with a recorded balance of $13,628, compared to $19,377 at December 31, 2018. The decrease was due to $7,853 in sales and $550 of write-downs to reflect the estimated current sale value of the properties. This was partially offset by OREO additions of $2,654 in the period.

Classification of Assets. Our policies, consistent with regulatory guidelines, provide for the classification of loans and other assets that are considered to be of lesser quality, such as “substandard”, “doubtful”, or “loss” assets. An asset is considered “substandard” if it is inadequately protected by the current net worth and paying capacity of the obligor or of the collateral pledged, if any. “Substandard” assets include those characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected. Assets classified as “doubtful” have all of the weaknesses inherent in those classified as “substandard” with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable. Assets classified as “loss” are those considered uncollectible and of such little value that their continuance as assets is not warranted and are charged-off. Assets that do not expose us to risk sufficient to warrant classification in one of the aforementioned categories, but which possess potential weaknesses that deserve our close attention, are designated as “special mention.” As of June 30, 2019, we had $118,940 of loans designated as “special mention” compared to $113,180 at December 31, 2018. The increase was mainly due to asset-based lending and equipment finance loans acquired in the Woodforest Acquisition.

Our determination as to the classification of our assets and the amount of our loan loss allowance are subject to review by our regulators, who can direct the charge-off of loans and order the establishment of additions to our allowance for loan losses. Management regularly reviews our asset portfolio to determine whether any assets require classification in accordance with applicable regulations. On the basis of management’s review of our assets at June 30, 2019, classified assets consisted of substandard loans of $311,418 and OREO of $13,628. Classified loans were $266,047 and OREO was $19,377 at December 31, 2018. The increase in classified loans in the six months ended June 30, 2019 was mainly related to wo asset-based lending relationships, one performing multi-family loan and various classified equipment finance loans.

Taxi Medallion Loans. At June 30, 2019, we had four taxi medallion relationships that totaled $32,677, or 0.16% of portfolio loans, compared to $34,063, or 0.18% of portfolio loans, at December 31, 2018. The decline in the balance between the periods of $1,386 was due to repayments. Our taxi medallion loans are mainly collateralized by New York City taxi medallions and other corporate and personal collateral of the borrowers. Two of the relationships are on non-accrual and totaled $13,573 at June 30, 2019, compared to $26,136 at December 31, 2018. The decline in non-accrual taxi medallion loans at June 30, 2019 was mainly due to the work-out of one of the non-accrual relationships. We continue to closely monitor the collateral values, cash flows and performance of each of these loans and are working with our borrowers to reduce these outstanding balances.

Allowance for Loan Losses. The allowance for loan losses is a reserve established through a provision for loan losses charged to expense, which represents management’s best estimate of probable losses that have been incurred within the existing portfolio of loans. The allowance, in the judgment of management, is necessary to reserve for estimated loan losses and risks inherent in the loan portfolio. Our allowance for loan loss methodology includes allowance allocations calculated in accordance with ASC Topic 310, *“Receivables”* and allowance allocations calculated in accordance with ASC Topic 450, *“Contingencies.”* Accordingly, the methodology is based on historical loss experience by type of credit and internal risk grade, specific homogeneous risk pools and specific loss allocations, with adjustments for current events and conditions. Our process for determining the appropriate level of allowance for loan losses is designed to account for credit deterioration as it occurs. The provision for loan losses reflects loan quality trends, including the levels of, and trends related to, non-accrual loans, past due loans, potential problem loans, classified and criticized loans and net charge-offs or recoveries and loan documentation exceptions, among other factors. See Note 5. “Allowance for Loan Losses” in the notes to consolidated financial statements included elsewhere in this report for further information regarding the allowance for loan losses.

The allowance for loan losses increased from $95,677 at December 31, 2018 to $104,664 at June 30, 2019, as the provision for loan losses exceeded net charge-offs by $5,704. The allowance for loan losses at June 30, 2019 represented 54.3% of non-performing loans and 0.51% of total portfolio loans. At December 31, 2018, the allowance for loan losses represented 56.7% of non-performing loans and 0.50% of total portfolio loans. Loans acquired in prior mergers and acquisitions were recorded with a fair value adjustment as of the acquisition date that included estimated lifetime credit losses and interest rate adjustments, among other factors (the “loan mark”). A substantial portion of portfolio loans covered by the loan mark continue to carry no allowance for loan losses. As a result, we believe our allowance for loan losses to portfolio loans may not be comparable to other banking entities that have not engaged in mergers and acquisitions.

Allocation of Allowance for Loan Losses. The following table sets forth the allowance for loan losses allocated by loan category, the total loan balances by category (excluding loans held for sale), and the percent of loans in each category to total loans at the dates indicated. The allowance for loan losses allocated to each category is not necessarily indicative of future losses in any particular category and does not restrict the use of the allowance to absorb losses in other categories.

