

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-Q

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

For the quarterly period ended
September 30, 2019

or

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission File No. 000-08185

TCF Financial Corporation

(Exact name of registrant as specified in its charter)

Michigan

(State or other jurisdiction of incorporation or organization)

38-2022454

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

333 W. Fort Street, Suite 1800

Detroit, Michigan 48226

(Address and Zip Code of principal executive offices)

(800) 867-9757

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock (par value \$1 per share)	TCF	The NASDAQ Stock Market
Depository shares, each representing a 1/1000th interest in a share of the 5.70% Series C Non-Cumulative Perpetual Preferred Stock	TCFCP	The NASDAQ Stock Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes

No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes

No

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

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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

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

Yes

No

As of November 8, 2019, there were 153,406,792 shares outstanding of the registrant's common stock, par value \$1 per share, its only outstanding class of common stock.

TABLE OF CONTENTS

Description	Page
Part I - Financial Information	
Item 1. Financial Statements.	
Consolidated Statements of Financial Condition at September 30, 2019 and December 31, 2018 (Unaudited)	1
Consolidated Statements of Income for the Three and Nine Months Ended September 30, 2019 and 2018 (Unaudited)	2
Consolidated Statements of Comprehensive Income for the Three and Nine Months Ended September 30, 2019 and 2018 (Unaudited)	3
Consolidated Statements of Equity for the Three and Nine Months Ended September 30, 2019 and 2018 (Unaudited)	4
Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2019 and 2018 (Unaudited)	6
Notes to Consolidated Financial Statements (Unaudited)	7
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.	60
Item 3. Quantitative and Qualitative Disclosures About Market Risk.	93
Item 4. Controls and Procedures.	94
Part II - Other Information	
Item 1. Legal Proceedings.	95
Item 1A. Risk Factors.	95
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.	96
Item 3. Defaults Upon Senior Securities.	96
Item 4. Mine Safety Disclosures.	96
Item 5. Other Information.	97
Item 6. Index to Exhibits.	98
Signatures	99

Part I - Financial Information
Item 1. Financial Statements.
TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Consolidated Statements of Financial Condition (Unaudited)

(Dollars in thousands, except per share data)

At September 30, 2019 At December 31, 2018

ASSETS			
Cash and cash equivalents:			
Cash and due from banks	\$	586,060	\$ 279,267
Interest-bearing deposits with other banks		736,954	307,790
Total cash and cash equivalents		1,323,014	587,057
Federal Home Loan Bank and Federal Reserve Bank stocks, at cost		290,238	91,654
Investment securities:			
Available-for-sale, at fair value		5,579,835	2,470,065
Held-to-maturity, at amortized cost (fair value of \$149,928 and \$149,267)		144,000	148,852
Total investment securities		5,723,835	2,618,917
Loans and leases held-for-sale (includes \$114,831 and \$18,070 at fair value)		1,436,069	90,664
Loans and leases		33,510,752	19,073,020
Allowance for loan and lease losses		(121,218)	(157,446)
Loans and leases, net		33,389,534	18,915,574
Premises and equipment, net		554,194	427,534
Goodwill		1,265,111	154,757
Other intangible assets, net		215,910	20,496
Loan servicing rights		55,301	23
Other assets		1,439,305	792,936
Total assets	\$	45,692,511	\$ 23,699,612
LIABILITIES AND EQUITY			
Liabilities			
Deposits:			
Noninterest-bearing	\$	7,979,900	\$ 3,936,155
Interest-bearing		27,306,174	14,967,531
Total deposits		35,286,074	18,903,686
Short-term borrowings		2,607,300	—
Long-term borrowings		860,482	1,449,472
Other liabilities		1,245,238	790,194
Total liabilities		39,999,094	21,143,352
Equity			
Preferred stock, \$0.01 par value			
Authorized - 2,000,000 shares at September 30, 2019 and 30,000,000 shares at December 31, 2018			
Issued and outstanding - 7,000 shares at both September 30, 2019 and December 31, 2018		169,302	169,302
Common stock, \$1.00 par value at both September 30, 2019 and December 31, 2018			
Authorized - 220,000,000 shares at September 30, 2019 and 142,268,000 shares at December 31, 2018			
Issued and outstanding - 153,571,381 shares at September 30, 2019 and 88,198,460 shares at December 31, 2018		153,571	88,198
Additional paid-in capital		3,478,159	798,627
Retained earnings		1,840,214	1,766,994
Accumulated other comprehensive income (loss)		56,228	(33,138)
Treasury stock at cost and other (4,909,069 Treasury shares at December 31, 2018)		(27,370)	(252,182)
Total TCF Financial Corporation shareholders' equity		5,670,104	2,537,801
Non-controlling interest		23,313	18,459
Total equity		5,693,417	2,556,260
Total liabilities and equity	\$	45,692,511	\$ 23,699,612

See accompanying notes to consolidated financial statements.

TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Consolidated Statements of Income (Unaudited)

(In thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Interest income				
Interest and fees on loans and leases	\$ 417,370	\$ 269,167	\$ 983,890	\$ 806,935
Interest on investment securities:				
Taxable	31,038	11,498	69,745	27,491
Tax-exempt	3,385	4,328	7,277	12,991
Interest on loans held-for-sale	1,408	3,625	2,832	5,281
Interest on other earning assets	6,607	3,089	13,739	8,722
Total interest income	459,808	291,707	1,077,483	861,420
Interest expense				
Interest on deposits	70,900	27,479	149,154	74,228
Interest on borrowings	17,115	10,726	48,050	31,850
Total interest expense	88,015	38,205	197,204	106,078
Net interest income	371,793	253,502	880,279	755,342
Provision for credit losses	27,188	2,270	50,879	27,874
Net interest income after provision for credit losses	344,605	251,232	829,400	727,468
Noninterest income				
Fees and service charges on deposit accounts	34,384	29,175	88,504	83,703
Leasing revenue	39,590	41,944	117,032	121,001
Wealth management revenue	4,241	—	4,241	—
Card and ATM revenue	23,315	20,074	62,470	58,313
Net (losses) gains on sales of loans and leases	(5,984)	8,502	13,374	24,900
Servicing fee revenue	5,121	6,032	14,754	21,811
Net gains (losses) on investment securities	5,900	94	7,417	181
Other	(12,309)	6,243	(312)	20,620
Total noninterest income	94,258	112,064	307,480	330,529
Noninterest expense				
Compensation and employee benefits	155,745	124,996	395,953	372,174
Occupancy and equipment	49,229	42,337	132,789	123,562
Lease financing equipment depreciation	19,408	19,525	57,797	54,744
Net foreclosed real estate and repossessed assets	2,203	3,880	9,281	12,654
Merger-related expenses	111,259	—	124,943	—
Other	87,776	55,685	194,781	201,308
Total noninterest expense	425,620	246,423	915,544	764,442
Income before income tax expense	13,243	116,873	221,336	293,555
Income tax (benefit) expense	(11,735)	28,034	28,866	66,083
Income after income tax (benefit) expense	24,978	88,839	192,470	227,472
Income attributable to non-controlling interest	2,830	2,643	9,401	8,766
Net income attributable to TCF Financial Corporation	22,148	86,196	183,069	218,706
Preferred stock dividends	2,494	2,494	7,481	9,094
Impact of preferred stock redemption	—	—	—	3,481
Net income available to common shareholders	\$ 19,654	\$ 83,702	\$ 175,588	\$ 206,131
Earnings per common share				
Basic	\$ 0.15	\$ 1.00	\$ 1.79	\$ 2.44
Diluted	0.15	1.00	1.79	2.43
Weighted-average common shares outstanding				
Basic	128,575,171	83,762,625	97,876,262	84,522,519
Diluted	128,754,588	83,808,063	98,055,279	84,791,124

See accompanying notes to consolidated financial statements.

TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income (Unaudited)

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income attributable to TCF Financial Corporation	\$ 22,148	\$ 86,196	\$ 183,069	\$ 218,706
Other comprehensive income (loss), net of tax:				
Net unrealized gains (losses) on available for sale investment securities and interest-only strips	19,230	(13,434)	87,223	(46,059)
Net unrealized gains (losses) on net investment hedges	1,641	(1,904)	(2,846)	3,479
Foreign currency translation adjustment	(1,968)	2,899	5,014	(4,136)
Recognized postretirement prior service cost	(9)	(9)	(25)	(26)
Total other comprehensive income (loss), net of tax	18,894	(12,448)	89,366	(46,742)
Comprehensive income	\$ 41,042	\$ 73,748	\$ 272,435	\$ 171,964

See accompanying notes to consolidated financial statements.

TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Consolidated Statements of Equity (Unaudited)
At or For the Three Months Ended September 30, 2019 and 2018

TCF Financial Corporation

(Dollars in thousands)	Number of Shares Issued		Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock and Other	Total	Non-controlling Interest	Total Equity
	Preferred	Common									
Balance, June 30, 2019	7,000	87,943,860	\$ 169,302	\$ 87,944	\$ 781,788	\$ 1,874,308	\$ 37,334	\$ (265,017)	\$ 2,685,659	\$ 24,858	\$ 2,710,517
Net income	—	—	—	—	—	22,148	—	—	22,148	2,830	24,978
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	18,894	—	18,894	—	18,894
Reverse merger with Chemical Financial Corporation	—	65,539,678	—	65,540	2,687,153	—	—	265,863	3,018,556	—	3,018,556
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(4,375)	(4,375)
Repurchases of 780,716 shares of common stock	—	—	—	—	—	—	—	(32,310)	(32,310)	—	(32,310)
Dividends on 5.70% Series C Preferred Stock	—	—	—	—	—	(2,494)	—	—	(2,494)	—	(2,494)
Dividends on common stock of \$0.35 per common share	—	—	—	—	—	(53,748)	—	—	(53,748)	—	(53,748)
Stock compensation plans, net of tax	—	87,843	—	87	13,070	—	—	242	13,399	—	13,399
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	(3,852)	—	—	3,852	—	—	—
Balance, September 30, 2019	7,000	153,571,381	\$ 169,302	\$ 153,571	\$ 3,478,159	\$ 1,840,214	\$ 56,228	\$ (27,370)	\$ 5,670,104	\$ 23,313	\$ 5,693,417
Balance, June 30, 2018	7,000	88,166,532	\$ 169,302	\$ 88,167	\$ 790,933	\$ 1,649,449	\$ (52,811)	\$ (164,107)	\$ 2,480,933	\$ 23,646	\$ 2,504,579
Net income	—	—	—	—	—	86,196	—	—	86,196	2,643	88,839
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	(12,448)	—	(12,448)	—	(12,448)
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(5,135)	(5,135)
Repurchases of 477,804 shares of common stock	—	—	—	—	—	—	—	(24,026)	(24,026)	—	(24,026)
Dividends on 5.70% Series C Preferred Stock	—	—	—	—	—	(2,494)	—	—	(2,494)	—	(2,494)
Dividends on common stock of \$0.295 per common share	—	—	—	—	—	(24,741)	—	—	(24,741)	—	(24,741)
Common stock warrants exercised	—	40,304	—	40	(40)	—	—	—	—	—	—
Stock compensation plans, net of tax	—	(5,791)	—	(6)	3,444	—	—	—	3,438	—	3,438
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	1,519	—	—	(1,519)	—	—	—
Balance, September 30, 2018	7,000	88,201,045	\$ 169,302	\$ 88,201	\$ 795,856	\$ 1,708,410	\$ (65,259)	\$ (189,652)	\$ 2,506,858	\$ 21,154	\$ 2,528,012

See accompanying notes to consolidated financial statements.

TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Consolidated Statements of Equity (Unaudited)
At or For the Nine Months Ended September 30, 2019 and 2018

TCF Financial Corporation												
(Dollars in thousands)	Number of Shares Issued		Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock and Other	Total	Non- controlling Interest	Total Equity	
	Preferred	Common										
Balance, December 31, 2018	7,000	88,198,460	\$ 169,302	\$ 88,198	\$ 798,627	\$ 1,766,994	\$ (33,138)	\$ (252,182)	\$ 2,537,801	\$ 18,459	\$ 2,556,260	
Net income	—	—	—	—	—	183,069	—	—	183,069	9,401	192,470	
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	89,366	—	89,366	—	89,366	
Reverse merger with Chemical Financial Corporation	—	65,539,678	—	65,540	2,687,153	—	—	265,863	3,018,556	—	3,018,556	
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(4,547)	(4,547)	
Repurchases of 1,453,908 shares of common stock	—	—	—	—	—	—	—	(58,805)	(58,805)	—	(58,805)	
Dividends on 5.70% Series C Preferred Stock	—	—	—	—	—	(7,481)	—	—	(7,481)	—	(7,481)	
Dividends on common stock of \$0.94 per common share	—	—	—	—	—	(102,368)	—	—	(102,368)	—	(102,368)	
Stock compensation plans, net of tax	—	(166,757)	—	(167)	(5,626)	—	—	15,759	9,966	—	9,966	
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	(1,995)	—	—	1,995	—	—	—	
Balance, September 30, 2019	7,000	153,571,381	\$ 169,302	\$ 153,571	\$ 3,478,159	\$ 1,840,214	\$ 56,228	\$ (27,370)	\$ 5,670,104	\$ 23,313	\$ 5,693,417	
Balance, December 31, 2017	4,007,000	87,473,708	\$ 265,821	\$ 87,474	\$ 791,465	\$ 1,577,311	\$ (18,517)	\$ (40,797)	\$ 2,662,757	\$ 17,827	\$ 2,680,584	
Change in accounting principle	—	—	—	—	—	(116)	—	—	(116)	—	(116)	
Balance, January 1, 2018	4,007,000	87,473,708	265,821	87,474	791,465	1,577,195	(18,517)	(40,797)	2,662,641	17,827	2,680,468	
Net income	—	—	—	—	—	218,706	—	—	218,706	8,766	227,472	
Other comprehensive income (loss), net of tax	—	—	—	—	—	—	(46,742)	—	(46,742)	—	(46,742)	
Net investment by (distribution to) non-controlling interest	—	—	—	—	—	—	—	—	—	(5,439)	(5,439)	
Redemption of Series B Preferred Stock	(4,000,000)	—	(96,519)	—	—	(3,481)	—	—	(100,000)	—	(100,000)	
Repurchases of 3,195,126 shares of common stock	—	—	—	—	—	—	—	(149,912)	(149,912)	—	(149,912)	
Dividends on 6.45% Series B Preferred Stock	—	—	—	—	—	—	—	—	—	—	—	
Dividends on 5.70% Series C Preferred Stock	—	—	—	—	—	(9,094)	—	—	(9,094)	—	(9,094)	
Dividends on common stock of \$0.885 per common share	—	—	—	—	—	(74,916)	—	—	(74,916)	—	(74,916)	
Common stock warrants exercised	—	533,548	—	534	(534)	—	—	—	—	—	—	
Common shares purchased by TCF employee benefit plans	—	17,594	—	17	698	—	—	—	715	—	715	
Stock compensation plans, net of tax	—	176,195	—	176	5,284	—	—	—	5,460	—	5,460	
Change in shares held in trust for deferred compensation plans, at cost	—	—	—	—	(1,057)	—	—	1,057	—	—	—	
Balance, September 30, 2018	7,000	88,201,045	\$ 169,302	\$ 88,201	\$ 795,856	\$ 1,708,410	\$ (65,259)	\$ (189,652)	\$ 2,506,858	\$ 21,154	\$ 2,528,012	

See accompanying notes to consolidated financial statements.

TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Consolidated Statements of Cash Flows (Unaudited)

(In thousands)	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities		
Net income	\$ 192,470	\$ 227,472
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Provision for credit losses	50,879	27,874
Share-based compensation expense	17,762	14,040
Depreciation and amortization	207,954	153,018
Provision (benefit) for deferred income taxes	(27,732)	33,409
Net gains on sales of assets	(46,966)	(28,977)
Proceeds from sales of loans and leases held-for-sale	512,051	264,970
Originations of loans and leases held-for-sale, net of repayments	(548,371)	(271,793)
Impairment of loan servicing rights	4,520	—
Net change in other assets	(188,081)	21,984
Net change in other liabilities	16,229	(1,849)
Other, net	(34,793)	(29,668)
Net cash provided by (used in) operating activities	155,922	410,480
Cash flows from investing activities		
Proceeds from sales of investment securities available-for-sale	1,993,274	—
Proceeds from maturities of and principal collected on investment securities available-for-sale	398,989	120,183
Purchases of investment securities available-for-sale	(1,424,344)	(919,645)
Proceeds from maturities of and principal collected on investment securities held-to-maturity	11,945	11,259
Purchases of investment securities held-to-maturity	(4,029)	(2,187)
Redemption of Federal Home Loan Bank stock	162,011	201,001
Purchases of Federal Home Loan Bank stock	(142,000)	(199,000)
Proceeds from sales of loans and leases	566,880	675,164
Loan and lease originations and purchases, net of principal collected	(674,459)	735,840
Proceeds from sales of other assets	82,970	58,879
Purchases of premises and equipment and lease equipment	(108,404)	(903,394)
Net cash acquired (paid) in business combination	975,014	—
Other, net	(6,743)	15,151
Net cash provided by (used in) investing activities	1,831,104	(206,749)
Cash flows from financing activities		
Net change in deposits	(15,296)	163,442
Net change in short-term borrowings	(17,292)	2,451
Proceeds from long-term borrowings	2,799,986	7,043,458
Payments on long-term borrowings	(3,838,454)	(7,118,690)
Payments on liabilities related to acquisition and portfolio purchase	(1,000)	—
Redemption of Series B preferred stock	—	(100,000)
Repurchases of common stock	(58,804)	(149,912)
Common shares sold to TCF employee benefit plans	—	715
Dividends paid on preferred stock	(7,481)	(9,094)
Dividends paid on common stock	(102,368)	(74,916)
Exercise of stock options	—	(997)
Payments related to tax-withholding upon conversion of share-based awards	(5,813)	(6,563)
Net investment by (distribution to) non-controlling interest	(4,547)	(5,439)
Net cash provided by (used in) financing activities	(1,251,069)	(255,545)
Net change in cash and due from banks	735,957	(51,814)
Cash and cash equivalents at beginning of period	587,057	621,782
Cash and cash equivalents at end of period	\$ 1,323,014	\$ 569,968
Supplemental disclosures of cash flow information		
Cash paid (received) for:		
Interest on deposits and borrowings	\$ 192,793	\$ 99,336
Income taxes, net	10,367	(21,035)
Noncash activities:		
Transfer of loans and leases to other assets	73,314	77,704
Transfer of loans and leases from held for investment to held for sale, net	1,837,445	644,488

See accompanying notes to consolidated financial statements.

TCF FINANCIAL CORPORATION AND SUBSIDIARIES
Notes to Consolidated Financial Statements (Unaudited)

Note 1. Basis of Presentation

On August 1, 2019 (the "Merger Date"), TCF Financial Corporation, a Delaware corporation ("Legacy TCF"), merged with and into Chemical Financial Corporation, a Michigan corporation ("Chemical"), with Chemical continuing as the surviving legal corporation (the "Merger"). Immediately following the Merger, Chemical's wholly owned bank subsidiary, Chemical Bank, a Michigan state-chartered bank, merged with and into Legacy TCF's wholly owned bank subsidiary, TCF National Bank, a national banking association, with TCF National Bank surviving the merger ("TCF Bank"). Upon completion of the Merger, Chemical was renamed TCF Financial Corporation. TCF Financial Corporation (together with its direct and indirect subsidiaries, "we," "us," "our," "TCF" or the "Corporation"), is a financial holding company, headquartered in Detroit, Michigan. TCF Bank has its main office in Sioux Falls, South Dakota. References herein to "TCF Financial" or the "Holding Company" refer to TCF Financial Corporation on an unconsolidated basis.

The Merger was accounted for as a reverse merger using the acquisition method of accounting, which means that for accounting and financial reporting purposes, Legacy TCF was deemed to have acquired Chemical in the Merger, even though Chemical was the legal acquirer. Accordingly, Legacy TCF's historical financial statements are the historical financial statements of the combined company for all periods before the Merger Date. TCF's results of operations for the third quarter of 2019 and the first nine months of 2019 include the results of operations of Chemical on and after August 1, 2019. Results for periods before August 1, 2019 reflect only those of Legacy TCF and do not include the results of operations of Chemical. The number of shares issued and outstanding, earnings per share, additional paid-in-capital, dividends paid and all references to share quantities of TCF have been retrospectively adjusted to reflect the equivalent number of shares issued to holders of Legacy TCF common stock in the Merger. See Note 2. Merger for further information. In addition, the assets and liabilities of Chemical as of the Merger Date have been recorded at their estimated fair value and added to those of Legacy TCF.

TCF Bank operates bank branches in Michigan, Minnesota, Illinois, Ohio, Indiana, Colorado, Wisconsin, Arizona and South Dakota (TCF's "primary banking markets"). Through its direct subsidiaries, TCF Bank provides a full range of consumer-facing and commercial services, including consumer and commercial banking, trust and wealth management, and specialty leasing and lending products and services to consumers, small businesses and commercial customers.

The accompanying unaudited consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") for interim financial information and in accordance with the instructions to Quarterly Report on Form 10-Q and Article 10 of Regulation S-X as promulgated by the Securities and Exchange Commission ("SEC"). Accordingly, the consolidated financial statements do not include all of the information and notes necessary for complete financial statements in conformity with GAAP. In the opinion of management, the accompanying unaudited consolidated financial statements contain all the significant adjustments, consisting of normal recurring items, considered necessary for fair presentation. The results of operations for interim periods are not necessarily indicative of the results to be expected for the entire year. These interim unaudited financial statements should be read in connection with the Legacy TCF audited Consolidated Financial Statements and notes thereto, at and for the year ended December 31, 2018, which were filed as Exhibit 99.1 to TCF's Current Report on Form 8-K filed with the SEC on August 1, 2019, and together with Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Annual Report on Form 10-K of Legacy TCF for the year ended December 31, 2018.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. These estimates are based on information available to management at the time the estimates are made. Actual results could differ from those estimates. Certain reclassifications have been made to prior period financial statements to conform to the current period presentation.

In connection with the Merger, effective August 1, 2019, TCF renamed its Wholesale Banking segment to Commercial Banking to align with the way TCF is now managed. In addition, activity that was related to small business banking and private banking were moved from the Wholesale Banking (now named Commercial Banking) segment to the Consumer Banking segment. The revised presentation of previously reported segment data has been applied retroactively for all periods presented in these financial statements. See Note 25. Reportable Segments for further information.

Note 2. Merger

As described in Note 1. Basis of Presentation, on August 1, 2019, we completed our Merger with Legacy TCF.

The Merger was an all-stock transaction. Pursuant to the merger agreement, on the Merger Date, each holder of Legacy TCF common stock received 0.5081 shares (the "Exchange Ratio") of TCF's common stock for each share of Legacy TCF common stock held. Each outstanding share of common stock of Chemical remained outstanding and was unaffected by the Merger other than by the change of the Corporation's name from Chemical Financial Corporation to TCF Financial Corporation. As of the effective time of the Merger on August 1, 2019, TCF Financial had approximately 153.5 million shares of common stock outstanding. On the Merger Date, the shares of Legacy TCF common stock, which previously traded under the ticker symbol "TCF" on the New York Stock Exchange (the "NYSE") ceased trading on, and were delisted from, the NYSE. Following the Merger, TCF Financial common stock continues to trade on the Nasdaq Stock Market ("NASDAQ"), but its ticker symbol changed from "CHFC" to "TCF" effective August 1, 2019.

Pursuant to the merger agreement, each outstanding share of Legacy TCF 5.70% Series C Non-Cumulative Perpetual Preferred Stock, with a liquidation preference of \$25,000 per share (the "Legacy TCF Preferred Stock") was converted into the right to receive one share of newly created 5.70% Series C Non-Cumulative Perpetual Preferred Stock of TCF, with a liquidation preference of \$25,000 per share (the "New TCF Preferred Stock"), and each depository share representing 1/1000th of a share of Legacy TCF Preferred Stock was converted into one depository share representing 1/1000th of a share of New TCF Preferred Stock. Immediately following the effective time of the Merger, as of August 1, 2019, TCF Financial had 7,000 shares of New TCF Preferred Stock outstanding and 7.0 million related depository shares outstanding.

The Merger constituted a business combination and was accounted for as a reverse merger using the acquisition method of accounting. As a result, Legacy TCF was the accounting acquirer, and Chemical was the legal acquirer and the accounting acquiree. Therefore, the historical financial statements of Legacy TCF became the historical financial statements of the combined company. In addition, the assets, including the intangible assets identified, and liabilities of Chemical as of the Merger Date, have been recorded at their estimated fair value and added to those of Legacy TCF. In many cases, the determination of fair value required management to make estimates about discount rates, expected future cash flows, market conditions and other future events that are highly subjective in nature and subject to change.

As the legal acquirer, Chemical (now TCF Financial Corporation) issued approximately 81.9 million shares of TCF Financial common stock in connection with the Merger, which represented approximately 53% of the voting interests in TCF Financial upon completion of the Merger. Guidance in Accounting Standards Codification ("ASC") 805-40-30-2 explains that the purchase price in a reverse acquisition is determined based on "the number of equity interests the legal acquiree would have had to issue to give the owners of the legal acquirer the same percentage equity interest in the combined entity that results from the reverse acquisition." The first step in calculating the purchase price in the Merger is to determine the ownership of the combined company following the Merger. The table below summarizes the ownership of the combined company (TCF Financial) following the Merger, as well as the market capitalization of the combined company using shares of Chemical and Legacy TCF common stock outstanding at July 31, 2019 and Chemical's closing price on July 31, 2019.

(In thousands)	TCF Financial Ownership and Market Value Table		
	Number of Chemical Outstanding Shares	Percentage Ownership	Market Value at \$42.04 Chemical Share Price
Chemical shareholders	71,559	46.62%	\$ 3,008,330
Legacy TCF shareholders	81,920	53.38	3,443,938
Total	153,479	100	\$ 6,452,268

Next, the hypothetical number of shares Legacy TCF would have to issue to give Chemical owners the same percentage ownership in the combined company is calculated in the table below (based on shares of Legacy TCF common stock outstanding at July 31, 2019):

(In thousands)	Hypothetical Legacy TCF Ownership	
	Number of Legacy TCF Outstanding Shares	Percentage Ownership
Chemical shareholders	140,836	46.62%
Legacy TCF shareholders	161,229	53.38
Total	302,065	100%

Finally, the purchase price is calculated based on the number of hypothetical shares of Legacy TCF common stock issued to Chemical shareholders multiplied by the share price as demonstrated in the table below (amounts in thousands except per share data).

(In thousands, except per share data)	
Number of hypothetical Legacy TCF shares issued to Chemical shareholders	140,835,967
Legacy TCF market price per share as of July 31, 2019	\$ 21.38
Purchase price determination of hypothetical Legacy TCF shares issued to Chemical shareholders	3,011,073
Value of Chemical stock options hypothetically converted to options to acquire shares of Legacy TCF common stock	7,335
Cash in lieu of fractional shares	148
Purchase price consideration	\$ 3,018,556

The following table provides the purchase price allocation as of the Merger Date and the Chemical assets acquired and liabilities assumed at their estimated fair value as of the Merger Date as recorded by TCF. We recorded the estimate of fair value based on initial valuations available at the Merger Date and these estimates are considered preliminary and subject to adjustment for up to one year after the Merger Date. While we believe that the information available on the Merger Date provided a reasonable basis for estimating fair value, we expect that we may obtain additional information and evidence during the measurement period that would result in changes to the estimated fair value amounts. The measurement period ends on the earlier of one year after the Merger Date or the date we are able to determine that we have obtained all necessary information about the facts and circumstances that existed as of Merger Date. Subsequent adjustments to fair value, if necessary, will be reflected in our future filings. These adjustments include: (i) changes in the estimated fair value of loans acquired, (ii) changes in the estimated fair value of intangible assets acquired, (iii) changes in deferred tax assets related to fair value estimates and changes in the expected realization of items considered to be net operating loss carryforwards and (iv) changes in goodwill as a result of the net effect of any adjustments.

(In thousands)

Purchase price consideration:	
Stock	\$ 3,018,556
Fair value of assets acquired:	
Cash and cash equivalents	975,014
Federal Home Loan Bank and Federal Reserve Bank stocks	218,582
Investment securities	3,774,738
Loans held-for-sale	44,532
Loans and leases	15,726,213
Premises and equipment	140,219
Loan servicing rights	59,567
Other intangible assets	201,568
Net deferred tax asset ⁽¹⁾	49,345
Other assets	553,796
Total assets acquired	21,743,574
Fair value of liabilities assumed:	
Deposits	16,418,019
Short-term borrowings	2,629,426
Long-term borrowings	442,323
Other liabilities	345,604
Total liabilities assumed	19,835,372
Fair value of net identifiable assets	1,908,202
Goodwill resulting from Merger ⁽²⁾	\$ 1,110,354

(1) Net deferred tax asset includes acquisition-related fair value adjustments, loss and tax credit carry forwards, mortgage servicing rights and core deposit and customer intangibles.

(2) The goodwill recorded was primarily attributable to the synergies and economies of scale expected from combining the operations of Legacy TCF and Chemical.

As described in more detail in Note 3. Summary of Significant Accounting Policies below, all Chemical loans and leases were recorded at their estimated fair value as of the Merger Date with no carryover of the related allowance for loans and lease losses. These loans were segregated into two classifications at acquisition, purchased credit impaired ("PCI") loans accounted for under the provisions of Accounting Standards Codification ("ASC") Topic 310-30, and purchased nonimpaired loans, also referred to as purchased loans. The excess of cash flows expected to be collected over the estimated fair value of PCI loans is referred to as the accretable yield and is accreted into interest income over the estimated remaining life of the loan using the effective yield method. The difference between the contractually required payments and the cash flows expected to be collected at acquisition, considering the impact of prepayment and estimates of future credit losses expected to be incurred, is referred to the nonaccretable difference.

Information regarding acquired loans included in net loans and leases acquired at the Merger Date was as follows:

(In thousands)

PCI loans:	
Contractually required payments receivable	\$ 458,374
Nonaccretable difference	(105,031)
Expected cash flows	353,343
Accretable yield	39,733
Fair value of PCI loans	\$ 313,610
Purchased nonimpaired loans and leases:	
Unpaid principal balance	\$ 15,636,020
Fair value discount	(223,417)
Fair value at acquisition	15,412,603
Total fair value at acquisition	\$ 15,726,213

Supplemental disclosures of cash flow information related to investing and financing activities regarding the Merger are as follows for the nine months ended September 30, 2019:

(In thousands)

Business combination

Fair value of tangible assets acquired	\$ 21,482,439
Goodwill, loan servicing rights and other identifiable intangible assets acquired	1,371,489
Liabilities assumed	19,835,372
Common stock and stock options converted	3,018,556

Other intangible assets consisted of core deposits and customer relationship intangibles with estimated fair values at the Merger Date of \$177.8 million and \$23.8 million, respectively. Core deposit intangibles are being amortized over a weighted-average life of ten years on an accelerated basis. Customer relationship intangibles are being amortized over a weighted-average life of 15.6 years based on expected economic benefits of the underlying intangible assets. The weighted-average life of amortizable intangibles acquired in the Merger was eleven years.

As a result of the Merger, we recorded \$1.1 billion of goodwill. Due to the timing of the Merger, we are in the process of completing our analysis of the allocation of goodwill across business segments, and, therefore, goodwill is presented as part of Enterprise Services at September 30, 2019. The goodwill recorded is not deductible for income tax purposes.

Pro Forma Combined Results of Operations The following pro forma financial information presents the consolidated results of operations of Legacy TCF and Chemical as if the Merger had occurred as of January 1, 2018 with pro forma adjustments. The pro forma adjustments give effect to any change in interest income due to the accretion of the discount (premium) associated with the fair value adjustments to acquired loans, any change in interest expense due to estimated premium amortization/discount accretion associated with the fair value adjustments to acquired time deposits and borrowings and other debt and the amortization of the core deposit intangible that would have resulted had the deposits been acquired as of January 1, 2018. Merger-related expenses incurred by TCF during the three and nine months ended September 30, 2019 are not reflected in the pro forma amounts. The pro forma information does not necessarily reflect the results of operations that would have occurred had Legacy TCF merged with Chemical at the beginning of 2018. Anticipated cost savings that have not yet been realized are also not reflected in the pro forma amounts for the three and nine months ended September 30, 2019 and 2018.

(In thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net interest income and other noninterest income	\$ 536,165	\$ 570,396	\$ 1,654,571	\$ 1,693,537
Net income	125,560	156,977	435,003	434,686
Net income available to common shareholders	123,066	154,483	427,522	422,111
Earnings per share:				
Basic	\$ 0.81	\$ 1.00	\$ 2.79	\$ 2.71
Diluted	0.81	0.99	2.77	2.69

Note 3. Summary of Significant Accounting Policies

Accounting policies in effect at December 31, 2018, as previously disclosed in Note 2. Summary of Significant Accounting Policies in Legacy TCF's audited Consolidated Financial Statements at and for the year ended December 31, 2018, which were filed as Exhibit 99.1 to TCF's Current Report on Form 8-K filed with the SEC on August 1, 2019, remain significantly unchanged and have been followed similarly as in previous periods except for the lease financing accounting policy, resulting from the adoption of Accounting Standards Update ("ASU") No. 2016-02, *Leases (Topic 842)* and related ASUs, and certain policies added as a result of the Merger, as described below.

