CULLEN/FROST BANKERS, INC.
Form 10-Q
July 26, 2018
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United States
Securities and Exchange Commission
Washington, D.C. 20549
Form 10-Q
ý Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the quarterly period ended: June 30, 2018
Or
¨ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from to
Commission file number: 001-13221
Cullen/Frost Bankers, Inc.
(Exact name of registrant as specified in its charter)

Texas	74-1751768
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
100 W. Houston Street, San Antonio, Texas	78205
(Address of principal executive offices)	(Zip code)

(210) 220-4011
(Registrant's telephone number, including area code)
N/A
(Former name, former address and former fiscal year, if changed since last report)
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ý No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý 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 ý	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	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 Act). Yes ¨ No ý
As of July 19, 2018 there were 63,907,784 shares of the registrant's Common Stock, $.01 par value, outstanding.

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Part I. Financial Information
Item 1. Financial Statements (Unaudited)
Cullen/Frost Bankers, Inc.
Consolidated Balance Sheets
(Dollars in thousands, except per share amounts)

	June 30, 2018	December 31, 2017
Assets:		
Cash and due from banks	$509,191	$545,542
Interest-bearing deposits	2,476,587	4,347,538
Federal funds sold and resell agreements	329,692	159,967
Total cash and cash equivalents	3,315,470	5,053,047
Securities held to maturity, at amortized cost	1,236,511	1,432,098
Securities available for sale, at estimated fair value	10,717,743	10,489,009
Trading account securities	21,334	21,098
Loans, net of unearned discounts	13,711,762	13,145,665
Less: Allowance for loan losses	(150,226)	(155,364)
Net loans	13,561,536	12,990,301
Premises and equipment, net	539,861	520,958
Goodwill	654,952	654,952
Other intangible assets, net	4,316	5,073
Cash surrender value of life insurance policies	181,756	180,477
Accrued interest receivable and other assets	453,735	400,867
Total assets	$30,687,214	$31,747,880
Liabilities:		
Deposits:		
Non-interest-bearing demand deposits	$10,525,998	$11,197,093
Interest-bearing deposits	15,470,501	15,675,296
Total deposits	25,996,499	26,872,389
Federal funds purchased and repurchase agreements	977,470	1,147,824
Junior subordinated deferrable interest debentures, net of unamortized issuance costs	136,213	136,184
Subordinated notes, net of unamortized issuance costs	98,630	98,552
Accrued interest payable and other liabilities	168,890	195,068
Total liabilities	27,377,702	28,450,017
Shareholders' Equity:		
Preferred stock, par value $0.01 per share; 10,000,000 shares authorized; 6,000,000 Series A shares ($25 liquidation preference) issued at June 30, 2018 and December 31, 2017	144,486	144,486
Common stock, par value $0.01 per share; 210,000,000 shares authorized; 64,236,306 shares issued at both June 30, 2018 and December 31, 2017	642	642
Additional paid-in capital	960,121	953,361
Retained earnings	2,297,099	2,187,069
Accumulated other comprehensive income, net of tax	(63,319)	79,512
Treasury stock, at cost; 332,722 shares at June 30, 2018 and 760,720 shares at December 31, 2017	(29,517)	(67,207)
Total shareholders' equity	3,309,512	3,297,863
Total liabilities and shareholders' equity	$30,687,214	$31,747,880

See Notes to Consolidated Financial Statements.

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Cullen/Frost Bankers, Inc.
Consolidated Statements of Income
(Dollars in thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Interest income:				
Loans, including fees	$164,133	$131,073	$315,335	$253,673
Securities:				
Taxable	21,188	23,527	41,746	48,829
Tax-exempt	57,298	55,435	114,009	112,382
Interest-bearing deposits	13,917	9,076	28,011	15,912
Federal funds sold and resell agreements	1,415	163	2,176	270
Total interest income	257,951	219,274	501,277	431,066
Interest expense:				
Deposits	17,575	2,173	28,213	4,041
Federal funds purchased and repurchase agreements	631	187	1,265	326
Junior subordinated deferrable interest debentures	1,311	962	2,453	1,870
Other long-term borrowings	1,164	1,164	2,328	1,532
Total interest expense	20,681	4,486	34,259	7,769
Net interest income	237,270	214,788	467,018	423,297
Provision for loan losses	8,251	8,426	15,196	16,378
Net interest income after provision for loan losses	229,019	206,362	451,822	406,919
Non-interest income:				
Trust and investment management fees	29,121	27,727	58,708	54,197
Service charges on deposit accounts	21,142	21,198	41,985	41,967
Insurance commissions and fees	10,556	9,728	26,536	23,549
Interchange and debit card transaction fees	3,446	5,692	6,604	11,266
Other charges, commissions and fees	9,273	9,898	18,280	19,490
Net gain (loss) on securities transactions	(60)	(50)	(79)	(50)
Other	11,588	6,887	24,477	14,361
Total non-interest income	85,066	81,080	176,511	164,780
Non-interest expense:				
Salaries and wages	85,204	80,995	171,887	163,507
Employee benefits	17,907	18,198	39,902	39,823
Net occupancy	19,455	19,153	39,195	38,390
Technology, furniture and equipment	20,459	18,250	40,138	36,240
Deposit insurance	4,605	5,570	9,484	10,485
Intangible amortization	369	438	757	896
Other	40,909	45,447	84,156	86,625
Total non-interest expense	188,908	188,051	385,519	375,966
Income before income taxes	125,177	99,391	242,814	195,733
Income taxes	13,836	13,838	24,993	25,239
Net income	111,341	85,553	217,821	170,494
Preferred stock dividends	2,015	2,015	4,031	4,031
Net income available to common shareholders	$109,326	$83,538	$213,790	$166,463
Earnings per common share:				
Basic	$1.70	$1.30	$3.33	$2.59

Diluted	1.68	1.29	3.30	2.57

See Notes to Consolidated Financial Statements.

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Cullen/Frost Bankers, Inc.
Consolidated Statements of Comprehensive Income (Loss)
(Dollars in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	$111,341	$85,553	$217,821	$170,494
Other comprehensive income (loss), before tax:				
Securities available for sale and transferred securities:				
Change in net unrealized gain/loss during the period	(11,884)	90,390	(190,788)	124,201
Change in net unrealized gain on securities transferred to held to maturity	(2,041)	(3,860)	(4,660)	(10,146)
Reclassification adjustment for net (gains) losses included in net income	60	50	79	50
Total securities available for sale and transferred securities	(13,865)	86,580	(195,369)	114,105
Defined-benefit post-retirement benefit plans:				
Change in the net actuarial gain/loss	—	—	—	—
Reclassification adjustment for net amortization of actuarial gain/loss included in net income as a component of net periodic cost (benefit)	1,251	1,358	2,501	2,715
Total defined-benefit post-retirement benefit plans	1,251	1,358	2,501	2,715
Other comprehensive income (loss), before tax	(12,614)	87,938	(192,868)	116,820
Deferred tax expense (benefit)	(2,649)	30,778	(40,502)	40,887
Other comprehensive income (loss), net of tax	(9,965)	57,160	(152,366)	75,933
Comprehensive income (loss)	$101,376	$142,713	$65,455	$246,427

See Notes to Consolidated Financial Statements.

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Cullen/Frost Bankers, Inc.
Consolidated Statements of Changes in Shareholders' Equity
(Dollars in thousands, except per share amounts)

	Six Months Ended June 30,	
	2018	2017
Total shareholders' equity at beginning of period	$3,297,863	$3,002,528
Cumulative effect of accounting change	(2,285)	—
Total shareholders' equity at beginning of period, as adjusted	3,295,578	3,002,528
Net income	217,821	170,494
Other comprehensive income (loss)	(152,366)	75,933
Stock option exercises/stock unit conversions (428,599 shares in 2018 and 752,075 shares in 2017)	25,448	44,149
Stock compensation expense recognized in earnings	6,760	6,291
Purchase of treasury stock (601 shares in 2018 and 469 shares in 2017)	(70)	(42)
Cash dividends – preferred stock (approximately $0.67 per share in both 2018 and in 2017)	(4,031)	(4,031)
Cash dividends – common stock ($1.24 per share in 2018 and $1.11 per share in 2017)	(79,628)	(71,393)
Total shareholders' equity at end of period	$3,309,512	$3,223,929

See Notes to Consolidated Financial Statements.

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Cullen/Frost Bankers, Inc.
Consolidated Statements of Cash Flows
(Dollars in thousands)

	Six Months Ended June 30,	
	2018	2017
Operating Activities:		
Net income	$217,821	$170,494
Adjustments to reconcile net income to net cash from operating activities:		
Provision for loan losses	15,196	16,378
Deferred tax expense (benefit)	22,886	(4,173)
Accretion of loan discounts	(6,904)	(7,403)
Securities premium amortization (discount accretion), net	48,936	43,652
Net (gain) loss on securities transactions	79	50
Depreciation and amortization	24,581	24,055
Net (gain) loss on sale/write-down of assets/foreclosed assets	(5,453)	(1,383)
Stock-based compensation	6,760	6,291
Net tax benefit from stock-based compensation	3,160	5,579
Earnings on life insurance policies	(1,663)	(1,565)
Net change in:		
Trading account securities	(2,263)	(7,120)
Accrued interest receivable and other assets	(42,959)	(20,116)
Accrued interest payable and other liabilities	(26,176)	(36,277)
Net cash from operating activities	254,001	188,462
Investing Activities:		
Securities held to maturity:		
Purchases	(1,500)	—
Sales	—	—
Maturities, calls and principal repayments	183,140	634,874
Securities available for sale:		
Purchases	(11,453,662)	(8,825,545)
Sales	10,890,388	8,247,439
Maturities, calls and principal repayments	108,316	164,182
Proceeds from sale of loans	18,918	—
Net change in loans	(601,101)	(549,408)
Benefits received on life insurance policies	384	462
Proceeds from sales of premises and equipment	12,844	1,550
Purchases of premises and equipment	(45,766)	(14,481)
Proceeds from sales of repossessed properties	986	345
Net cash from investing activities	(887,053)	(340,582)
Financing Activities:		
Net change in deposits	(875,890)	(198,002)
Net change in short-term borrowings	(170,354)	(52,125)
Proceeds from issuance of subordinated notes	—	98,434
Principal payments on subordinated notes	—	(100,000)
Proceeds from stock option exercises	25,448	44,149
Purchase of treasury stock	(70)	(42)

Cash dividends paid on preferred stock	(4,031)	(4,031)
Cash dividends paid on common stock	(79,628)	(71,393)
Net cash from financing activities	(1,104,525)	(283,010)
Net change in cash and cash equivalents	(1,737,577)	(435,130)
Cash and cash equivalents at beginning of period	5,053,047	4,141,445
Cash and cash equivalents at end of period	$3,315,470	$3,706,315

See Notes to Consolidated Financial Statements.

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Notes to Consolidated Financial Statements
(Table amounts in thousands, except for share and per share amounts)

Note 1 - Significant Accounting Policies

Nature of Operations. Cullen/Frost Bankers, Inc. ("Cullen/Frost") is a financial holding company and a bank holding company headquartered in San Antonio, Texas that provides, through its subsidiaries, a broad array of products and services throughout numerous Texas markets. The terms "Cullen/Frost," "the Corporation," "we," "us" and "our" mean Cullen/Frost Bankers, Inc. and its subsidiaries, when appropriate. In addition to general commercial and consumer banking, other products and services offered include trust and investment management, insurance, brokerage, mutual funds, leasing, treasury management, capital markets advisory and item processing.

Basis of Presentation. The consolidated financial statements in this Quarterly Report on Form 10-Q include the accounts of Cullen/Frost and all other entities in which Cullen/Frost 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 and to general practices within the financial services industry.

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 accounting principles generally accepted in the United States for interim financial information and with the instructions to Form 10-Q adopted by the Securities and Exchange Commission ("SEC"). Accordingly, the financial statements do not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements and should be read in conjunction with our consolidated financial statements, and notes thereto, for the year ended December 31, 2017, included in our Annual Report on Form 10-K filed with the SEC on February 7, 2018 (the "2017 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.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates. The allowance for loan losses and the fair values of financial instruments and the status of contingencies are particularly subject to change.

Cash Flow Reporting. Additional cash flow information was as follows:

	Six Months Ended June 30,	
	2018	2017
Cash paid for interest	$31,962	$6,666
Cash paid for income taxes	3,888	22,801
Significant non-cash transactions:		
Unsettled purchases/sales of securities	2,186	80,586
Loans foreclosed and transferred to other real estate owned and foreclosed assets	2,656	—

Accounting Changes, Reclassifications and Restatements. Certain items in prior financial statements have been reclassified to conform to the current presentation. In addition, we adopted ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220) - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" as of January 1, 2018. In accordance with ASU 2018-02, we elected to reclassify certain income tax effects related to the change in the U.S. statutory federal income tax rate under the Tax Cuts and Jobs Act, which was enacted on December 22, 2017, from accumulated other comprehensive income to retained earnings. Such amounts, which totaled $9.5 million, related to a net actuarial loss on defined benefit post-retirement plans and unrealized gains on securities available for sale and securities transferred to held to maturity. See Note 14 - Other Comprehensive Income. The effects of the Tax Cuts and Jobs Act on deferred taxes related to amounts initially

recorded in accumulated other comprehensive income are provisional. As we finalize the accounting for the tax effects of the Tax Cuts and Jobs Act, additional reclassification adjustments may be recorded in future periods. See Note 13 - Income Taxes. Notwithstanding this election made in accordance with ASU 2018-02, our policy is to release such income tax effects only when the entire portfolio to which the underlying transactions relate is liquidated, sold or extinguished.

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We also adopted ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)" as of January 1, 2018. Using a modified retrospective transition approach for contracts that were not complete as of our adoption, we recognized a cumulative effect reduction to beginning retained earnings totaling $2.3 million. The amount was related to certain revenue streams within trust and investment management fees. Additionally, based on our underlying contracts, ASU 2014-09 requires us to report network costs associated with debit card and ATM transactions netted against the related fee income from such transactions. Previously, such network costs were reported as a component of other non-interest expense. For the three and six months ended June 30, 2018, gross interchange and debit card transaction fees totaled $6.5 million and $12.6 million, respectively, while related network costs totaled $3.0 million and $6.0 million, respectively. On a net basis, we reported $3.4 million and $6.6 million as interchange and debit card transaction fees in the accompanying Consolidated Statement of Income for the three and six months ended June 30, 2018, respectively. For the three and six months ended June 30, 2017, we reported interchange and debit card transaction fees totaling $5.7 million and $11.3 million, respectively, on a gross basis in the accompanying Consolidated Statement of Income while related network costs totaling $2.9 million and $6.1 million were reported as a component of other non-interest expense for the three and six months ended June 30, 2017, respectively. ASU 2014-09 also required us to change the way we recognize certain recurring revenue streams reported as components of trust and investment management fees, insurance commissions and fees and other categories of non-interest income, however, such changes were not significant to our financial statements for the six months ended June 30, 2018. Under ASU 2014-09, we adopted new policies related to revenue recognition. In general, for revenue not associated with financial instruments, guarantees and lease contracts, we apply the following steps when recognizing revenue from contracts with customers: (i) identify the contract, (ii) identify the performance obligations, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations and (v) recognize revenue when performance obligation is satisfied. Our contracts with customers are generally short term in nature, typically due within one year or less or cancellable by us or our customer upon a short notice period. Performance obligations for our customer contracts are generally satisfied at a single point in time, typically when the transaction is complete, or over time. For performance obligations satisfied over time, we primarily use the output method, directly measuring the value of the products/services transferred to the customer, to determine when performance obligations have been satisfied. We typically receive payment from customers and recognize revenue concurrent with the satisfaction of our performance obligations. In most cases, this occurs within a single financial reporting period. For payments received in advance of the satisfaction of performance obligations, revenue recognition is deferred until such time the performance obligations have been satisfied. In cases where we have not received payment despite satisfaction of our performance obligations, we accrue an estimate of the amount due in the period our performance obligations have been satisfied. For contracts with variable components, only amounts for which collection is probable are accrued. We generally act in a principal capacity, on our own behalf, in most of our contracts with customers. In such transactions, we recognize revenue and the related costs to provide our services on a gross basis in our financial statements. In some cases, we act in an agent capacity, deriving revenue through assisting other entities in transactions with our customers. In such transactions, we recognized revenue and the related costs to provide our services on a net basis in our financial statements. These transactions primarily relate to insurance and brokerage commissions and fees derived from our customers' use of various interchange and ATM/debit card networks.

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Note 2 - Securities

Securities. A summary of the amortized cost and estimated fair value of securities, excluding trading securities, is presented below.

	June 30, 2018				December 31, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Held to Maturity								
Residential mortgage-backed securities	$3,317	$9	$73	$3,253	$3,610	$15	$38	$3,587
States and political subdivisions	1,231,694	13,100	2,394	1,242,400	1,428,488	26,462	2,746	1,452,204
Other	1,500	—	10	1,490	—	—	—	—
Total	$1,236,511	$13,109	$2,477	$1,247,143	$1,432,098	$26,477	$2,784	$1,455,791
Available for Sale								
U.S. Treasury	$3,454,387	$—	$44,306	$3,410,081	$3,453,391	$7,494	$15,732	$3,445,153
Residential mortgage-backed securities	625,897	13,540	7,779	631,658	648,288	19,048	2,250	665,086
States and political subdivisions	6,626,495	71,701	64,807	6,633,389	6,185,711	167,293	16,795	6,336,209
Other	42,615	—	—	42,615	42,561	—	—	42,561
Total	$10,749,394	$85,241	$116,892	$10,717,743	$10,329,951	$193,835	$34,777	$10,489,009

All mortgage-backed securities included in the above table were issued by U.S. government agencies and corporations. At June 30, 2018, approximately 98.3% of the securities in our municipal bond portfolio were issued by political subdivisions or agencies within the State of Texas, of which approximately 67.9% are either guaranteed by the Texas Permanent School Fund, which has a “triple A” insurer financial strength rating, or are secured by U.S. Treasury securities via defeasance of the debt by the issuers. Securities with limited marketability and that do not have readily determinable fair values are carried at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar securities of the same issuer. These securities include stock in the Federal Reserve Bank and the Federal Home Loan Bank and are reported as other available for sale securities in the table above. The carrying value of securities pledged to secure public funds, trust deposits, repurchase agreements and for other purposes, as required or permitted by law was $3.3 billion at June 30, 2018 and $3.8 billion at December 31, 2017.

During the fourth quarter of 2012, we reclassified certain securities from available for sale to held to maturity. The securities had an aggregate fair value of $2.3 billion with an aggregate net unrealized gain of $165.7 million ($107.7 million, net of tax) on the date of the transfer. The net unamortized, unrealized gain on the remaining transferred securities included in accumulated other comprehensive income in the accompanying balance sheet as of June 30, 2018 totaled $6.9 million ($5.4 million, net of tax). This amount will be amortized out of accumulated other comprehensive income over the remaining life of the underlying securities as an adjustment of the yield on those securities.

Unrealized Losses. As of June 30, 2018, securities with unrealized losses, segregated by length of impairment, were as follows:

	Less than 12 Months		More than 12 Months		Total	
	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses
Held to Maturity						
Residential mortgage-backed securities	$1,103	$ 25	$1,392	$ 48	$2,495	$73

States and political subdivisions	232,707	633	44,490	1,761	277,197	2,394
Other	1,490	10	—	—	1,490	10
Total	$235,300	$ 668	$45,882	$ 1,809	$281,182	$ 2,477
Available for Sale						
U.S. Treasury	$2,841,825	$ 34,887	$568,256	$ 9,419	$3,410,081	$ 44,306
Residential mortgage-backed securities	238,548	4,687	58,923	3,092	297,471	7,779
States and political subdivisions	1,907,610	25,535	813,864	39,272	2,721,474	64,807
Total	$4,987,983	$ 65,109	$1,441,043	$ 51,783	$6,429,026	$ 116,892

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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 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) the intent and our ability to retain our 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 expect to receive full value for the securities. Furthermore, as of June 30, 2018, management does 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 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 of credit quality. Accordingly, as of June 30, 2018, management believes the impairments detailed in the table above are temporary and no impairment loss has been realized in our consolidated income statement.

Contractual Maturities. The amortized cost and estimated fair value of securities, excluding trading securities, at June 30, 2018 are presented below by contractual maturity. Expected maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations. Residential mortgage-backed securities and equity securities are shown separately since they are not due at a single maturity date.