	June 30, 2019			December 31, 2018		
	Allowance for loan losses	Loan balance	% of total originated loans	Allowance for loan losses	Loan balance	% of total originated loans
Traditional C&I	$ 17,649	$ 2,357,081	16.6%	$ 14,201	$ 2,321,131	18.0%
Asset-based lending	11,905	854,618	6.0	7,979	792,935	6.2
Payroll finance	1,391	203,581	1.4	2,738	227,452	1.8
Warehouse lending	843	1,221,458	8.6	2,800	782,646	6.1
Factored receivables	1,157	254,786	1.8	1,064	258,383	2.0
Equipment financing	14,284	885,678	6.2	12,450	913,751	7.1
Public sector finance	1,594	1,047,405	7.4	1,739	860,746	6.7
Commercial real estate	34,846	4,614,943	32.5	32,285	4,154,956	32.3
Multi-family	9,360	1,713,243	12.1	8,355	1,527,619	11.9
ADC	2,272	338,973	2.4	1,769	267,754	2.1
Residential mortgage	7,109	569,637	4.0	7,454	621,471	4.8
Consumer	2,254	135,430	1.0	2,843	153,811	1.0
Total	$ 104,664	$ 14,196,833	100.0%	$ 95,677	$ 12,882,655	100.0%

At June 30, 2019, the allocation of the allowance for loan losses increased in the traditional C&I, asset-based lending and equipment financing portfolios mainly due to net charge-offs, which caused an increase in our trailing loss factors. The change in warehouse lending and public sector finance portfolios reflects ongoing adjustments to our qualitative loss factors as these portfolios have not incurred delinquencies or charge-offs over the prior 12 quarters and trends and conditions in both sectors have remained strong. The fluctuation in the remaining portfolios is mainly due to the change in loan balances between the periods.

Impaired Loans. A loan is impaired when it is probable we will be unable to collect all amounts due according to the contractual terms of the loan agreement. Impaired loan values are based on one of three measures: (i) the present value of expected future cash flows discounted at the loan's effective interest rate; (ii) the loan's observable market price; or (iii) the fair value of the collateral if the loan is collateral dependent. If the measure of an impaired loan is less than its recorded investment, our practice is to write-down the loan against the allowance for loan losses so the recorded investment matches the impaired value of the loan. Impaired loans generally include a portion of non-performing loans and accruing and performing TDR loans. At June 30, 2019, we had $114,027 in impaired loans compared to $100,998 at December 31, 2018. The increase was mainly due to the two asset-based lending relationships discussed above.

PCI Loans. A PCI loan is an acquired loan that has demonstrated evidence of deterioration in credit quality subsequent to origination. As of June 30, 2019, the balance of PCI loans was $136,656, compared to $139,795 at December 31, 2018 and is mainly comprised of loans acquired in the Astoria Merger. The decrease from December 31, 2018 was mainly from repayments and was partially offset by PCI loans acquired in the Woodforest Acquisition. PCI loans are accounted for under applicable guidance, which results in an accretable yield that represents the amount of expected cash flows that exceeds the initial investment in the loan. See the tables of loans evaluated for impairment by segment and changes in accretable yield for PCI loans in Note 4. "Portfolio Loans" in the notes to consolidated financial statements included elsewhere in this report for additional information.

Provision for Loan Losses. We recorded $11,500 in loan loss provision for the three months ended June 30, 2019, compared to $13,000 for the three months ended June 30, 2018. Net charge-offs for the three months ended June 30, 2019 were $5,796, or 0.12% of average loans on an annualized basis, compared to net charge-offs of $9,066, or 0.18% of average loans on an annualized basis for the three months ended June 30, 2018. In the six months ended June 30, 2019, provision for loan losses was $21,700, compared to $26,000 for the six months ended June 30, 2018. Net charge-offs for the six months ended June 30, 2019 were $12,713, compared to $17,881 for the six months ended June 30, 2018. The decline in provision expense was mainly due to lower net charge-offs.

Changes in Financial Condition between June 30, 2019 and December 31, 2018

Total assets decreased $1,145,762 to $30,237,545 at June 30, 2019, compared to $31,383,307 at December 31, 2018. Components of the change in total assets were:

- Loans held for sale declined by $1,538,758, mainly due to the sale of residential mortgage loans and continued run-off and repayments.
- Residential mortgage loans held in our loan portfolio declined by $169,559 to $2,535,667 at June 30, 2019 compared to $2,705,226 at December 31, 2018. This decline was net of $128,833 of residential mortgage loans that were held for sale at December 31, 2018 that were transferred to portfolio loans at June 30, 2019. The carrying value of the loans transferred

from held for sale to portfolio loans approximated their fair value. The decline of residential mortgage loans due to repayments was $298,392 in the six months ended June 30, 2019.