Business Combinations Pursuant to the guidance of ASC Topic 805 ("ASC 805"), TCF recognized assets acquired, including identified intangible assets, and the liabilities assumed in mergers and acquisitions at their fair values as of the acquisition date, with the acquisition and merger-related transaction and restructuring costs expensed in the period incurred.

ASC 805 affords a measurement period beyond the acquisition date that allows the opportunity to finalize the acquisition accounting in the event that new information is identified that existed as of the acquisition date but was not known or available at that time. This measurement period ends on the earlier of one year after the acquisition or the date information about the facts and circumstances that existed at the acquisition are available. TCF anticipates that measurement period adjustments may arise from adjustments to the fair values of Chemical's assets and liabilities recorded at the Merger Date, as additional information and evidence is obtained. In the event that a measurement period adjustment is identified, TCF will recognize the adjustment as part of its acquisition accounting, which may result in an adjustment to goodwill in the period the adjustment was identified.

See Note 2. Merger for further information.

Loans and Leases Acquired in a Business Combination We record loans and leases acquired in a business combination at fair value at the acquisition date and the fair value discount or premium is recognized as an adjustment to yield over the remaining life of each loan or lease. Credit discounts are included in the determination of fair value; therefore, an allowance for loan and lease losses is not recorded at the acquisition date. Purchased loans are evaluated at the acquisition date and classified as either (i) loans purchased without evidence of deteriorated credit quality since origination, referred to as purchased loans, or (ii) loans purchased with evidence of deteriorated credit quality since origination for which it is probable that all contractually required payments will not be collected, referred to as PCI loans. PCI loans are considered to be impaired and are accounted for under ASC Topic 310-30, Loans and Debt Securities Acquired with Deteriorated Credit Quality ("ASC 310-30"). In determining whether a purchased loan should be classified as a PCI loan, we must make numerous assumptions, interpretations and judgments using internal and third-party credit quality information to determine whether or not it is probable that we will be able to collect all contractually required payments. This is a point in time assessment and is inherently subjective due to the nature of the available information and judgment involved. Evidence of credit quality deterioration as of the acquisition date may include statistics such as past due and nonaccrual status, recent borrower credit scores and loan-to-value percentages. The excess of cash flows expected to be collected over the estimated fair value of PCI loans is referred to as the accretible yield and is accreted into interest income over the estimated remaining life of the loan using the effective yield method. We estimate the expected cash flows based on the expected remaining life of the loans, which includes the effects of estimated prepayments and estimates of future credit losses. Cash flow evaluations are inherently subjective as they require material estimates, all of which may be susceptible to significant change. The difference between the contractually required payments and the cash flows expected to be collected at acquisition, is referred to as the nonaccretible difference.

We do not classify PCI loans as nonaccrual loans subsequent to acquisition because the loans are recorded at net realizable value based on the principal and interest expected to be collected on the loan. Judgment is required to estimate the timing and amount of cash flows expected to be collected when the loans are not performing in accordance with the original contractual terms.

Purchased loans outside the scope of ASC 310-30 are accounted for under ASC 310-20, Receivables - Nonrefundable Fees and Other Costs. For purchased loans, credit discounts representing the principal losses expected over the life of the loan are a component of the initial fair value and the discount is accreted to interest income over the life of the loan. Subsequent to the purchase date, the method used to evaluate the sufficiency of the credit discount is similar to originated loans, and if necessary, additional reserves are recognized in the allowance for loan and lease losses.

Leases TCF enters into lease contracts as both a lessor and a lessee. A contract, or part of a contract, is considered a lease if it conveys the right to obtain substantially all of the economic benefits from, and the right to direct and use, an identified asset for a period of time in exchange for consideration. The determination of lease classification requires various judgments and estimates by management which may include the fair value of the equipment at lease inception, useful life of the equipment under lease, estimate of the lease residual value and collectability of minimum lease payments. Management has policies and procedures in place for the determination of lease classification and review of the related judgments and estimates for all leases.

As a lessor, TCF provides various types of lease financing that are classified for accounting purposes as direct financing, sales-type or operating leases. Leases that transfer substantially all of the benefits and risks of ownership to the lessee are classified as direct financing or sales-type leases and are recorded in loans and leases. Direct financing and sales-type leases are carried at the combined present value of future minimum lease payments and lease residual values.

Interest income on net investment in direct financing and sales-type leases is recognized using methods that approximate a level yield over the fixed, non-cancelable term of the lease, including pro rata rent payments received for the interim period until the lease contract commences and the fixed, non-cancelable lease term begins. Sales-type leases generate selling profit (loss), which is recognized on the commencement date by recording lease revenue net of lease cost. Lease revenue consists of the present value of the future minimum lease payments and lease cost consists of the leased equipment's net book value, less the present value of its residual.

Some lease financing contracts include a residual value component, which represents the estimated fair value of the leased equipment at the expiration of the initial term of the transaction. The estimation of residual values involves judgment regarding product and technology changes, customer behavior, shifts in supply and demand and other economic assumptions. TCF reviews residual assumptions when assessing potential impairment of the net investment in direct financing and sales-type leases each quarter. Decreases in the expected residual value are reflected through an increase in the provision for credit losses, which results in an increase to the allowance for loan and lease losses.

TCF may sell minimum lease payment receivables, primarily as a credit risk reduction tool, to third-party financial institutions at fixed rates, on a non-recourse basis, with its underlying equipment as collateral. For those transactions that qualify for sale accounting, the related lease cash flow stream and the non-recourse financing are derecognized. For those transactions that do not qualify for sale accounting, the underlying lease remains on TCF's Consolidated Statements of Financial Condition and non-recourse debt is recorded in the amount of the proceeds received. TCF retains servicing of these leases and bills, collects and remits funds to the third-party financial institution. Upon default by the lessee, the third-party financial institutions may take control of the underlying collateral which TCF would otherwise retain as residual value.

Leases that do not transfer substantially all benefits and risks of ownership to the lessee are classified as operating leases. Such leased equipment and related initial direct costs are included in other assets and depreciated to their estimated salvage value on a straight-line basis over the term of the lease. Lease financing equipment depreciation is recorded in noninterest expense. Operating lease payments received are recognized as lease income when due and recorded as a component of leasing and equipment finance noninterest income. An allowance for lease losses is not provided on operating leases.

See Note 7. Loans and Leases for further information.

As a lessee, TCF enters into contracts to lease real estate, information technology equipment and various other types of equipment. Leases that transfer substantially all of the benefits and risks of ownership to TCF are classified as finance leases, while all others are classified as operating leases. At lease commencement, a lease liability and right-of-use asset are calculated and recognized for both types of leases. The lease liability is equal to the present value of future minimum lease payments. The right-of-use asset is equal to the lease liability, plus any initial direct costs and prepaid lease payments, less any lease incentives received. Operating lease right-of-use assets are recorded in other assets and finance lease right-of-use assets are recorded in premises and equipment, net. TCF uses the appropriate term Federal Home Loan Bank ("FHLB") rate to determine the discount rate for the present value calculation of future minimum payments when an implicit rate is not known for a given lease. The lease term used in the calculation includes any options to extend that TCF is reasonably certain to exercise.

Subsequent to lease commencement, lease liabilities recorded for finance leases are measured using the effective interest rate method and the related right-of-use assets are amortized on a straight-line basis over the lease term. Interest expense and amortization expense are recorded separately in the income statement in interest expense on borrowings and occupancy and equipment noninterest expense, respectively. For operating leases, total lease cost is comprised of lease expense, short-term lease cost, variable lease cost and sublease income. Lease expense includes future minimum lease payments, which are recognized on a straight-line basis over the lease term, as well as common area maintenance charges, real estate taxes, insurance and other expenses, where applicable, which are expensed as incurred. Total lease cost for operating leases is recorded in occupancy and equipment noninterest expense.

See Note 12. Operating Lease Right-of-Use Assets and Liabilities for further information.

Loan Servicing Rights Loan servicing rights ("LSRs") are recognized as assets or liabilities as a result of selling residential mortgage and commercial real estate loans in the secondary market while retaining the right to service these loans and receive servicing income over the life of the loan, and from acquisitions of other banks that had LSRs. An LSR is recorded at estimated fair value when initially recognized. Fair value is determined by the present value of expected cash flows received in excess of a market servicing rate. If the amount earned to service assets is equal to the market rate, no value is recorded. Subsequently, LSRs are accounted for at the lower of amortized cost or fair value and amortized in proportion to and over the period of net servicing income. Unexpected prepayments of mortgage loans result in increased amortization of LSRs, as the remaining book value of the LSRs is expensed at the time of prepayment. LSRs are assessed quarterly for impairment. See Note 11. Loan Servicing Rights for further information.

Recently Adopted Accounting Pronouncements

Effective January 1, 2019, TCF adopted ASU No. 2018-16, *Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes*, which permits the use of the OIS Rate based on the SOFR as a U.S. benchmark interest rate for hedge accounting purposes under Topic 815 in addition to the interest rates on direct Treasury obligations of the U.S. government, the London Interbank Offered Rate ("LIBOR") swap rate, the OIS Rate based on the Fed Funds Effective Rate and the Securities Industry and Financial Markets Association Municipal Swap Rate. The adoption of this ASU was on a prospective basis for qualifying new or redesignated hedging relationships entered into on or after January 1, 2019. The adoption of this guidance did not have a material impact on our consolidated financial statements.

Effective January 1, 2019, TCF adopted ASU No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)*, which requires the decision to capitalize or expense implementation costs incurred in a cloud computing arrangement (i.e. a hosting arrangement) that is a service contract to follow the internal-use software guidance in ASC 350-40. TCF's policy had been to expense these costs as incurred. The adoption of this ASU was on a prospective basis. The adoption of this guidance did not have a material impact on our consolidated financial statements.

Effective January 1, 2019, TCF adopted ASU No. 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, which simplifies the accounting for share-based payments to nonemployees by aligning it more consistently with the accounting for share-based payments to employees. The new guidance in ASC 718 supersedes the guidance in ASC 505-50. The adoption of this ASU was on a modified retrospective basis with no cumulative effect adjustment recorded. The adoption of this guidance did not have a material impact on our consolidated financial statements.

Effective January 1, 2019, TCF adopted ASU No. 2017-11, *Earnings Per Share (Topic 260): Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features*, which simplifies the accounting for certain equity-linked financial instruments and embedded features with the down round features that reduce the exercise price when the pricing of a future round of financing is lower. The adoption of this ASU was on a modified retrospective basis. The adoption of this guidance did not have a material impact on our consolidated financial statements.

Effective January 1, 2019, TCF adopted ASU No. 2016-02, *Leases (Topic 842)*, which, along with other amendments, requires lessees to recognize most leases on their balance sheet. Lessor accounting is largely unchanged. The ASU requires both quantitative and qualitative disclosure regarding key information about leasing arrangements from both lessees and lessors. Effective January 1, 2019, TCF also adopted the following ASUs, which further amend the original lease guidance in Topic 842: (i) ASU No. 2017-13, *Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840) and Leases (Topic 842): Amendments to SEC Paragraphs*, which rescinds certain SEC Observer comments and staff announcements from the lease guidance and incorporates SEC staff announcements on the effect of a change in tax law on leveraged leases from ASC 840 into ASC 842; (ii) ASU No. 2018-01, *Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842*, which amends the new lease guidance to add an optional transition practical expedient that permits an entity to continue applying its current accounting policy for land easements that existed or expired before January 1, 2019; (iii) ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*, which makes narrow scope improvements to the standard for specific issues; (iv) ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides an optional transition method allowing the standard to be applied at the adoption date and provides a practical expedient related to separating components of a contract for lessors; (v) ASU No. 2018-20, *Leases (Topic 842): Narrow-Scope Improvements for Lessors*, which allows lessors to elect to account for all sales taxes as lessee costs, instead of determining whether they are lessee or lessor costs in each individual jurisdiction. It requires lessor costs paid by lessees directly to third parties to be excluded from revenue, requires lessors to account for costs excluded from the consideration of a contract that are paid by the lessor as revenue and requires certain variable payments to be allocated (rather than recognized) to lease and nonlease components when changes occur in the facts and circumstances on which the variable payments are based; and (vi) ASU No. 2019-01, *Leases (Topic 842): Codification Improvements*, which allows lessors that are not manufacturers or dealers to calculate the fair value of an underlying asset as its cost less any volume or trade discount, requires lessors to classify principal payments received from direct financing and sales-type leases as investing activities in the statement of cash flows and clarifies that certain disclosure requirements that were explicitly excluded from annual reporting during the year of adoption are also excluded from interim reporting during the same year. These

ASUs were adopted on a modified retrospective basis. Management elected the practical expedients and optional transition method, which allow for leases entered into prior to January 1, 2019 to be accounted for consistent with prior guidance. Management evaluated TCF's leasing contracts and activities, and developed methodologies and processes to estimate and account for the right-of-use assets and lease liabilities based on the present value of future lease payments. On January 1, 2019, TCF recorded right-of-use assets and lease liabilities totaling \$91.9 million and \$112.8 million, respectively. TCF also recorded additional right-of-use assets and lease liabilities totaling \$39.8 million and \$41.6 million on August 1, 2019 as a result of the Merger. The impact to capital ratios as a result of increased risk-weighted assets is immaterial. The adoption of this guidance did not result in a material change to lessee expense recognition. The changes to lessor accounting, as well as changes in customer behavior driven by the adoption of these ASUs, impacts the results of TCF's leasing and equipment financing businesses, including earlier recognition of expense due to a narrower definition of initial direct costs and the timing of revenue recognition for certain leases, resulting in more revenue being deferred over the lease term.

Recently Issued but Not Yet Adopted Accounting Pronouncements

In November 2018, the Financial Accounting Standards Board (the "FASB") issued ASU No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*, which makes targeted improvements to the accounting for collaborative arrangements in response to questions raised as a result of the issuance of ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The adoption of this ASU will be required beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2020. Early adoption is allowed. The adoption of this guidance will not have a material impact on our consolidated financial statements.

In October 2018, the FASB issued ASU No. 2018-17, *Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities*, which provides an elective exemption to private companies from applying variable interest entities ("VIE") guidance to all entities under common control if certain criteria are met. In addition, this ASU contains an amendment applicable to all entities which amends how a decision maker or service provider determines whether its fee is a variable interest in a VIE when a related party under common control also has an interest in the VIE. The adoption of this ASU will be required beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2020. Early adoption is allowed. The adoption of this guidance will not have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*, which eliminates, adds and modifies certain disclosure requirements for fair value measurements. The adoption of this ASU will be required beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2020. Certain of the amendments require prospective application, while the remainder require retrospective application. Early adoption is allowed either for the entire standard or only the provisions that eliminate or modify the requirements. Management is currently evaluating which adoption method will be selected as well as the related potential impact of this guidance on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. This ASU simplifies the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Subsequent to adoption, goodwill impairment will be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance largely remains unchanged. The adoption of this ASU will be required beginning with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2020 on a prospective basis. Early adoption is allowed. The adoption of this guidance will not have a material impact on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which changes the impairment model for most financial assets (including off-balance sheet exposure), including trade and other receivables, debt securities held to maturity, loans, net investments in leases and purchased financial assets with credit deterioration. The ASU requires the use of a current expected credit loss ("CECL") methodology to determine the allowance for credit losses for loans and debt securities held to maturity. CECL requires loss estimates for the remaining estimated life of the asset to be measured using historical loss data as well as reasonable and supportable forecasts based on current and forecasted economic conditions. In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments - Credit Losses*, which clarifies that receivables arising from operating leases are not within the scope of Subtopic 326-20 and should be accounted for in accordance with Topic 842. In April 2019, the FASB issued ASU No. 2019-04, *Codification Improvements to Topic 326, Financial Instruments - Credit Losses, Topic 815, Derivatives and*

Hedging, and Topic 825, Financial Instruments, which clarifies and corrects certain unintended applications of the guidance contained in each of the amended Topics. In May 2019, the FASB issued ASU No. 2019-05, *Financial Instruments - Credit Losses (Topic 326): Targeted Transition Relief*, which provides an option to irrevocably elect the fair value option in Subtopic 825-10 to certain instruments within the scope of Subtopic 326-20 upon adoption of Topic 326. The adoption of these ASUs will be required on a modified retrospective basis with a cumulative effect adjustment required beginning January 1, 2020 with TCF's Quarterly Report on Form 10-Q for the quarter ending March 31, 2020. CECL represents a significant change in GAAP and is expected to result in a material impact to our consolidated financial statements and capital ratios. The impact of these ASUs will depend on the composition of TCF's portfolios, the current economic conditions, and forecasted macroeconomic conditions at the date of adoption. Additionally, industry practice and interpretation of the ASUs continues to evolve which may impact management's implementation of the standard.