	Held to Maturity		Available for Sale	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due in one year or less	$138,403	$140,001	$400,123	$398,992
Due after one year through five years	134,389	136,874	3,739,862	3,705,611
Due after five years through ten years	448,447	450,758	480,038	481,384
Due after ten years	511,955	516,257	5,460,859	5,457,483
Residential mortgage-backed securities	3,317	3,253	625,897	631,658
Equity securities	—	—	42,615	42,615
Total	$1,236,511	$1,247,143	$10,749,394	$10,717,743

Sales of Securities. Sales of securities available for sale were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Proceeds from sales	$7,905,521	$8,247,439	$10,890,388	$8,247,439
Gross realized gains	3	—	3	—
Gross realized losses	(63)	(50)	(82)	(50)
Tax (expense) benefit of securities gains/losses	13	18	17	18

Premiums and Discounts. Premium amortization and discount accretion included in interest income on securities was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Premium amortization	$(26,689)	$(24,119)	$(52,723)	$(48,147)
Discount accretion	2,010	2,105	3,787	4,495
Net (premium amortization) discount accretion	$(24,679)	$(22,014)	$(48,936)	$(43,652)

Trading Account Securities. Trading account securities, at estimated fair value, were as follows:

	June 30, 2018	December 31, 2017

U.S. Treasury	$20,755	$ 19,210
States and political subdivisions	579	1,888
Total	$21,334	$ 21,098

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Net gains and losses on trading account securities were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net gain on sales transactions	$434	$293	$939	$604
Net mark-to-market gains (losses)	23	(56)	(13)	(43)
Net gain (loss) on trading account securities	$457	$237	$926	$561

Note 3 - Loans

Loans were as follows:

	June 30, 2018	Percentage of Total	December 31, 2017	Percentage of Total
Commercial and industrial	$5,043,272	36.8 %	$4,792,388	36.4 %
Energy:				
Production	1,211,261	8.8	1,182,326	9.0
Service	163,013	1.2	171,795	1.3
Other	153,754	1.1	144,972	1.1
Total energy	1,528,028	11.1	1,499,093	11.4
Commercial real estate:				
Commercial mortgages	4,097,255	29.9	3,887,742	29.6
Construction	1,106,999	8.1	1,066,696	8.1
Land	305,585	2.2	331,986	2.5
Total commercial real estate	5,509,839	40.2	5,286,424	40.2
Consumer real estate:				
Home equity loans	352,243	2.6	355,342	2.7
Home equity lines of credit	321,795	2.3	291,950	2.2
Other	400,661	3.0	376,002	2.9
Total consumer real estate	1,074,699	7.9	1,023,294	7.8
Total real estate	6,584,538	48.1	6,309,718	48.0
Consumer and other	555,924	4.0	544,466	4.2
Total loans	$13,711,762	100.0 %	$13,145,665	100.0 %

Concentrations of Credit. Most of our lending activity occurs within the State of Texas, including the four largest metropolitan areas of Austin, Dallas/Ft. Worth, Houston and San Antonio, as well as other markets. The majority of our loan portfolio consists of commercial and industrial and commercial real estate loans. As of June 30, 2018, there were no concentrations of loans related to any single industry in excess of 10% of total loans other than energy loans, which totaled 11.1% of total loans. Unfunded commitments to extend credit and standby letters of credit issued to customers in the energy industry totaled $1.1 billion and $47.6 million, respectively, as of June 30, 2018.

Foreign Loans. We have U.S. dollar denominated loans and commitments to borrowers in Mexico. The outstanding balance of these loans and the unfunded amounts available under these commitments were not significant at June 30, 2018 or December 31, 2017.

Related Party Loans. In the ordinary course of business, we have granted loans to certain directors, executive officers and their affiliates (collectively referred to as “related parties”). Such loans totaled $213.2 million at June 30, 2018 and $166.4 million at December 31, 2017.

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Non-Accrual and Past Due Loans. Non-accrual loans, segregated by class of loans, were as follows:

	June 30, 2018	December 31, 2017
Commercial and industrial	$17,306	$ 46,186
Energy	79,963	94,302
Commercial real estate:		
Buildings, land and other	19,415	7,589
Construction	—	—
Consumer real estate	872	2,109
Consumer and other	1,625	128
Total	$119,181	$ 150,314

As of June 30, 2018, non-accrual loans reported in the table above included $843 thousand related to loans that were restructured as "troubled debt restructurings" during 2018. See the section captioned "Troubled Debt Restructurings" elsewhere in this note.

Had non-accrual loans performed in accordance with their original contract terms, we would have recognized additional interest income, net of tax, of approximately $1.4 million and $2.9 million for the three and six months ended June 30, 2018, compared to $798 thousand and $1.6 million for the three and six months ended June 30, 2017.

An age analysis of past due loans (including both accruing and non-accruing loans), segregated by class of loans, as of June 30, 2018 was as follows:

	Loans 30-89 Days Past Due	Loans 90 or More Days Past Due	Total Past Due Loans	Current Loans	Total Loans	Accruing Loans 90 or More Days Past Due
Commercial and industrial	$ 19,560	$ 14,656	$34,216	$5,009,056	$5,043,272	$ 5,842
Energy	3,775	19,914	23,689	1,504,339	1,528,028	5,878
Commercial real estate:						
Buildings, land and other	14,208	23,300	37,508	4,365,332	4,402,840	9,055
Construction	615	—	615	1,106,384	1,106,999	—
Consumer real estate	6,399	1,959	8,358	1,066,341	1,074,699	1,617
Consumer and other	3,710	608	4,318	551,606	555,924	608
Total	$ 48,267	$ 60,437	$108,704	$13,603,058	$13,711,762	$ 23,000

Impaired Loans. Impaired loans are set forth in the following table. No interest income was recognized on impaired loans subsequent to their classification as impaired.

	Unpaid Contractual Principal Balance	Recorded Investment With No Allowance	Recorded Investment With Allowance	Total Recorded Investment	Related Allowance
June 30, 2018					
Commercial and industrial	$ 23,510	$ 3,710	$ 11,671	$ 15,381	$ 7,667
Energy	90,744	19,461	60,228	79,689	14,371
Commercial real estate:					
Buildings, land and other	18,382	2,512	15,597	18,109	999
Construction	—	—	—	—	—
Consumer real estate	293	293	—	293	—
Consumer and other	1,625	—	1,625	1,625	1,625
Total	$ 134,554	$ 25,976	$ 89,121	$ 115,097	$ 24,662
December 31, 2017					
Commercial and industrial	$ 60,781	$ 28,038	$ 15,722	$ 43,760	$ 7,553
Energy	99,606	33,080	61,162	94,242	13,267

Commercial real estate:					
Buildings, land and other	10,795	6,394	—	6,394	—
Construction	—	—	—	—	—
Consumer real estate	1,214	1,214	—	1,214	—
Consumer and other	—	—	—	—	—
Total	$ 172,396	$ 68,726	$ 76,884	$ 145,610	$ 20,820

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The average recorded investment in impaired loans was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Commercial and industrial	$15,307	$21,347	$24,791	$23,867
Energy	92,380	67,008	93,001	63,860
Commercial real estate:				
Buildings, land and other	13,867	5,966	11,376	6,266
Construction	—	—	—	—
Consumer real estate	860	1,376	978	1,135
Consumer and other	813	12	542	18
Total	$123,227	$95,709	$130,688	$95,146

Troubled Debt Restructurings. Troubled debt restructurings during the six months ended June 30, 2018 and June 30, 2017 are set forth in the following table.

	Six Months Ended June 30, 2018		Six Months Ended June 30, 2017	
	Balance at Restructure	Balance at Period-End	Balance at Restructure	Balance at Period-End
Commercial and industrial	$2,203	$ 843	$784	$ 643
Energy	13,708	—	12,959	12,458
	$15,911	$ 843	$13,743	$ 13,101

Loan modifications are typically related to extending amortization periods, converting loans to interest only for a limited period of time, deferral of interest payments, waiver of certain covenants, consolidating notes and/or reducing collateral or interest rates. The modifications during the reported periods did not significantly impact our determination of the allowance for loan losses.

Additional information related to restructured loans was as follows:

	June 30, 2018	June 30, 2017
Restructured loans past due in excess of 90 days at period-end:		
Number of loans	—	—
Dollar amount of loans	$ —	$ —
Restructured loans on non-accrual status at period end	843	11,405
Charge-offs of restructured loans:		
Recognized in connection with restructuring	—	—
Recognized on previously restructured loans	1,650	9,951
Proceeds from sale of restructured loans	13,350	—

Credit Quality Indicators. As part of the on-going 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 consumer loans (see details above), (iv) net charge-offs, (v) non-performing loans (see details above) and (vi) the general economic conditions in the State of Texas.

We utilize a risk grading matrix to assign a risk grade to each of our commercial loans. Loans are graded on a scale of 1 to 14. A description of the general characteristics of the 14 risk grades is set forth in our 2017 Form 10-K. In monitoring credit quality trends in the context of assessing the appropriate level of the allowance for loan losses, we monitor portfolio credit quality by the weighted-average risk grade of each class of commercial loan. Individual relationship managers review updated financial information for all pass grade loans to reassess the risk grade on at

least an annual basis. When a loan has a risk grade of 9, it is still considered a pass grade loan; however, it is considered to be on management's "watch list," where a significant risk-modifying action is anticipated in the near term. When a loan has a risk grade of 10 or higher, a special assets officer monitors the loan on an on-going basis.

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The following tables present weighted-average risk grades for all commercial loans by class.

	June 30, 2018		December 31, 2017	
	Weighted Average Risk Grade	Loans	Weighted Average Risk Grade	Loans
Commercial and industrial:				
Risk grades 1-8	6.10	$4,737,862	6.06	$4,378,839
Risk grade 9	9.00	110,377	9.00	170,285
Risk grade 10	10.00	117,623	10.00	99,260
Risk grade 11	11.00	60,104	11.00	97,818
Risk grade 12	12.00	9,639	12.00	38,633
Risk grade 13	13.00	7,667	13.00	7,553
Total	6.33	$5,043,272	6.41	$4,792,388
Energy				
Risk grades 1-8	5.98	$1,288,490	6.01	$1,199,207
Risk grade 9	9.00	44,181	9.00	50,427
Risk grade 10	10.00	48,115	10.00	64,282
Risk grade 11	11.00	67,279	11.00	90,875
Risk grade 12	12.00	65,591	12.00	81,035
Risk grade 13	13.00	14,372	13.00	13,267
Total	6.74	$1,528,028	6.97	$1,499,093
Commercial real estate:				
Buildings, land and other				
Risk grades 1-8	6.77	$4,071,883	6.75	$3,868,659
Risk grade 9	9.00	130,689	9.00	151,487
Risk grade 10	10.00	101,505	10.00	129,391
Risk grade 11	11.00	79,348	11.00	62,602
Risk grade 12	12.00	18,416	12.00	7,589
Risk grade 13	13.00	999	13.00	—
Total	7.01	$4,402,840	7.00	$4,219,728
Construction				
Risk grades 1-8	7.13	$1,077,422	7.11	$1,019,635
Risk grade 9	9.00	10,873	9.00	18,042
Risk grade 10	10.00	17,237	10.00	23,393
Risk grade 11	11.00	1,467	11.00	5,626
Risk grade 12	12.00	—	12.00	—
Risk grade 13	13.00	—	13.00	—
Total	7.20	$1,106,999	7.23	$1,066,696

Net (charge-offs)/recoveries, segregated by class of loans, were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Commercial and industrial	$(3,548)	$(4,861)	$(11,223)	$(7,590)
Energy	(2,076)	(6,236)	(4,925)	(10,461)
Commercial real estate:				
Buildings, land and other	(402)	460	(321)	502
Construction	6	3	8	6

Consumer real estate	(164)	111	(690)	207
Consumer and other	(1,726)	(1,401)	(3,183)	(2,529)
Total	$(7,910)	$(11,924)	$(20,334)	$(19,865)

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In assessing the general economic conditions in the State of Texas, management monitors and tracks the Texas Leading Index ("TLI"), which is produced by the Federal Reserve Bank of Dallas. The TLI, the components of which are more fully described in our 2017 Form 10-K, totaled 129.7 at June 30, 2018 and 129.4 at December 31, 2017. A higher TLI value implies more favorable economic conditions.

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 inherent 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, which is more fully described in our 2017 Form 10-K, follows the accounting guidance set forth in U.S. generally accepted accounting principles and the Interagency Policy Statement on the Allowance for Loan and Lease Losses, which was jointly issued by U.S. bank regulatory agencies. The level of the allowance reflects management's continuing evaluation of industry concentrations, specific credit risks, loan loss and recovery experience, current loan portfolio quality, present economic, political and regulatory conditions and unidentified losses inherent in the current loan portfolio. Portions of the allowance may be allocated for specific credits; however, the entire allowance is available for any credit that, in management's judgment, should be charged off.

The following table presents details of the allowance for loan losses allocated to each portfolio segment as of June 30, 2018 and December 31, 2017 and detailed on the basis of the impairment evaluation methodology we used:

	Commercial and Industrial	Energy	Commercial Real Estate	Consumer Real Estate	Consumer and Other	Total
June 30, 2018						
Historical valuation allowances	$ 25,233	$12,117	$ 20,072	$ 2,555	$ 6,779	$66,756
Specific valuation allowances	7,667	14,371	999	—	1,625	24,662
General valuation allowances	9,671	6,807	4,036	1,474	(114)	21,874
Macroeconomic valuation allowances	15,142	4,018	13,811	2,307	1,656	36,934
Total	$ 57,713	$37,313	$ 38,918	$ 6,336	$ 9,946	$150,226
Allocated to loans:						
Individually evaluated	$ 7,667	$14,371	$ 999	$ —	$ 1,625	$24,662
Collectively evaluated	50,046	22,942	37,919	6,336	8,321	125,564
Total	$ 57,713	$37,313	$ 38,918	$ 6,336	$ 9,946	$150,226
December 31, 2017						
Historical valuation allowances	$ 26,401	$22,073	$ 18,931	$ 2,473	$ 5,603	$75,481
Specific valuation allowances	7,553	13,267	—	—	—	20,820
General valuation allowances	9,112	7,964	4,165	2,133	(91)	23,283
Macroeconomic valuation allowances	16,548	8,224	7,852	1,051	2,105	35,780
Total	$ 59,614	$51,528	$ 30,948	$ 5,657	$ 7,617	$155,364
Allocated to loans:						
Individually evaluated	$ 7,553	$13,267	$ —	$ —	$ —	$20,820
Collectively evaluated	52,061	38,261	30,948	5,657	7,617	134,544
Total	$ 59,614	$51,528	$ 30,948	$ 5,657	$ 7,617	$155,364

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Our recorded investment in loans as of June 30, 2018 and December 31, 2017 related to each balance in the allowance for loan losses by portfolio segment and detailed on the basis of the impairment methodology we used was as follows:

	Commercial and Industrial	Energy	Commercial Real Estate	Consumer Real Estate	Consumer and Other	Total
June 30, 2018						
Individually evaluated	$15,381	$79,689	$18,109	$293	$1,625	$115,097
Collectively evaluated	5,027,891	1,448,339	5,491,730	1,074,406	554,299	13,596,665
Total	$5,043,272	$1,528,028	$5,509,839	$1,074,699	$555,924	$13,711,762
December 31, 2017						
Individually evaluated	$43,760	$94,242	$6,394	$1,214	$—	$145,610
Collectively evaluated	4,748,628	1,404,851	5,280,030	1,022,080	544,466	13,000,055
Total	$4,792,388	$1,499,093	$5,286,424	$1,023,294	$544,466	$13,145,665

The following table details activity in the allowance for loan losses by portfolio segment for the three and six months ended June 30, 2018 and 2017. Allocation of a portion of the allowance to one category of loans does not preclude its availability to absorb losses in other categories.

	Commercial and Industrial	Energy	Commercial Real Estate	Consumer Real Estate	Consumer and Other	Total
Three months ended:						
June 30, 2018						
Beginning balance	$ 57,733	$39,039	$ 38,474	$ 6,349	$ 8,290	$149,885
Provision for loan losses	3,528	350	840	151	3,382	8,251
Charge-offs	(4,153)	(2,689)	(614)	(482)	(3,994)	(11,932)
Recoveries	605	613	218	318	2,268	4,022
Net charge-offs	(3,548)	(2,076)	(396)	(164)	(1,726)	(7,910)
Ending balance	$ 57,713	$37,313	$ 38,918	$ 6,336	$ 9,946	$150,226
June 30, 2017						
Beginning balance	$ 45,583	$61,793	$ 34,009	$ 4,823	$ 6,848	$153,056
Provision for loan losses	8,184	(1,280)	(1,470)	601	2,391	8,426
Charge-offs	(5,579)	(6,317)	(14)	(2)	(3,623)	(15,535)
Recoveries	718	81	477	113	2,222	3,611
Net charge-offs	(4,861)	(6,236)	463	111	(1,401)	(11,924)
Ending balance	$ 48,906	$54,277	$ 33,002	$ 5,535	$ 7,838	$149,558
Six months ended:						
June 30, 2018						
Beginning balance	$ 59,614	$51,528	$ 30,948	$ 5,657	$ 7,617	$155,364
Provision for loan losses	9,322	(9,290)	8,283	1,369	5,512	15,196
Charge-offs	(13,405)	(5,539)	(619)	(1,201)	(7,966)	(28,730)
Recoveries	2,182	614	306	511	4,783	8,396
Net charge-offs	(11,223)	(4,925)	(313)	(690)	(3,183)	(20,334)
Ending balance	$ 57,713	$37,313	$ 38,918	$ 6,336	$ 9,946	$150,226
June 30, 2017						
Beginning balance	$ 52,915	$60,653	$ 30,213	$ 4,238	$ 5,026	$153,045
Provision for loan losses	3,581	4,085	2,281	1,090	5,341	16,378
Charge-offs	(9,106)	(10,595)	(14)	(13)	(7,171)	(26,899)
Recoveries	1,516	134	522	220	4,642	7,034
Net charge-offs	(7,590)	(10,461)	508	207	(2,529)	(19,865)

Ending balance	$ 48,906	$54,277	$ 33,002	$ 5,535	$ 7,838	$149,558

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Note 4 - Goodwill and Other Intangible Assets

Goodwill and other intangible assets are presented in the table below.

	June 30, 2018	December 31, 2017
Goodwill	$654,952	$ 654,952
Other intangible assets:		
Core deposits	$3,466	$ 4,044
Customer relationships	819	986
Non-compete agreements	31	43
	$4,316	$ 5,073

The estimated aggregate future amortization expense for intangible assets remaining as of June 30, 2018 is as follows:

Remainder of 2018	667
2019	1,167
2020	918
2021	697
2022	481
Thereafter	386
	$4,316

Note 5 - Deposits

Deposits were as follows:

	June 30, 2018	Percentage of Total	December 31, 2017	Percentage of Total
Non-interest-bearing demand deposits:				
Commercial and individual	$9,976,325	38.4 %	$10,412,882	38.8 %
Correspondent banks	198,314	0.8	222,648	0.8
Public funds	351,359	1.3	561,563	2.1
Total non-interest-bearing demand deposits	10,525,998	40.5	11,197,093	41.7
Interest-bearing deposits:				
Private accounts:				
Savings and interest checking	6,692,025	25.7	6,788,766	25.2
Money market accounts	7,609,681	29.3	7,624,471	28.4
Time accounts of $100,000 or more	464,134	1.8	453,668	1.7
Time accounts under $100,000	324,195	1.2	324,636	1.2
Total private accounts	15,090,035	58.0	15,191,541	56.5
Public funds:				
Savings and interest checking	301,225	1.2	410,140	1.5
Money market accounts	65,002	0.2	59,008	0.2
Time accounts of $100,000 or more	13,649	0.1	14,301	0.1
Time accounts under $100,000	590	—	306	—
Total public funds	380,466	1.5	483,755	1.8
Total interest-bearing deposits	15,470,501	59.5	15,675,296	58.3
Total deposits	$25,996,499	100.0 %	$26,872,389	100.0 %

The following table presents additional information about our deposits:

	June 30, 2018	December 31, 2017
Deposits from foreign sources (primarily Mexico)	$ 739,213	$ 716,339
Deposits not covered by deposit insurance	12,198,682	13,281,040

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Note 6 - Commitments and Contingencies

Financial Instruments with Off-Balance-Sheet Risk. In the normal course of business, we enter into various transactions, which, in accordance with generally accepted accounting principles are not included in our consolidated balance sheets. We enter into these transactions to meet the financing needs of our customers. As more fully discussed in our 2017 Form 10-K, 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 loss under these commitments by subjecting them to credit approval and monitoring procedures.

Financial instruments with off-balance-sheet risk were as follows:

	June 30, 2018	December 31, 2017
Commitments to extend credit	$8,081,645	$ 7,949,400
Standby letters of credit	240,232	236,595
Deferred standby letter of credit fees	1,741	1,843

Lease Commitments. We lease certain office facilities and office equipment under operating leases. Rent expense for all operating leases totaled $8.1 million and $16.3 million during the three and six months ended June 30, 2018 and $7.5 million and $15.3 million during the three and six months ended June 30, 2017. There has been no significant change in our expected future minimum lease payments since December 31, 2017. See the 2017 Form 10-K for information regarding these commitments.

Litigation. We are subject to various claims and legal actions that have arisen in the course of conducting business. Management does not expect the ultimate disposition of these matters to have a material adverse impact on our financial statements.

Note 7 - Capital and Regulatory Matters

Banks and bank holding companies are subject to various regulatory capital requirements administered by state and 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.

Cullen/Frost’s and Frost Bank’s Common Equity Tier 1 capital includes 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. Common Equity Tier 1 for both Cullen/Frost and Frost Bank is reduced by, goodwill and other intangible assets, net of associated deferred tax liabilities, and subject to transition provisions. Frost Bank's Common Equity Tier 1 is also reduced by its equity investment in its financial subsidiary, Frost Insurance Agency (“FIA”).

Tier 1 capital includes Common Equity Tier 1 capital and additional Tier 1 capital. For Cullen/Frost, additional Tier 1 capital at June 30, 2018 and December 31, 2017 includes $144.5 million of 5.375% non-cumulative perpetual preferred stock. Frost Bank did not have any additional Tier 1 capital beyond Common Equity Tier 1 at June 30, 2018 or December 31, 2017.

Total capital includes Tier 1 capital and Tier 2 capital. Tier 2 capital for both Cullen/Frost and Frost Bank includes a permissible portion of the allowance for loan losses. Tier 2 capital for Cullen/Frost also includes $100.0 million of qualified subordinated debt and $133.0 million of trust preferred securities at both June 30, 2018 and December 31, 2017.