- Total investment securities declined by $808,315 to $5,858,865 at June 30, 2019, compared to $6,667,180 at December 31, 2018. We adopted ASU 2017-12, "*Derivatives and Hedging (Topic 815) - Targeted Improvements to Accounting for Hedging Activities,*" which allowed us to reclassify a debt security from held to maturity to available for sale if the debt security was eligible to be hedged under the last-of-layer method in accordance with the accounting standard. Generally, this included debt securities that were pre-payable, including mortgage-backed securities, and debt securities that are callable by the issuer, which are applicable to many of our state and local government debt securities. We transferred held to maturity securities with a book value of $720,440 and a fair value of $708,627 at December 31, 2018 to available for sale effective January 1, 2019. In the first quarter of 2019, we sold securities with a book value of $738,751 to fund a portion of the Woodforest Acquisition and to reduce lower yielding securities as a percentage of total assets. Investment securities were 19.4% of total assets at June 30, 2019, compared to 21.2% at December 31, 2018.
- Commercial loans increased by $1,360,163 to $17,567,844 at June 30, 2019, compared to $16,207,681 at December 31, 2018. The increase was due to organic growth and the Woodforest Acquisition.
- Other assets increased by $242,921 to $675,161 at June 30, 2019, compared to $432,240 at December 31, 2018. The components of other assets are as follows:

	June 30, 2019	December 31, 2018
Low income housing tax credit investments	$ 231,395	$ 181,498
Right of use asset for operating leases	118,036	—
Cash on deposit as swap collateral / settlement	83,839	19,454
Account receivable for redeemed bank owned life insurance, pending settlement	60,491	—
Other items	181,400	231,288
	$ 675,161	$ 432,240

The table above includes the following items:

- We have invested in various limited partnerships that sponsor affordable housing utilizing low income housing tax credits. These investments assist us in achieving our goals associated with the Community Reinvestment Act.
- The right of use assets for operating leases was established January 1, 2019 in connection with the new leasing accounting standard disclosed in Note 9. "Leases", which requires all operating leases to be recorded in the consolidated balance sheets.
- Cash on deposit as swap collateral / settlement reflects the change in value since date of inception of our back-to-back commercial client loan swap program and positions, which are discussed in Note 10. "Derivatives".
- Accounts receivable for redeemed bank owned life insurance pending settlement is related to a partial redemption of bank owned life insurance acquired in the Astoria Merger. Proceeds for the balance shown above were received July 1, 2019.
- Other items include income tax balances, prepaid insurance, prepaid property taxes, prepaid maintenance, other accounts receivable and miscellaneous assets.

Total liabilities decreased $1,176,067 to $25,778,387 at June 30, 2019, compared to $26,954,454 at December 31, 2018. This decrease was mainly due to the following:

- FHLB borrowings decreased $1,072,548 to $3,766,224 at June 30, 2019, compared to $4,838,772 at December 31, 2018. The decrease in FHLB borrowings was mainly the result of the residential mortgage loans and securities sales discussed above, as proceeds from the sales were mainly used to pay down borrowings.
- Other liabilities increased $169,529 to $622,761 at June 30, 2019, compared to $453,232 at December 31, 2018. The increase was mainly due to the adoption of the new leasing standard disclosed in Note 9. "Leases", which requires all operating leases to be recorded in the consolidated balance sheets.
- Total deposits declined $265,684 to $20,948,464 at June 30, 2019, compared to $21,214,148 at December 31, 2018. Our core retail, commercial and municipal transaction, money market, savings accounts and certificates of deposit accounts were $19,893,875 at June 30, 2019, which represented 95.0% of our total deposit balances.
- Municipal deposits declined $51,846 to $1,699,824 at June 30, 2019, compared to $1,751,670 at December 31, 2018. The decrease was mainly due to seasonal factors as municipal deposits typically reach a low in the second quarter.
- Brokered deposits declined $114,747 to $1,043,076 at June 30, 2019, compared to $1,157,823 at December 31, 2018. The decline was mainly due to the decrease in earning assets. Our loans to deposits ratio was 97.2% at June 30, 2019.

Supplemental Reporting of Non-GAAP Financial Measures

The non-GAAP financial measures presented below are used by our management and our Board of Directors on a regular basis in addition to our GAAP results to facilitate the assessment of our financial performance and to assess our performance compared to our annual budget and strategic plans. These non-GAAP financial measures complement our GAAP reporting and are presented below to provide investors, analysts, regulators and others information that we use to manage and evaluate our performance each period. This information supplements our GAAP reported results, and should not be viewed in isolation from, or as a substitute for, our GAAP results. Accordingly, this financial information should be read in conjunction with our consolidated financial statements, and notes thereto for the quarter ended June 30, 2019, included elsewhere in this report, and the year ended December 31, 2018, included in the 2018 Form 10-K.