TCF has established a governance structure to implement these ASUs and has developed a majority of the methodology and models to be used upon adoption. Based on parallel runs of the CECL process that TCF has performed alongside our current allowance for loan and lease losses process, we preliminarily estimated that the adoption of the standard will increase the allowance for loan and lease losses between 35% to 45% on Legacy TCF portfolios, when compared to current allowance for loan and lease loss levels. At September 30, 2019, Legacy TCF loan and lease portfolios totaled approximately \$17.8 billion with a corresponding allowance for loans and lease losses of approximately \$117.1 million. The largest impact is anticipated to be to our consumer segment given the longer duration of the portfolios. Management is in the process of finalizing model validations and approval of all key design decisions through its governance structure, which includes decisions about the methodology for estimating reserves for unfunded commitments and disclosures. The estimated impact of the standard depends on the composition of the portfolio, credit quality, economic conditions and forecasts at the time of adoption, as well as final decisions by management, all of which could result in a change to management's estimate.

With the close of the Merger on August 1, 2019, management is evaluating the impact of CECL on the acquired legacy Chemical portfolio which will then be included in the combined portfolio of TCF upon adoption. The loans and leases acquired in the Merger were recorded at estimated fair value on the Merger Date, which includes an estimate of credit losses. Under current GAAP, an allowance for loan and lease losses is not recorded on these loans and leases until there is evidence of credit deterioration post acquisition. However, upon adoption of CECL an allowance for loan and lease loss will need to be recorded for the acquired loans based on the lifetime loss concept within CECL. We are in the process of developing CECL assumptions on the acquired Chemical portfolios with those used by Legacy TCF. Since these assumptions could materially impact the estimate of the allowance for loan and lease losses under CECL, we are unable to estimate the impact on the Chemical portfolio at this time.

The initial increase to TCF's allowance for loan and lease losses will be recorded as an adjustment to beginning of the year retained earnings. Post adoption, as loans and leases are added to the portfolio, we expect higher levels of allowance for loan and lease losses determined by CECL assumptions, resulting in higher levels of provision for credit losses. Management will continue to refine this process during the fourth quarter of 2019 as well as consider the impacts the Merger will have on the adoption of the standard.

Note 4. Cash and Cash Equivalents

At September 30, 2019 and December 31, 2018, TCF Bank was required by Federal Reserve regulations to maintain reserves of \$149.6 million and \$106.2 million, respectively, in cash on hand or at the Federal Reserve Bank.

TCF maintains cash balances that are restricted as to their use in accordance with certain obligations. Cash payments received on loans serviced for third parties are generally held in separate accounts until remitted. TCF may also retain cash balances for collateral on certain borrowings and derivatives. TCF maintained restricted cash totaling \$72.7 million and \$38.3 million at September 30, 2019 and December 31, 2018, respectively.

Note 5. Federal Home Loan Bank and Federal Reserve Bank Stocks

Federal Home Loan Bank ("FHLB") and Federal Reserve Bank ("FRB") stocks were as follows:

(In thousands)	At September 30, 2019	At December 31, 2018
FHLB stock, at cost	\$ 184,483	\$ 54,019
FRB stock, at cost	105,755	37,635

The investments in FHLB stock are required investments related to TCF's membership and borrowings in the FHLB of Des Moines, and additional current borrowings from the FHLB of Indianapolis and Cincinnati. TCF's investments in the FHLB of Des Moines could be adversely impacted by the financial operations of the Federal Home Loan Banks and actions of their regulator, the Federal Housing Finance Agency. The amount of FRB stock that TCF Bank is required to hold is based on TCF Bank's capital structure. TCF periodically evaluates investments for other than temporary impairment. There was no impairment of these investments at September 30, 2019 and December 31, 2018.

Note 6. Investment Securities

The amortized cost and fair value of investment securities were as follows:

(In thousands)	Investment Securities Available-for-sale, At Fair Value			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
At September 30, 2019				
Debt securities:				
Government and government-sponsored enterprises	\$ 247,666	\$ 2	\$ 521	\$ 247,147
Obligations of states and political subdivisions	779,263	11,017	609	789,671
Mortgage-backed:				
Agency mortgage-backed securities	3,456,110	66,929	4,327	3,518,712
Non-agency mortgage-backed securities	—	—	—	—
Agency collateralized mortgage obligations	565,959	12,484	101	578,342
Non-agency collateralized mortgage obligations	445,174	934	570	445,538
Total mortgage-backed debt securities	4,467,243	80,347	4,998	4,542,592
Corporate debt and trust preferred securities	450	—	25	425
Total debt securities available-for-sale	5,494,622	91,366	6,153	5,579,835
Total investment securities available-for-sale	\$ 5,494,622	\$ 91,366	\$ 6,153	\$ 5,579,835
At December 31, 2018				
Debt securities:				
Government and government-sponsored enterprises	\$ —	\$ —	\$ —	\$ —
Obligations of states and political subdivisions	566,304	46	9,479	556,871
Mortgage-backed:				
Agency mortgage-backed securities	1,845,451	8,026	26,728	1,826,749
Non-agency mortgage-backed securities	—	—	—	—
Agency collateralized mortgage obligations	85,245	1,196	—	86,441
Non-agency collateralized mortgage obligations	4	—	—	4
Total mortgage-backed debt securities	1,930,700	9,222	26,728	1,913,194
Corporate debt and trust preferred securities	—	—	—	—
Total debt securities available-for-sale	2,497,004	9,268	36,207	2,470,065
Total investment securities available-for-sale	\$ 2,497,004	\$ 9,268	\$ 36,207	\$ 2,470,065

(In thousands)	Investment Securities Held-to-Maturity			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
At September 30, 2019				
Agency mortgage-backed securities	\$ 140,324	\$ 6,122	\$ 194	\$ 146,252
Corporate debt and trust preferred securities	3,676	—	—	3,676
Total investment securities held-to-maturity	\$ 144,000	\$ 6,122	\$ 194	\$ 149,928
At December 31, 2018				
Agency mortgage-backed securities	\$ 146,052	\$ 1,460	\$ 1,045	\$ 146,467
Corporate debt and trust preferred securities	2,800	—	—	2,800
Total investment securities held-to-maturity	\$ 148,852	\$ 1,460	\$ 1,045	\$ 149,267

Gross unrealized losses and fair value of investment securities aggregated by investment category and the length of time the securities were in a continuous loss position were as follows:

(In thousands)	At September 30, 2019					
	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Investment securities available-for-sale						
Debt securities:						
Government and government sponsored enterprises	\$ 233,756	\$ 521	\$ —	\$ —	\$ 233,756	\$ 521
Obligations of states and political subdivisions	273,967	609	—	—	273,967	609
Mortgage-backed:						
Agency mortgage-backed securities	241,408	1,479	210,896	2,848	452,304	4,327
Agency collateralized mortgage obligations	37,750	101	—	—	37,750	101
Non-agency collateralized mortgage obligations	152,895	570	—	—	152,895	570
Total mortgage-backed debt securities	432,053	2,150	210,896	2,848	642,949	4,998
Corporate debt and trust preferred securities	425	25	—	—	425	25
Total debt securities available-for-sale	940,201	3,305	210,896	2,848	1,151,097	6,153
Total investment securities available-for-sale	\$ 940,201	\$ 3,305	\$ 210,896	\$ 2,848	\$ 1,151,097	\$ 6,153
Investment securities held-to-maturity						
Agency mortgage-backed securities	4,031	52	11,674	142	15,705	194
Total investment securities held-to-maturity	\$ 4,031	\$ 52	\$ 11,674	\$ 142	\$ 15,705	\$ 194

(In thousands)	At December 31, 2018					
	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Investment securities carried at fair value						
Debt securities:						
Obligations of states and political subdivisions	\$ 3,620	\$ —	\$ 526,817	\$ 9,479	\$ 530,437	\$ 9,479
Agency mortgage-backed securities	102,709	184	838,482	26,544	941,191	26,728
Total debt securities available-for-sale	106,329	184	1,365,299	36,023	1,471,628	36,207
Total investment securities available-for-sale	\$ 106,329	\$ 184	\$ 1,365,299	\$ 36,023	\$ 1,471,628	\$ 36,207
Investment securities held-to-maturity						
Agency mortgage-backed securities	3,074	14	31,738	1,031	34,812	1,045
Total investment securities held-to-maturity	\$ 3,074	\$ 14	\$ 31,738	\$ 1,031	\$ 34,812	\$ 1,045

At September 30, 2019 there were 1,056 investment securities in an unrealized loss position. We have assessed each investment security with unrealized losses for credit impairment. As part of that assessment we evaluated and concluded that it is more likely than not that we will not be required and do not intend to sell any of the investment securities prior to recovery of the amortized cost. Unrealized losses on investment securities were primarily due to changes in interest rates.

The gross gains and losses on sales of investment securities were as follows:

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Gross realized gains	\$ 7,717	\$ —	\$ 10,872	\$ —
Gross realized losses	1,849	—	3,491	—
Recoveries on previously impaired investment securities held-to-maturity	32	94	36	181
Net gains (losses) on investment securities	\$ 5,900	\$ 94	\$ 7,417	\$ 181

The amortized cost and fair value of investment securities by final contractual maturity were as follows. Securities with multiple maturity dates are classified in the period of final maturity. The final contractual maturities do not consider possible prepayments and therefore expected maturities may differ because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

(In thousands)	At September 30, 2019		At December 31, 2018	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Investment Securities Available-for-Sale				
Due in one year or less	\$ 60,739	\$ 60,652	\$ —	\$ —
Due in 1-5 years	199,777	199,399	24,464	24,375
Due in 5-10 years	483,336	492,755	509,832	503,768
Due after 10 years	4,750,770	4,827,029	1,962,708	1,941,922
Total investment securities available-for-sale	\$ 5,494,622	\$ 5,579,835	\$ 2,497,004	\$ 2,470,065
Investment Securities Held-to-Maturity				
Due in 1-5 years	\$ 3,150	\$ 3,150	\$ 2,400	\$ 2,400
Due in 5-10 years	460	467	430	432
Due after 10 years	140,390	146,311	146,022	146,435
Total investment securities held-to-maturity	\$ 144,000	\$ 149,928	\$ 148,852	\$ 149,267

At September 30, 2019 and December 31, 2018, investment securities with a carrying value of \$761.4 million and \$1.6 million, respectively, were pledged as collateral to secure certain deposits and borrowings.

Note 7. Loans and Leases

Loans and leases were as follows:

(In thousands)	At September 30, 2019	At December 31, 2018
Commercial loan and lease portfolio:		
Commercial and industrial	\$ 10,810,534	\$ 6,220,632
Commercial real estate	8,876,779	2,908,313
Lease financing	2,594,373	2,530,163
Total commercial loan and lease portfolio	22,281,686	11,659,108
Consumer loan portfolio:		
Residential mortgage	6,057,404	2,335,835
Consumer installment	1,562,252	2,003,572
Home equity	3,609,410	3,074,505
Total consumer loan portfolio	11,229,066	7,413,912
Total loans and leases ⁽¹⁾	\$ 33,510,752	\$ 19,073,020

(1) Loans and leases are reported at historical cost including net direct fees and costs associated with originating and acquiring loans and leases, lease residuals, unearned income and unamortized purchase premiums and discounts. The aggregate amount of loan and lease adjustments was a net deferred cost of \$234.4 million and \$1.5 million at September 30, 2019 and December 31, 2018, respectively.

Acquired Loans and Leases TCF acquired loans and leases at fair value in the Merger and in previous acquisitions completed by Legacy TCF. Certain loans acquired were classified as PCI and are accounted for under ASC 310-30, which recognizes the expected shortfall of expected future cash flows, as compared to the contractual amount due, as nonaccretable difference. Any excess of the net present value of expected future cash flows over the acquisition date fair value is recognized as the accretable yield. The accretable yield is recognized over the expected remaining life of the acquired loan. In the event an acquired loan is renewed or extended, the loan continues to be accounted for as an acquired loan in accordance with ASC 310-30.

The carrying value and changes in accretable yield of all PCI loans were as follows:

(In thousands)	At or For the Three Months Ended September 30,		At or For the Nine Months Ended September 30,	
	2019	2018	2019	2018
Balance of PCI loans, beginning of period	\$ 2,273	\$ 7,033	\$ 3,816	\$ 11,844
Accretable Yield				
Balance, beginning of period	\$ 401	\$ 439	\$ 961	\$ 1,051
Addition attributable to the Merger	39,733	—	39,733	—
Accretion recognized in interest income	(4,312)	(38)	(5,015)	(188)
Net reclassification (to) from nonaccretable difference	(517)	—	179	370
Payments received	(824)	26	(1,377)	(806)
Balance, end of period	\$ 34,481	\$ 427	\$ 34,481	\$ 427
Balance of PCI loans, end of period	\$ 293,713	\$ 4,802	\$ 293,713	\$ 4,802

Leases Effective January 1, 2019, TCF adopted ASU No. 2016-02, *Leases (Topic 842)* and related ASUs on a modified retrospective basis, electing the practical expedients and optional transition method. As such, the following leasing disclosures include information at or for the three and nine months ended September 30, 2019.

The components of the net investment in direct financing and sales-type leases were as follows:

(In thousands)	At September 30, 2019
Carrying amount	\$ 2,682,097
Unguaranteed residual assets	148,669
Net direct fees and costs and unearned income	(236,393)
Total net investment in direct financing and sales-type leases	\$ 2,594,373

The carrying amount of the direct financing and sales-type leases subject to residual value guarantees was \$263.3 million at September 30, 2019.

The components of total lease income were as follows:

(In thousands)	September 30, 2019	
	Three Months Ended	Nine Months Ended
Interest income - loans and leases:		
Interest income on net investment in direct financing and sales-type leases	\$ 32,832	\$ 98,116
Leasing revenue (noninterest income):		
Lease income from operating lease payments	25,444	76,140
Profit (loss) recorded on commencement date on sales-type leases	7,983	22,289
Gains (losses) on sales of leased equipment	6,163	18,603
Leasing revenue	39,590	117,032
Total lease income	\$ 72,422	\$ 215,148

Lease financing equipment depreciation on equipment leased to others was \$19.4 million and \$57.8 million for the three and nine months ended September 30, 2019, respectively. The net book value of equipment leased to others and related initial direct costs under operating leases was \$285.4 million at September 30, 2019.

Undiscounted future minimum lease payments receivable for direct financing and sales-type leases, and a reconciliation to the carrying amount recorded at September 30, 2019 were as follows:

(In thousands)	
Remainder of 2019	\$ 51,851
2020	333,516
2021	459,359
2022	554,951
2023	563,752
Thereafter	612,063
Equipment under leases not yet commenced	47,948
Total undiscounted future minimum lease payments receivable for direct financing and sales-type leases	2,623,440
Third-party residual value guarantees	58,657
Total carrying amount of direct financing and sales-type leases	\$ 2,682,097

Undiscounted future minimum lease payments expected to be received for operating leases at September 30, 2019 were as follows:

(In thousands)	
Remainder of 2019	\$ 20,087
2020	71,120
2021	48,885
2022	25,915
2023	9,777
Thereafter	4,717
Total undiscounted future minimum lease payments	\$ 180,501

Loan Sales The following table summarizes the net gains on sales of loans and leases. TCF retains servicing on a majority of loans sold. See Note 11. Loan Servicing Rights for further information.

(In millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Sale proceeds, net	\$ 472,800	\$ 410,389	\$ 1,066,576	\$ 940,134
Recorded investment in loans and leases sold, including accrued interest	458,697	393,078	1,033,961	911,218
Interest-only strips at initial value and other	(20,087)	(8,809)	(19,241)	(4,016)
Net (losses) gains on sales of loans and leases	\$ (5,984)	\$ 8,502	\$ 13,374	\$ 24,900

Interest-only strips related to loan sales were as follows:

(In thousands)	At September 30, 2019	At December 31, 2018
Interest-only strips	\$ 14,078	\$ 16,835

TCF recorded \$22 thousand and \$43 thousand of impairment charges on interest-only strips during the three and nine months ended September 30, 2019, respectively, and \$45 thousand and \$0.7 million during the same periods in 2018.