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The following tables present actual and required capital ratios as of June 30, 2018 and December 31, 2017 for Cullen/Frost and Frost Bank under the Basel III Capital Rules. The minimum required capital amounts presented include the minimum required capital levels as of June 30, 2018 and December 31, 2017 based on the phase-in provisions of the Basel III Capital Rules and the minimum required capital levels as of January 1, 2019 when the Basel III Capital Rules have been fully phased-in. 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. See the 2017 Form 10-K for a more detailed discussion of the Basel III Capital Rules.

	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
June 30, 2018								
Common Equity Tier 1 to Risk-Weighted Assets								
Cullen/Frost	$2,581,196	12.69%	$1,296,280	6.38%	$1,423,366	7.00 %	$1,321,697	6.50 %
Frost Bank	2,621,188	12.92	1,293,055	6.38	1,419,825	7.00	1,318,409	6.50
Tier 1 Capital to Risk-Weighted Assets								
Cullen/Frost	2,725,682	13.40	1,601,287	7.88	1,728,373	8.50	1,626,704	8.00
Frost Bank	2,621,188	12.92	1,597,304	7.88	1,724,074	8.50	1,622,658	8.00
Total Capital to Risk-Weighted Assets								
Cullen/Frost	3,109,408	15.29	2,007,963	9.88	2,135,049	10.50	2,033,380	10.00
Frost Bank	2,771,914	13.67	2,002,968	9.88	2,129,738	10.50	2,028,322	10.00
Leverage Ratio								
Cullen/Frost	2,725,682	9.02	1,208,770	4.00	1,208,770	4.00	1,510,963	5.00
Frost Bank	2,621,188	8.68	1,207,880	4.00	1,207,880	4.00	1,509,851	5.00
December 31, 2017								
Common Equity Tier 1 to Risk-Weighted Assets								
Cullen/Frost	$2,426,048	12.42%	$1,123,430	5.75%	$1,367,583	7.00 %	$1,269,965	6.50 %
Frost Bank	2,518,999	12.92	1,120,663	5.75	1,364,214	7.00	1,266,836	6.50
Tier 1 Capital to Risk-Weighted Assets								
Cullen/Frost	2,570,534	13.16	1,416,499	7.25	1,660,637	8.50	1,563,033	8.00
Frost Bank	2,518,999	12.92	1,413,010	7.25	1,656,546	8.50	1,559,183	8.00
Total Capital to Risk-Weighted Assets								
Cullen/Frost	2,959,326	15.15	1,807,257	9.25	2,051,375	10.50	1,953,792	10.00
Frost Bank	2,674,791	13.72	1,802,805	9.25	2,046,321	10.50	1,948,979	10.00
Leverage Ratio								
Cullen/Frost	2,570,534	8.46	1,215,227	4.00	1,215,186	4.00	1,519,034	5.00
Frost Bank	2,518,999	8.30	1,214,295	4.00	1,214,254	4.00	1,517,869	5.00

As of June 30, 2018, capital levels at Cullen/Frost and Frost Bank exceed all capital adequacy requirements under the Basel III Capital Rules on a fully phased-in basis. Based on the ratios presented above, capital levels as of June 30, 2018 at Cullen/Frost and Frost Bank exceed the minimum levels necessary to be considered “well capitalized.”

Cullen/Frost and Frost Bank are subject to the regulatory capital requirements administered by the Federal Reserve Board and, for Frost Bank, the Federal Deposit Insurance Corporation ("FDIC"). Regulatory authorities can initiate certain mandatory actions if Cullen/Frost or Frost Bank fail to meet the minimum capital requirements, which could have a direct material effect on our financial statements. Management believes, as of June 30, 2018, that Cullen/Frost and Frost Bank meet all capital adequacy requirements to which they are subject.

Stock Repurchase Plans. From time to time, our board of directors has authorized stock repurchase plans. In general, stock repurchase plans allow us to proactively manage our capital position and return excess capital to shareholders. Shares purchased under such plans also provide us with shares of common stock necessary to satisfy obligations related to stock compensation awards. On October 24, 2017, our board of directors authorized a $150.0 million stock repurchase program, allowing us to

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repurchase shares of our common stock over a two-year period from time to time at various prices in the open market or through private transactions. No shares were repurchased under this plan during 2018 or 2017. Under a prior plan, we repurchased 1,134,966 shares under the plan at a total cost of $100.0 million during the third quarter of 2017.

Dividend Restrictions. In the ordinary course of business, Cullen/Frost is dependent upon dividends from Frost Bank to provide funds for the payment of dividends to shareholders 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 Frost Bank to fall below specified minimum levels. Approval is also required if dividends declared exceed the net profits for that year combined with the retained net profits for the preceding two years. Under the foregoing dividend restrictions and while maintaining its "well capitalized" status, at June 30, 2018, Frost Bank could pay aggregate dividends of up to $507.2 million to Cullen/Frost without prior regulatory approval.

Under the terms of the junior subordinated deferrable interest debentures that Cullen/Frost has issued to Cullen/Frost Capital Trust II and WNB Capital Trust I, Cullen/Frost has the right at any time during the term of the debentures to defer the payment of interest at any time or from time to time for an extension period not exceeding 20 consecutive quarterly periods with respect to each extension period. In the event that we have elected to defer interest on the debentures, we may not, with certain exceptions, declare or pay any dividends or distributions on our capital stock or purchase or acquire any of our capital stock.

Under the terms of our Series A Preferred Stock, in the event that we do not declare and pay dividends on our Series A Preferred Stock for the most recent dividend period, we may not, with certain exceptions, declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our common stock or any of our securities that rank junior to our Series A Preferred Stock.

Note 8 - Derivative Financial Instruments

The fair value of derivative positions outstanding is included in accrued interest receivable and other assets and accrued interest payable and other liabilities in the accompanying consolidated balance sheets and in the net change in each of these financial statement line items in the accompanying consolidated statements of cash flows.

Interest Rate Derivatives. We utilize interest rate swaps, caps and floors to mitigate exposure to interest rate risk and to facilitate the needs of our customers. Our objectives for utilizing these derivative instruments are described in our 2017 Form 10-K.

The notional amounts and estimated fair values of interest rate derivative contracts are presented in the following table. The fair values of interest rate derivative contracts are estimated utilizing internal valuation models with observable market data inputs, or as determined by the Chicago Mercantile Exchange ("CME") for centrally cleared derivative contracts. CME rules legally characterize variation margin payments for centrally cleared derivatives as settlements of the derivatives' exposure rather than collateral. As a result, the variation margin payment and the related derivative instruments are considered a single unit of account for accounting and financial reporting purposes. Variation margin, as determined by the CME, is settled daily. As a result, derivative contracts that clear through the CME have an estimated fair value of zero as of June 30, 2018 and December 31, 2017.

	June 30, 2018		December 31, 2017	
	Notional Amount	Estimated Fair Value	Notional Amount	Estimated Fair Value
Derivatives designated as hedges of fair value:				
Financial institution counterparties:				
Loan/lease interest rate swaps – assets	$11,596	$ 310	$13,679	$ 242
Loan/lease interest rate swaps – liabilities	4,561	(247)	11,147	(593)
Non-hedging interest rate derivatives:				
Financial institution counterparties:				
Loan/lease interest rate swaps – assets	706,088	4,832	430,449	1,418
Loan/lease interest rate swaps – liabilities	380,596	(6,307)	541,496	(12,820)
Loan/lease interest rate caps – assets	97,120	851	114,619	480
Customer counterparties:				

Loan/lease interest rate swaps – assets	380,596	9,472	541,496	17,882
Loan/lease interest rate swaps – liabilities	706,088	(16,806)	430,449	(4,861)
Loan/lease interest rate caps – liabilities	97,120	(851)	114,619	(480)

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The weighted-average rates paid and received for interest rate swaps outstanding at June 30, 2018 were as follows:

	Weighted-Average Interest Rate Paid	Weighted-Average Interest Rate Received
Interest rate swaps:		
Fair value hedge loan/lease interest rate swaps	2.49 %	2.05 %
Non-hedging interest rate swaps – financial institution counterparties	4.09 %	3.67 %
Non-hedging interest rate swaps – customer counterparties	3.67 %	4.09 %

The weighted-average strike rate for outstanding interest rate caps was 3.01% at June 30, 2018.

Commodity Derivatives. We enter into commodity swaps and option contracts that are not designated as hedging instruments primarily to accommodate the business needs of our customers. Upon the origination of a commodity swap or option contract with a customer, we simultaneously enter into an offsetting contract with a third party financial institution to mitigate the exposure to fluctuations in commodity prices.

The notional amounts and estimated fair values of non-hedging commodity swap and option derivative positions outstanding are presented in the following table. We obtain dealer quotations and use internal valuation models with observable market data inputs to value our commodity derivative positions.

		June 30, 2018		December 31, 2017	
	Notional Units	Notional Amount	Estimated Fair Value	Notional Amount	Estimated Fair Value
Financial institution counterparties:					
Oil – assets	Barrels	585	$ 1,520	253	$ 193
Oil – liabilities	Barrels	2,761	(30,963)	2,731	(13,448)
Natural gas – assets	MMBTUs	6,080	548	5,927	1,399
Natural gas – liabilities	MMBTUs	5,600	(612)	3,917	(326)
Customer counterparties:					
Oil – assets	Barrels	2,761	30,952	2,731	13,709
Oil – liabilities	Barrels	585	(1,518)	253	(187)
Natural gas – assets	MMBTUs	5,697	623	3,917	340
Natural gas – liabilities	MMBTUs	5,983	(538)	5,927	(1,366)

Foreign Currency Derivatives. We enter into foreign currency forward contracts that are not designated as hedging instruments primarily to accommodate the business needs of our customers. Upon the origination of a foreign currency denominated transaction with a customer, we simultaneously enter into an offsetting contract with a third party financial institution to negate the exposure to fluctuations in foreign currency exchange rates. We also utilize foreign currency forward contracts that are not designated as hedging instruments to mitigate the economic effect of fluctuations in foreign currency exchange rates on foreign currency holdings and certain short-term, non-U.S. dollar denominated loans. The notional amounts and fair values of open foreign currency forward contracts were as follows:

		June 30, 2018		December 31, 2017	
	Notional Currency	Notional Amount	Estimated Fair Value	Notional Amount	Estimated Fair Value
Financial institution counterparties:					
Forward contracts – assets	EUR	591	$ 6	4,014	$ 77
Forward contracts – assets	GBP	—	—	127	1
Forward contracts – assets	AUD	57	1	—	—
Forward contracts – liabilities	EUR	906	(5)	4,846	(37)
Forward contracts – liabilities	CAD	22,626	(208)	25,413	(142)
Forward contracts – liabilities	GBP	1,095	(3)	1,178	(9)

Customer counterparties:						
Forward contracts – assets	EUR	400	1	3,867	58	
Forward contracts – assets	CAD	22,575	262	25,282	279	
Forward contracts – liabilities	EUR	—	—	4,041	(51	)
Forward contracts – liabilities	GBP	—	—	127	—	

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Gains, Losses and Derivative Cash Flows. For fair value hedges, the changes in the fair value of both the derivative hedging instrument and the hedged item are included in other non-interest income or other non-interest expense. The extent that such changes in fair value do not offset represents hedge ineffectiveness. Net cash flows from interest rate swaps on commercial loans/leases designated as hedging instruments in effective hedges of fair value are included in interest income on loans. For non-hedging derivative instruments, gains and losses due to changes in fair value and all cash flows are included in other non-interest income and other non-interest expense.

Amounts included in the consolidated statements of income related to interest rate derivatives designated as hedges of fair value were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Commercial loan/lease interest rate swaps:				
Amount of gain (loss) included in interest income on loans	$31	$(198)	$(11)	$(443)
Amount of (gain) loss included in other non-interest expense	(1)	(2)	(1)	(3)

As stated above, we enter into non-hedge related derivative positions primarily to accommodate the business needs of our customers. Upon the origination of a derivative contract with a customer, we simultaneously enter into an offsetting derivative contract with a third party financial institution. We recognize immediate income based upon the difference in the bid/ask spread of the underlying transactions with our customers and the third party. Because we act only as an intermediary for our customer, subsequent changes in the fair value of the underlying derivative contracts for the most part offset each other and do not significantly impact our results of operations.

Amounts included in the consolidated statements of income related to non-hedging interest rate, commodity and foreign currency derivative instruments are presented in the table below.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Non-hedging interest rate derivatives:				
Other non-interest income	$702	$607	$2,190	$977
Other non-interest expense	17	2	(4)	1
Non-hedging commodity derivatives:				
Other non-interest income	(54)	104	36	156
Non-hedging foreign currency derivatives:				
Other non-interest income	91	9	150	18

Counterparty Credit Risk. Our credit exposure relating to interest rate swaps, commodity swaps/options and foreign currency forward contracts with bank customers was approximately $38.9 million at June 30, 2018. This credit exposure is partly mitigated as transactions with customers are generally secured by the collateral, if any, securing the underlying transaction being hedged. Our credit exposure, net of collateral pledged, relating to interest rate swaps, commodity swaps/options and foreign currency forward contracts with upstream financial institution counterparties was approximately $747 thousand at June 30, 2018. This amount was primarily related to excess collateral we posted to counterparties. Collateral levels for upstream financial institution counterparties are monitored and adjusted as necessary. See Note 9 – Balance Sheet Offsetting and Repurchase Agreements for additional information regarding our credit exposure with upstream financial institution counterparties.

The aggregate fair value of securities we posted as collateral related to derivative contracts totaled $6.2 million at June 30, 2018. At such date, we also had $25.7 million in cash collateral on deposit with other financial institution counterparties.

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Note 9 - Balance Sheet Offsetting and Repurchase Agreements

Balance Sheet Offsetting. Certain financial instruments, including resell and repurchase agreements and derivatives, may be eligible for offset in the consolidated balance sheet and/or subject to master netting arrangements or similar agreements. Our derivative transactions with upstream financial institution counterparties are generally executed under International Swaps and Derivative Association ("ISDA") master agreements which include "right of set-off" provisions. In such cases there is generally a legally enforceable right to offset recognized amounts and there may be an intention to settle such amounts on a net basis. Nonetheless, we do not generally offset such financial instruments for financial reporting purposes.

Information about financial instruments that are eligible for offset in the consolidated balance sheet as of June 30, 2018 is presented in the following tables.

	Gross Amount Recognized	Gross Amount Offset	Net Amount Recognized
June 30, 2018			
Financial assets:			
Derivatives:			
Loan/lease interest rate swaps and caps	$ 5,993	$ —	$ 5,993
Commodity swaps and options	2,068	—	2,068
Foreign currency forward contracts	7	—	7
Total derivatives	8,068	—	8,068
Resell agreements	9,642	—	9,642
Total	$ 17,710	$ —	$ 17,710
Financial liabilities:			
Derivatives:			
Loan/lease interest rate swaps	$ 6,554	$ —	$ 6,554
Commodity swaps and options	31,575	—	31,575
Foreign currency forward contracts	216	—	216
Total derivatives	38,345	—	38,345
Repurchase agreements	968,420	—	968,420
Total	$ 1,006,765	$ —	$ 1,006,765

	Net Amount Recognized	Gross Amounts Not Offset Financial Instruments	Collateral	Net Amount
June 30, 2018				
Financial assets:				
Derivatives:				
Counterparty A	$ 1,234	$ (1,234)	$ —	$ —
Counterparty B	2,211	(2,211)	—	—
Counterparty C	77	(77)	—	—
Other counterparties	4,546	(1,448)	(2,873)	225
Total derivatives	8,068	(4,970)	(2,873)	225
Resell agreements	9,642	—	(9,642)	—
Total	$ 17,710	$ (4,970)	$ (12,515)	$ 225
Financial liabilities:				
Derivatives:				
Counterparty A	$ 4,660	$ (1,234)	$ (3,426)	$ —
Counterparty B	5,333	(2,211)	(2,358)	764
Counterparty C	1,195	(77)	(1,040)	78
Other counterparties	27,157	(1,448)	(24,532)	1,177

Total derivatives	38,345	(4,970)	(31,356)	2,019
Repurchase agreements	968,420	—	(968,420)	—
Total	$ 1,006,765	$ (4,970)	$ (999,776)	$ 2,019

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Information about financial instruments that are eligible for offset in the consolidated balance sheet as of December 31, 2017 is presented in the following tables.

	Gross Amount Recognized	Gross Amount Offset	Net Amount Recognized
December 31, 2017			
Financial assets:			
Derivatives:			
Loan/lease interest rate swaps and caps	$ 2,140	$ —	$ 2,140
Commodity swaps and options	1,592	—	1,592
Foreign currency forward contracts	78	—	78
Total derivatives	3,810	—	3,810
Resell agreements	9,642	—	9,642
Total	$ 13,452	$ —	$ 13,452
Financial liabilities:			
Derivatives:			
Loan/lease interest rate swaps	$ 13,413	$ —	$ 13,413
Commodity swaps and options	13,774	—	13,774
Foreign currency forward contracts	188	—	188
Total derivatives	27,375	—	27,375
Repurchase agreements	1,117,199	—	1,117,199
Total	$ 1,144,574	$ —	$ 1,144,574

	Net Amount Recognized	Gross Amounts Not Offset Financial Instruments	Collateral	Net Amount
December 31, 2017				
Financial assets:				
Derivatives:				
Counterparty A	$ 395	$ (395)	$ —	$ —
Counterparty B	1,028	(1,028)	—	—
Counterparty C	55	(55)	—	—
Other counterparties	2,332	(1,830)	(387)	115
Total derivatives	3,810	(3,308)	(387)	115
Resell agreements	9,642	—	(9,642)	—
Total	$ 13,452	$ (3,308)	$ (10,029)	$ 115
Financial liabilities:				
Derivatives:				
Counterparty A	$ 7,397	$ (395)	$ (7,002)	$ —
Counterparty B	4,466	(1,028)	(3,101)	337
Counterparty C	1,520	(55)	(1,450)	15
Other counterparties	13,992	(1,830)	(11,215)	947
Total derivatives	27,375	(3,308)	(22,768)	1,299
Repurchase agreements	1,117,199	—	(1,117,199)	—
Total	$ 1,144,574	$ (3,308)	$ (1,139,967)	$ 1,299

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Repurchase Agreements. We utilize securities sold under agreements to repurchase to facilitate the needs of our customers and to facilitate secured short-term funding needs. Securities sold under agreements to repurchase are stated at the amount of cash received in connection with the transaction. We monitor collateral levels on a continuous basis. We may be required to provide additional collateral based on the fair value of the underlying securities. Securities pledged as collateral under repurchase agreements are maintained with our safekeeping agents.

The remaining contractual maturity of repurchase agreements in the consolidated balance sheets as of June 30, 2018 and December 31, 2017 is presented in the following tables.

	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Up to 30 Days	30-90 Days	Greater than 90 Days	Total
June 30, 2018					
Repurchase agreements:					
U.S. Treasury	$956,963	$ —	$ —	$ —	$956,963
Residential mortgage-backed securities	11,457	—	—	—	11,457
Total borrowings	$968,420	$ —	$ —	$ —	$968,420
Gross amount of recognized liabilities for repurchase agreements					$968,420
Amounts related to agreements not included in offsetting disclosures above					$—
December 31, 2017					
Repurchase agreements:					
U.S. Treasury	$1,036,891	$ —	$ —	$ —	$1,036,891
Residential mortgage-backed securities	80,308	—	—	—	80,308
Total borrowings	$1,117,199	$ —	$ —	$ —	$1,117,199
Gross amount of recognized liabilities for repurchase agreements					$1,117,199
Amounts related to agreements not included in offsetting disclosures above					$—

Note 10 - Stock-Based Compensation

A combined summary of activity in our active stock plans is presented in the table. Performance stock units outstanding are presented assuming attainment of the maximum payout rate as set forth by the performance criteria. As of June 30, 2018, there were 1,409,473 shares remaining available for grant for future stock-based compensation awards.

	Director Deferred Stock Units Outstanding		Non-Vested Stock Awards/Stock Units Outstanding		Performance Stock Units Outstanding		Stock Options Outstanding	
	Number of Units	Weighted-Average Fair Value at Grant	Number of Shares/Units	Weighted-Average Fair Value at Grant	Number of Units	Weighted-Average Fair Value at Grant	Number of Shares	Weighted-Average Exercise Price
Balance, January 1, 2018	53,008	$ 64.87	312,656	$ 81.71	80,103	$ 79.91	2,917,142	$ 63.34
Authorized	—	—	—	—	—	—	—	—
Granted	6,576	109.58	—	—	—	—	—	—
Exercised/vested	(10,674)	63.68	(2,470)	78.92	—	—	(415,455)	61.25
Forfeited/expired	—	—	(4,424)	87.24	—	—	(43,875)	70.19
Balance, June 30, 2018	48,910	$ 71.14	305,762	$ 81.65	80,103	$ 79.91	2,457,812	$ 63.57

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Shares issued in connection with stock compensation awards are issued from available treasury shares. If no treasury shares are available, new shares are issued from available authorized shares. Shares issued in connection with stock compensation awards along with other related information were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
New shares issued from available authorized shares	—	310,021	—	593,363
Issued from available treasury stock	110,489	—	428,599	158,712
Total	110,489	310,021	428,599	752,075
Proceeds from stock option exercises	$6,283	$19,402	$25,448	$44,149

Stock-based compensation expense is recognized ratably over the requisite service period for all awards. For most stock option awards, the service period generally matches the vesting period. For stock options granted to certain executive officers and for non-vested stock units granted to all participants, the service period does not extend past the date the participant reaches 65 years of age. Deferred stock units granted to non-employee directors generally have immediate vesting and the related expense is fully recognized on the date of grant. For performance stock units, the service period generally matches the three-year performance period specified by the award, however, the service period does not extend past the date the participant reaches 65 years of age. Expense recognized each period is dependent upon our estimate of the number of shares that will ultimately be issued.