	June 30,	
	2019	2018
The following table shows the reconciliation of stockholders' equity to tangible common equity and the tangible common equity ratio [1]:		
Total assets	$ 30,237,545	$ 31,463,077
Goodwill and other intangibles	(1,777,748)	(1,754,418)
Tangible assets	28,459,797	29,708,659
Stockholders' equity	4,459,158	4,352,735
Preferred stock	(138,011)	(138,828)
Goodwill and other intangibles	(1,777,748)	(1,754,418)
Tangible common stockholders' equity	2,543,399	2,459,489
Common stock outstanding at period end	205,187,243	225,470,254
Common stockholders' equity as a % of total assets	14.29%	13.39%
Book value per common share	$ 21.06	$ 18.69
Tangible common equity as a % of tangible assets	8.94%	8.28%
Tangible book value per common share	$ 12.40	$ 10.91

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
The following table shows the reconciliation of reported return on average tangible assets and adjusted return on average tangible assets [4]:				
Average assets	$ 29,666,951	$ 30,994,904	$ 30,201,974	$ 30,509,306
Average goodwill and other intangibles	(1,780,885)	(1,757,296)	(1,768,763)	(1,744,197)
Average tangible assets	27,886,066	29,237,608	28,433,211	28,765,109
Net income available to common stockholders	94,473	112,245	193,921	209,118
Net income, if annualized	378,930	450,213	391,056	421,702
Reported return on average tangible assets	1.36%	1.54%	1.38%	1.47%
Adjusted net income (non-GAAP)	$ 105,124	$ 112,868	$ 212,408	$ 214,751
Annualized adjusted net income	421,651	452,712	428,337	433,061
Adjusted return on average tangible assets (non-GAAP)	1.51%	1.55%	1.51%	1.51%

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See legend beginning on page 75.

	For the three months ended June 30, 2019	For the three months ended June 30, 2018	For the six months ended June 30, 2019	For the six months ended June 30, 2018
The following table shows the reconciliation of reported net income and reported EPS (GAAP) to adjusted net income available to common stockholders (non-GAAP) and adjusted diluted EPS (non-GAAP)[2]:				
Income before income tax expense	$ 120,457	$ 146,156	$ 250,368	$ 274,484
Income tax expense	23,997	31,915	52,471	61,371
Net income (GAAP)	96,460	114,241	197,897	213,113
Adjustments:				
Net loss on sale of securities	528	425	13,712	5,846
Net (gain) on sale of fixed assets	—	(11,797)	—	(11,797)
Impairment related to financial centers and real estate consolidation strategy	14,398	—	14,398	—
Net (gain) on sale of residential mortgage loans	—	—	(8,313)	—
Charge for asset write-downs, retention and severance	—	13,132	3,344	13,132
(Gain) on extinguishment of borrowings	—	—	(46)	—
Amortization of non-compete agreements and acquired customer lists	200	295	441	589
Total pre-tax adjustments	15,126	2,055	23,536	7,770
Adjusted pre-tax income	135,583	148,211	273,904	282,254
Adjusted income tax expense	28,472	33,347	57,520	63,508
Adjusted net income (non-GAAP)	107,111	114,864	216,384	218,746
Preferred stock dividend	1,987	1,996	3,976	3,995
Adjusted net income available to common stockholders (non-GAAP)	$ 105,124	$ 112,868	$ 212,408	$ 214,751
Weighted average diluted shares	207,376,239	225,621,856	210,419,425	225,444,579
Diluted EPS as reported (GAAP)	$ 0.46	$ 0.50	$ 0.92	$ 0.93
Adjusted diluted EPS (non-GAAP)	0.51	0.50	1.01	0.95

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
The following table shows the reconciliation of reported return on average tangible common stockholders' equity and adjusted return on average tangible common stockholders' equity [5]:				
Average stockholders' equity	$ 4,423,910	$ 4,305,928	$ 4,419,703	$ 4,275,097
Average preferred stock	(138,142)	(138,958)	(138,245)	(139,054)
Average goodwill and other intangibles	(1,780,885)	(1,757,296)	(1,768,763)	(1,744,197)
Average tangible common stockholders' equity	2,504,883	2,409,674	2,512,695	2,391,846
Net income available to common stockholders	94,473	112,245	193,921	209,118
Net income, if annualized	378,930	450,213	391,056	421,702
Reported return on average tangible common stockholders' equity	15.13%	18.68%	15.56%	17.63%
Adjusted net income (non-GAAP)	$ 105,124	$ 112,868	$ 212,408	$ 214,751
Annualized adjusted net income	421,651	452,712	428,337	433,061
Adjusted return on average tangible common stockholders' equity (non-GAAP)	16.83%	18.79%	17.05%	18.11%

See legend beginning on page 74.