Note 8. Allowance for Loan and Lease Losses and Credit Quality

Allowance for Loan and Lease Losses The rollforwards of the allowance for loan and lease losses were as follows:

(In thousands)	Consumer Loan Portfolio	Commercial Loan and Lease Portfolio	Total Loans and Leases
At or For the Three Months Ended September 30, 2019			
Balance, beginning of period	\$ 70,711	\$ 75,792	\$ 146,503
Charge-offs	(14,098)	(21,449)	(35,547)
Recoveries	5,330	1,639	6,969
Net (charge-offs) recoveries	(8,768)	(19,810)	(28,578)
Provision for credit losses	4,693	22,495	27,188
Other ⁽¹⁾	(23,849)	(46)	(23,895)
Balance, end of period	\$ 42,787	\$ 78,431	\$ 121,218
At or For the Three Months Ended September 30, 2018			
Balance, beginning of period	\$ 91,241	\$ 74,378	\$ 165,619
Charge-offs	(15,942)	(3,506)	(19,448)
Recoveries	11,711	947	12,658
Net (charge-offs) recoveries	(4,231)	(2,559)	(6,790)
Provision for credit losses	(847)	3,117	2,270
Other ⁽¹⁾	(299)	(179)	(478)
Balance, end of period	\$ 85,864	\$ 74,757	\$ 160,621
At or For the Nine Months Ended September 30, 2019			
Balance, beginning of period	\$ 80,017	\$ 77,429	\$ 157,446
Charge-offs	(43,922)	(37,122)	(81,044)
Recoveries	15,840	3,890	19,730
Net (charge-offs) recoveries	(28,082)	(33,232)	(61,314)
Provision for credit losses	16,644	34,235	50,879
Other ⁽¹⁾	(25,792)	(1)	(25,793)
Balance, end of period	\$ 42,787	\$ 78,431	\$ 121,218
At or For the Nine Months Ended September 30, 2018			
Balance, beginning of period	\$ 98,085	\$ 72,956	\$ 171,041
Charge-offs	(48,120)	(9,381)	(57,501)
Recoveries	21,299	2,491	23,790
Net (charge-offs) recoveries	(26,821)	(6,890)	(33,711)
Provision for credit losses	18,872	9,002	27,874
Other ⁽¹⁾	(4,272)	(311)	(4,583)
Balance, end of period	\$ 85,864	\$ 74,757	\$ 160,621

(1) Includes the transfer of the allowance for loan and lease losses to loans and leases held-for-sale (inclusive of the transfer of Legacy TCF auto loan portfolio for the three and nine months ended September 30, 2019).

The allowance for loan and lease losses and loans and leases outstanding by type of allowance methodology were as follows:

(In thousands)	At September 30, 2019		
	Consumer Loan Portfolio	Commercial Loan and Lease Portfolio	Total Loans and Leases
Allowance for loan and lease losses			
Collectively evaluated for impairment	\$ 26,024	\$ 70,219	\$ 96,243
Individually evaluated for impairment	16,763	8,212	24,975
Total	\$ 42,787	\$ 78,431	\$ 121,218
Loans and leases outstanding			
Collectively evaluated for impairment	\$ 11,016,429	\$ 21,956,151	\$ 32,972,580
Individually evaluated for impairment	132,900	111,559	244,459
PCI loans	79,737	213,976	293,713
Total	\$ 11,229,066	\$ 22,281,686	\$ 33,510,752

(In thousands)	At December 31, 2018		
	Consumer Loan Portfolio	Commercial Loan and Lease Portfolio	Total Loans and Leases
Allowance for loan and lease losses			
Collectively evaluated for impairment	\$ 57,113	\$ 68,140	\$ 125,253
Individually evaluated for impairment	22,904	9,289	32,193
Total	\$ 80,017	\$ 77,429	\$ 157,446
Loans and leases outstanding			
Collectively evaluated for impairment	\$ 7,285,753	\$ 11,587,373	\$ 18,873,126
Individually evaluated for impairment	128,159	67,919	196,078
PCI loans	—	3,816	3,816
Total	\$ 7,413,912	\$ 11,659,108	\$ 19,073,020

Accruing and Nonaccrual Loans and Leases TCF's key credit quality indicator is the receivable's payment performance status, defined as accruing or not accruing. Nonaccrual loans and leases are those which management believes have a higher risk of loss. Delinquent balances are determined based on the contractual terms of the loan or lease. Loans and leases that are over 90 days delinquent are a leading indicator for future charge-off trends and are generally placed on nonaccrual status. TCF's accruing and nonaccrual loans and leases were as follows:

(In thousands)	Current	30-89 Days Delinquent and Accruing	90 Days or More Delinquent and Accruing	Total Accruing	Nonaccrual	Total
At September 30, 2019						
Commercial loan and lease portfolio:						
Commercial and industrial	\$ 10,615,519	\$ 49,595	\$ 2,241	\$ 10,667,355	\$ 55,039	\$ 10,722,394
Commercial real estate	8,677,350	39,023	8,054	8,724,427	26,518	8,750,945
Lease financing	2,551,326	29,123	2,421	2,582,870	11,503	2,594,373
Total commercial loan and lease portfolio	21,844,195	117,741	12,716	21,974,652	93,060	22,067,712
Consumer loan portfolio:						
Residential mortgage	5,919,947	14,533	886	5,935,366	48,816	5,984,182
Consumer installment	1,557,320	3,667	6	1,560,993	636	1,561,629
Home equity	3,550,652	13,569	—	3,564,221	39,296	3,603,517
Total consumer loan portfolio	11,027,919	31,769	892	11,060,580	88,748	11,149,328
PCI loans ⁽¹⁾	261,082	16,578	16,052	293,712	—	293,712
Total	\$ 33,133,196	\$ 166,088	\$ 29,660	\$ 33,328,944	\$ 181,808	\$ 33,510,752
At December 31, 2018						
Commercial loan and lease portfolio:						
Commercial and industrial	\$ 6,176,341	\$ 13,653	\$ 760	\$ 6,190,754	\$ 26,061	\$ 6,216,815
Commercial real estate	2,903,795	—	—	2,903,795	4,518	2,908,313
Lease financing	2,498,811	21,477	1,882	2,522,170	7,993	2,530,163
Total commercial loan and lease portfolio	11,578,947	35,130	2,642	11,616,719	38,572	11,655,291
Consumer loan portfolio:						
Residential mortgage	2,291,435	10,014	1,275	2,302,724	33,111	2,335,835
Consumer installment	1,951,302	40,340	3,349	1,994,991	8,581	2,003,572
Home equity	3,042,968	5,883	—	3,048,851	25,654	3,074,505
Total consumer loan portfolio	7,285,705	56,237	4,624	7,346,566	67,346	7,413,912
PCI loans ⁽¹⁾	3,639	—	178	3,817	—	3,817
Total	\$ 18,868,291	\$ 91,367	\$ 7,444	\$ 18,967,102	\$ 105,918	\$ 19,073,020

(1) PCI loans that are not performing in accordance with contractual terms are not reported as nonaccrual because these loans were recorded at their net realizable value based on the principal and interest TCF expects to collect on these loans.

In addition to the receivables payment performance status, credit quality is also analyzed using risk categories, which vary based on the size and type of credit risk exposure and additionally measure liquidity, debt capacity, coverage and payment behavior as shown in the borrower's financial statements. The risk categories also measure the quality of the borrower's management and the repayment support offered by any guarantors. Loan and lease credit classifications are derived from standard regulatory rating definitions, which include: pass, special mention, substandard, doubtful and loss. Substandard and doubtful loans and leases have well-defined weaknesses, but may never result in a loss.

The following schedule presents the recorded investment of loans and leases by credit risk categories.

(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total
At September 30, 2019					
Commercial loan and lease portfolio:					
Commercial and industrial	\$ 10,307,229	\$ 309,440	\$ 193,865	\$ —	\$ 10,810,534
Commercial real estate	8,645,910	150,132	80,737	—	8,876,779
Lease financing	2,540,637	27,007	26,729	—	2,594,373
Total commercial loan and lease portfolio	21,493,776	486,579	301,331	—	22,281,686
Consumer loan portfolio:					
Residential mortgage	6,001,380	1,543	54,481	—	6,057,404
Consumer installment	1,561,506	—	746	—	1,562,252
Home equity	3,565,763	1,284	42,363	—	3,609,410
Total consumer loan portfolio	11,128,649	2,827	97,590	—	11,229,066
Total loans and leases	\$ 32,622,425	\$ 489,406	\$ 398,921	\$ —	\$ 33,510,752
At December 31, 2018					
Commercial loan and lease portfolio:					
Commercial and industrial	\$ 5,955,713	\$ 158,296	\$ 106,623	\$ —	\$ 6,220,632
Commercial real estate	2,869,711	12,864	25,738	—	2,908,313
Lease financing	2,480,964	25,195	24,004	—	2,530,163
Total commercial loan and lease portfolio	11,306,388	196,355	156,365	—	11,659,108
Consumer loan portfolio:					
Residential mortgage	2,294,740	3,606	37,489	—	2,335,835
Consumer installment	1,981,844	1,302	20,426	—	2,003,572
Home equity	3,043,296	3,747	27,462	—	3,074,505
Total consumer loan portfolio	7,319,880	8,655	85,377	—	7,413,912
Total loans and leases	\$ 18,626,268	\$ 205,010	\$ 241,742	\$ —	\$ 19,073,020

Troubled Debt Restructurings In certain circumstances, TCF may consider modifying the terms of a loan for economic or legal reasons related to the customer's financial difficulties. If TCF grants a concession, the modified loan is classified as a troubled debt restructuring ("TDR"). TDRs typically involve a deferral of the principal balance of the loan, a reduction of the stated interest rate of the loan or, in certain limited circumstances, a reduction of the principal balance of the loan or the loan's accrued interest. All loans classified as TDR loans are considered to be impaired.

The following table presents the recorded investment of loan modifications first classified as TDRs during the periods presented:

(In thousands)	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019		2018		2019		2018	
	Pre-modification Investment	Post-modification Investment	Pre-modification Investment	Post-modification Investment	Pre-modification Investment	Post-modification Investment	Pre-modification Investment	Post-modification Investment
Commercial loan and lease portfolio:								
Commercial and industrial	\$ —	\$ —	\$ 11	\$ 11	\$ —	\$ —	\$ 11	\$ 11
Commercial real estate	—	—	—	—	31,518	31,518	5,228	5,228
Total commercial loan and lease portfolio	—	—	11	11	31,518	31,518	5,239	5,239
Consumer loan portfolio:								
Residential mortgage	1,724	1,723	2,132	2,119	4,023	4,016	4,385	4,315
Home equity	1,115	1,115	983	983	3,589	3,577	1,792	1,790
Total consumer loan portfolio	2,839	2,838	3,115	3,102	7,612	7,593	6,177	6,105
Total	\$ 2,839	\$ 2,838	\$ 3,126	\$ 3,113	\$ 39,130	\$ 39,111	\$ 11,416	\$ 11,344

The following table presents TDR loans:

(In thousands)	At September 30, 2019			At December 31, 2018		
	Accruing TDR Loans	Nonaccrual TDR Loans	Total TDR Loans	Accruing TDR Loans	Nonaccrual TDR Loans	Total TDR Loans
Commercial loan and lease portfolio	\$ 10,068	\$ 1,953	\$ 12,021	\$ 12,665	\$ 6,153	\$ 18,818
Consumer loan portfolio	75,836	19,284	95,120	85,794	22,554	108,348
Total	\$ 85,904	\$ 21,237	\$ 107,141	\$ 98,459	\$ 28,707	\$ 127,166

Commitments to lend additional funds to borrowers whose terms have been modified in TDRs were \$0.5 million and \$0.6 million at September 30, 2019 and December 31, 2018, respectively.

Loan modifications to troubled borrowers are no longer disclosed as TDR loans in the calendar years after modification if the loans were modified to an interest rate equal to or greater than the yields of new loan originations with comparable risk at the time of restructuring and if the loan is performing based on the restructured terms; however, these loans are still considered impaired and follow TCF's impaired loan reserve policies.

The following table summarizes the TDR loans that defaulted during the periods presented that were modified during the respective reporting period or within one year of the beginning of the respective reporting period. TCF considers a loan to have defaulted when under the modified terms it becomes 90 or more days delinquent, has been transferred to nonaccrual status, has been charged down or has been transferred to other real estate owned or repossessed and returned assets.

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Defaulted TDR loan balances modified during the applicable period				
Commercial loan and lease portfolio:				
Commercial and industrial	\$ —	\$ 87	\$ 297	\$ 4,784
Total commercial loan and lease portfolio	—	87	297	4,784
Consumer loan portfolio:				
Residential mortgage	212	778	964	2,556
Consumer installment	452	217	1,555	950
Home equity	82	176	328	435
Total consumer loan portfolio	746	1,171	2,847	3,941
Defaulted TDR loan balances	\$ 746	\$ 1,258	\$ 3,144	\$ 8,725

Impaired Loans and Leases Effective January 1, 2019, in conjunction with the adoption of ASU No. 2016-02, *Leases (Topic 842)* and related ASUs, TCF considers impaired loans and leases to include nonaccrual commercial loans and leases, as well as all commercial and consumer TDR loans. Previously, TCF did not include impaired leases within the following tables. For purposes of this disclosure, PCI loans have been excluded. In the following table, the balance of impaired loans and leases represents the amount recorded within loans and leases on the Consolidated Statements of Financial Condition, whereas the unpaid contractual balance represents the balances legally owed by the borrowers.

Information on impaired loans and leases at September 30, 2019 and information on impaired loans at December 31, 2018 was as follows:

(In thousands)	At September 30, 2019			At December 31, 2018		
	Unpaid Contractual Balance	Loan and Lease Balance	Related Allowance Recorded	Unpaid Contractual Balance	Loan Balance	Related Allowance Recorded
Impaired loans and leases with an allowance recorded:						
Commercial loan and lease portfolio:						
Commercial and industrial	\$ 27,748	\$ 24,775	\$ 5,151	\$ 35,444	\$ 32,326	\$ 6,354
Commercial real estate	4,257	3,922	330	4,905	4,474	1,108
Lease financing	11,503	11,503	2,731	—	—	—
Total commercial loan and lease portfolio	43,508	40,200	8,212	40,349	36,800	7,462
Consumer loan portfolio:						
Residential mortgage	81,658	78,247	13,630	63,004	60,172	17,216
Consumer installment	—	—	—	919	647	81
Home equity	30,584	29,228	2,916	27,386	25,836	5,288
Total consumer loan portfolio	112,242	107,475	16,546	91,309	86,655	22,585
Total impaired loans and leases with an allowance recorded	155,750	147,675	24,758	131,658	123,455	30,047
Impaired loans and leases without an allowance recorded:						
Commercial loan and lease portfolio:						
Commercial and industrial	56,284	36,409	—	2,239	2,237	—
Commercial real estate	63,069	34,950	—	4,275	4,208	—
Total commercial loan and lease portfolio	119,353	71,359	—	6,514	6,445	—
Consumer loan portfolio:						
Residential mortgage	27,420	19,370	—	11,636	9,494	—
Consumer installment	1,878	635	—	15,400	10,770	—
Home equity	16,771	5,420	—	10,620	1,429	—
Total consumer loan portfolio	46,069	25,425	—	37,656	21,693	—
Total impaired loans and leases without an allowance recorded	165,422	96,784	—	44,170	28,138	—
Total impaired loans and leases	\$ 321,172	\$ 244,459	\$ 24,758	\$ 175,828	\$ 151,593	\$ 30,047

The average balance of impaired loans and leases and interest income recognized on impaired loans and leases and the average loan balance of impaired loans and interest income recognized on impaired loans were as follows:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019		2018		2019		2018	
(In thousands)	Average Loan and Lease Balance	Interest Income Recognized	Average Loan Balance	Interest Income Recognized	Average Loan and Lease Balance	Interest Income Recognized	Average Loan Balance	Interest Income Recognized
Impaired loans and leases with an allowance recorded								
Commercial loan and lease portfolio:								
Commercial and industrial	\$ 22,845	\$ 3	\$ 22,917	\$ 49	\$ 28,551	\$ 32	\$ 15,213	\$ 251
Commercial real estate	4,175	51	5,192	—	4,198	120	5,929	—
Lease financing	12,195	55	—	—	5,751	117	8,552	—
Total commercial loan and lease portfolio	39,215	109	28,109	49	38,500	269	29,694	251
Consumer loan portfolio:								
Residential mortgage	77,852	770	60,737	380	69,209	1,864	69,268	1,221
Consumer installment	289	—	454	—	324	—	713	—
Home equity	30,225	94	26,462	301	27,532	681	29,583	1,326
Total consumer loan portfolio	108,366	864	87,653	681	97,065	2,545	99,564	2,547
Total impaired loans and leases with an allowance recorded	\$ 147,581	\$ 973	\$ 115,762	\$ 730	\$ 135,565	\$ 2,814	\$ 129,258	\$ 2,798
Impaired loans and leases without an allowance recorded								
Commercial loan and lease portfolio:								
Commercial and industrial	\$ 20,448	\$ 37	\$ 403	\$ 31	\$ 19,323	\$ 129	\$ 1,510	\$ 136
Commercial real estate	39,222	437	4,315	58	19,579	1,087	4,385	174
Lease financing	—	—	—	—	—	—	—	—
Total commercial loan and lease portfolio	59,670	474	4,718	89	38,902	1,216	5,895	310
Consumer loan portfolio:								
Residential mortgage	12,609	121	9,982	160	14,431	450	10,013	502
Consumer installment	6,476	83	8,757	77	5,703	256	8,630	211
Home equity	3,551	23	1,683	55	3,425	110	1,648	177
Total consumer loan portfolio	22,636	227	20,422	292	23,559	816	20,291	890
Total impaired loans and leases without an allowance recorded	82,306	701	25,140	381	62,461	2,032	26,186	1,200
Total impaired loans and leases	\$ 229,887	\$ 1,674	\$ 140,902	\$ 1,111	\$ 198,026	\$ 4,846	\$ 155,444	\$ 3,998

Other Real Estate Owned and Repossessed and Returned Assets Other real estate owned and repossessed and returned assets were as follows:

(In thousands)	At September 30, 2019	At December 31, 2018
Other real estate owned	\$ 27,638	\$ 17,403
Repossessed and returned assets	14,598	14,574
Consumer loans in process of foreclosure	15,509	15,540

On August 1, 2019, TCF acquired \$14.6 million of other real estate owned and \$0.3 million of repossessed and returned assets in connection with the Merger. Other real estate owned and repossessed and returned assets were written down \$2.3 million and \$5.5 million during the three and nine months ended September 30, 2019, respectively, and \$0.7 million and \$2.7 million during the same periods in 2018, included in other assets on the Consolidated Statements of Financial Condition.