Stock-based compensation expense and the related income tax benefit is presented in the following table.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Stock options	$1,019	$1,573	$2,104	$3,360
Non-vested stock awards/stock units	1,371	901	2,839	1,934
Director deferred stock units	720	519	720	519
Performance stock units	475	195	1,097	478
Total	$3,585	$3,188	$6,760	$6,291
Income tax benefit	$753	$1,116	$1,420	$2,202

Unrecognized stock-based compensation expense at June 30, 2018 is presented in the table below. Unrecognized stock-based compensation expense related to performance stock units is presented assuming attainment of the maximum payout rate as set forth by the performance criteria.

Stock options	$2,943
Non-vested stock awards/stock units	11,728
Performance stock units	4,033
Total	$18,704

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Note 11 - Earnings Per Common Share

Earnings per common share is computed using the two-class method as more fully described in our 2017 Form 10-K. The following table presents a reconciliation of net income available to common shareholders, net earnings allocated to common stock and the number of shares used in the calculation of basic and diluted earnings per common share.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	$111,341	$ 85,553	$217,821	$ 170,494
Less: Preferred stock dividends	2,015	2,015	4,031	4,031
Net income available to common shareholders	109,326	83,538	213,790	166,463
Less: Earnings allocated to participating securities	726	436	1,431	871
Net earnings allocated to common stock	$108,600	$ 83,102	$212,359	$ 165,592
Distributed earnings allocated to common stock	$42,791	$ 36,545	$79,096	$ 71,020
Undistributed earnings allocated to common stock	65,809	46,557	133,263	94,572
Net earnings allocated to common stock	$108,600	$ 83,102	$212,359	$ 165,592
Weighted-average shares outstanding for basic earnings per common share	63,836,651	64,061,264	63,743,442	63,900,620
Dilutive effect of stock compensation	1,062,637	974,067	1,043,712	988,198
Weighted-average shares outstanding for diluted earnings per common share	64,899,288	65,035,331	64,787,154	64,888,818

Note 12 - Defined Benefit Plans

The components of the combined net periodic expense (benefit) for our defined benefit pension plans are presented in the table below.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Expected return on plan assets, net of expenses	$(2,979)	$(2,780)	$(5,958)	$(5,559)
Interest cost on projected benefit obligation	1,474	1,548	2,949	3,095
Net amortization and deferral	1,251	1,358	2,501	2,715
Net periodic expense (benefit)	$(254)	$126	$(508)	$251

Our non-qualified defined benefit pension plan is not funded. No contributions to the qualified defined benefit pension plan were made during the six months ended June 30, 2018. We do not expect to make any contributions to the qualified defined benefit plan during the remainder of 2018.

Note 13 - Income Taxes

Income tax expense was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Current income tax expense	$1,361	$13,710	$2,107	$29,412
Deferred income tax expense (benefit)	12,475	128	22,886	(4,173)
Income tax expense, as reported	$13,836	$13,838	$24,993	$25,239
Effective tax rate	11.1 %	13.9 %	10.3 %	12.9 %

Net deferred tax assets totaled $49.7 million at June 30, 2018 and $31.7 million at December 31, 2017. No valuation allowance for deferred tax assets was recorded at June 30, 2018 as management believes it is more likely than not that all of the deferred tax assets will be realized against deferred tax liabilities and projected future taxable income.

The effective income tax rates differed from the U.S. statutory federal income tax rates of 21% during 2018 and 35% during 2017 primarily due to the effect of tax-exempt income from loans, securities and life insurance policies and the income tax effects

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associated with stock-based compensation. There were no unrecognized tax benefits during any of the reported periods. Interest and/or penalties related to income taxes are reported as a component of income tax expense. Such amounts were not significant during the reported periods.

We file income tax returns in the U.S. federal jurisdiction. We are no longer subject to U.S. federal income tax examinations by tax authorities for years before 2014.

Tax Cuts and Jobs Act. The Tax Cuts and Jobs Act was enacted on December 22, 2017 as more fully discussed in the 2017 Form 10-K. Among other things, the new law established a new, flat corporate federal statutory income tax rate of 21%. As a result, we remeasured our deferred tax assets and liabilities based on the new tax rate and recognized a provisional net tax benefit related to the remeasurement totaling $4.0 million. Notwithstanding the foregoing, we are still analyzing certain aspects of the new law and refining our calculations, which could affect the measurement of these assets and liabilities or give rise to new deferred tax amounts. Nonetheless, there has been no change to the provisional net tax benefit we recorded during the fourth quarter of 2017.

Note 14 - Other Comprehensive Income (Loss)

The before and after tax amounts allocated to each component of other comprehensive income (loss) are presented in the following table. Reclassification adjustments related to securities available for sale are included in net gain (loss) on securities transactions in the accompanying consolidated statements of income. Reclassification adjustments related to defined-benefit post-retirement benefit plans are included in the computation of net periodic pension expense (see Note 12 – Defined Benefit Plans).

	Three Months Ended June 30, 2018			Three Months Ended June 30, 2017		
	Before Tax Amount	Tax Expense, (Benefit)	Net of Tax Amount	Before Tax Amount	Tax Expense, (Benefit)	Net of Tax Amount
Securities available for sale and transferred securities:						
Change in net unrealized gain/loss during the period	$(11,884)	$(2,496)	$(9,388)	$90,390	$31,636	$58,754
Change in net unrealized gain on securities transferred to held to maturity	(2,041)	(429)	(1,612)	(3,860)	(1,351)	(2,509)
Reclassification adjustment for net (gains) losses included in net income	60	13	47	50	18	32
Total securities available for sale and transferred securities	(13,865)	(2,912)	(10,953)	86,580	30,303	56,277
Defined-benefit post-retirement benefit plans:						
Change in the net actuarial gain/loss	—	—	—	—	—	—
Reclassification adjustment for net amortization of actuarial gain/loss included in net income as a component of net periodic cost (benefit)	1,251	263	988	1,358	475	883
Total defined-benefit post-retirement benefit plans	1,251	263	988	1,358	475	883
Total other comprehensive income (loss)	$(12,614)	$(2,649)	$(9,965)	$87,938	$30,778	$57,160

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	Six Months Ended June 30, 2018			Six Months Ended June 30, 2017		
	Before Tax Amount	Tax Expense, (Benefit)	Net of Tax Amount	Before Tax Amount	Tax Expense, (Benefit)	Net of Tax Amount
Securities available for sale and transferred securities:						
Change in net unrealized gain/loss during the period	$(190,788)	$(40,066)	$(150,722)	$124,201	$43,470	$80,731
Change in net unrealized gain on securities transferred to held to maturity	(4,660)	(979)	(3,681)	(10,146)	(3,551)	(6,595)
Reclassification adjustment for net (gains) losses included in net income	79	17	62	50	18	32
Total securities available for sale and transferred securities	(195,369)	(41,028)	(154,341)	114,105	39,937	74,168
Defined-benefit post-retirement benefit plans:						
Change in the net actuarial gain/loss	—	—	—	—	—	—
Reclassification adjustment for net amortization of actuarial gain/loss included in net income as a component of net periodic cost (benefit)	2,501	526	1,975	2,715	950	1,765
Total defined-benefit post-retirement benefit plans	2,501	526	1,975	2,715	950	1,765
Total other comprehensive income (loss)	$(192,868)	$(40,502)	$(152,366)	$116,820	$40,887	$75,933

Activity in accumulated other comprehensive income (loss), net of tax, was as follows:

	Securities Available For Sale	Defined Benefit Plans	Accumulated Other Comprehensive Income
Balance January 1, 2018	$117,230	$(37,718)	$ 79,512
Other comprehensive income (loss) before reclassifications	(154,403)	—	(154,403)
Reclassification of amounts included in net income	62	1,975	2,037
Net other comprehensive income (loss) during period	(154,341)	1,975	(152,366)
Reclassification of certain income tax effects related to the change in the U.S. statutory federal income tax rate under the Tax Cuts and Jobs Act to retained earnings	17,557	(8,022)	9,535
Balance at June 30, 2018	$(19,554)	$(43,765)	$ (63,319)
Balance January 1, 2017	$16,153	$(40,776)	$ (24,623)
Other comprehensive income (loss) before reclassifications	74,136	—	74,136
Reclassification of amounts included in net income	32	1,765	1,797
Net other comprehensive income (loss) during period	74,168	1,765	75,933
Balance at June 30, 2017	$90,321	$(39,011)	$ 51,310

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Note 15 – Operating Segments

We are managed under a matrix organizational structure whereby our two primary operating segments, Banking and Frost Wealth Advisors, overlap a regional reporting structure. See our 2017 Form 10-K for additional information regarding our operating segments. Summarized operating results by segment were as follows:

	Banking	Frost Wealth Advisors	Non-Banks	Consolidated
Revenues from (expenses to) external customers:				
Three months ended:				
June 30, 2018	$290,433	$34,526	$ (2,623)	$ 322,336
June 30, 2017	261,250	36,712	(2,094)	295,868
Six months ended:				
June 30, 2018	$578,994	$69,607	$ (5,072)	$ 643,529
June 30, 2017	520,161	71,300	(3,384)	588,077
Net income (loss):				
Three months ended:				
June 30, 2018	$109,276	$5,901	$ (3,836)	$ 111,341
June 30, 2017	81,529	6,279	(2,255)	85,553
Six months ended:				
June 30, 2018	$212,917	$11,535	$ (6,631)	$ 217,821
June 30, 2017	162,398	11,573	(3,477)	170,494

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Note 16 – Fair Value Measurements

The fair value of an asset or liability is the price that would be received to sell that asset or paid to transfer that liability in an orderly transaction occurring in the principal market (or most advantageous market in the absence of a principal market) for such asset or liability. In estimating fair value, we utilize valuation techniques that are consistent with the market approach, the income approach and/or the cost approach. Such valuation techniques are consistently applied. Inputs to valuation techniques include the assumptions that market participants would use in pricing an asset or liability. ASC Topic 820 establishes a three-level fair value hierarchy for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. See our 2017 Form 10-K for additional information regarding the fair value hierarchy and a description of our valuation techniques.

Financial Assets and Financial Liabilities. The table below summarizes financial assets and financial liabilities measured at fair value on a recurring basis as of June 30, 2018 and December 31, 2017, segregated by the level of the valuation inputs within the fair value hierarchy of ASC Topic 820 utilized to measure fair value.

	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Total Fair Value
June 30, 2018				
Securities available for sale:				
U.S. Treasury	$3,410,081	$ —	$ —	$3,410,081
Residential mortgage-backed securities	—	631,658	—	631,658
States and political subdivisions	—	6,633,389	—	6,633,389
Other	—	42,615	—	42,615
Trading account securities:				
U.S. Treasury	20,755	—	—	20,755
States and political subdivisions	—	579	—	579
Derivative assets:				
Interest rate swaps, caps and floors	—	15,465	—	15,465
Commodity swaps and options	—	31,638	2,005	33,643
Foreign currency forward contracts	270	—	—	270
Derivative liabilities:				
Interest rate swaps, caps and floors	—	24,211	—	24,211
Commodity swaps and options	—	33,631	—	33,631
Foreign currency forward contracts	216	—	—	216
December 31, 2017				
Securities available for sale:				
U.S. Treasury	$3,445,153	$ —	$ —	$3,445,153
Residential mortgage-backed securities	—	665,086	—	665,086
States and political subdivisions	—	6,336,209	—	6,336,209
Other	—	42,561	—	42,561
Trading account securities:				
U.S. Treasury	19,210	—	—	19,210
States and political subdivisions	—	1,888	—	1,888
Derivative assets:				
Interest rate swaps, caps and floors	—	20,022	—	20,022
Commodity swaps and options	—	14,408	1,233	15,641
Foreign currency forward contracts	415	—	—	415
Derivative liabilities:				
Interest rate swaps, caps and floors	—	18,754	—	18,754
Commodity swaps and options	—	15,327	—	15,327
Foreign currency forward contracts	239	—	—	239

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Derivative assets, measured at fair value on a recurring basis using significant unobservable (Level 3) inputs during the reported periods consist of commodity swaps sold to loan customers. The significant unobservable (Level 3) inputs used in the fair value measurement of these commodity swaps sold to loan customers primarily relate to the probability of default and loss severity in the event of default. The probability of default is determined by the underlying risk grade of the loan (see Note 3 - Loans) underlying the commodity swap in that the probability of default increases as a loan's risk grade deteriorates, while the loss severity is estimated through an analysis of the collateral supporting both the underlying loan and commodity swap. Generally, a change in the assumption used for the probability of default is accompanied by a directionally similar change in the assumption used for the loss severity. The weighted-average risk grade of loans underlying commodity swaps measured at fair value using significant unobservable (Level 3) inputs was 12.0 for both periods ended June 30, 2018 and December 31, 2017. The weighted-average loss severity in the event of default on the commodity swaps was 19.7% and 15.4% for the periods ended June 30, 2018 and December 31, 2017 respectively. A reconciliation of the beginning and ending balances of derivative assets measured at fair value on a recurring basis using significant unobservable (Level 3) inputs is not presented as such amounts were not significant during the reported periods.

Certain financial assets and financial liabilities are measured at fair value on a nonrecurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances (for example, when there is evidence of impairment). Financial assets measured at fair value on a non-recurring basis during the reported periods include certain impaired loans reported at the fair value of the underlying collateral if repayment is expected solely from the collateral. The following table presents impaired loans that were remeasured and reported at fair value through a specific valuation allowance allocation of the allowance for loan losses based upon the fair value of the underlying collateral during the reported periods.

	Six Months Ended June 30, 2018		Six Months Ended June 30, 2017	
	Level 2	Level 3	Level 2	Level 3
Carrying value of impaired loans before allocations	$14,359	$52,048	$—	$21,686
Specific valuation allowance (allocations) reversals of prior allocations	(799)	(1,149)	—	(561)
Fair value	$13,560	$50,899	$—	$21,125

Non-Financial Assets and Non-Financial Liabilities. We do not have any non-financial assets or non-financial liabilities measured at fair value on a recurring basis. Non-financial assets measured at fair value on a non-recurring basis during the reported periods include certain foreclosed assets which, upon initial recognition, were remeasured and reported at fair value through a charge-off to the allowance for loan losses and certain foreclosed assets which, subsequent to their initial recognition, were remeasured at fair value through a write-down included in other non-interest expense. The following table presents foreclosed assets that were remeasured and reported at fair value during the reported periods:

	Six Months Ended June 30,	
	2018	2017
Foreclosed assets remeasured at initial recognition:		
Carrying value of foreclosed assets prior to remeasurement	$2,656	$—
Charge-offs recognized in the allowance for loan losses	—	—
Fair value	$2,656	$—
Foreclosed assets remeasured subsequent to initial recognition:		
Carrying value of foreclosed assets prior to remeasurement	$1,823	$89
Write-downs included in other non-interest expense	(473)	(16)
Fair value	$1,350	$73

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Financial Instruments Reported at Amortized Cost. The estimated fair values of financial instruments that are reported at amortized cost in our consolidated balance sheets, segregated by the level of the valuation inputs within the fair value hierarchy utilized to measure fair value, were as follows:

	June 30, 2018		December 31, 2017	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Financial assets:				
Level 2 inputs:				
Cash and cash equivalents	$3,315,470	$3,315,470	$5,053,047	$5,053,047
Securities held to maturity	1,236,511	1,247,143	1,432,098	1,455,791
Cash surrender value of life insurance policies	181,756	181,756	180,477	180,477
Accrued interest receivable	173,394	173,394	167,508	167,508
Level 3 inputs:				
Loans, net	13,561,536	13,515,854	12,990,301	12,981,165
Financial liabilities:				
Level 2 inputs:				
Deposits	25,996,499	25,989,689	26,872,389	26,866,676
Federal funds purchased and repurchase agreements	977,470	977,470	1,147,824	1,147,824
Junior subordinated deferrable interest debentures	136,213	137,115	136,184	137,115
Subordinated notes payable and other borrowings	98,630	100,250	98,552	105,311
Accrued interest payable	5,655	5,655	3,358	3,358

Under ASC Topic 825, entities may choose to measure eligible financial instruments at fair value at specified election dates. The fair value measurement option (i) may be applied instrument by instrument, with certain exceptions, (ii) is generally irrevocable and (iii) is applied only to entire instruments and not to portions of instruments. Unrealized gains and losses on items for which the fair value measurement option has been elected must be reported in earnings at each subsequent reporting date. During the reported periods, we had no financial instruments measured at fair value under the fair value measurement option.

Note 17 - Accounting Standards Updates

Information about certain recently issued accounting standards updates is presented below. Also refer to Note 20 - Accounting Standards Updates in our 2017 Form 10-K for additional information related to previously issued accounting standards updates.

Accounting Standards Update (“ASU”) 2014-09, “Revenue from Contracts with Customers (Topic 606).” ASU 2014-09 implements a common revenue standard that clarifies the principles for recognizing revenue. The core principle of ASU 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve that core principle, an entity should apply the following steps: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We adopted ASU 2014-09 effective January 1, 2018. See Note 1 - Significant Accounting Policies for additional information.

ASU 2016-02, “Leases (Topic 842).” ASU 2016-02 will, among other things, require lessees to recognize a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee’s right to use, or control the use of, a specified asset for the lease term. ASU 2016-02 does not significantly change lease accounting requirements applicable to lessors; however, certain changes were made to align, where necessary, lessor accounting with the lessee accounting model and ASC Topic 606, “Revenue from Contracts with Customers.” ASU 2016-02 will be effective for us on January 1, 2019 and will require transition using a modified retrospective approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. Notwithstanding the foregoing, in January 2018, the Financial Accounting Standards Board issued a proposal to provide an additional transition method

that would allow entities to not apply the guidance in ASU 2016-02 in the comparative periods presented in the financial statements and instead recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. We are currently implementing a third-party vendor solution to assist us in the application of ASU 2016-02. While we are currently unable to reasonably estimate the impact of adopting ASU 2016-02 until such time as we have implemented the solution, the adoption will result in an increase in right-of-use assets and lease liabilities recorded on our balance sheet.

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ASU 2016-13, “Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.” 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 an organization’s 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 on January 1, 2020. We are currently evaluating the potential impact of ASU 2016-13 on our financial statements. In that regard, we have formed a cross-functional working group, under the direction of our Chief Financial Officer and our Chief Risk Officer. The working group is comprised of individuals from various functional areas including credit, risk management, finance and information technology, among others. We are currently developing an implementation plan to include assessment of processes, portfolio segmentation, model development, system requirements and the identification of data and resource needs, among other things. We are also in the process of implementing a third-party vendor solution to assist us in the application of the ASU 2016-13. The adoption of the ASU 2016-13 could result in an increase in the allowance for loan losses as a result of changing from an “incurred loss” model, which encompasses allowances for current known and inherent losses within the portfolio, to an “expected loss” model, which encompasses allowances for losses expected to be incurred over the life of the portfolio. Furthermore, ASU 2016-13 will necessitate that we establish an allowance for expected credit losses for certain debt securities and other financial assets. While we are currently unable to reasonably estimate the impact of adopting ASU 2016-13, we expect that the impact of adoption 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.

ASU 2017-08, “Receivables - Nonrefundable Fees and Other Costs (Subtopic 310-20) - Premium Amortization on Purchased Callable Debt Securities.” ASU 2017-08 shortens the amortization period for certain callable debt securities held at a premium to require such premiums to be amortized to the earliest call date unless applicable guidance related to certain pools of securities is applied to consider estimated prepayments. Under prior guidance, entities were generally required to amortize premiums on individual, non-pooled callable debt securities as a yield adjustment over the contractual life of the security. ASU 2017-08 does not change the accounting for callable debt securities held at a discount. ASU 2017-08 will be effective for us on January 1, 2019, with early adoption permitted. While we are currently evaluating the potential impact of ASU 2017-08 on our financial statements, we expect that the impact of adoption will be significantly influenced by the composition of our securities portfolio as of the adoption date.

ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220) - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." Under ASU 2018-02, entities may elect to reclassify certain income tax effects related to the change in the U.S. statutory federal income tax rate under the Tax Cuts and Jobs Act, which was enacted on December 22, 2017, from accumulated other comprehensive income to retained earnings. ASU 2018-02 also requires certain accounting policy disclosures. We elected to adopt the provisions of ASU 2018-02 as of January 1, 2018 in advance of the required application date of January 1, 2019. See Note 1 - Significant Accounting Policies.

ASU 2018-05, "Income Taxes (Topic 740) - Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin (SAB) No. 118." ASU 2018-05 amends the Accounting Standards Codification to incorporate various SEC paragraphs pursuant to the issuance of SAB 118. SAB 118 addresses the application of generally accepted accounting principles in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Cuts and Jobs Act. See Note 13 - Income Taxes.

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

Financial Review

Cullen/Frost Bankers, Inc.

The following discussion should be read in conjunction with our consolidated financial statements, and notes thereto, for the year ended December 31, 2017, and the other information included in the 2017 Form 10-K. Operating results for the three and six months ended June 30, 2018 are not necessarily indicative of the results for the year ending December 31, 2018 or any future period.

Dollar amounts in tables are stated in thousands, except for per share amounts.

Forward-Looking Statements and Factors that Could Affect Future Results

Certain statements contained in this Quarterly Report on Form 10-Q that are not statements of historical fact constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Act"), notwithstanding that such statements are not specifically identified as such. In addition, certain statements may be contained in our future filings with the SEC, in press releases, and in oral and written statements made by us or with our approval that are not statements of historical fact and constitute forward-looking statements within the meaning of the Act. Examples of forward-looking statements include, but are not limited to: (i) projections of revenues, expenses, income or loss, earnings or loss per share, the payment or nonpayment of dividends, capital structure and other financial items; (ii) statements of plans, objectives and expectations of Cullen/Frost or its management or Board of Directors, including those relating to products, services or operations; (iii) statements of future economic performance; and (iv) statements of assumptions underlying such statements. Words such as "believes", "anticipates", "expects", "intends", "targeted", "continue", "remain", "will", "should", "may" and other similar expressions are intended to id forward-looking statements but are not the exclusive means of identifying such statements.

Forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from those in such statements. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- Local, regional, national and international economic conditions and the impact they may have on us and our customers and our assessment of that impact.
- Volatility and disruption in national and international financial and commodity markets.
- Government intervention in the U.S. financial system.
- Changes in the mix of loan geographies, sectors and types or the level of non-performing assets and charge-offs.
- Changes in estimates of future reserve requirements based upon the periodic review thereof under relevant regulatory and accounting requirements.
- The effects of and changes in trade and monetary and fiscal policies and laws, including the interest rate policies of the Federal Reserve Board.
- Inflation, interest rate, securities market and monetary fluctuations.
- The effect of changes in laws and regulations (including laws and regulations concerning taxes, banking, securities and insurance) with which we and our subsidiaries must comply.
- The soundness of other financial institutions.
- Political instability.
- Impairment of our goodwill or other intangible assets.
- Acts of God or of war or terrorism.
- The timely development and acceptance of new products and services and perceived overall value of these products and services by users.
- Changes in consumer spending, borrowings and savings habits.
- Changes in the financial performance and/or condition of our borrowers.
- Technological changes.
- The cost and effects of failure, interruption, or breach of security of our systems.
- Acquisitions and integration of acquired businesses.
- Our ability to increase market share and control expenses.

- Our ability to attract and retain qualified employees.
- Changes in the competitive environment in our markets and among banking organizations and other financial service providers.
- The effect of changes in accounting policies and practices, as may be adopted by the regulatory agencies, as well as the Public Company Accounting Oversight Board, the Financial Accounting Standards Board and other accounting standard setters.
- Changes in the reliability of our vendors, internal control systems or information systems.

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- Changes in our liquidity position.
- Changes in our organization, compensation and benefit plans.
- The costs and effects of legal and regulatory developments, the resolution of legal proceedings or regulatory or other governmental inquiries, the results of regulatory examinations or reviews and the ability to obtain required regulatory approvals.
- Greater than expected costs or difficulties related to the integration of new products and lines of business.
- Our success at managing the risks involved in the foregoing items.

Forward-looking statements speak only as of the date on which such statements are made. We do not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events.

Application of Critical Accounting Policies and Accounting Estimates

We follow accounting and reporting policies that conform, in all material respects, to accounting principles generally accepted in the United States and to general practices within the financial services industry. The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the 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 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 - Summary of Significant Accounting Policies and Note 3 - Loans in the notes to consolidated financial statements and the sections captioned “Application of Critical Accounting Policies and Accounting Estimates” and “Allowance for Loan Losses” in Management’s Discussion and Analysis of Financial Condition and Results of Operations included in the 2017 Form 10-K. There have been no significant changes in our application of critical accounting policies related to the allowance for loan losses since December 31, 2017.

Overview

A discussion of our results of operations is presented below. Certain reclassifications have been made to make prior periods comparable. Taxable-equivalent adjustments are the result of increasing income from tax-free loans and investments by an amount equal to the taxes that would be paid if the income were fully taxable based on the applicable 21% federal tax rate in 2018 and 35% federal tax rate in 2017, thus making tax-exempt yields comparable to taxable asset yields.

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Results of Operations

Net income available to common shareholders totaled $109.3 million, or $1.68 per diluted common share and $213.8 million, or $3.30 per diluted common share, for the three and six months ended June 30, 2018 compared to $83.5 million, or $1.29 per diluted common share, and $166.5 million, or $2.57 per diluted common share, for the three and six months ended June 30, 2017.

Selected data for the comparable periods was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Taxable-equivalent net interest income	$260,531	$258,020	$513,067	$510,413
Taxable-equivalent adjustment	23,261	43,232	46,049	87,116
Net interest income	237,270	214,788	467,018	423,297
Provision for loan losses	8,251	8,426	15,196	16,378
Net interest income after provision for loan losses	229,019	206,362	451,822	406,919
Non-interest income	85,066	81,080	176,511	164,780
Non-interest expense	188,908	188,051	385,519	375,966
Income before income taxes	125,177	99,391	242,814	195,733
Income taxes	13,836	13,838	24,993	25,239
Net income	111,341	85,553	217,821	170,494
Preferred stock dividends	2,015	2,015	4,031	4,031
Net income available to common shareholders	$109,326	$83,538	$213,790	$166,463
Earnings per common share – basic	$1.70	$1.30	$3.33	$2.59
Earnings per common share – diluted	1.68	1.29	3.30	2.57
Dividends per common share	0.67	0.57	1.24	1.11
Return on average assets	1.43 %	1.11 %	1.39 %	1.11 %
Return on average common equity	14.03	11.07	13.83	11.31
Average shareholders' equity to average assets	10.63	10.53	10.55	10.33

Net income available to common shareholders increased $25.8 million, or 30.9%, for the three months ended June 30, 2018 and increased $47.3 million, or 28.4%, for the six months ended June 30, 2018 compared to the same periods in 2017. The increase during the three months ended June 30, 2018 was primarily the result of a $22.5 million increase in net interest income, a $4.0 million increase in non-interest income and a $175 thousand decrease in the provision for loan losses partly offset by an $857 thousand increase in non-interest expense. The increase during the six months ended June 30, 2018 was primarily the result of a $43.7 million increase in net interest income, an $11.7 million increase in non-interest income and a $1.2 million decrease in the provision for loan losses partly offset by a $9.6 million increase in non-interest expense.

Details of the changes in the various components of net income are further discussed below.

Net Interest Income

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 72.6% of total revenue during the first six months of 2018. 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.

The Federal Reserve influences the general market rates of interest, including the deposit and loan rates offered by many financial institutions. Our loan portfolio is significantly affected by changes in the prime interest rate. The prime rate began 2017 at 3.75% and remained at that level until March 2017, when it increased 25 basis points to 4.00%. During the remainder of 2017, the prime rate increased an additional 50 basis points (25 basis points in each of June and December) to end 2017 at 4.50%. During the first six months of 2018, the prime rate increased 50 basis points (25 basis points in each of March and June) to end the period at 5.00%. Our loan portfolio is also impacted by changes in

the London Interbank Offered Rate (LIBOR). At June 30, 2018, the one-month and three-month U.S. dollar LIBOR interest rates were 2.09% and 2.34%, respectively, while at June 30, 2017, the one-month and three-month U.S. dollar LIBOR interest rates were 1.22% and 1.30%, respectively. The effective federal funds rate, which is the cost of immediately available overnight funds, began 2017 at 0.75% and subsequently increased 75 basis points (25 basis points in each of March, June and December) to end 2017 at 1.50%. During the first six months of 2018, the effective federal funds rate increased 50 basis points (25 basis points in each of March and June) to end the period at 2.00%.

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We are primarily funded by core deposits, with non-interest-bearing demand deposits historically being a significant source of funds. This lower-cost funding base is expected to have a positive impact on our net interest income and net interest margin in a rising interest rate environment. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") repealed the federal prohibitions on the payment of interest on demand deposits, thereby permitting depository institutions to pay interest on business transaction and other accounts beginning July 21, 2011. To date, we have not experienced any significant additional interest costs as a result of the repeal. However, as market interest rates have increased, we have increased the interest rates we pay on most of our interest-bearing deposit products. See Item 3. Quantitative and Qualitative Disclosures About Market Risk elsewhere in this report for information about the expected impact of this legislation on our sensitivity to interest rates. Further analysis of the components of our net interest margin is presented below.

The following table presents the changes in taxable-equivalent net interest income and identifies the changes due to differences in the average volume of earning assets and interest-bearing liabilities and the changes due to changes in the average interest rate on those assets and liabilities. The changes in net interest income due to changes in both average volume and average interest rate have been allocated to the average volume change or the average interest rate change in proportion to the absolute amounts of the change in each. The comparison between the periods includes an additional change factor detailing the effect of the reduction in the U.S. statutory federal income tax rate under the Tax Cuts and Jobs Act, which was enacted on December 22, 2017, as further discussed in our 2017 Form 10-K.

	Three Months Ended June 30, 2018 vs. June 30, 2017 Increase (Decrease) Due to Change in			
	Rate	Volume	Tax Rate	Total
Interest-bearing deposits	$6,249	$(1,408)	$—	$4,841
Federal funds sold and resell agreements	102	1,150	—	1,252
Securities:				
Taxable	1,682	(4,021)	—	(2,339)
Tax-exempt	(3,073)	6,199	(21,249)	(18,123)
Loans, net of unearned discounts	19,375	14,341	(641)	33,075
Total earning assets	24,335	16,261	(21,890)	18,706
Savings and interest checking	1,017	15	—	1,032
Money market deposit accounts	12,708	35	—	12,743
Time accounts	965	4	—	969
Public funds	673	(15)	—	658
Federal funds purchased and repurchase agreements	421	23	—	444
Junior subordinated deferrable interest debentures	349	—	—	349
Subordinated notes payable and other notes	(2)	2	—	—
Total interest-bearing liabilities	16,131	64	—	16,195
Net change	$8,204	$16,197	$(21,890)	$2,511

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	Six Months Ended June 30, 2018 vs. June 30, 2017 Increase (Decrease) Due to Change in			
	Rate	Volume	Tax Rate	Total
Interest-bearing deposits	$12,368	$(269)	$—	$12,099
Federal funds sold and resell agreements	259	1,647	—	1,906
Securities:				
Taxable	2,199	(9,282)	—	(7,083)
Tax-exempt	(6,555)	10,023	(42,832)	(39,364)
Loans, net of unearned discounts	35,588	27,275	(1,277)	61,586
Total earning assets	43,859	29,394	(44,109)	29,144
Savings and interest checking	1,861	35	—	1,896
Money market deposit accounts	19,250	55	—	19,305
Time accounts	1,646	—	—	1,646
Public funds	1,368	(43)	—	1,325
Federal funds purchased and repurchase agreements	891	48	—	939
Junior subordinated deferrable interest debentures	582	1	—	583
Subordinated notes payable and other notes	436	360	—	796
Total interest-bearing liabilities	26,034	456	—	26,490
Net change	$17,825	$28,938	$(44,109)	$2,654

Taxable-equivalent net interest income for the three months ended June 30, 2018 increased $2.5 million, or 1.0%, while taxable-equivalent net interest income for the six months ended June 30, 2018 increased $2.7 million, or 0.5%, compared to the same periods in 2017. Taxable-equivalent net interest income for the three and six months ended June 30, 2018 was impacted by the reduction in the U.S. federal statutory income tax rate from 35% to 21% under the Tax Cuts and Jobs Act enacted on December 22, 2017. Taxable-equivalent net interest income for the three and six months ended June 30, 2017 would have been lower by approximately $21.9 million and $44.1 million, respectively, based on a 21% tax rate rather than the 35% tax rate then in effect. Excluding the effect of the tax rate reduction, taxable-equivalent net interest income effectively increased approximately $24.4 million and $46.8 million during the three and six months ended June 30, 2018, respectively, compared to the same periods in 2017. These effective increases in taxable-equivalent net interest income were primarily related to increases in the average yields on loans and interest-bearing deposits combined with increases in the average volumes of loans, tax-exempt securities and federal funds sold and resell agreements. The impact of these items was partly offset by increases in the average rates paid on interest-bearing deposits and other borrowed funds, decreases in the average volume of taxable securities and interest bearing deposits and decreases in the average yield on tax-exempt securities, notwithstanding the effect of the tax rate reduction.

The average volume of interest-earning assets for the three months ended June 30, 2018 increased $582.4 million, while the average volume of interest-earning assets for the six months ended June 30, 2018 increased $787.6 million compared to the same periods in 2017. The increase in the average volume of interest-earning assets during the three months ended June 30, 2018 included a $1.3 billion increase in average loans and a $445.9 million increase in average tax-exempt securities partly offset by a $907.6 million decrease in average taxable securities and a $217.4 million decrease in average interest-bearing deposits and federal funds sold and resell agreements. The increase in the average volume of interest-earning assets during the six months ended June 30, 2018 included a $1.2 billion increase in average loans, a $417.2 million increase in average tax-exempt securities and a $138.3 million increase in average interest-bearing deposits and federal funds sold and resell agreements partly offset by a $1.0 billion decrease in average taxable securities.

The taxable-equivalent net interest margin decreased 6 basis points from 3.70% during the three months ended June 30, 2017 to 3.64% during the three months ended June 30, 2018 and decreased 9 basis points from 3.67% during the six months ended June 30, 2017 to 3.58% during the six months ended June 30, 2018. The taxable-equivalent net

interest margin for the three and six months ended June 30, 2018 was impacted by the aforementioned reduction in the U.S. federal statutory income tax rate. The taxable-equivalent net interest margin for the three and six months ended June 30, 2017 would have been lower by approximately 32 basis points in each period, respectively, based on a 21% tax rate rather than the 35% tax rate then in effect. Excluding the effect of the tax rate reduction, the taxable-equivalent net interest margin effectively increased 26 and 23 basis points during the three and six months ended June 30, 2018, respectively, compared to the same periods in 2017. These effective increases were primarily related to increases in the average yields on loans, interest-bearing deposits and federal funds sold and resell agreements partly offset by increases in the average cost of interest-bearing deposits and other borrowed funds and decreases in the average yields on tax-exempt securities, notwithstanding the effects of the tax rate reduction.

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The average taxable-equivalent yield on interest-earning assets increased 17 basis points from 3.76% during the three months ended June 30, 2017 to 3.93% during the three months ended June 30, 2018 and increased 10 basis points from 3.72% during the six months ended June 30, 2017 to 3.82% during the six months ended June 30, 2018. The increases in the average yield on interest earning assets during the three and six months ended June 30, 2018 were primarily due to increases in the average yields on loans, interest-bearing deposits and federal funds sold and resell agreements mostly offset by decreases in the average taxable-equivalent yield on tax exempt securities, primarily because of the tax rate reduction, as further discussed below. The average taxable-equivalent yield on interest-earning assets is primarily impacted by changes in market interest rates, changes in the volume and relative mix of interest-earning assets and statutory tax rates.

The average taxable-equivalent yield on loans increased 54 basis points from 4.24% during the six months ended June 30, 2017 to 4.78% during the six months ended June 30, 2018. The average taxable-equivalent yield on loans was positively impacted by the increases in market interest rates discussed above. Due to the relative proportion of our tax-exempt loan portfolio to total loans, the reduction in the U.S. federal statutory income tax rate did not significantly impact the overall average taxable-equivalent yield on loans during the six months ended June 30, 2018. The average volume of loans for the six months ended June 30, 2018 increased $1.2 billion, or 10.1%, compared to the same period in 2017. Loans made up approximately 46.5% of average interest-earning assets during the six months ended June 30, 2018 compared to 43.5% during the same period in 2017.

The average taxable-equivalent yield on securities was 3.36% during the six months ended June 30, 2018, decreasing 60 basis points from 3.96% during the six months ended June 30, 2017. The decrease in the average taxable-equivalent yield on securities was primarily related to a decrease in the average taxable-equivalent yield on tax exempt securities partly offset by an increase in the relative proportion of higher-yielding tax exempt securities to total securities and, to a lesser extent, an increase in the average yield on taxable securities. The average taxable-equivalent yield on tax-exempt securities decreased 130 basis points from 5.41% during the six months ended June 30, 2017 to 4.11% during the six months ended June 30, 2018. This decrease was primarily related to the aforementioned reduction in the U.S. federal statutory income tax rate.

The taxable-equivalent yield on tax exempt securities for the six months ended June 30, 2017 would have been 118 basis points lower based on a 21% tax rate rather than the 35% tax rate then in effect. Excluding the effect of the tax rate reduction, the taxable-equivalent yield on tax exempt securities effectively decreased 12 basis points during the six months ended June 30, 2018 compared to the same period in 2017. The overall average yield on total securities was positively impacted by a higher proportion of average securities invested in higher-yielding tax exempt securities during the six months ended June 30, 2018 compared to the same period in 2017. Tax exempt securities made up approximately 64.8% of total average securities during the six months ended June 30, 2018, compared to 58.4% during the same period in 2017. The average yield on taxable securities increased 9 basis points from 1.91% during the six months ended June 30, 2017 to 2.00% during the six months ended June 30, 2018. The average volume of total securities during the six months ended June 30, 2018 decreased $584.2 million, or 4.7%, compared to the same period in 2017. Securities made up approximately 41.2% of average interest-earning assets during the six months ended June 30, 2018 compared to 44.5% during the same period in 2017.

Average interest-bearing deposits, federal funds sold and resell agreements for the six months ended June 30, 2018 increased $138.3 million, or 4.1%, compared to the same period in 2017. Interest-bearing deposits, federal funds sold and resell agreements made up approximately 12.2% of average interest-earning assets during the six months ended June 30, 2018 compared to 12.1% during the same period in 2017. The combined average yield on interest-bearing deposits, federal funds sold and resell agreements was 1.73% during the six months ended June 30, 2018 compared to 0.96% during the same period in 2017. As discussed above, the effective federal funds rate began 2017 at 0.75% and subsequently increased 75 basis points (25 basis points in each of March, June and December) to end 2017 at 1.50%. During the first six months of 2018, the effective federal funds rate increased 50 basis points (25 basis points in each of March and June) to end the period at 2.00%.

The average rate paid on interest-bearing liabilities was 0.41% during the six months ended June 30, 2018, increasing 31 basis points from 0.10% during the same period in 2017. Average deposits increased $507.3 million ($89.2 million non-interest bearing and $418.0 million interest-bearing) during the six months ended June 30, 2018 compared to the

same period in 2017. The ratio of average interest-bearing deposits to total average deposits was 58.9% during the first six months of 2018 compared to 58.4% during the same period of 2017. The average cost of deposits is primarily impacted by changes in market interest rates as well as changes in the volume and relative mix of interest-bearing deposits. The average cost of interest-bearing deposits and total deposits was 0.37% and 0.22%, respectively, during the six months ended June 30, 2018 compared to 0.05% and 0.03%, respectively, during the six months ended June 30, 2017. The average cost of deposits during 2018 was impacted by increases in the interest rates we pay on most of our interest-bearing deposit products as a result of the aforementioned increases in market interest rates. Our net interest spread, which represents the difference between the average rate earned on earning assets and the average rate paid on interest-bearing liabilities, was 3.41% during the first six months of 2018 compared to 3.62% during the same period in 2017. Our net interest spread during the six months ended June 30, 2018 was negatively impacted by the aforementioned reduction in the U.S. federal statutory income tax rate, which limited growth in the average taxable-equivalent yield on interest earning

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assets despite increases in market interest rates. The net interest spread during the six months ended June 30, 2018 was further negatively impacted by the increases in the average cost of interest-bearing deposits and other borrowed funds. The net interest spread, as well as the net interest margin, will be impacted by future changes in short-term and long-term interest rate levels, as well as the impact from the competitive environment. A discussion of the effects of changing interest rates on net interest income is set forth in Item 3. Quantitative and Qualitative Disclosures About Market Risk included elsewhere in this report.

Our hedging policies permit the use of various derivative financial instruments, including interest rate swaps, swaptions, caps and floors, to manage exposure to changes in interest rates. Details of our derivatives and hedging activities are set forth in Note 8 - Derivative Financial Instruments in the accompanying notes to consolidated financial statements included elsewhere in this report. Information regarding the impact of fluctuations in interest rates on our derivative financial instruments is set forth in Item 3. Quantitative and Qualitative Disclosures About Market Risk included elsewhere in this report.

Provision for Loan Losses

The provision for loan losses is determined by management 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 which, in management's best estimate, is necessary to absorb inherent losses within the existing loan portfolio. The provision for loan losses totaled $8.3 million and $15.2 million for the three and six months ended June 30, 2018 compared to $8.4 million and $16.4 million for the three and six months ended June 30, 2017. See the section captioned "Allowance for Loan Losses" elsewhere in this discussion for further analysis of the provision for loan losses.

Non-Interest Income

The components of non-interest income were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Trust and investment management fees	$29,121	$27,727	$58,708	$54,197
Service charges on deposit accounts	21,142	21,198	41,985	41,967
Insurance commissions and fees	10,556	9,728	26,536	23,549
Interchange and debit card transaction fees	3,446	5,692	6,604	11,266
Other charges, commissions and fees	9,273	9,898	18,280	19,490
Net gain (loss) on securities transactions	(60)	(50)	(79)	(50)
Other	11,588	6,887	24,477	14,361
Total	$85,066	$81,080	$176,511	$164,780

Total non-interest income for the three and six months ended June 30, 2018 increased $4.0 million, or 4.9%, and increased $11.7 million, or 7.1%, compared to the same periods in 2017, respectively. Changes in the various components of non-interest income are discussed in more detail below.

Trust and Investment Management Fees. Trust and investment management fees for the three and six months ended June 30, 2018 increased $1.4 million, or 5.0%, and increased $4.5 million, or 8.3%, compared to the same periods in 2017, respectively. Investment fees are the most significant component of trust and investment management fees, making up approximately 82.4% and 82.7% of total trust and investment management fees for the first six months of 2018 and 2017, respectively. Investment and other custodial account fees are generally based on the market value of assets within a trust account. Volatility in the equity and bond markets impacts the market value of trust assets and the related investment fees.

The increase in trust and investment management fees during the three and six months ended June 30, 2018 compared to the same periods in 2017 was primarily the result of increases in trust investment fees (up $991 thousand and $3.5 million, respectively) and increases in oil and gas fees (up $853 thousand and $1.2 million, respectively). The increase in trust investment fees during 2018 was due to higher average equity valuations. The increase in oil and gas fees during 2018 was related to an increase in energy prices.