	For the three months ended June 30,		For the six months ended June 30,	
	2019	2018	2019	2018
The following table shows the reconciliation of the reported operating efficiency ratio and adjusted operating efficiency ratio [3]:				
Net interest income	$ 231,839	$ 246,216	$ 467,345	$ 480,584
Non-interest income	27,058	37,868	46,655	56,575
Total net revenue	258,897	284,084	514,000	537,159
Tax equivalent adjustment on securities	3,834	4,094	7,781	8,165
Net (gain) on sale of fixed assets	—	(11,797)	—	(11,797)
Net loss on sale of securities	528	425	13,712	5,846
Net (gain) on sale of residential mortgage loans	—	—	(8,313)	—
Adjusted total revenue (non-GAAP)	263,259	276,806	527,180	539,373
Non-interest expense	126,940	124,928	241,932	236,675
Impairment related to financial centers and real estate consolidation strategy	(14,398)	—	(14,398)	—
Charge for asset write-downs, systems integration, retention and severance	—	(13,132)	(3,344)	(13,132)
Gain on extinguishment of borrowings	—	—	46	—
Amortization of intangible assets	(4,785)	(5,865)	(9,611)	(11,917)
Adjusted non-interest expense (non-GAAP)	$ 107,757	$ 105,931	$ 214,625	$ 211,626
Reported operating efficiency ratio	49.0%	44.0%	47.1%	44.1%
Adjusted operating efficiency ratio (non-GAAP)	40.9	38.3	40.7	39.2

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See legend beginning below.

[1] Common stockholders' equity as a percentage of total assets, book value per common share, tangible common equity as a percentage of tangible assets and tangible book value per common share provides information to help assess our capital position and financial strength. We believe tangible book value measures improve comparability to other banking organizations that have not engaged in acquisitions that have resulted in the accumulation of goodwill and other intangible assets.

[2] Adjusted net income available to common stockholders and adjusted EPS present a summary of our earnings which includes adjustments to exclude certain revenues and expenses (generally associated with discrete merger transactions and non-recurring strategic plans) to help in assessing our recurring profitability. For the purpose of calculating adjusted earnings and adjusted earnings per share, income tax expense is calculated using the estimated effective income tax rate for the full year in effect for the particular period end, as we believe this is a more accurate presentation of run rate income tax expense and earnings.

[3] The reported operating efficiency ratio is a non-GAAP measure calculated by dividing our GAAP non-interest expense by the sum of our GAAP net interest income plus GAAP non-interest income. The adjusted operating efficiency ratio is a non-GAAP measure calculated by dividing non-interest expense adjusted for intangible asset amortization and certain expenses generally associated with discrete merger transactions and non-recurring strategic plans by the sum of net interest income plus non-interest income plus the tax equivalent adjustment on securities income and elimination of the impact of gain or loss on sale of securities. The adjusted operating efficiency ratio is a measure we use to assess our operating performance.

[4] Reported return on average tangible assets and adjusted return on average tangible assets measures provide information to help assess our profitability.

[5] Reported return on average tangible common stockholders' equity and the adjusted return on average tangible common stockholders' equity measures provide information to evaluate the use of our tangible common equity.

Liquidity and Capital Resources

Capital. Stockholders' equity was $4,459,158 as of June 30, 2019, an increase of $30,305 relative to December 31, 2018. The increase was mainly the result of net income of $197,897, an increase in accumulated other comprehensive gain of $106,291, which was primarily due to an increase in the fair value of our available for sale securities portfolio, and an increase of stock option exercises and stock-based compensation, which totaled $1,889. These increases were partially offset by the repurchase of 12,504,648 common shares at a cost of $247,203 as well as declared dividends of $29,690 on common stock and $4,388 on preferred stock.

We paid dividends of $0.07 per common share in each quarter of 2018 and the first two quarters of 2019. Most recently, our Board of Directors declared a dividend of $0.07 per common share on July 24, 2019, which is payable August 19, 2019 to our holders as of the record date of August 5, 2019. We paid dividends of $16.25 per preferred share in each quarter of 2018 and the first two quarters of 2019. In addition, on July 15, 2019, we paid a dividend of $16.25 per preferred share.

Basel III Capital Rules. The Basel III Capital Rules were fully phased in on January 1, 2019. The rules are discussed in Note 16. "Stockholders' Equity - Regulatory Capital Requirements" in the notes to consolidated financial statements included elsewhere in this report.

Liquidity. As discussed in our 2018 Form 10-K, our liquidity position is continuously monitored and we make adjustments to the balance between sources and uses of funds as deemed appropriate. Liquidity risk management is an important element in our asset / liability management process. We regularly model liquidity stress scenarios to assess potential liquidity outflows or funding problems resulting from economic activity, volatility in the financial markets, unexpected credit events or other significant occurrences. These scenarios are incorporated into our contingency funding plan, which provides the basis for the identification of our liquidity needs. As of June 30, 2019, our management is not aware of any events that are reasonably likely to have a material adverse effect on our liquidity, capital resources or operations. In addition, management is not aware of any regulatory recommendations regarding liquidity, including the Basel III liquidity framework, which, if implemented, would have a material adverse effect on us.