Note 9. Premises and Equipment, Net

Premises and equipment, net were as follows:

(In thousands)	At 9/30/2019	At December 31, 2018
Land	\$ 156,380	\$ 144,754
Office buildings	345,663	268,495
Leasehold improvements	57,274	51,868
Furniture, equipment and computer software	450,739	404,743
Premises and equipment leased under capital leases	3,180	3,180
Subtotal	1,013,236	873,040
Less: Accumulated depreciation and amortization	(459,042)	(445,506)
Premises and equipment, net	\$ 554,194	\$ 427,534

Depreciation and amortization expense related to premises and equipment was \$14.9 million and \$52.1 million for the three and nine months ended September 30, 2019, respectively, and \$12.6 million and \$36.0 million for the same periods in 2018.

Note 10. Other Intangible Assets

The following table sets forth the carrying amount and accumulated amortization of intangible assets that are amortizable and arose from business combinations or other acquisitions.

(In thousands)	Core deposit intangibles	Program agreements	Non-compete agreements	Customer relationships	Total
At September 30, 2019					
Gross carrying value	\$ 180,837	\$ 14,700	\$ 9,250	\$ 24,380	\$ 229,167
Accumulated amortization	(6,372)	(868)	(5,334)	(683)	(13,257)
Net carrying amount	\$ 174,465	\$ 13,832	\$ 3,916	\$ 23,697	\$ 215,910
At December 31, 2018					
Gross carrying value	\$ 3,049	\$ 14,700	\$ 9,250	\$ 2,000	\$ 28,999
Accumulated amortization	(2,502)	(408)	(3,643)	(1,950)	(8,503)
Net carrying amount	\$ 547	\$ 14,292	\$ 5,607	\$ 50	\$ 20,496

Amortization expense recognized on intangible assets was \$4.5 million and \$6.2 million for the three and nine months ended September 30, 2019, respectively, and \$0.9 million and \$2.6 million for the same periods in 2018.

Estimated amortization expense for the remainder of 2019 through 2023 is as follows:

(In thousands)	Total
Remainder of 2019	\$ 9,509
2020	27,393
2021	24,892
2022	22,531
2023	20,762

Note 11. Loan Servicing Rights

Information regarding LSRs was as follows:

(Dollars in thousands)	At or For the Three Months Ended September 30, 2019		At or For the Nine Months Ended September 30, 2019	
Balance, beginning of period	\$	18	\$	23
Acquired in the Merger		59,567		59,567
New servicing assets created		1,906		1,906
Impairment (charge) recovery		(4,520)		(4,520)
Amortization		(1,670)		(1,675)
Balance, end of period	\$	55,301	\$	55,301
Valuation allowance, end of period	\$	(4,520)	\$	(4,520)
Loans serviced for others that have servicing rights capitalized, end of period	\$	6,647,153	\$	6,647,153

LSRs are stratified into relatively homogeneous pools based on products with similar characteristics.

Total loan servicing, late fee and other ancillary fee income, included in servicing fee income, related to loans serviced for others that have servicing rights capitalized was \$2.8 million for both the three and nine months ended September 30, 2019.

Note 12. Operating Lease Right-of-Use Assets and Liabilities

Operating lease right-of-use assets, included in other assets, were \$114.2 million at September 30, 2019. Operating lease liabilities, included in accrued expenses and other liabilities, were \$135.1 million at September 30, 2019. In connection with the Merger, TCF recorded \$39.8 million and \$41.6 million of operating lease right-of-use assets and operating lease liabilities, respectively. Undiscounted future minimum operating lease payments and a reconciliation to the amount recorded as operating lease liabilities at September 30, 2019 were as follows:

(In thousands)	
Remainder of 2019	\$ 9,137
2020	32,687
2021	23,902
2022	18,624
2023	15,807
Thereafter	48,737
Total undiscounted future minimum operating lease payments	148,894
Discount	(13,751)
Total operating lease liabilities	\$ 135,143

As of September 30, 2019, TCF had approximately \$250.1 million in additional leases for real property that have not yet commenced and are excluded from the operating lease liability table above. Of this amount, \$231.7 million was related to a lease agreement for TCF Financial's new headquarters building in Detroit, Michigan signed on May 31, 2019 by Legacy Chemical, with an organization 50% owned by indirect related parties. The new headquarter lease has a term of 22.5 years commencing January 1, 2022 with renewal options.

The weighted-average discount rate and remaining lease term for operating leases were as follows:

	At September 30, 2019
Weighted-average discount rate	2.66%
Weighted-average remaining lease term (years)	6.6

The components of total lease cost for operating leases, included in occupancy and equipment noninterest expense, were as follows:

(In thousands)	September 30, 2019	
	Three Months Ended	Nine Months Ended
Lease expense	\$ 10,367	\$ 28,488
Short-term and variable lease cost	241	332
Sublease income	(447)	(1,189)
Total lease cost for operating leases	\$ 10,161	\$ 27,631

Supplemental cash flow information related to operating leases was as follows:

(In thousands)	September 30, 2019	
	Three Months Ended	Nine Months Ended
Operating lease right-of-use assets obtained in exchange for operating lease liabilities	\$ 395	\$ 118,100
Cash paid for amounts included in the measurement of lease liabilities - operating	8,807	23,841

Note 13. Investments in Qualified Affordable Housing Projects, Federal Historical Projects and New Market Tax Credits

TCF invests in qualified affordable housing projects, federal historical projects, and new market tax credits for the purposes of community reinvestment and to obtain tax credits. Return on TCF's investment in these projects comes in the form of pass through tax credits and tax losses. The carrying value of the investments is included in other assets. TCF primarily utilizes the proportional amortization method to account for investments in qualified affordable housing projects and the equity method to account for investments in other tax credit projects.

Under the proportional amortization method, TCF amortizes the initial cost of the investment in proportion to the tax credits and other tax benefits. TCF recognized amortization expense of investments in qualified affordable housing projects of \$3.6 million and \$8.5 million for the three and nine months ended September 30, 2019, respectively, and \$2.4 million and \$7.2 million for the three and nine months ended September 30, 2018, respectively. Amortization expense was offset by tax credits and other benefits of \$4.5 million and \$10.5 million for the three and nine months ended September 30, 2019, respectively, and \$2.9 million and \$8.5 million for the three and nine months ended September 30, 2018, respectively. TCF's remaining investment in qualified affordable housing projects totaled \$231.4 million at September 30, 2019 and \$90.9 million at December 31, 2018.

Under the equity method, TCF's share of the earnings or losses is included in other noninterest expense. TCF's remaining investment in federal historical projects, all of which were acquired in the Merger, totaled \$38.5 million at September 30, 2019.

TCF's unfunded equity contributions relating to investments in qualified affordable housing projects, federal historical projects and new market tax credits are included in other liabilities. TCF's remaining unfunded equity contributions totaled \$128.1 million at September 30, 2019 and \$56.2 million at December 31, 2018.

Management analyzes these investments for potential impairment when events or changes in circumstances indicate that it is more-likely-than-not that the carrying amount of the investment will not be realized. An impairment loss is measured as the amount by which the carrying amount of an investment exceeds its fair value.

Investments in qualified affordable housing projects, federal historical projects and new market tax credits are considered VIEs because TCF, as a limited partner, lacks the power to direct the activities that most significantly impact the entities' economic performance. TCF has concluded it is not the primary beneficiary and therefore, they are not consolidated. The maximum exposure to loss on the VIE investments is limited to the carrying amount of the investments and the potential recapture of any recognized tax credits. TCF believes the likelihood of the tax credits being recaptured is remote, as a loss would require the managing entity to fail to meet certain government compliance requirements. Further, certain of TCF's investments in affordable housing limited liability entities include guaranteed minimum returns which are backed by an investment grade credit-rated company, which reduces the risk of loss.

Note 14. Deposits

Deposits were as follows:

(In thousands)	At September 30, 2019	At December 31, 2018
Checking:		
Noninterest-bearing	\$ 7,959,455	\$ 3,921,710
Interest-bearing	6,260,136	2,452,954
Total checking	14,219,591	6,374,664
Savings	8,362,170	6,122,257
Money market	3,621,729	1,193,782
Certificates of deposit	6,949,082	3,797,241
Brokered deposits	2,133,502	1,415,742
Total deposits	\$ 35,286,074	\$ 18,903,686

Excluded from total deposits are account overdrafts which have been classified as loans. At September 30, 2019 and December 31, 2018, overdrafts totaled \$18.4 million and \$9.6 million, respectively.

Scheduled maturities for certificates of deposits, including Certificate of Deposit Account Registry Service ("CDARS") deposits, IRA deposits and other brokered funds at September 30, 2019 were as follows:

(In thousands)	
Remainder of 2019	\$ 4,813,249
2020	3,138,314
2021	266,425
2022	97,139
2023	40,823
Thereafter	30,022

The aggregate amount of certificates of deposit with balances equal to or greater than the Federal Deposit Insurance Corporation ("FDIC") insurance limit of \$250,000 was \$3.0 billion at September 30, 2019 and \$782.4 million at December 31, 2018.

Note 15. Borrowings

TCF Bank is a member of the FHLB, which provides short- and long-term funding collateralized by mortgage related assets to its members.

Collateralized Deposits include TCF Bank's Repurchase Investment Sweep Agreement product collateralized by mortgage-backed securities, and funds deposited by customers that are collateralized by investment securities owned by TCF Bank, as these deposits are not covered by FDIC insurance.

Short-term borrowings (borrowings with an original maturity of less than one year) were as follows:

(Dollars in thousands)	At September 30, 2019		At December 31, 2018	
	Amount	Weighted-average Rate	Amount	Weighted-average Rate
FHLB advances	\$ 2,335,960	1.63%	\$ —	—%
Collateralized Deposits	271,340	1.00	—	—
Total short-term borrowings	\$ 2,607,300	1.56	\$ —	—

On August 5, 2019, TCF Financial entered into a \$50.0 million unsecured 364-day revolving credit facility bearing interest at the then applicable Eurocurrency Rate plus 150 basis points, available to be used, as needed, to fund growth, common stock repurchases or other general corporate purposes. The revolving credit facility contains covenants related to certain thresholds that must be maintained related to various capital adequacy levels, asset quality and profitability ratios, and certain restrictions on levels of indebtedness. TCF Financial had no outstanding balance under the revolving credit facility and was in compliance with all covenants at September 30, 2019.

Long-term borrowings were as follows:

(In thousands)	At September 30, 2019	At December 31, 2018
FHLB advances	\$ 322,674	\$ 1,100,000
Subordinated debt obligations	430,178	253,391
Discounted lease rentals	104,571	92,976
Capital lease obligation	3,059	3,105
Total long-term borrowings	\$ 860,482	\$ 1,449,472

FHLB Advances As a result of the Merger, TCF assumed long-term FHLB advances of \$322.7 million. These acquired long-term FHLB advances have maturity dates ranging from 2020 to 2025 and carried interest rates ranging from 1.30% to 2.72% at September 30, 2019. FHLB advances are collateralized by residential mortgage and commercial real estate loans.

Subordinated Debt Obligations As a result of the Merger, TCF assumed subordinated debt securities totaling \$19.0 million. Included in the obligations assumed in the Merger were \$5.6 million of obligations due in 2032 with a carrying interest rate based on the three-month LIBOR plus 3.25% and \$13.4 million of obligations due in 2034 and 2035 with carrying interest rates based on the three-month LIBOR plus 1.45% to 2.85%.

On July 2, 2019, TCF Bank issued \$150.0 million of fixed-to-floating rate subordinated notes (the "2029 Notes") at par. The fixed-to-floating rate subordinated notes, due July 2, 2029, bear an initial interest rate of 4.13% per annum, payable semi-annually in arrears on January 2 and July 2, commencing on January 2, 2020. The 2029 Notes are redeemable at TCF Bank's option beginning on July 2, 2024. Effective July 2, 2024, the interest rate will reset quarterly to an annual interest rate equal to the then-current three-month LIBOR rate plus 237.5 basis points, payable quarterly in arrears on January 2, April 2, July 2 and October 2, commencing on October 2, 2024. TCF Bank incurred issuance costs of \$1.5 million that are amortized as interest expense over the full term of the 2029 Notes using the effective interest method.

The contractual maturities of long-term borrowings at September 30, 2019 were as follows:

(In thousands)	
Remainder of 2019	\$ 11,138
2020	150,274
2021	29,508
2022	126,721
2023	5,960
Thereafter	536,881
Total long-term borrowings	\$ 860,482

Note 16. Accumulated Other Comprehensive Income

The components of other comprehensive income (loss), reclassifications from accumulated other comprehensive income (loss) to various financial statement line items and the related tax effects were as follows:

(In thousands)	Three Months Ended September 30,					
	2019			2018		
	Before Tax	Tax Effect	Net of Tax	Before Tax	Tax Effect	Net of Tax
Net unrealized gains (losses) on available-for-sale investment securities and interest-only strips:						
Net unrealized gains (losses) arising during the period	\$ 24,236	\$ (5,606)	\$ 18,630	\$ (18,086)	\$ 4,516	\$ (13,570)
Reclassification of net (gains) losses from accumulated other comprehensive income (loss) to:						
Total interest income	844	(205)	639	263	(65)	198
Net gains (losses) on investment securities	—	—	—	—	—	—
Other noninterest expense	(53)	14	(39)	(84)	22	(62)
Amounts reclassified from accumulated other comprehensive income (loss)	791	(191)	600	179	(43)	136
Net unrealized gains (losses) on available-for-sale investment securities and interest-only strips	25,027	(5,797)	19,230	(17,907)	4,473	(13,434)
Recognized postretirement prior service cost:						
Reclassification of amortization of prior service cost to other noninterest expense	(12)	3	(9)	(12)	3	(9)
Foreign currency translation adjustment ⁽¹⁾	(1,968)	—	(1,968)	2,899	—	2,899
Net unrealized gains (losses) on net investment hedges	2,170	(529)	1,641	(2,537)	633	(1,904)
Total other comprehensive income (loss)	\$ 25,217	\$ (6,323)	\$ 18,894	\$ (17,557)	\$ 5,109	\$ (12,448)

(In thousands)	Nine Months Ended September 30,					
	2019			2018		
	Before Tax	Tax Effect	Net of Tax	Before Tax	Tax Effect	Net of Tax
Net unrealized gains (losses) on available-for-sale investment securities and interest-only strips:						
Net unrealized gains (losses) arising during the period	\$ 114,263	\$ (27,519)	\$ 86,744	\$ (62,521)	\$ 15,688	\$ (46,833)
Reclassification of net (gains) losses from accumulated other comprehensive income (loss) to:						
Total interest income	2,495	(607)	1,888	810	(202)	608
Net gains (losses) on investment securities	(1,513)	368	(1,145)	—	—	—
Other noninterest expense	(350)	86	(264)	221	(55)	166
Amounts reclassified from accumulated other comprehensive income (loss)	632	(153)	479	1,031	(257)	774
Net unrealized gains (losses) on available-for-sale investment securities and interest-only strips	114,895	(27,672)	87,223	(61,490)	15,431	(46,059)
Recognized postretirement prior service cost:						
Reclassification of amortization of prior service cost to other noninterest expense	(35)	10	(25)	(35)	9	(26)
Foreign currency translation adjustment ⁽¹⁾	5,014	—	5,014	(4,136)	—	(4,136)
Net unrealized gains (losses) on net investment hedges	(3,761)	915	(2,846)	4,637	(1,158)	3,479
Total other comprehensive income (loss)	\$ 116,113	\$ (26,747)	\$ 89,366	\$ (61,024)	\$ 14,282	\$ (46,742)

(1) Foreign investments are deemed to be permanent in nature and, therefore, TCF does not provide for taxes on foreign currency translation adjustments.