At June 30, 2018, trust assets, including both managed assets and custody assets, were primarily composed of equity securities (50.0% of assets), fixed income securities (37.9% of assets) and cash equivalents (7.2% of assets). The estimated fair value of these assets was $33.4 billion (including managed assets of $14.4 billion and custody assets of $19.0 billion) at June 30, 2018, compared to $32.8 billion (including managed assets of $14.1 billion and custody assets of $18.7 billion) at December 31, 2017 and $30.5 billion (including managed assets of $13.6 billion and custody assets of $16.9 billion) at June 30, 2017.

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Service Charges on Deposit Accounts. Service charges on deposit accounts for the three months ended June 30, 2018 decreased $56 thousand, or 0.3%, compared to the same period in 2017. The decrease was primarily due to a decrease in commercial service charges (down $751 thousand) mostly offset by increases in overdraft/insufficient funds charges on consumer and commercial accounts (up $445 thousand and $129 thousand, respectively) and an increase in consumer service charges (up $127 thousand). Service charges on deposit accounts for the six months ended June 30, 2018 did not significantly fluctuate compared to the same period in 2017 as increases in overdraft/insufficient funds charges on consumer and commercial accounts (up $634 thousand and $224 thousand, respectively) and consumer service charges (up $549 thousand) were for the most part offset by a decrease in commercial service charges (down $1.4 million). Overdraft/insufficient funds charges totaled $9.2 million ($7.1 million consumer and $2.1 million commercial) during the three months ended June 30, 2018 compared to $8.6 million ($6.6 million consumer and $2.0 million commercial) during the same period in 2017. Overdraft/insufficient funds charges totaled $18.0 million ($13.8 million consumer and $4.2 million commercial) during the six months ended June 30, 2018 compared to $17.1 million ($13.2 million consumer and $3.9 million commercial) during the same period in 2017.

Insurance Commissions and Fees. Insurance commissions and fees for the three months ended June 30, 2018 increased $828 thousand, or 8.5%, compared to the same period in 2017. The increase was related to increases in commission income (up $1.0 million) partly offset by a decrease in contingent income (down $200 thousand). Insurance commissions and fees for the six months ended June 30, 2018 increased $3.0 million, or 12.7%, compared to the same period in 2017. The increase was related to increases in commission income (up $2.1 million) and contingent income (up $858 thousand). The increases in commission income during the three and six months ended June 30, 2018 were primarily related to increases in commissions on property and casualty policies and benefit plan commissions due to increased business volumes. Insurance commissions and fees include contingent income totaling $492 thousand and $3.9 million during the three and six months ended June 30, 2018, respectively, and $692 thousand and $3.0 million during the same periods in 2017. Contingent income primarily consists of amounts received from various property and casualty insurance carriers related to the loss performance of insurance policies previously placed. These performance related contingent payments are seasonal in nature and are mostly received during the first quarter of each year. This performance related contingent income totaled $3.0 million and $2.0 million during the six months ended June 30, 2018 and 2017, respectively. The increase in performance related contingent income during 2018 was related to growth within the portfolio and improvement in the loss performance of insurance policies previously placed. Contingent income also includes amounts received from various benefit plan insurance companies related to the volume of business generated and/or the subsequent retention of such business. This benefit plan related contingent income totaled $313 thousand and $865 thousand during the three and six months ended June 30, 2018, respectively, and $398 thousand and $1.0 million during the same periods in 2017.

Interchange and Debit Card Transaction Fees. Interchange fees, or “swipe” fees, are charges that merchants pay to us and other card-issuing banks for processing electronic payment transactions. Interchange and debit card transaction fees consist of income from check card usage, point of sale income from PIN-based debit card transactions and ATM service fees. Beginning in 2018, in connection with the adoption of Accounting Standards Update (“ASU”) No. 2014-09, “Revenue from Contracts with Customers (Topic 606),” interchange and debit card transaction fees are reported net of related network costs. See Note 1 - Significant Accounting Policies. Previously, such network costs were reported as a component of other non-interest expense. Interchange and debit card transaction fees for the three and six months ended June 30, 2018 reported on a net basis totaled $3.4 million and $6.6 million, respectively, while interchange and debit card transaction fees for the three and six months ended June 30, 2017 reported on a gross basis totaled $5.7 million and $11.3 million, respectively. A comparison of gross and net interchange and debit card transaction fees for the reported periods is presented in the table below:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Income from debit card transactions	$5,467	$4,707	$10,591	$9,402
ATM service fees	1,016	985	1,963	1,864

Gross interchange and debit card transaction fees	6,483	5,692	12,554	11,266
Network costs	3,037	2,891	5,950	6,114
Net interchange and debit card transaction fees	$3,446	$2,801	$6,604	$5,152

The increase in interchange and debit card transaction fees during 2018, on a net basis, was primarily related to increased transaction volumes.

Federal Reserve rules applicable to financial institutions that have assets of $10 billion or more provide that the maximum permissible interchange fee for an electronic debit transaction is the sum of 21 cents per transaction and 5 basis points multiplied by the value of the transaction. An upward adjustment of no more than 1 cent to an issuer's debit card interchange fee is allowed if the card issuer develops and implements policies and procedures reasonably designed to achieve certain fraud-prevention

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standards. The Federal Reserve also has rules governing routing and exclusivity that require issuers to offer two unaffiliated networks for routing transactions on each debit or prepaid product.

Other Charges, Commissions and Fees. Other charges, commissions and fees for the three months ended June 30, 2018 decreased $625 thousand, or 6.3%, compared to the same period in 2017. The decrease was primarily related to decreases in loan processing fees (down $547 thousand) and income from the sale of mutual funds (down $154 thousand). Other charges, commissions and fees for the six months ended June 30, 2018 decreased $1.2 million, or 6.2%, compared to the same period in 2017. The decrease was primarily related to decreases in loan processing fees (down $1.2 million).

Net Gain/Loss on Securities Transactions. During the six months ended June 30, 2018, and 2017 we sold certain available-for-sale U.S Treasury securities with amortized costs totaling $10.9 billion and $8.2 billion and realized net losses of $79 thousand and $50 thousand on those sales, respectively. The sales were primarily related to securities purchased and subsequently sold in the same period of their purchase in connection with our tax planning strategies related to the Texas franchise tax. The gross proceeds from the sales of these securities outside of Texas are included in total revenues/receipts from all sources reported for Texas franchise tax purposes, which results in a reduction in the overall percentage of revenues/receipts apportioned to Texas and subjected to taxation under the Texas franchise tax.

Other Non-Interest Income. Other non-interest income for the three months ended June 30, 2018 increased $4.7 million, or 68.3%, compared to the same period in 2017. The increase during the three months ended June 30, 2018 was primarily related to increases in sundry and other miscellaneous income (up $3.0 million), gains on the sale of foreclosed and other assets (up $885 thousand), public finance underwriting fees (up $625 thousand) and income from customer derivative and trading activities (up $240 thousand). Other non-interest income for the six months ended June 30, 2018 increased $10.1 million, or 70.4%, compared to the same period in 2017. The increase during the six months ended June 30, 2018 was primarily related to increases in gains on the sale of foreclosed and other assets (up $4.6 million), sundry and other miscellaneous income (up $3.1 million), income from customer derivative and trading activities (up $1.6 million), public finance underwriting fees (up $497 thousand) and income from customer foreign currency transactions (up $336 thousand), among other things. During the first six months of 2018, gains on the sale of foreclosed and other assets included $4.2 million related to gains on the sale of various branch and operational facilities. Sundry and other miscellaneous income during the first six months of 2018 included $2.4 million related to the recovery of prior write-offs and $1.2 million related to a distribution from a private equity investment. The fluctuations in income from customer derivative and trading activities, public finance underwriting fees and income from customer foreign currency transactions during the first six months of 2018 were primarily related to changes in business volumes.

Non-Interest Expense

The components of non-interest expense were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Salaries and wages	$85,204	$80,995	$171,887	$163,507
Employee benefits	17,907	18,198	39,902	39,823
Net occupancy	19,455	19,153	39,195	38,390
Technology, furniture and equipment	20,459	18,250	40,138	36,240
Deposit insurance	4,605	5,570	9,484	10,485
Intangible amortization	369	438	757	896
Other	40,909	45,447	84,156	86,625
Total	$188,908	$188,051	$385,519	$375,966

Total non-interest expense for the three and six months ended June 30, 2018 increased $857 thousand, or 0.5%, and increased $9.6 million, or 2.5%, compared to the same periods in 2017. Changes in the various components of non-interest expense are discussed below.

Salaries and Wages. Salaries and wages for the three and six months ended June 30, 2018 increased $4.2 million, or 5.2%, and increased $8.4 million, or 5.1%, compared to the same periods in 2017. The increase was primarily related to an increase in salaries, due to an increase in the number of employees and normal annual merit and market increases, as well as an increase in incentive compensation.

Employee Benefits. Employee benefits expense for the three months ended June 30, 2018 decreased $291 thousand, or 1.6%, compared to the same period in 2017. The decrease was primarily due to a decrease in expenses related to our defined benefit retirement plans, as further discussed below, partly offset by an increase in expenses related to our 401(k) and profit sharing plans

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(up $133 thousand). Employee benefits expense for the six months ended June 30, 2018 increased $79 thousand, or 0.2%, compared to the same period in 2017. The increase was primarily due to increases in payroll taxes (up $545 thousand) and expenses related to our 401(k) and profit sharing plans (up $490 thousand) partly offset by decreases in expenses related to our defined benefit retirement plans, as further discussed below, and medical insurance (down $148 thousand).

During the three and six months ended June 30, 2018, we recognized a combined net periodic pension benefit of $254 thousand and $508 thousand, respectively, related to our defined benefit retirement plans compared to a combined net periodic pension expense of $126 thousand and $251 thousand during the same periods in 2017. Our defined benefit retirement and restoration plans were frozen effective as of December 31, 2001 and were replaced by a profit sharing plan. Management believes these actions helped to reduce the volatility in retirement plan expense. However, we still have funding obligations related to the defined benefit and restoration plans and could recognize retirement expense related to these plans in future years, which would be dependent on the return earned on plan assets, the level of interest rates and employee turnover. See Note 12 - Defined Benefit Plans for additional information related to our net periodic pension benefit/cost.

Net Occupancy. Net occupancy expense for the three and six months ended June 30, 2018 increased $302 thousand, or 1.6%, and $805 thousand, or 2.1%, respectively, compared to the same periods in 2017. The increase during the three months ended June 30, 2018 was primarily related to increases in lease expense (up $479 thousand) partly offset by a decrease in property taxes (down $188 thousand). The increase during the six months ended June 30, 2018 was primarily related to increases in lease expense (up $982 thousand) and repairs and maintenance/service contracts expense (up $218 thousand) partly offset by a decrease in property taxes (down $376 thousand).

Technology, Furniture and Equipment. Technology, furniture and equipment expense for the three and six months ended June 30, 2018 increased $2.2 million, or 12.1%, and $3.9 million, or 10.8%, respectively, compared to the same periods in 2017. The increases were primarily related to increases in software maintenance (up $1.6 million and $2.9 million for the three and six months ended June 30, 2018, respectively), software amortization (up $449 thousand and $860 thousand for the three and six months ended June 30, 2018, respectively) and service contracts expense (up $118 thousand and $429 thousand for the three and six months ended June 30, 2018, respectively). The increase during the six months ended June 30, 2018 was partly offset by a decrease in depreciation on furniture and equipment (down $254 thousand).

Deposit Insurance. Deposit insurance expense totaled $4.6 million and $9.5 million for the three and six months ended June 30, 2018 compared to $5.6 million and $10.5 million for the three and six months ended June 30, 2017. The decrease in deposit insurance expense during 2018 was mostly related to a decrease in our base assessment rate resulting from an improvement in our performance score. The level of deposit insurance expense during the comparable periods was impacted by a surcharge that became applicable during the third quarter of 2016. In August 2016, the Federal Deposit Insurance Corporation (“FDIC”) announced that the Deposit Insurance Fund (“DIF”) reserve ratio had surpassed 1.15% as of June 30, 2016. As a result, beginning in the third quarter of 2016, the range of initial assessment rates for all institutions was adjusted downward and institutions with $10 billion or more in assets were assessed a quarterly surcharge. The quarterly surcharge will continue to be assessed until such time as the reserve ratio reaches the statutory minimum of 1.35% required by the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Intangible Amortization. Intangible amortization is primarily related to core deposit intangibles and, to a lesser extent, intangibles related to customer relationships and non-compete agreements. Intangible amortization for the three and six months ended June 30, 2018 decreased $69 thousand, or 15.8%, and $139 thousand, or 15.5%, respectively, compared to the same periods in 2017. The decrease in amortization was primarily related to the completion of amortization of certain previously recognized intangible assets as well as a reduction in the annual amortization rate of certain previously recognized intangible assets as we use an accelerated amortization approach which results in higher amortization rates during the earlier years of the useful lives of intangible assets.

Other Non-Interest Expense. Other non-interest expense for the three and six months ended June 30, 2018 decreased $4.5 million, or 10.0%, and decreased $2.5 million, or 2.9%, compared to the same periods in 2017. As discussed above in the section captioned “Interchange and Debit Card Transaction Fees,” in connection with the adoption of

ASU 2014-09 in 2018, network costs associated with debit card and ATM transactions are now reported netted against the related fees from such transactions and included in Interchange and Debit Card Transaction Fees in the accompanying Consolidated Statement of Income for the three and six months ended June 30, 2018. Previously, such network costs were reported as a component of other non-interest expense. Network costs associated with debit card and ATM transactions during the three and six months ended June 30, 2018 totaled $3.0 million and $6.0 million, respectively, compared to $2.9 million and $6.1 million during the same periods in 2017. Excluding network costs from the three months ended June 30, 2017, other non-interest expense effectively decreased $1.6 million, or 3.9%, during the three months ended June 30, 2018. This effective decrease included decreases in fraud losses, primarily related to check cards, (down $2.2 million); advertising/promotions expense (down $1.9 million); and travel/meals and entertainment expense (down $666 thousand); among other things. These items were partly offset by increases in professional services expense (up $2.6 million), sundry and other miscellaneous expenses (up $545 thousand) and donations expense related to a contribution to our charitable

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foundation (up $444 thousand), among other things. Excluding network costs from the six months ended June 30, 2017, other non-interest expense effectively increased $3.6 million , or 4.5%, during the six months ended June 30, 2018. This increase included increases in professional services expense (up $4.6 million), donations expense related to a contributions to our charitable foundation (up $4.2 million) and outside computer services expense (up $508 thousand), among other things. These items were partly offset by decreases in advertising/promotions expense (down $2.4 million); fraud losses, primarily related to check cards, (down $2.1 million); travel/meals and entertainment expense (down $870 thousand); and data communications expense (down $722 thousand); among other things.

The increase in professional services expense during 2018 was partly related to a data security incident during the first quarter of 2018 which resulted in unauthorized access to a third-party lockbox software program used by certain of our commercial lockbox customers to store digital images. We have stopped the identified unauthorized access and are working with a leading cybersecurity firm. We have reported the incident to, and are cooperating with, law-enforcement authorities and our investigation is ongoing. We have contacted each of the affected commercial customers and are working with them to support them in taking appropriate actions. The identified incident did not impact other Frost systems. As of June 30, 2018, costs incurred related to this incident totaled $1.4 million, of which $937 thousand was incurred in second quarter of 2018.

Results of Segment Operations

Our operations are managed along two primary operating segments: Banking and Frost Wealth Advisors. A description of each business and the methodologies used to measure financial performance is described in Note 15 - Operating Segments in the accompanying notes to consolidated financial statements included elsewhere in this report. Net income (loss) by operating segment is presented below:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Banking	$109,276	$81,529	$212,917	$162,398
Frost Wealth Advisors	5,901	6,279	11,535	11,573
Non-Banks	(3,836)	(2,255)	(6,631)	(3,477)
Consolidated net income	$111,341	$85,553	$217,821	$170,494

Banking

Net income for the three and six months ended June 30, 2018 increased $27.7 million, or 34.0%, and increased $50.5 million, or 31.1%, compared to the same periods in 2017, respectively. The increases during the three and six months ended June 30, 2018 compared to the same periods in 2017 were primarily the result of increases in net interest income (up $26.1 million and $51.2 million respectively) and non-interest income (up $3.1 million and $7.6 million respectively) and decreases in the provision for loan losses (down $175 thousand and $1.2 million respectively) partly offset by increases in non-interest expense (up $224 thousand and $7.4 million respectively) and income tax expense (up $1.4 million and $2.1 million respectively).

Net interest income for the three and six months ended June 30, 2018 increased $26.1 million, or 12.3%, and increased $51.2 million, or 12.2%, compared to the same periods in 2017, respectively. The increases during the three and six months ended June 30, 2018 were primarily related to increases in the average yields on loans, interest-bearing deposits and taxable securities combined with increases in the average volumes of loans, tax-exempt securities and federal funds sold and resell agreements. The impact of these items were partly offset by increases in the average rates paid on interest-bearing deposits and other borrowed funds, decreases in the average volume of taxable securities and decreases in the average yield on tax-exempt securities. See the analysis of net interest income included in the section captioned “Net Interest Income” included elsewhere in this discussion.

The provision for loan losses for the three and six months ended June 30, 2018 totaled $8.3 million and $15.2 million compared to $8.4 million and $16.4 million for the same periods in 2017. See the analysis of the provision for loan losses included in the section captioned “Allowance for Loan Losses” included elsewhere in this discussion.

Non-interest income for the three and six months ended June 30, 2018 increased $3.1 million, or 6.3%, and increased $7.6 million, or 7.5%, compared to the same periods in 2017. The increases were primarily due to increases in other non-interest income and insurance commissions and fees partly offset by decreases in interchange and debit card transaction fees and other charges, commissions and fees. The increases in other non-interest income were primarily related to increases in sundry and other miscellaneous income, gains on the sale of foreclosed and other assets, public finance underwriting fees and income from customer derivative and trading activities. Sundry and other miscellaneous income during the first six months of 2018 included $2.4 million related to the recovery of prior write-offs and $1.2 million related to a distribution from a private equity investment. During the first six months of 2018, gains on the sale of foreclosed and other assets included $4.2 million related to gains on the sale of various branch and operational facilities. The fluctuations in income from customer derivative and trading activities and public finance

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underwriting fees were primarily related to changes in business volumes. The increases in insurance commission and fees were primarily related to increases in commission income related to property and casualty policies and benefit plan commissions due to increased business volumes. Insurance commissions and fees during the six months ended June 30, 2018 was also partly impacted by an increase in performance-related contingent income related to growth within the portfolio and improvement in the loss performance of insurance policies previously placed. In connection with the adoption of a new accounting standard in 2018, network costs associated with debit card and ATM transactions are now reported netted against the related fees from such transactions. Previously, such network costs were reported as a component of other non-interest expense. If such network costs had been netted against interchange and debit card transaction fees in 2017, interchange and debit card transaction fees would have reflected an increase in 2018 as a result of increased transaction volumes. The decreases in other charges, commissions and fees were primarily related to decreases in loan processing fees and, for the six months ended June 30, 2018, a decrease in income from capital markets advisory services. See the analysis of these categories of non-interest income included in the section captioned “Non-Interest Income” included elsewhere in this discussion.

Non-interest expense for the three and six months ended June 30, 2018 increased $224 thousand, or 0.1%, and increased $7.4 million, or 2.3%, compared to the same periods in 2017. The increases during three and six months ended June 30, 2018 were primarily related to increases in salaries and wages and technology, furniture and equipment expense partly offset by decreases in other non-interest expense and deposit insurance expense. The increases in salaries and wage were primarily due to an increase in the number of employees and normal annual merit and market increases, as well as increases in incentive compensation. The increases in technology, furniture and equipment expense were primarily related to increases in software maintenance, software amortization and service contracts expense. The increase in technology, furniture and equipment expense during the six months ended June 30, 2018 was partly offset by a decrease in depreciation on furniture and equipment. As discussed above, network costs associated with debit card and ATM transactions are now reported netted against the related fees from such transactions, rather than as a component of other non-interest expense as was previously the case. Excluding network costs from the three and six months ended June 30, 2017, other non-interest expense for the three months ended June 30, 2018 effectively decreased $1.2 million while other non-interest expense for the six months ended June 30, 2018 effectively increased $3.4 million. This effective decrease for the three months ended June 30, 2018 included decreases in fraud losses, primarily related to check cards; advertising/promotions expense; and travel/meals and entertainment expense; among other things. These items were partly offset by increases in professional services expense, sundry and other miscellaneous expenses and donations expense related to a contribution to our charitable foundation, among other things. The effective increase in other non-interest expense for the six months ended June 30, 2018, included increases in professional services expense and donations expense related to a contributions to our charitable foundation, among other things. These items were partly offset by decreases in advertising/promotions expense; fraud losses, primarily related to check cards; travel/meals and entertainment expense; and data communications expense; among other things. The decrease in deposit insurance expense during 2018 was mostly related to a decrease in our base assessment rate resulting from an improvement in our performance score. See the analysis of these categories of non-interest expense included in the section captioned “Non-Interest Expense” included elsewhere in this discussion.

Frost Insurance Agency, which is included in the Banking operating segment, had gross commission revenues of $10.6 million and $26.7 million during the three and six months ended June 30, 2018 and $9.7 million and $23.7 million during the three and six months ended June 30, 2017. The increases were primarily related to increases in commissions on property and casualty policies and benefit plan commissions due to increased business volumes and, during the six months ended June 30, 2018, an increase in performance-related contingent income primarily related to growth within the portfolio and improvement in the loss performance of insurance policies previously placed. See the analysis of insurance commissions and fees included in the section captioned “Non-Interest Income” included elsewhere in this discussion.