At June 30, 2019, the Bank had $343,368 in cash and cash equivalents on hand and unused borrowing capacity at the FHLB of $3,695,570. In addition, the Bank may purchase federal funds from other institutions and enter into additional repurchase agreements. The Bank had $3,630,928 of unencumbered securities available to pledge as collateral as of June 30, 2019. The Bank was required to maintain $87,675 of cash on hand or on deposit with the FRB to meet regulatory reserve and clearing requirements at June 30, 2019.

We are a bank holding company and do not conduct operations. Our primary sources of liquidity are dividends received from the Bank and borrowings from outside sources. Banking regulations may limit the amount of dividends that may be paid by the Bank. At June 30, 2019, the Bank had capacity to pay approximately $270,000 of dividends to us and maintain its "well-capitalized" status under regulatory guidelines and internal capital management policies and procedures. However, based on regulatory limits determined by the amount of net profits for the current fiscal year and the retained net profits of the preceding two fiscal years, the Bank had capacity to pay aggregate dividends of up to $165,000 to us without prior regulatory approval.

We had cash on hand of $40,745 at June 30, 2019. We received dividends from the Bank of $300,000 in the six months ended June 30, 2019. In the first six months of 2019, we had used $247,203 for common stock repurchases, $34,078 was used for dividends and $7,000 was used to repurchase principal amount, plus interest, of our outstanding 3.50% Senior Notes that we assumed in the Astoria Merger. Since the beginning of the fourth quarter of 2018, we have repurchased 21,619,419 shares of our common stock.

Effective September 2, 2018, we renewed our $35,000 credit facility with a financial institution, which is more fully described in Note 8. “Borrowings” in the notes to consolidated financial statements included elsewhere in this report. The use of proceeds are for general corporate purposes. The credit facility has no outstanding balance and requires us and the Bank to maintain certain ratios related to capital, non-performing assets to capital, reserves to non-performing loans and debt service coverage. We and the Bank were in compliance with all requirements at June 30, 2019.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Management believes that our most significant form of market risk is interest rate risk. The general objective of our interest rate risk management is to determine the appropriate level of risk given our business strategy, and then manage that risk in a manner that is consistent with our policy to limit the exposure of our net interest income to changes in market interest rates. The Bank’s Asset/Liability Management Committee (“ALCO”), which consists of certain members of senior management, evaluates the interest rate risk inherent in certain assets and liabilities, our operating environment, and capital and liquidity requirements, and modifies our lending, investing and deposit gathering strategies accordingly. A committee of our Board of Directors reviews ALCO’s activities and strategies, the effect of those strategies on our net interest margin, and the effect that changes in market interest rates would have on the economic value of our loan and securities portfolios, as well as the intrinsic value of our deposits and borrowings.

Management actively evaluates interest rate risk in connection with our lending, investing, and deposit activities. Management emphasizes the origination of commercial real estate loans, C&I loans, and consumer loans. We also invest in shorter-term securities, which generally have lower yields compared to longer-term investments. Shortening the average maturity of our interest earning assets by increasing our investments in shorter-term loans and securities may help us to better match the maturities and interest rates of our assets and liabilities, thereby reducing the exposure of our net interest income to changes in market interest rates. These strategies may adversely affect net interest income due to lower initial yields on these investments in comparison to longer-term, fixed-rate loans and investments.

Management monitors interest rate sensitivity primarily through the use of a model that simulates net interest income (“NII”) under varying interest rate assumptions. Management also evaluates this sensitivity using a model that estimates the change in our and the Bank’s economic value of equity (“EVE”) over a range of interest rate scenarios. EVE is the present value of expected cash flows from assets, liabilities and off-balance sheet contracts. The model assumes estimated loan prepayment rates, reinvestment rates and deposit decay rates that management believes is reasonable, based on historical experience during prior interest rate changes.

Estimated Changes in EVE and NII. The table below sets forth, as of June 30, 2019, the estimated changes in our (i) EVE that would result from the designated instantaneous changes in the forward rate curves; and (ii) NII that would result from the designated instantaneous changes in the U.S. Treasury yield curve. Computations of prospective effects of hypothetical interest rate changes are based on numerous assumptions including relative levels of market interest rates, loan prepayments and deposit decay, and should not be relied on as indicative of actual results.