The components of accumulated other comprehensive income (loss) were as follows:

(In thousands)	Net Unrealized Gains (Losses) on Available-for-Sale Investment Securities and Interest-only Strips	Net Unrealized Gains (Losses) on Net Investment Hedges	Foreign Currency Translation Adjustment	Recognized Postretirement Prior Service Cost	Total
At or For the Three Months Ended September 30, 2019					
Balance, beginning of period	\$ 39,971	\$ 10,499	\$ (13,229)	\$ 93	\$ 37,334
Other comprehensive income (loss)	18,630	1,641	(1,968)	—	18,303
Amounts reclassified from accumulated other comprehensive income (loss)	600	—	—	(9)	591
Net other comprehensive income (loss)	19,230	1,641	(1,968)	(9)	18,894
Balance, end of period	\$ 59,201	\$ 12,140	\$ (15,197)	\$ 84	\$ 56,228
At or For the Three Months Ended September 30, 2018					
Balance, beginning of period	\$ (48,978)	\$ 9,919	\$ (13,878)	\$ 126	\$ (52,811)
Other comprehensive income (loss)	(13,570)	(1,904)	2,899	—	(12,575)
Amounts reclassified from accumulated other comprehensive income (loss)	136	—	—	(9)	127
Net other comprehensive income (loss)	(13,434)	(1,904)	2,899	(9)	(12,448)
Balance, end of period	\$ (62,412)	\$ 8,015	\$ (10,979)	\$ 117	\$ (65,259)
At or For the Nine Months Ended September 30, 2019					
Balance, beginning of period	\$ (28,022)	\$ 14,986	\$ (20,211)	\$ 109	\$ (33,138)
Other comprehensive income (loss)	86,744	(2,846)	5,014	—	88,912
Amounts reclassified from accumulated other comprehensive income (loss)	479	—	—	(25)	454
Net other comprehensive income (loss)	87,223	(2,846)	5,014	(25)	89,366
Balance, end of period	\$ 59,201	\$ 12,140	\$ (15,197)	\$ 84	\$ 56,228
At or For the Nine Months Ended September 30, 2018					
Balance, beginning of period	\$ (16,353)	\$ 4,536	\$ (6,843)	\$ 143	\$ (18,517)
Other comprehensive income (loss)	(46,833)	3,479	(4,136)	—	(47,490)
Amounts reclassified from accumulated other comprehensive income (loss)	774	—	—	(26)	748
Net other comprehensive income (loss)	(46,059)	3,479	(4,136)	(26)	(46,742)
Balance, end of period	\$ (62,412)	\$ 8,015	\$ (10,979)	\$ 117	\$ (65,259)

Note 17. Regulatory Capital Requirements

TCF and TCF Bank are subject to minimum capital requirements administered by the federal banking regulators. Failure to meet minimum capital requirements can initiate certain mandatory, and possible additional discretionary, actions by the federal banking regulators that could have a material adverse effect on TCF. In general, TCF Bank may not declare or pay a dividend to TCF in excess of 100% of its net retained earnings for the current year combined with its net retained earnings for the preceding two calendar years, which was \$296.6 million at September 30, 2019, without prior approval of the Office of the Comptroller of the Currency ("OCC"). The OCC also has the authority to prohibit the payment of dividends by a national bank when it determines such payments would constitute an unsafe and unsound banking practice. TCF Bank's ability to make capital distributions in the future may require regulatory approval and may be restricted by its federal banking regulators. TCF Bank's ability to make any such distributions will also depend on its earnings and ability to meet minimum regulatory capital requirements in effect during future periods. In the future, these capital adequacy standards may be higher than existing minimum regulatory capital requirements.

Regulatory capital information for TCF and TCF Bank was as follows:

	TCF		TCF Bank			
	At September 30, 2019	At December 31, 2018	At September 30, 2019	At December 31, 2018	Well-capitalized Standard under Prompt Corrective Action Provisions	Minimum Capital Requirement for Capital Adequacy Plus Conservation Buffer
(Dollars in thousands)						
Regulatory Capital:						
Common equity Tier 1 capital	\$ 4,009,214	\$ 2,224,183	\$ 3,991,895	\$ 2,282,013		
Tier 1 capital	4,197,706	2,408,393	4,015,208	2,300,472		
Total capital	4,652,708	2,750,581	4,487,968	2,675,347		
Regulatory Capital Ratios:						
Common equity Tier 1 capital ratio	10.88%	10.82%	10.85%	11.10%	6.50%	7.00%
Tier 1 risk-based capital ratio	11.40	11.72	10.91	11.19	8.00	8.50
Total risk-based capital ratio	12.63	13.38	12.20	13.01	10.00	10.50
Tier 1 leverage ratio	11.16	10.44	10.68	9.97	5.00	4.00

Note 18. Derivative Instruments

Derivatives Designated as Hedging Instruments TCF entered into an interest rate contract (interest rate swap agreement) in February 2015 related to its contemporaneously issued subordinated debt, which settles through a central clearing house. The swap was designated as a fair value hedge and effectively converts the fixed interest rate to a floating rate based on the three-month LIBOR plus a fixed number of basis points on the \$150.0 million notional amount through February 27, 2025, the maturity date of the subordinated debt.

The interest rate swap substantially offsets the change in fair value of the hedged underlying subordinated debt that is attributable to the changes in market risk. The gains and losses related to changes in the fair value of the interest rate swap, as well as the offsetting changes in fair value of the hedged debt, are recorded in interest expense.

Forward foreign exchange contracts, which generally settle within 34 days, are used to manage the foreign exchange risk associated with TCF's net investment in TCF Commercial Finance Canada, Inc., a wholly-owned indirect Canadian subsidiary of TCF Bank. These forward foreign exchange contracts have been designated as net investment hedges. Changes in net investment hedges recorded within other comprehensive income (loss) are subsequently reclassified to noninterest expense during the period in which the foreign investment is substantially liquidated or when other elements of the currency translation adjustment are reclassified to income.

Derivatives Not Designated as Hedges TCF executes interest rate contracts with commercial banking customers to facilitate their respective risk management strategies. Those interest rate contracts are simultaneously hedged with offsetting interest rate contracts that TCF executes with a third party and generally settles through a central clearing house, minimizing TCF's net risk exposure. As the interest rate contracts do not meet hedge accounting requirements, changes in the fair value of both the customer contracts and the offsetting contracts are recorded in other noninterest income. These contracts have original fixed maturity dates ranging from 27 days to 16 years.

TCF executes its forward foreign exchange contracts in the over-the-counter market with large financial institutions pursuant to International Swaps and Derivatives Association, Inc. agreements. These agreements include credit risk-related features that enhance the creditworthiness of these instruments, as compared with other obligations of the respective counterparty with whom TCF has transacted, by requiring that additional collateral be posted under certain circumstances. The amount of collateral required depends on the contract and is determined daily based on market and currency exchange rate conditions. Changes in the fair value of these forward foreign exchange contracts are recorded in other noninterest expense.

TCF enters into interest rate lock commitments in conjunction with the sale of certain consumer real estate loans. These interest rate lock commitments are agreements to extend credit under certain specified terms and conditions at fixed rates with original lock expirations generally within three months. They are not designated as hedges and accordingly, changes in the valuation of these commitments are recorded in net (losses) gains on sales of loans and leases.

Residential mortgage loan commitments, forward loan sales commitments, are generally entered into at the time interest rate locks are accepted to protect the value of the mortgage loans from increases in market interest rates during the period held and are generally settled with the investor in the secondary market within 90 days after entering into the forward commitment. Certain forward loan commitments are accounted for as derivatives and recorded at fair value, with changes in fair value recorded through earnings. In the normal course of business, TCF may decide to settle a forward contract rather than fulfill the contract. Cash received or paid in this settlement manner is recorded in net (losses) gains on sales of loans and leases in the Consolidated Statements of Income and is considered a cost of executing a forward contract.

Power Equity CDs are time deposits that provide the purchaser a guaranteed return of principal at maturity plus a potential equity return (a written option), while TCF receives a known stream of funds based on the equity return (a purchased option). The written and purchased options are mirror derivative instruments which are carried at fair value. Power Equity CDs include written and purchased option derivatives consisting of instruments to facilitate an equity-linked time deposit product.

TCF's swap agreement is related to the sale of TCF's Visa Class B stock. The fair value of the swap agreement is based on TCF's estimated exposure related to the Visa covered litigation through a probability analysis of the funding and estimated settlement amounts. Changes, if any, in the valuation of this swap agreement, which has no determinable maturity date, are recorded in other noninterest expense.

Derivative instruments, recognized at fair value within other assets or other liabilities were as follows:

(In thousands)	At September 30, 2019			
	Notional Amount ⁽¹⁾	Fair Value		
		Derivative Assets	Derivative Liabilities	
Derivatives designated as hedging instruments				
Interest rate contract	\$ 150,000	\$ —	\$ 11	
Forward foreign exchange contracts	171,075	1,252	—	
Total derivatives designated as hedging instruments	\$ 321,075	\$ 1,252	\$ 11	
Derivatives not designated as hedging instruments				
Interest rate contracts	\$ 4,694,964	\$ 130,391	\$ 101,899	
Forward foreign exchange contracts	291,999	414	315	
Interest rate lock commitments	266,949	4,554	113	
Forward loan sales commitments	218,061	166	253	
Power Equity CDs	31,870	617	617	
Swap agreement	12,644	—	356	
Total derivatives not designated as hedging instruments	\$ 5,516,487	\$ 136,142	\$ 103,553	
Total derivatives before netting	\$ 5,837,562	137,394	103,564	
Netting ⁽²⁾		(2,152)	(93,785)	
Total derivatives, net		\$ 135,242	\$ 9,779	

(In thousands)	At December 31, 2018			
	Notional Amount ⁽¹⁾	Fair Value		
		Derivative Assets	Derivative Liabilities	
Derivatives designated as hedging instruments				
Interest rate contract	\$ 150,000	\$ 393	\$ —	
Forward foreign exchange contracts	157,271	2,980	—	
Total derivatives designated as hedging instruments	\$ 307,271	\$ 3,373	\$ —	
Derivatives not designated as hedging instruments				
Interest rate contracts	\$ 1,095,449	\$ 7,516	\$ 3,732	
Forward foreign exchange contracts	254,274	3,709	13	
Interest rate lock commitments	28,007	652	28	
Swap agreement	13,020	—	583	
Total derivatives not designated as hedging instruments	\$ 1,390,750	\$ 11,877	\$ 4,356	
Total derivatives before netting		15,250	4,356	
Netting ⁽²⁾		(6,982)	(991)	
Total derivatives, net		\$ 8,268	\$ 3,365	

(1) Notional or contract amounts, which represent the extent of involvement in the derivatives market, are used to determine the contractual cash flows required in accordance with the terms of the agreement. These amounts are typically not exchanged, significantly exceed amounts subject to credit or market risk and are not reflected in the Consolidated Statements of Financial Condition.

(2) Includes netting of derivative asset and liability balances and related cash collateral, where counterparty netting agreements are in place.

Derivative instruments may be subject to master netting arrangements and collateral arrangements and qualify for offset in the Consolidated Statements of Financial Condition. A master netting arrangement with a counterparty creates a right of offset for amounts due to and from that same counterparty that is enforceable in the event of a default or bankruptcy. Derivative instruments subject to master netting arrangements and collateral arrangements are recognized on a net basis in the Consolidated Statements of Financial Condition. The gross amounts recognized, gross amounts offset and net amount presented of derivative instruments were as follows:

(In thousands)	At September 30, 2019		
	Gross Amounts Recognized	Gross Amounts Offset ⁽¹⁾	Net Amount Presented
Derivative assets			
Interest rate contracts	\$ 130,391	\$ (312)	\$ 130,079
Forward foreign exchange contracts	1,666	(1,666)	—
Interest rate lock commitments	4,554	(8)	4,546
Forward loan sales commitments	166	(166)	—
Power Equity CDs	617	—	617
Total derivative assets	\$ 137,394	\$ (2,152)	\$ 135,242
Derivative liabilities			
Interest rate contracts	\$ 101,910	\$ (93,099)	\$ 8,811
Forward foreign exchange contracts	315	(156)	159
Interest rate lock commitments	113	(8)	105
Forward loan sales commitments	253	(166)	87
Power Equity CDs	617	—	617
Other contracts	356	(356)	—
Total derivative liabilities	\$ 103,564	\$ (93,785)	\$ 9,779

(In thousands)	At December 31, 2018		
	Gross Amounts Recognized	Gross Amounts Offset ⁽¹⁾	Net Amount Presented
Derivative assets			
Interest rate contracts	\$ 7,909	\$ (395)	\$ 7,514
Forward foreign exchange contracts	6,689	(6,587)	102
Interest rate lock commitments	652	—	652
Total derivative assets	\$ 15,250	\$ (6,982)	\$ 8,268
Derivative liabilities			
Interest rate contracts	\$ 3,732	\$ (395)	\$ 3,337
Forward foreign exchange contracts	13	(13)	—
Interest rate lock commitments	28	—	28
Swap agreement	583	(583)	—
Total derivative liabilities	\$ 4,356	\$ (991)	\$ 3,365

(1) Includes the amounts with counterparties subject to enforceable master netting arrangements that have been offset in the Consolidated Statements of Financial Condition.

Derivatives Designated as Hedging Instruments

Interest rate contract The carrying amount of the hedged subordinated debt, including the cumulative basis adjustment related to the application of fair value hedge accounting, is recorded in long-term borrowings on the Consolidated Statements of Financial Condition and was as follows:

(In thousands)	Carrying Amount of the Hedged Liability		Cumulative Amount of Fair Value Hedging Adjustments Included in the Carrying Amount of the Hedged Liability	
	At September 30, 2019	At December 31, 2018	At September 30, 2019	At December 31, 2018
Subordinated bank note - 2025	\$ 153,307	\$ 144,296	\$ 4,682	\$ (4,165)

The following table summarizes the effect of fair value hedge accounting on the Consolidated Statements of Income for the three and nine months ended September 30, 2019 and 2018.

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Statement of income line where the gain (loss) on the fair value hedge was recorded:				
Interest expense on borrowings	\$ 17,115	\$ 10,726	\$ 48,050	\$ 31,850
Gain (loss) on interest rate contract (fair value hedge)				
Hedged item	\$ (2,100)	\$ 1,206	\$ (8,847)	\$ 6,337
Derivative designated as a hedging instrument	2,195	(1,165)	8,938	(6,621)
Net income (expense) recognized on fair value hedge in interest expense on borrowings	\$ 95	\$ 41	\$ 91	\$ (284)

Forward foreign exchange contracts The effect of net investment hedges on accumulated other comprehensive income was as follows:

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Forward foreign exchange contracts	\$ 2,170	\$ (2,537)	\$ (3,761)	\$ 4,637

Derivatives Not Designated as Hedging Instruments Certain other interest rate contracts, forward foreign exchange contracts, interest rate lock commitments, Power Equity CDs and other contracts have not been designated as hedging instruments. The effect of these derivatives on the Consolidated Statements of Income was as follows:

(In thousands)	Location of Gain (Loss)	Three Months Ended September 30,		Nine Months Ended September 30,	
		2019	2018	2019	2018
Interest rate contracts ⁽¹⁾	Other noninterest income	\$ (19,764)	\$ 51	\$ (21,307)	\$ 157
Forward foreign exchange contracts	Other noninterest expense	3,307	(3,706)	(5,302)	8,050
Interest rate lock commitments	Net (losses) gains on sales of loans and leases	337	(244)	1,117	798
Forward loan sales commitments	Net (losses) gains on sales of loans and leases	(11)	—	(11)	—
Swap agreement	Other noninterest income	4	(292)	4	(274)
Net gain (loss) recognized		\$ (16,127)	\$ (4,191)	\$ (25,499)	\$ 8,731

(1) Included in both the three and nine months ended September 30, 2019 is a loss of \$17.3 million related to the termination of \$1.1 billion of interest rate swaps.