Frost Wealth Advisors

Net income for the three and six months ended June 30, 2018 decreased $378 thousand, or 6.0%, and decreased $38 thousand, or 0.3%, compared to the same periods in 2017. The decrease during the three months ended June 30, 2018

was primarily due to a $3.3 million decrease in net interest income partly offset by a $1.8 million decrease in income tax expense and a $1.1 million increase in non-interest income. The decrease during the six months ended June 30, 2018 was primarily due to a $6.1 million decrease in net interest income and a $1.5 million increase in non-interest expense mostly offset by a $4.4 million increase in non-interest income and a $3.2 million decrease in income tax expense.

Net interest income for the three and six months ended June 30, 2018 decreased $3.3 million, or 75.3%, and decreased $6.1 million, or 75.2%, compared to the same periods in 2017. Beginning in 2018, certain repurchase agreements that were previously allocated to the Frost Wealth Advisors segment are now allocated to the Banking segment which resulted in the decreases in net interest income.

Non-interest income for the three and six months ended June 30, 2018 increased $1.1 million, or 3.4%, and increased $4.4 million, or 7.0%, compared to the same periods in 2017. The increases in non-interest income during the three and six months

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ended June 30, 2018 were primarily related to increases in trust and investment management fees partly offset by decreases in other charges, commissions and fees. Trust and investment management fee income is the most significant income component for Frost Wealth Advisors. Investment fees are the most significant component of trust and investment management fees, making up approximately 82.4% of total trust and investment management fees for the first six months of 2018. Investment and other custodial account fees are generally based on the market value of assets within a trust account. Volatility in the equity and bond markets impacts the market value of trust assets and the related investment fees. The increases in trust and investment management fees during the three and six months ended June 30, 2018 compared to the same periods in 2017 were primarily the result of increases in trust investment fees and oil and gas fees. The increase in trust investment fees during 2018 was due to higher average equity valuations while the increase in oil and gas fees was related to an increase in energy prices. The decreases in other charges, commissions and fees during the three and six months ended June 30, 2018 were primarily related to decreases in income related to the sale of mutual funds and annuities partly offset by increases in income related to the sale of money market accounts. See the analysis of trust and investment management fees and other charges, commissions and fees included in the section captioned “Non-Interest Income” included elsewhere in this discussion.

Non-interest expense for the three months ended June 30, 2018 did not significantly fluctuate compared to the same period in 2017 as increases in salaries and wages; technology, furniture and equipment expense and net occupancy expense were mostly offset by a decrease in other non-interest expense. Non-interest expense for the six months ended June 30, 2018 increased $1.5 million, or 2.8%, compared to the same period in 2017. The increase was primarily related to increases in salaries and wages and employee benefits; technology, furniture and equipment expense; and net occupancy expense. The increases in salaries and wages were primarily due to an increase in the number of employees and normal annual merit and market increases, as well as increases in incentive compensation. The increase in employee benefits was primarily due to increases in expenses related to our 401(k) and profit sharing plans and payroll taxes partly offset by a decrease in medical insurance expense. The increase in technology, furniture and equipment expense was primarily related to increases in service contracts expense, software maintenance and software amortization. The increase in net occupancy expense was primarily related to an increase in lease expense.

Non-Banks

The Non-Banks operating segment had net losses of $3.8 million and $6.6 million for the three and six months ended June 30, 2018, respectively, compared to net losses of $2.3 million and $3.5 million for the same periods in 2017. The increased net losses for the three and six months ended June 30, 2018 were primarily due to increases in net interest expense due to increases in the interest rates paid on our long-term borrowings, decreases in net income tax benefits due to a decrease in the U.S. federal statutory income tax rate and increases in salaries and wages.

Income Taxes

We recognized income tax expense of $13.8 million and $25.0 million, for effective tax rates of 11.1% and 10.3% for the three and six months ended June 30, 2018 compared to $13.8 million and $25.2 million, for effective tax rates of 13.9% and 12.9% for the three and six months ended June 30, 2017. The effective income tax rates differed from the U.S. statutory federal income tax rates of 21% during 2018 and 35% during 2017 primarily due to the effect of tax-exempt income from loans, securities and life insurance policies and the income tax effects associated with stock-based compensation. Income tax expense and the effective tax rate during the three and six months ended June 30, 2018 were impacted by the decrease in U.S. statutory federal income tax rate under the Tax Cuts and Jobs Act which is more fully discussed in our 2017 Form 10-K. The effect of this decrease was mostly offset by increases in total income during 2018 with a higher proportion of taxable income relative to tax-exempt income and the impact of certain expenses related to meals and entertainment, executive compensation and deposit insurance, among other things, that are no longer deductible as a result of the Tax Cuts and Jobs Act.

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Average Balance Sheet

Average assets totaled $30.9 billion for the six months ended June 30, 2018 representing an increase of $805.0 million, or 2.7%, compared to average assets for the same period in 2017. The growth in average assets was primarily funded by deposit growth, an increase in average federal funds purchased and repurchase agreements and earnings retention. The increase was primarily reflected in earning assets, which increased $787.6 million, or 2.8%, during the first six months of 2018 compared to the same period in 2017. The increase in earning assets included a $1.2 billion increase in average loans, a $417.2 million increase in average tax-exempt securities, a $138.3 million increase in average interest-bearing deposits, federal funds sold and resell agreements partly offset by a $1.0 billion decrease in average taxable securities. Average deposit growth included an $89.2 million increase in non-interest bearing deposits and a $418.0 million increase in interest-bearing deposit accounts. Average non-interest bearing deposits made up 41.1% and 41.6% of average total deposits during the first six months of 2018 and 2017, respectively.

Loans

Loans were as follows as of the dates indicated:

	June 30, 2018	Percentage of Total	December 31, 2017	Percentage of Total
Commercial and industrial	$5,043,272	36.8 %	$4,792,388	36.4 %
Energy:				
Production	1,211,261	8.8	1,182,326	9.0
Service	163,013	1.2	171,795	1.3
Other	153,754	1.1	144,972	1.1
Total energy	1,528,028	11.1	1,499,093	11.4
Commercial real estate:				
Commercial mortgages	4,097,255	29.9	3,887,742	29.6
Construction	1,106,999	8.1	1,066,696	8.1
Land	305,585	2.2	331,986	2.5
Total commercial real estate	5,509,839	40.2	5,286,424	40.2
Consumer real estate:				
Home equity loans	352,243	2.6	355,342	2.7
Home equity lines of credit	321,795	2.3	291,950	2.2
Other	400,661	3.0	376,002	2.9
Total consumer real estate	1,074,699	7.9	1,023,294	7.8
Total real estate	6,584,538	48.1	6,309,718	48.0
Consumer and other	555,924	4.0	544,466	4.2
Total loans	$13,711,762	100.0 %	$13,145,665	100.0 %

Loans increased $566.1 million, or 4.3%, compared to December 31, 2017. The majority of our loan portfolio is comprised of commercial and industrial loans, energy loans and real estate loans. Commercial and industrial loans made up 36.8% and 36.4% of total loans at June 30, 2018 and December 31, 2017, respectively, while energy loans made up 11.1% and 11.4% of total loans, respectively, and real estate loans made up 48.1% and 48.0% of total loans, respectively, at those dates. Real estate loans include both commercial and consumer balances. Selected details related to our loan portfolio segments are presented below. Refer to our 2017 Form 10-K for a more detailed discussion of our loan origination and risk management processes.

Commercial and industrial. Commercial and industrial loans increased $250.9 million, or 5.2%, during the first six months of 2018. Our commercial and industrial loans are a diverse group of loans to small, medium and large businesses. The purpose of these loans varies from supporting seasonal working capital needs to term financing of equipment. While some short-term loans may be made on an unsecured basis, most are secured by the assets being financed with collateral margins that are consistent with our loan policy guidelines. The commercial and industrial loan portfolio also includes commercial leases and purchased shared national credits ("SNC"s).

Energy. Energy loans include loans to entities and individuals that are engaged in various energy-related activities including (i) the development and production of oil or natural gas, (ii) providing oil and gas field servicing,

(iii) providing energy-related transportation services (iv) providing equipment to support oil and gas drilling (v) refining petrochemicals, or (vi) trading oil, gas and related commodities. Energy loans increased $28.9 million, or 1.9%, during the first six months of 2018 compared to December 31, 2017. The increase was related to increases in production and other loans partly offset by a decrease in service loans. The average loan size, the significance of the portfolio and the specialized nature of the energy industry requires a highly

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prescriptive underwriting policy. Exceptions to this policy are rarely granted. Due to the large borrowing requirements of this customer base, the energy loan portfolio includes participations and SNCs.

Purchased Shared National Credits. Purchased shared national credits are participations purchased from upstream financial organizations and tend to be larger in size than our originated portfolio. Our purchased SNC portfolio totaled $778.7 million at June 30, 2018, decreasing $56.3 million, or 6.7%, from $835.0 million at December 31, 2017. At June 30, 2018, 52.3% of outstanding purchased SNCs were related to the energy industry, while 12.9% related to the construction industry and 11.2% related to the investment management industry. The remaining purchased SNCs were diversified throughout various other industries, with no other single industry exceeding 10% of the total purchased SNC portfolio. Additionally, almost all of the outstanding balance of purchased SNCs was included in the energy and commercial and industrial portfolio, with the remainder included in the real estate categories. SNC participations are originated in the normal course of business to meet the needs of our customers. As a matter of policy, we generally only participate in SNCs for companies headquartered in or which have significant operations within our market areas. In addition, we must have direct access to the company’s management, an existing banking relationship or the expectation of broadening the relationship with other banking products and services within the following 12 to 24 months. SNCs are reviewed at least quarterly for credit quality and business development successes.

Commercial Real Estate. Commercial real estate loans totaled $5.5 billion at June 30, 2018, increasing $223.4 million compared to $5.3 billion at December 31, 2017. At such dates, commercial real estate loans represented 83.7% and 83.8% of total real estate loans, respectively. The majority of this portfolio consists of commercial real estate mortgages, which includes both permanent and intermediate term loans. These loans are viewed primarily as cash flow loans and secondarily as loans secured by real estate. Consequently, these loans must undergo the analysis and underwriting process of a commercial and industrial loan, as well as that of a real estate loan. At June 30, 2018, approximately 50% of the outstanding principal balance of our commercial real estate loans were secured by owner-occupied properties.

Consumer Real Estate and Other Consumer Loans. The consumer loan portfolio, including all consumer real estate and consumer installment loans, totaled $1.6 billion at both June 30, 2018 and December 31, 2017. Consumer real estate loans, increased $51.4 million, or 5.0%, from December 31, 2017. Combined, home equity loans and lines of credit made up 62.7% and 63.3% of the consumer real estate loan total at June 30, 2018 and December 31, 2017, respectively. We offer home equity loans up to 80% of the estimated value of the personal residence of the borrower, less the value of existing mortgages and home improvement loans. In general, we do not originate 1-4 family mortgage loans; however, from time to time, we may invest in such loans to meet the needs of our customers or for other regulatory compliance purposes. Consumer and other loans, increased $11.5 million, or 2.1%, from December 31, 2017. The consumer and other loan portfolio primarily consists of automobile loans, overdrafts, unsecured revolving credit products, personal loans secured by cash and cash equivalents and other similar types of credit facilities.

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Non-Performing Assets

Non-performing assets and accruing past due loans are presented in the table below. Troubled debt restructurings on non-accrual status are reported as non-accrual loans. Troubled debt restructurings on accrual status are reported separately.

	June 30, 2018	December 31, 2017
Non-accrual loans:		
Commercial and industrial	$17,306	$46,186
Energy	79,963	94,302
Commercial real estate:		
Buildings, land and other	19,415	7,589
Construction	—	—
Consumer real estate	872	2,109
Consumer and other	1,625	128
Total non-accrual loans	119,181	150,314
Restructured loans	—	4,862
Foreclosed assets:		
Real estate	3,643	2,116
Other	—	—
Total foreclosed assets	3,643	2,116
Total non-performing assets	$122,824	$157,292
Ratio of non-performing assets to:		
Total loans and foreclosed assets	0.90 %	1.20 %
Total assets	0.40	0.50
Accruing past due loans:		
30 to 89 days past due	$44,362	$93,428
90 or more days past due	23,000	14,432
Total accruing past due loans	$67,362	$107,860
Ratio of accruing past due loans to total loans:		
30 to 89 days past due	0.32 %	0.71 %
90 or more days past due	0.17	0.11
Total accruing past due loans	0.49 %	0.82 %

Non-performing assets include non-accrual loans, troubled debt restructurings and foreclosed assets. Non-performing assets at June 30, 2018 decreased $34.5 million from December 31, 2017 primarily due to decreases in non-accrual commercial and industrial loans and energy loans partly offset by an increase in non-accrual commercial real estate loans. There were no non-accrual commercial industrial loans in excess of $5.0 million at June 30, 2018. Non-accrual commercial and industrial loans at December 31, 2017 included two credit relationships in excess of $5 million totaling $34.2 million. We charged-off $8.2 million related to these two credit relationships during the first six months of 2018. Subsequent to the charge-offs, one credit relationship paid off and the other had a remaining outstanding balance totaling $4.1 million at June 30, 2018. Non-accrual energy loans included four credit relationships in excess of $5 million totaling $76.7 million at June 30, 2018. Each of these credit relationships was previously reported as non-accrual at December 31, 2017 with an aggregate balance totaling $83.5 million. We charged-off$3.2 million related to one of these credit relationships during the first six months of 2018. Non-accrual real estate loans primarily consist of land development, 1-4 family residential construction credit relationships and loans secured by office buildings and religious facilities. Non-accrual commercial real estate loans included one relationship in excess of $5.0 million totaling $14.0 million at June 30, 2018. This entire relationship was previously reported as a potential problem as of March 31, 2018 and one of the credits in this relationship was previously reported as a potential problem loan as of December 31, 2017.

Generally, loans are placed on non-accrual status if principal or interest payments become 90 days past due and/or management deems the collectibility of the principal and/or interest to be in question, as well as when required by regulatory requirements. Once interest accruals are discontinued, accrued but uncollected interest is charged to current year operations. Subsequent receipts on non-accrual loans are recorded as a reduction of principal, and interest income is recorded only after principal recovery is reasonably assured. Classification of a loan as non-accrual does not preclude the ultimate collection of loan principal or interest.

Restructured loans totaled $4.9 million at December 31, 2017 and consisted of one energy loan relationship restructured during the second quarter of 2017 totaling $1.3 million, one commercial and industrial credit relationship restructured during the third

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quarter of 2017 totaling $3.1 million and one construction loan relationship restructured during the fourth quarter of 2017 totaling $388 thousand.

Foreclosed assets represent property acquired as the result of borrower defaults on loans. Foreclosed assets are recorded at estimated fair value, less estimated selling costs, at the time of foreclosure. Write-downs occurring at foreclosure are charged against the allowance for loan losses. Regulatory guidelines require us to reevaluate the fair value of foreclosed assets on at least an annual basis. Our policy is to comply with the regulatory guidelines. Write-downs are provided for subsequent declines in value and are included in other non-interest expense along with other expenses related to maintaining the properties. Write-downs of foreclosed assets totaled $473 thousand and $16 thousand during the six months ended June 30, 2018 and 2017, respectively.

Potential problem loans consist of loans that are performing in accordance with contractual terms but for which management has concerns about the ability of an obligor to continue to comply with repayment terms because of the obligor's potential operating or financial difficulties. Management monitors these loans closely and reviews their performance on a regular basis. At June 30, 2018 and December 31, 2017, we had $50.5 million and $61.4 million in loans of this type which are not included in any one of the non-accrual, restructured or 90 days past due loan categories. At June 30, 2018, potential problem loans consisted of seven credit relationships. Of the total outstanding balance at June 30, 2018, 39.7% was related to the restaurant industry, 20.5% was related to the energy industry, 16.9% was related to the real estate industry and 9.8% was related to the medical industry. Weakness in these organizations' operating performance and financial condition, among other factors, have caused us to heighten the attention given to these credits.

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 inherent 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, which is more fully described in our 2017 Form 10-K, follows the accounting guidance set forth in U.S. generally accepted accounting principles and the Interagency Policy Statement on the Allowance for Loan and Lease Losses, which was jointly issued by U.S. bank regulatory agencies. The level of the allowance reflects management's continuing evaluation of industry concentrations, specific credit risks, loan loss and recovery experience, current loan portfolio quality, present economic, political and regulatory conditions and unidentified losses inherent in the current loan portfolio. Portions of the allowance may be allocated for specific credits; however, the entire allowance is available for any credit that, in management's judgment, should be charged off.

The table below provides, as of the dates indicated, an allocation of the allowance for loan losses by loan type; however, allocation of a portion of the allowance to one category of loans does not preclude its availability to absorb losses in other categories:

	June 30, 2018	December 31, 2017
Commercial and industrial	$57,713	$ 59,614
Energy	37,313	51,528
Commercial real estate	38,918	30,948
Consumer real estate	6,336	5,657
Consumer and other	9,946	7,617
Total	$150,226	$ 155,364

The reserve allocated to commercial and industrial loans at June 30, 2018 decreased $1.9 million compared to December 31, 2017. The decrease was primarily due to decreases in macroeconomic valuation allowances and historical valuation allowances. Macroeconomic valuation allowances for commercial and industrial loans decreased $1.4 million from $16.5 million at December 31, 2017 to $15.1 million at June 30, 2018. The decrease was primarily related to a decrease in the general macroeconomic risk allocation (down $1.6 million), which was partly related to improvements in the weighted-average risk grade of the portfolio and the level of classified loans, as further discussed below. Historical valuation allowances decreased $1.2 million from $26.4 million at December 31, 2017 to $25.2

million at June 30, 2018. The decrease was primarily related to a decrease in the volume of classified loans graded as "substandard - accrual" (risk grade 11) and loans graded "watch" (risk grade 9) partly offset by the impact of an increase in the volume of pass-graded loans. Classified loans consist of loans having a risk grade of 11, 12 or 13. Classified commercial and industrial loans totaled $77.4 million at June 30, 2018 compared to $144.0 million at December 31, 2017. The weighted-average risk grade of commercial and industrial loans was 6.33 at June 30, 2018 compared to 6.41 at December 31, 2017. Commercial loan net charge-offs totaled $11.2 million during the first six months of 2018 compared to $7.6 million during the first six months of 2017. Charge-offs in 2018 included $8.2 million related to two credit relationships that, as of December 31, 2017, had associated specific valuation allowances totaling $5.9 million. Specific valuation allowances for commercial and industrial loans increased $114 thousand from $7.6 million at December 31, 2017 to $7.7 million at June 30,

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2018. General valuation allowances for commercial and industrial loans increased $559 thousand from $9.1 million at December 31, 2017 to $9.7 million at June 30, 2018. The increase was primarily related to increases in the allocations for highly-leveraged transactions and excessive industry concentrations partly offset by an increase in the adjustment for recoveries combined with decreases in the allocations for loans not reviewed by concurrence and large credit relationships.

The reserve allocated to energy loans at June 30, 2018 decreased $14.2 million compared to December 31, 2017. As a result, reserves allocated to energy loans as a percentage of total energy loans totaled 2.44% at June 30, 2018 compared to 3.44% at December 31, 2017. This decrease was primarily related to decreases in historical valuation allowances, macroeconomic valuation allowances and general valuation allowances and partly offset by an increase in specific valuation allowances. Historical valuation allowances decreased $10.0 million from $22.1 million at December 31, 2017 to $12.1 million at June 30, 2018. The decrease was primarily related to decreases in the historical loss allocation factors for non-classified energy loans and classified energy loans graded “substandard - accrual” (risk grade 11). The decrease was also partly related to a decrease in the volume of certain categories of non-classified energy loans and a decrease in the volume of classified energy loans. Non-classified energy loans graded as “watch” and “special mention” totaled $92.3 million at June 30, 2018 compared to $114.7 million at December 31, 2017, decreasing $22.4 million. The impact of this was partly offset by an increase in "pass" grade energy loans which increased $89.3 million from December 31, 2017. Classified energy loans decreased $37.9 million from $185.2 million at December 31, 2017 to $147.2 million at June 30, 2018. The weighted-average risk grade of energy loans decreased to 6.74 at June 30, 2018 from 6.97 at December 31, 2017. Macroeconomic valuation allowances related to energy loans decreased $4.2 million from $8.2 million at December 31, 2017 to $4.0 million at June 30, 2018, primarily due to a decrease in the general macroeconomic risk allocation (down $2.6 million), in part due to stabilization within the energy loan portfolio, decreased oil price volatility and the decline in the portfolio weighted average risk grade; and a decrease in the environmental risk adjustment (down $1.6 million) due to decreases in the historical loss valuation allowances to which the environmental risk adjustment factor is applied. General valuation allowances for energy loans decreased $1.2 million from $8.0 million at December 31, 2017 to $6.8 million at June 30, 2018. The decrease was primarily related to a decrease in the allocation for highly-leveraged transactions and an increase in the adjustment for recoveries, among other things. Specific valuation allowances for energy loans increased $1.1 million from $13.3 million at December 31, 2017 to $14.4 million at June 30, 2018. Specific valuation allowances at June 30, 2018 and December 31, 2017 primarily related to two credit relationships totaling $58.5 million and $61.2 million at such dates, respectively. We recognized charge-offs totaling $3.2 million related to one of these credit relationships during the first six months of 2018. Total energy loan net charge-offs were $4.9 million during the six months ended June 30, 2018 compared to net charge-offs of $10.5 million during the same period in 2017.