Interest rates	Estimated	Estimated change in EVE		Estimated	Estimated change in NII	
(basis points)	EVE	Amount	Percent	NII	Amount	Percent
			(Dollars in thousands)			
+300	$ 4,244,911	$ (76,428)	(1.8)%	$ 1,052,610	$ 120,442	12.9 %
+200	4,352,843	31,504	0.7	1,014,812	82,644	8.9
+100	4,406,456	85,117	2.0	973,326	41,158	4.4
0	4,321,339	—	—	932,168	—	—
-100	4,022,959	(298,380)	(6.9)	878,353	(53,815)	(5.8)
-200	3,603,120	(718,219)	(16.6)	825,080	(107,088)	(11.5)

The table above indicates that at June 30, 2019, in the event of an immediate 200 basis point increase in interest rates, we would expect to experience a 0.7% increase in EVE and a 8.9% increase in NII.

Certain shortcomings are inherent in the methodology used in the above interest rate risk measurements. Modeling changes in EVE and NII require making certain assumptions that may or may not reflect the manner in which actual yields and costs respond to changes in market interest rates. The EVE and NII table presented above assumes that the composition of our interest-rate sensitive assets and liabilities existing at the beginning of a period remains constant over the period being measured and, accordingly, the data does not reflect any actions management may undertake in response to changes in interest rates. The table also assumes that a particular change in interest rates is reflected uniformly across the yield curve regardless of the duration to maturity or the re-pricing characteristics of specific assets and liabilities. Accordingly, although the EVE and NII table provides an indication of our sensitivity to interest rate changes at a particular point in time, such measurements are not intended to and do not provide a precise forecast of the effect of changes that market interest rates may have on our net interest income. Actual results will likely differ.

During the six months ended June 30, 2019, the federal funds target rate remained unchanged at 2.25 - 2.50%. U.S. Treasury yields with two year maturities decreased 73 basis points from 2.48% to 1.75% over the six months ended June 30, 2019, while the yield on U.S. Treasury 10-year notes decreased 69 basis points from 2.69% to 2.00% over the same six-month period. The decrease in interest rates on longer-term maturities relative to the greater decrease in interest rates on short-term maturities resulted in a steeper 2-10 year U.S. Treasury yield curve at June 30, 2019 compared to December 31, 2018. At its June 2019 meeting, the Federal Open Markets Committee (the "FOMC") stated that in determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric two percent inflation objective. However, should economic conditions improve at a faster pace than anticipated, the FOMC could resume increasing the federal funds target rate. This could cause the shorter end of the yield curve to rise disproportionately relative to the longer end, thereby resulting in an even flatter yield curve, which may result in compression of our net interest income.

Item 4. Controls and Procedures

The Company's management, including the principal executive officer and principal financial officer, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective for the purpose of ensuring that the information required to be disclosed in our reports filed with the SEC under the Securities Exchange Act of 1934, as amended, is: (i) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms; and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Controls

There were no changes in the Company's internal controls over financial reporting during the three months ended June 30, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal controls over financial reporting.

PART II

Item 1. Legal Proceedings

The "Litigation" section of Note 17. "Commitments and Contingencies" in the notes to consolidated financial statements included in Part I, Item 1 is incorporated herein by reference.

Item 1A. Risk Factors

For information regarding factors that could affect our business, results of operations, financial condition and liquidity, see the risk factors discussed under Part I, Item 1A of our 2018 Form 10-K. There have been no material changes in these risk factors.

The risks described in our 2018 Form 10-K are not the only risks that we encounter. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, results of operations, financial condition and/or liquidity.

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

Issuer Purchases of Equity Securities

The following table reports information regarding purchases of our common stock during the second quarter of 2019 and the stock repurchase plan approved by the Board:

	Total Number of shares (or units) purchased	Average price paid per share (or unit)	Total number of shares (or units) purchased as part of publicly announced plans or programs [1]	Maximum number (or approximate dollar value) of shares (or units) that may yet be purchased under the plans or programs [1]
Period (2019)				
April 1 — April 30	—	$ —	—	12,882,634
May 1 — May 31	3,847,433	20.71	3,847,433	9,035,201
June 1 — June 30	654,620	20.19	654,620	8,380,581
Total	4,502,053	$ 20.64	4,502,053	

[1] On April 24, 2019, the Board of Directors increased the authorized repurchase plan by 10,000,000 common shares, or 4.9% of the outstanding common shares excluding shares of treasury stock at June 30, 2019. Repurchases may be made at management's discretion through open market purchases and block trades in accordance with SEC and regulatory requirements. Any shares repurchased will be held as Treasury stock and made available for general corporate purposes.

Item 3. Defaults Upon Senior Securities

Not Applicable.

Item 4. Mine Safety Disclosure

Not Applicable.

Item 5. Other Information

Not Applicable.