The reserve allocated to commercial real estate loans at June 30, 2018 increased $8.0 million compared to December 31, 2017. The increase was primarily related to increases in macroeconomic valuation allowances, historical valuation allowances and specific valuation allowances. Macroeconomic valuation allowances increased $6.0 million from $7.9 million at December 31, 2017 to $13.8 million at June 30, 2018. The increase was primarily related to an increase in the general macroeconomic risk allocation (up $6.0 million), which reflects growth in the portfolio and increased inherent risk due to rising interest rates and the related impact on capitalization rates and real estate valuations. Historical valuation allowances increased $1.1 million primarily due to an increase in the volume of “pass” grade commercial real estate loans, which increased $261.0 million during the first six months of 2018. Classified commercial real estate loans increased $24.4 million from $75.8 million at December 31, 2017 to $100.2 million at June 30, 2018. The weighted-average risk grade of commercial real estate loans was 7.05 at both June 30, 2018 and December 31, 2017. Specific valuation allowances totaled $1.0 million at June 30, 2018 and related to three credit relationships totaling $15.6 million. There were no specific valuation allowances related to commercial real estate loans at December 31, 2017.

The reserve allocated to consumer real estate loans at June 30, 2018 increased $679 thousand compared to December 31, 2017. This increase was primarily due to a $1.3 million increase in macroeconomic valuation allowances, which reflects growth in the portfolio and increased inherent risk due to rising interest rates, partly offset by a $659 thousand decrease in general valuation allowances, which was primarily related to a decrease in allowances

allocated for loans not reviewed by concurrence and an increase in the reduction for recoveries.

The reserve allocated to consumer and other loans at June 30, 2018 increased $2.3 million compared to December 31, 2017. The increase was partly related to a $1.6 million increase in specific valuation allowances, which was related to one credit relationship totaling $1.6 million. The increase was also partly related to a $1.2 million increase in historical valuation allowances primarily due to an increase in the historical loss allocation factor.

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Activity in the allowance for loan losses is presented in the following table.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Balance at beginning of period	$149,885	$153,056	$155,364	$153,045
Provision for loan losses	8,251	8,426	15,196	16,378
Charge-offs:				
Commercial and industrial	(4,153)	(5,579)	(13,405)	(9,106)
Energy	(2,689)	(6,317)	(5,539)	(10,595)
Commercial real estate	(614)	(14)	(619)	(14)
Consumer real estate	(482)	(2)	(1,201)	(13)
Consumer and other	(3,994)	(3,623)	(7,966)	(7,171)
Total charge-offs	(11,932)	(15,535)	(28,730)	(26,899)
Recoveries:				
Commercial and industrial	605	718	2,182	1,516
Energy	613	81	614	134
Commercial real estate	218	477	306	522
Consumer real estate	318	113	511	220
Consumer and other	2,268	2,222	4,783	4,642
Total recoveries	4,022	3,611	8,396	7,034
Net charge-offs	(7,910)	(11,924)	(20,334)	(19,865)
Balance at end of period	$150,226	$149,558	$150,226	$149,558
Ratio of allowance for loan losses to:				
Total loans	1.10%	1.20%	1.10%	1.20%
Non-accrual loans	126.05	173.07	126.05	173.07
Ratio of annualized net charge-offs to average total loans	0.23	0.39	0.31	0.33

The provision for loan losses decreased $1.2 million, or 7.2%, during the six months ended June 30, 2018 compared to the same period in 2017. Despite increases in net charge-offs and specific valuation allowances during the six months ended June 30, 2018 compared to the same period in 2017, the provision for loan losses decreased due to a decrease in the calculated reserves necessary as a result of the aforementioned decreases in our historical loss allocation factors for energy loans, decreases in the level of classified loans and positive trends in the overall weighted-average risk grade of our energy and commercial and industrial loan portfolios. Classified energy, commercial and industrial and commercial real estate loans totaled $324.9 million at June 30, 2018 compared to $405.0 million at December 31, 2017 and $466.6 million at June 30, 2017. The overall weighted-average risk grade of our energy, commercial and industrial and commercial real estate loan portfolios was 6.71 at June 30, 2018 compared to 6.77 at December 31, 2017 and 6.81 at June 30, 2017. Net charge-offs totaled $20.3 million for six months ended June 30, 2018 compared to $19.9 million for the same period in 2017. Specific valuation allowances totaled $24.7 million at June 30, 2018 compared to $20.8 million at December 31, 2017 and $2.1 million at June 30, 2017.

The ratio of the allowance for loan losses to total loans was 1.10% at June 30, 2018 compared to 1.18% at December 31, 2017. Management believes the recorded amount of the allowance for loan losses is appropriate based upon management's best estimate of probable losses that have been incurred within the existing portfolio of loans. Should any of the factors considered by management in evaluating the appropriate level of the allowance for loan losses change, our estimate of probable loan losses could also change, which could affect the level of future provisions for loan losses.

Capital and Liquidity

Capital. Shareholders' equity totaled $3.3 billion at both June 30, 2018 and December 31, 2017. In addition to net income of $217.8 million, other sources of capital during the six months ended June 30, 2018 included $25.4 million in proceeds from stock option exercises and $6.8 million related to stock-based compensation. Uses of capital during

the six months ended June 30, 2018 included an other comprehensive loss, net of tax, of $152.4 million, $83.7 million of dividends paid on preferred and common stock and $2.3 million related to the cumulative effect of a new accounting principle adopted during the first quarter of 2018. See Note 1 - Significant Accounting Policies.

The accumulated other comprehensive income/loss component of shareholders' equity totaled a net, after-tax, unrealized loss of $63.3 million at June 30, 2018 compared to a net, after-tax, unrealized gain of $79.5 million at December 31, 2017. The change

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was primarily due to a $150.7 million net, after-tax, decrease in the net unrealized gain/loss on securities available for sale. Accumulated other comprehensive income at December 31, 2017 included $9.5 million related to certain income tax effects from the remeasurement of deferred tax assets and liabilities in connection with the change in the U.S. statutory federal income tax rate under the Tax Cuts and Jobs Act enacted on December 22, 2017. This amount was reclassified to retained earnings as of January 1, 2018 in accordance with an accounting standard update issued during the first quarter of 2018. See Note 1 - Significant Accounting Policies and Note 18 - Accounting Standards Updates.

Under the Basel III Capital Rules, we have elected to opt-out of the requirement to include most components of accumulated other comprehensive income in regulatory capital. Accordingly, amounts reported as accumulated other comprehensive income/loss do not increase or reduce regulatory capital and are not included in the calculation of risk-based capital and leverage ratios. Regulatory agencies for banks and bank holding companies utilize capital guidelines designed to measure capital and take into consideration the risk inherent in both on-balance sheet and off-balance sheet items. See Note 7 - Capital and Regulatory Matters in the accompanying notes to consolidated financial statements included elsewhere in this report. In addition, financial institutions, such as Cullen/Frost and Frost Bank, with average total consolidated assets greater than $10 billion were previously required by the Dodd-Frank Act to conduct an annual company-run stress test of capital, report the results thereof to the regulators and publicly disclose such results. As a result of regulatory reform signed into law during the second quarter of 2018, Cullen/Frost and Frost Bank are no longer required to conduct an annual stress test of capital under the Dodd-Frank Act.

We paid a quarterly dividend of $0.57 and $0.67 per common share during the first and second quarters of 2018, respectively, and a quarterly dividend of $0.54 and $0.57 per common share during the first and second quarters of 2017. This equates to a common stock dividend payout ratio of 37.2% and 42.9% during the first six months of 2018 and 2017, respectively. Our ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our capital stock may be impacted by certain restrictions under the terms of our junior subordinated deferrable interest debentures and our Series A Preferred Stock as described in Note 7 - Capital and Regulatory Matters in the accompanying notes to consolidated financial statements included elsewhere in this report.

Stock Repurchase Plans. From time to time, our board of directors has authorized stock repurchase plans. In general, stock repurchase plans allow us to proactively manage our capital position and return excess capital to shareholders. Shares purchased under such plans also provide us with shares of common stock necessary to satisfy obligations related to stock compensation awards. On October 24, 2017, our board of directors authorized a $150.0 million stock repurchase program, allowing us to repurchase shares of our common stock over a two-year period from time to time at various prices in the open market or through private transactions. No shares were repurchased under this plan during 2018 or 2017. Under a prior plan, we repurchased 1,134,966 shares under the plan at a total cost of $100.0 million during third quarter of 2017. See Part II, Item 2 - Unregistered Sales of Equity Securities and Use of Proceeds, included elsewhere in this report.

Liquidity. As more fully discussed in our 2017 Form 10-K, our liquidity position is continuously monitored and adjustments are made 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 disruptions, volatility in the financial markets, unexpected credit events or other significant occurrences deemed problematic by management. These scenarios are incorporated into our contingency funding plan, which provides the basis for the identification of our liquidity needs. As of June 30, 2018, 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 that would have a material adverse effect on us.

Since Cullen/Frost is a holding company and does not conduct operations, its primary sources of liquidity are dividends upstreamed from Frost Bank and borrowings from outside sources. Banking regulations may limit the amount of dividends that may be paid by Frost Bank. See Note 7 - Capital and Regulatory Matters in the accompanying notes to consolidated financial statements included elsewhere in this report regarding such dividends. At June 30, 2018, Cullen/Frost had liquid assets, including cash and resell agreements, totaling $312.5 million.

Accounting Standards Updates

See Note 17 - Accounting Standards Updates in the accompanying notes to consolidated financial statements included elsewhere in this report for details of recently issued accounting pronouncements and their expected impact on our financial statements.

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Consolidated Average Balance Sheets and Interest Income Analysis - Quarter To Date
(Dollars in thousands - taxable-equivalent basis)

	June 30, 2018			June 30, 2017		
	Average Balance	Interest Income/ Expense	Yield/ Cost	Average Balance	Interest Income/ Expense	Yield/ Cost
Assets:						
Interest-bearing deposits	$2,885,455	$13,917	1.93%	$3,349,997	$9,076	1.09%
Federal funds sold and resell agreements	296,335	1,415	1.92	49,232	163	1.33
Securities:						
Taxable	4,197,627	21,188	2.01	5,105,249	23,527	1.87
Tax-exempt	7,730,597	79,278	4.10	7,284,731	97,401	5.38
Total securities	11,928,224	100,466	3.36	12,389,980	120,928	3.93
Loans, net of unearned discounts	13,536,590	165,414	4.90	12,275,030	132,339	4.32
Total Earning Assets and Average Rate Earned	28,646,604	281,212	3.93	28,064,239	262,506	3.76
Cash and due from banks	476,212			495,954		
Allowance for loan losses	(150,551)			(151,784)		
Premises and equipment, net	531,410			521,275		
Accrued interest and other assets	1,254,506			1,194,275		
Total Assets	$30,758,181			$30,123,959		
Liabilities:						
Non-interest-bearing demand deposits:						
Commercial and individual	$10,062,771			$10,043,532		
Correspondent banks	190,879			242,920		
Public funds	374,817			407,830		
Total non-interest-bearing demand deposits	10,628,467			10,694,282		
Interest-bearing deposits:						
Private accounts						
Savings and interest checking	6,687,540	1,304	0.08	6,399,008	272	0.02
Money market deposit accounts	7,577,963	14,023	0.74	7,383,394	1,280	0.07
Time accounts	787,450	1,290	0.66	778,728	321	0.17
Public funds	387,141	958	0.99	405,658	300	0.30
Total interest-bearing deposits	15,440,094	17,575	0.46	14,966,788	2,173	0.06
Total deposits	26,068,561			25,661,070		
Federal funds purchased and repurchase agreements	1,019,961	631	0.25	915,607	187	0.08
Junior subordinated deferrable interest debentures	136,208	1,311	3.85	136,150	962	2.83
Subordinated notes payable and other notes	98,615	1,164	4.72	98,459	1,164	4.73
Total Interest-Bearing Funds and Average Rate Paid	16,694,878	20,681	0.50	16,117,004	4,486	0.11
Accrued interest and other liabilities	164,995			140,945		
Total Liabilities	27,488,340			26,952,231		
Shareholders' Equity	3,269,841			3,171,728		
Total Liabilities and Shareholders' Equity	$30,758,181			$30,123,959		
Net interest income		$260,531			$258,020	
Net interest spread			3.43%			3.65%
Net interest income to total average earning assets			3.64%			3.70%

For these computations: (i) average balances are presented on a daily average basis, (ii) information is shown on a taxable-equivalent basis assuming a 21% tax rate in 2018 and a 35% tax rate in 2017, (iii) average loans include loans on non-accrual status, and (iv) average securities include unrealized gains and losses on securities available for sale

while yields are based on average amortized cost.

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Consolidated Average Balance Sheets and Interest Income Analysis - Year To Date
(Dollars in thousands - taxable-equivalent basis)

	June 30, 2018			June 30, 2017		
	Average Balance	Interest Income/ Expense	Yield/ Cost	Average Balance	Interest Income/ Expense	Yield/ Cost
Assets:						
Interest-bearing deposits	$3,281,979	$28,011	1.72%	$3,336,695	$15,912	0.96%
Federal funds sold and resell agreements	241,610	2,176	1.82	48,622	270	1.12
Securities:						
Taxable	4,182,596	41,746	2.00	5,183,956	48,829	1.91
Tax-exempt	7,701,055	157,612	4.11	7,283,866	196,976	5.41
Total securities	11,883,651	199,358	3.36	12,467,822	245,805	3.96
Loans, net of unearned discounts	13,416,282	317,781	4.78	12,182,820	256,195	4.24
Total Earning Assets and Average Rate Earned	28,823,522	547,326	3.82	28,035,959	518,182	3.72
Cash and due from banks	493,981			514,146		
Allowance for loan losses	(153,518)			(152,791)		
Premises and equipment, net	527,515			522,948		
Accrued interest and other assets	1,248,863			1,215,147		
Total Assets	$30,940,363			$30,135,409		
Liabilities:						
Non-interest-bearing demand deposits:						
Commercial and individual	$10,171,916			$10,001,032		
Correspondent banks	207,813			263,641		
Public funds	419,585			445,397		
Total non-interest-bearing demand deposits	10,799,314			10,710,070		
Interest-bearing deposits:						
Private accounts						
Savings and interest checking	6,661,661	2,441	0.07	6,357,312	545	0.02
Money market deposit accounts	7,584,045	21,721	0.58	7,430,600	2,416	0.07
Time accounts	782,905	2,274	0.59	782,724	628	0.16
Public funds	419,773	1,777	0.85	459,706	452	0.20
Total interest-bearing deposits	15,448,384	28,213	0.37	15,030,342	4,041	0.05
Total deposits	26,247,698			25,740,412		
Federal funds purchased and repurchase agreements	1,035,101	1,265	0.25	910,333	326	0.07
Junior subordinated deferrable interest debentures	136,200	2,453	3.60	136,143	1,870	2.75
Subordinated notes payable and other notes	98,596	2,328	4.72	81,416	1,532	3.76
Total Interest-Bearing Funds and Average Rate Paid	16,718,281	34,259	0.41	16,158,234	7,769	0.10
Accrued interest and other liabilities	160,089			153,320		
Total Liabilities	27,677,684			27,021,624		
Shareholders' Equity	3,262,679			3,113,785		
Total Liabilities and Shareholders' Equity	$30,940,363			$30,135,409		
Net interest income		$513,067			$510,413	
Net interest spread			3.41%			3.62%
Net interest income to total average earning assets			3.58%			3.67%

For these computations: (i) average balances are presented on a daily average basis, (ii) information is shown on a taxable-equivalent basis assuming a 21% tax rate in 2018 and a 35% tax rate in 2017, (iii) average loans include loans on non-accrual status, and (iv) average securities include unrealized gains and losses on securities available for sale

while yields are based on average amortized cost.

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Item 3. Quantitative and Qualitative Disclosures About Market Risk

The disclosures set forth in this item are qualified by the section captioned “Forward-Looking Statements and Factors that Could Affect Future Results” included in Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations of this report and other cautionary statements set forth elsewhere in this report.

Refer to the discussion of market risks included in Item 7A. Quantitative and Qualitative Disclosures About Market Risk in the 2017 Form 10-K. There has been no significant change in the types of market risks we face since December 31, 2017.

We utilize an earnings simulation model as the primary quantitative tool in measuring the amount of interest rate risk associated with changing market rates. The model quantifies the effects of various interest rate scenarios on projected net interest income and net income over the next 12 months. The model measures the impact on net interest income relative to a flat-rate case scenario of hypothetical fluctuations in interest rates over the next 12 months. These simulations incorporate assumptions regarding balance sheet growth and mix, pricing and the repricing and maturity characteristics of the existing and projected balance sheet. The impact of interest rate derivatives, such as interest rate swaps, caps and floors, is also included in the model. Other interest rate-related risks such as prepayment, basis and option risk are also considered.

For modeling purposes, as of June 30, 2018, the model simulations projected that 100 and 200 basis point ratable increases in interest rates would result in positive variances in net interest income of 0.5% and 1.8%, respectively, relative to the flat-rate case over the next 12 months, while 100 and 200 basis point ratable decreases in interest rates would result in negative variances in net interest income of 3.2% and 8.6%, respectively, relative to the flat-rate case over the next 12 months. The June 30, 2018 model simulations for increased interest rates were impacted by the assumption, for modeling purposes, that we will begin to pay interest on commercial demand deposits (those not already receiving an earnings credit rate) in the third quarter of 2018, as further discussed below. For modeling purposes, as of June 30, 2017, the model simulations projected that 100 and 200 basis point ratable increases in interest rates would result in positive variances in net interest income of 1.0% and 2.8%, respectively, relative to the flat-rate case over the next 12 months, while 100 and 125 basis point ratable decreases in interest rates would result in a negative variance in net interest income of 4.8% and 10.1%, respectively, relative to the flat-rate case over the next 12 months. The June 30, 2017 model simulations for increased interest rates were impacted by the assumption, for modeling purposes, that we would begin to pay interest on commercial demand deposits (those not already receiving an earnings credit rate) in the third quarter of 2017, as further discussed below. The likelihood of a decrease in interest rates beyond 200 basis points as of June 30, 2018 and 125 basis points as of June 30, 2017 was considered to be remote given prevailing interest rate levels.

The model simulations as of June 30, 2018 indicate that our balance sheet is less asset sensitive in comparison to our balance sheet as of June 30, 2017. The shift to a less asset sensitive position was primarily due to a decrease in the relative proportion of interest-bearing deposits and federal funds sold to projected average interest-earning assets. Interest-bearing deposits and federal funds sold are more immediately impacted by changes in interest rates in comparison to our other categories of earning assets. Additionally, our model simulations in 2018 assume that the full impact of increases in the federal funds rate will not be reflected in the yields earned on interest-bearing deposits maintained at the Federal Reserve.

We do not currently pay interest on a significant portion of our commercial demand deposits. If we began to pay interest on commercial demand deposits (those not already receiving an earnings credit rate), our balance sheet would likely become less asset sensitive. Any interest rate that would ultimately be paid on these commercial demand deposits would likely depend upon a variety of factors, some of which are beyond our control. For modeling purposes, we have assumed an aggressive pricing structure with interest payments for commercial demand deposits (those not already receiving an earnings credit) beginning in the third quarters of 2017 and 2018, respectively, for each simulation. Should the actual interest rate paid on commercial demand deposits be less than the rate assumed in the model simulations, or should the interest rate paid for commercial demand deposits become an administered rate with less direct correlation to movements in general market interest rates, our balance sheet could be more asset sensitive than the model simulations might otherwise indicate.

As of June 30, 2018, the effects of a 200 basis point increase and a 200 basis point decrease in interest rates on our derivative holdings would not result in a significant variance in our net interest income.

The effects of hypothetical fluctuations in interest rates on our securities classified as “trading” under ASC Topic 320, “Investments—Debt and Equity Securities,” are not significant, and, as such, separate quantitative disclosure is not presented.

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Item 4. Controls and Procedures

As of the end of the period covered by this Quarterly Report on Form 10-Q, an evaluation was carried out by management, with the participation of its Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of the end of the period covered by this report. No change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934) occurred during the last fiscal quarter that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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Part II. Other Information

Item 1. Legal Proceedings

We are subject to various claims and legal actions that have arisen in the course of conducting business. Management does not expect the ultimate disposition of these matters to have a material adverse impact on our financial statements.

Item 1A. Risk Factors

There has been no material change in the risk factors disclosed under Item 1A. of our 2017 Form 10-K.

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

The following table provides information with respect to purchases we made or were made on our behalf or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934), of our common stock during the three months ended June 30, 2018. Dollar amounts in thousands.

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan	Maximum Number of Shares (or Approximate Dollar Value) That May Yet Be Purchased Under the Plan at the End of the Period
April 1, 2018 to April 30, 2018	—	$ —	—	$ 150,000
May 1, 2018 to May 31, 2018	—	—	—	150,000
June 1, 2018 to June 30, 2018	601	[(1)] 115.83	—	150,000
Total	601	$ 115.83	—	

(1) All of these repurchases were made in connection with the vesting of certain share awards.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits

(a) Exhibits

Exhibit Number	Description
31.1	Rule 13a-14(a) Certification of the Corporation's Chief Executive Officer
31.2	Rule 13a-14(a) Certification of the Corporation's Chief Financial Officer
32.1+	Section 1350 Certification of the Corporation's Chief Executive Officer
32.2+	Section 1350 Certification of the Corporation's Chief Financial Officer
101	Interactive Data File

+ This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

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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.

Cullen/Frost Bankers, Inc.
(Registrant)

Date: July 26, 2018 By: /s/ Jerry Salinas
Jerry Salinas
Group Executive Vice President
and Chief Financial Officer
(Duly Authorized Officer, Principal Financial Officer and Principal Accounting Officer)