Item 6. Exhibits

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q filed November 2, 2018).
3.2	Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on May 24, 2017 (File No. 001-35385)).
4.1	Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on November 1, 2013 (File No. 001-35385)).
4.2	Form of Corporate Governance Agreement (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on August 7, 2012 (File No. 001-35385)).
4.3	Deposit Agreement and specimen receipt attached as Exhibit A thereto, dated as of March 19, 2013 among Astoria Financial Corporation, Computershare Shareowner Services, LLC, as Depositary, and the holders of the depositary receipts (incorporated by reference to Exhibit 4.3 of the Company's Registration Statement on Form S-4 filed on April 5, 2017 (File No. 333-217153)).
4.4	First Amendment to the Deposit Agreement, dated as of October 2, 2017, among Sterling Bancorp, Computershare Shareowner Services, LLC, as Depositary, and the holders of the depositary receipts (incorporated by reference to Exhibit 4.4 of the Company's Quarterly Report on Form 10-Q filed on November 3, 2017 (File No. 001-35385)).
4.5	Certificate of Designations of 6.50% Non-Cumulative, Perpetual Preferred Stock, Series A of Sterling Bancorp (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on October 2, 2017 (File No. 001-35385)).
4.6	Form of Certificate of 6.5% Non-Cumulative Perpetual Preferred Stock, Series A (incorporated by reference to Exhibit 4.2 of the Company's Form 8-A12B filed on September 28, 2017 (File No. 001-35385)).
10.1	Employment Agreement by and among the Company, the Bank and Jack L. Kopnisky, dated April 3, 2019 (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on April 5, 2019)
10.2	Employment Agreement by and among the Company, the Bank and Luis Massiani, dated April 3, 2019 (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on April 5, 2019)
10.3	Employment Agreement by and among the Company, the Bank and Rodney Whitwell, dated April 3, 2019 (incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed on April 5, 2019)
10.4	Employment Agreement by and among the Company, the Bank and Michael E. Finn, dated April 3, 2019 (incorporated by reference to Exhibit 10.4 of the Company's Current Report on Form 8-K filed on April 5, 2019)
10.5	Employment Agreement by and among the Company, the Bank and James P. Blose, dated April 3, 2019 (incorporated by reference to Exhibit 10.5 of the Company's Current Report on Form 8-K filed on April 5, 2019)
10.6	Employment Agreement by and among the Company, the Bank and Thomas Geisel, dated April 3, 2019 (incorporated by reference to Exhibit 10.6 of the Company's Quarterly Report on Form 10-Q filed on May 3, 2019)
10.7	Employment Agreement by and among the Company, the Bank and Brian Edwards, dated April 3, 2019 (incorporated by reference to Exhibit 10.7 of the Company's Quarterly Report on Form 10-Q filed on May 3, 2019)
10.8	Employment Agreement by and among the Company, the Bank and Javier Evans, dated April 3, 2019 (incorporated by reference to Exhibit 10.8 of the Company's Quarterly Report on Form 10-Q filed on May 3, 2019)
31.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.0	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension schema Document

101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Calculation Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

The Company agrees to furnish to the SEC, upon request, any instrument with respect to long-term debt that the Company has not filed as an exhibit pursuant to the exemption provided by Item 601(b)(4)(iii)(A) of Regulation S-K.

SIGNATURES

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

Sterling Bancorp

Date: August 2, 2019	By: */s/ Jack Kopnisky* Jack Kopnisky President, Chief Executive Officer and Director (Principal Executive Officer)
Date: August 2, 2019	By: */s/ Luis Massiani* Luis Massiani Senior Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

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Section 2: EX-31.1 (EXHIBIT 31.1)

Exhibit 31.1

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

I, Jack Kopnisky, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Sterling Bancorp;
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 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 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: August 2, 2019

By: */s/ Jack Kopnisky*
Jack Kopnisky
President, Chief Executive Officer and Director
(Principal Executive Officer)

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Section 3: EX-31.2 (EXHIBIT 31.2)

Exhibit 31.2

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

I, Luis Massiani, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Sterling Bancorp;

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 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 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: August 2, 2019

By: */s/ Luis Massiani*
Luis Massiani
Senior Executive Vice President
Chief Financial Officer
Principal Accounting Officer
(Principal Financial Officer)

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Section 4: EX-32.0 (EXHIBIT 32.0)

Exhibit 32

Certification of Principal Executive Officer and Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Jack Kopnisky, Chief Executive Officer and Luis Massiani, Chief Financial Officer of Sterling Bancorp (the “Company”) each certify in his capacity as an officer of the Company that he has reviewed the Quarterly Report on Form 10-Q for the six months ended June 30, 2019 and that to the best of his knowledge:

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

Date: August 2, 2019

By: */s/ Jack Kopnisky*
Jack Kopnisky
President, Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 2, 2019

By: /s/ Luis Massiani
Luis Massiani
Senior Executive Vice President
Chief Financial Officer
Principal Accounting Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to Sterling Bancorp and will be retained by Sterling Bancorp and furnished to the Securities and Exchange Commission or its staff upon request.

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