At September 30, 2019 and December 31, 2018, credit risk-related contingent features existed on forward foreign exchange contracts with a notional value of \$30.2 million and \$25.7 million, respectively. In the event TCF is rated less than BB- by Standard and Poor's, the contracts could be terminated or TCF may be required to provide approximately \$0.6 million and \$0.5 million in additional collateral at September 30, 2019 and December 31, 2018, respectively. There were no forward foreign exchange contracts containing credit risk-related features in a liability position at both September 30, 2019 and December 31, 2018.

At September 30, 2019, TCF had posted \$58.1 million and \$0.1 million of cash collateral related to its interest rate contracts and forward foreign exchange contracts, respectively, and received \$1.9 million of cash collateral related to its forward foreign exchange contracts.

Note 19. Fair Value Measurements

TCF uses fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. Fair values are based on the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Investment securities carried at fair value, certain loans held for sale, interest-only strips, derivative instruments, forward loan sales commitments and assets and liabilities held in trust for deferred compensation plans are recorded at fair value on a recurring basis. From time to time we may be required to record at fair value other assets on a non-recurring basis, such as certain investment securities held to maturity, loans and leases, goodwill, loan servicing rights, other intangible assets, other real estate owned, repossessed and returned assets or the securitization receivable. These non-recurring fair value adjustments typically involve application of lower of cost or fair value accounting or write-downs of individual assets.

TCF groups its assets and liabilities measured at fair value in three levels, based on the markets in which the assets and liabilities are traded and the degree and reliability of estimates and assumptions used to determine fair value. The levels are as follows:

- Level 1 Valuations that are based on prices obtained from independent pricing sources for the same instruments traded in active markets.
- Level 2 Valuations that are based on prices obtained from independent pricing sources that are based on observable transactions of similar instruments, but not quoted markets.
- Level 3 Valuations generated from Corporation model-based techniques that use at least one significant unobservable inputs. Such unobservable inputs reflect estimates of assumptions that market participants would use in pricing the asset or liability.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis

Investment Securities Carried at Fair Value: The fair value of investment securities carried at fair value, categorized as Level 2, is recorded using prices obtained from independent asset pricing services that are based on observable transactions, but not quoted markets. Management reviews the prices obtained from independent asset pricing services for unusual fluctuations and comparisons to current market trading activity.

Loans Held-for-Sale: TCF has elected the fair value option for residential mortgage loans held-for-sale. Accordingly, the fair values of residential mortgage loans held-for-sale are based on valuation models that use the market price for similar loans sold in the secondary market. As these prices are derived from market observable inputs, TCF categorized as Level 2.

Interest-only Strips: The fair value of interest-only strips, categorized as Level 3, represents the present value of future cash flows expected to be received by TCF on certain assets. TCF uses available market data, along with its own empirical data and discounted cash flow models, to arrive at the fair value of its interest-only strips. The present value of the estimated expected future cash flows to be received is determined by using discount, loss and prepayment rates that TCF believes are commensurate with the risks associated with the cash flows and what a market participant would use. These assumptions are inherently subject to volatility and uncertainty and, as a result, the fair value of the interest-only strips may fluctuate significantly from period to period.

Derivative Instruments:

Interest Rate Contracts: TCF executes interest rate contracts as described in Note 18. The fair value of these interest rate contracts, categorized as Level 2, is determined using a cash flow model which may consider the forward curve, the discount curve, option volatilities and credit valuation adjustments related to counterparty and/or borrower non-performance risk.

Forward Foreign Exchange Contracts: TCF's forward foreign exchange contracts are recorded at fair value using a cash flow model that includes key inputs such as foreign exchange rates and an assessment of the risk of counterparty non-performance. The risk of counterparty non-performance is based on external assessments of credit risk. The fair value of these contracts, categorized as Level 2, is based on observable transactions, but not quoted markets.

Interest Rate Lock Commitments: TCF's interest rate lock commitments are derivative instruments that are recorded at fair value based on valuation models that use the market price for similar loans sold in the secondary market. The interest rate lock commitments are adjusted for expectations of exercise and funding. As the prices are derived from market observable inputs, TCF categorized as Level 2.

Power Equity CDs: Power Equity CDs are categorized as Level 2, and determined using quoted prices of underlying stocks, along with other terms and features of the derivative instruments.

Swap Agreement: TCF's swap agreement, categorized as Level 3, is related to the sale of TCF's Visa Class B stock. The fair value of the swap agreement is based on TCF's estimated exposure related to the Visa covered litigation through a probability analysis of the funding and estimated settlement amounts.

Forward Loan Sales Commitments: TCF enters into forward loan sales commitments to sell certain mortgage loans which are recorded at fair value based on valuation models. TCF's expectation of the amount of its interest rate lock commitments that will ultimately close is a factor in determining the position. The valuation models utilize the fair value of related mortgage loans determined using observable market data and therefore categorized as Level 2.

Assets and Liabilities Held in Trust for Deferred Compensation Plans: Assets held in trust for deferred compensation plans include investments in publicly traded securities, excluding TCF Financial common stock reported in treasury stock and other equity, and U.S. Treasury notes. The fair value of these assets, categorized as Level 1, is based on prices obtained from independent asset pricing services based on active markets. The fair value of the liabilities equals the fair value of the assets.

The balances of assets and liabilities measured at fair value on a recurring basis were as follows:

(In thousands)	September 30, 2019			
	Level 1	Level 2	Level 3	Total
Assets				
Investment securities carried at fair value	\$ —	\$ 5,579,407	\$ 428	\$ 5,579,835
Loans held-for-sale	—	114,831	—	114,831
Interest-only strips	—	—	14,078	14,078
Derivative assets: ⁽¹⁾				
Interest rate contracts	—	130,391	—	130,391
Forward foreign exchange contracts	—	1,666	—	1,666
Interest rate lock commitments	—	4,554	—	4,554
Forward loan sales commitments	—	166	—	166
Power Equity CDs	—	617	—	617
Total derivative assets	—	137,394	—	137,394
Forward loan sales commitments	—	404	—	404
Assets held in trust for deferred compensation plans	40,784	—	—	40,784
Total assets at fair value	\$ 40,784	\$ 5,832,036	\$ 14,506	\$ 5,887,326
Liabilities				
Derivative liabilities: ⁽¹⁾				
Interest rate contracts	\$ —	\$ 101,910	\$ —	\$ 101,910
Forward foreign exchange contracts	—	315	—	315
Interest rate lock commitments	—	113	—	113
Forward loan sales commitments	—	253	—	253
Power Equity CDs	—	617	—	617
Swap agreement	—	—	356	356
Total derivative liabilities	—	103,208	356	103,564
Forward loan sales commitments	—	284	—	284
Liabilities held in trust for deferred compensation plans	40,784	—	—	40,784
Total liabilities at fair value	\$ 40,784	\$ 103,492	\$ 356	\$ 144,632

(1) As permitted under GAAP, TCF has elected to net derivative assets and derivative liabilities when a legally enforceable master netting agreement exists as well as the related cash collateral received and paid. For purposes of this table, the derivative assets and derivative liabilities are presented gross of this netting adjustment.

December 31, 2018

(In thousands)	Level 1	Level 2	Level 3	Total
Assets				
Investment securities carried at fair value	\$ —	\$ 2,470,061	\$ 4	\$ 2,470,065
Loans held-for-sale	—	—	18,070	18,070
Interest-only strips	—	—	16,835	16,835
Derivative assets: ⁽¹⁾				
Interest rate contracts	—	7,909	—	7,909
Forward foreign exchange contracts	—	6,689	—	6,689
Interest rate lock commitments	—	—	652	652
Total derivative assets	—	14,598	652	15,250
Forward loan sales commitments	—	—	152	152
Assets held in trust for deferred compensation plans	33,217	—	—	33,217
Total assets at fair value	\$ 33,217	\$ 2,484,659	\$ 35,713	\$ 2,553,589
Liabilities				
Derivative liabilities: ⁽¹⁾				
Interest rate contracts	\$ —	\$ 3,732	\$ —	\$ 3,732
Forward foreign exchange contracts	—	13	—	13
Interest rate lock commitments	—	—	28	28
Swap agreement	—	—	583	583
Total derivative liabilities	—	3,745	611	4,356
Forward loan sales commitments	—	—	178	178
Liabilities held in trust for deferred compensation plans	33,217	—	—	33,217
Total liabilities at fair value	\$ 33,217	\$ 3,745	\$ 789	\$ 37,751

(1) As permitted under GAAP, TCF has elected to net derivative assets and derivative liabilities when a legally enforceable master netting agreement exists as well as the related cash collateral received and paid. For purposes of this table, the derivative assets and derivative liabilities are presented gross of this netting adjustment.

Management assesses the appropriate classification of financial assets and liabilities within the fair value hierarchy by monitoring the level of available observable market information. Changes in markets or economic conditions, as well as changes to our valuation models, may require the transfer of financial instruments from one fair value level to another. Such transfers, if any, are recorded at the fair values as of the beginning of the quarter in which the transfers occurred.

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis were as follows:

(In thousands)	Investment securities carried at fair value	Loans held-for-sale	Interest-only strips	Interest rate lock commitments	Other derivative contracts	Forward loan sales commitments
At or For the Three Months Ended September 30, 2019						
Asset (liability) balance, beginning of period	\$ 3	\$ 29,211	\$ 15,236	\$ 1,402	\$ (435)	\$ (145)
Transfers out of Level 3 ⁽¹⁾	—	(29,211)	—	(1,402)	—	145
Acquired through the Merger	450	—	—	—	—	—
Total net gains (losses) included in:						
Net income	—	—	611	—	—	—
Other comprehensive income (loss)	(25)	—	(65)	—	—	—
Acquired	—	—	—	—	—	—
Originations	—	—	628	—	—	—
Principal paydowns / settlements	—	—	(2,332)	—	79	—
Asset (liability) balance, end of period	\$ 428	\$ —	\$ 14,078	\$ —	\$ (356)	\$ —
At or For the Three Months Ended September 30, 2018						
Asset (liability) balance, beginning of period	\$ 4	\$ 18,554	\$ 19,887	\$ 858	\$ (441)	\$ 110
Total net gains (losses) included in:						
Net income	—	(184)	732	(242)	(292)	359
Other comprehensive income (loss)	—	—	246	—	—	—
Sales	—	(97,866)	—	—	—	—
Originations	—	98,018	—	—	—	—
Principal paydowns / settlements	—	(3)	(3,153)	—	75	—
Asset (liability) balance, end of period	\$ 4	\$ 18,519	\$ 17,712	\$ 616	\$ (658)	\$ 469
At or For the Nine Months Ended September 30, 2019						
Asset (liability) balance, beginning of period	\$ 4	\$ 18,070	\$ 16,835	\$ 624	\$ (583)	\$ (26)
Total net gains (losses) included in:						
Acquired through the Merger	450	—	—	—	—	—
Net income	—	534	1,976	778	—	(119)
Other comprehensive income (loss)	(25)	—	246	—	—	—
Sales	—	(164,693)	—	—	—	—
Originations	—	175,304	2,180	—	—	—
Principal paydowns / settlements	(1)	(4)	(7,159)	—	227	—
Transfers out of Level 3 ⁽¹⁾	—	(29,211)	—	(1,402)	—	145
Asset (liability) balance, end of period	\$ 428	\$ —	\$ 14,078	\$ —	\$ (356)	\$ —
At or For the Nine Months Ended September 30, 2018						
Asset (liability) balance, beginning of period	\$ 6	\$ 3,356	\$ 21,386	\$ 223	\$ (615)	\$ 63
Total net gains (losses) included in:						
Net income	—	254	1,913	393	(274)	406
Other comprehensive income (loss)	—	—	1,015	—	—	—
Sales	—	(232,747)	—	—	—	—
Originations	—	247,667	3,849	—	—	—
Principal paydowns / settlements	(2)	(11)	(10,451)	—	231	—
Asset (liability) balance, end of period	\$ 4	\$ 18,519	\$ 17,712	\$ 616	\$ (658)	\$ 469

(1) Certain assets (liabilities) previously classified as Level 3 were transferred to Level 2 because current period prices are derived from Level 2 observable market data.

Assets and Liabilities Recorded at Fair Value on a Non-recurring Basis

The following is a discussion of the valuation methodologies used to record assets and liabilities at fair value on a non-recurring basis.

Loans and Leases Held-for-sale: Auto loans held-for-sale, which were previously classified as held-for-investment were transferred to held-for-sale and recorded at the lower of the loan carrying amount or fair value. The fair value is determined based on internal estimates and/or assessments.

Loans and Leases: Loans and leases for which repayment is expected to be provided solely by the value of the underlying collateral, categorized as Level 3 and recorded at fair value on a non-recurring basis, are valued based on the fair value of that collateral less estimated selling costs. The fair value of the collateral is determined based on internal estimates and/or assessments provided by third-party appraisers and the valuation relies on discount rates ranging from 10.00% to 54.00%. Effective January 1, 2019, in conjunction with the adoption of ASU No. 2016-02, *Leases (Topic 842)* and the related ASUs, such loans and leases include nonaccrual impaired loans and leases as well as certain delinquent nonaccrual consumer loans. Previously, TCF did not include nonaccrual impaired leases. The fair value of the collateral is determined based on internal estimates and/or assessments provided by third-party appraisers.

Other Real Estate Owned: The fair value of other real estate owned, categorized as Level 3, is based on independent appraisals, real estate brokers' price opinions or automated valuation methods, less estimated selling costs. Certain properties require assumptions that are not observable in an active market in the determination of fair value and include a discount rate of 8.00%. Assets acquired through foreclosure are initially recorded at the lower of the loan or lease carrying amount or fair value less estimated selling costs at the time of transfer to other real estate owned.

Reposessed and Returned Assets: The fair value of reposessed and returned assets, categorized as Level 2 or Level 3 depending on the underlying asset type, is based on available pricing guides, auction results or price opinions, less estimated selling costs. Unobservable inputs used to value reposessed and returned assets categorized as Level 3 include discount rates ranging from 20.00% to 30.00%. Assets acquired through repossession or returned to TCF are initially recorded at the lower of the loan or lease carrying amount or fair value less estimated selling costs at the time of transfer to reposessed and returned assets.

The balances of assets measured at fair value on a non-recurring basis were as follows. There were no liabilities measured at fair value on a non-recurring basis at September 30, 2019 and December 31, 2018.

(In thousands)	Level 1	Level 2	Level 3	Total
At September 30, 2019				
Loans held-for-sale	\$ —	\$ 136	\$ 1,220,621	\$ 1,220,757
Loans and leases	—	—	130,991	130,991
Other real estate owned	—	—	17,924	17,924
Reposessed and returned assets	—	6,841	5,762	12,603
Total non-recurring fair value measurements	\$ —	\$ 6,977	\$ 1,375,298	\$ 1,382,275
At December 31, 2018				
Loans	\$ —	\$ —	\$ 57,663	\$ 57,663
Other real estate owned	—	—	9,397	9,397
Reposessed and returned assets	—	4,358	5,165	9,523
Total non-recurring fair value measurements	\$ —	\$ 4,358	\$ 72,225	\$ 76,583

Fair Value Option

TCF has elected the fair value option for residential loans held-for-sale. This election facilitates the offsetting of changes in fair value of the loans held-for-sale and the derivative financial instruments used to economically hedge them. The difference between the aggregate fair value and aggregate unpaid principal balance of these loans held-for-sale was as follows:

(In thousands)	September 30, 2019		December 31, 2018	
Fair value carrying amount	\$	114,831	\$	18,070
Aggregate unpaid principal amount		111,540		17,517
Fair value carrying amount less aggregate unpaid principal	\$	3,291	\$	553

Differences between the fair value carrying amount and the aggregate unpaid principal balance include changes in fair value recorded at and subsequent to funding and gains and losses on the related loan commitment prior to funding. No loans recorded under the fair value option were delinquent or on nonaccrual status at September 30, 2019 and December 31, 2018. The net gain from initial measurement of the loans held-for-sale, any subsequent changes in fair value while the loans are outstanding and any actual adjustment to the gains realized upon sales of the loans totaled \$12.4 million and \$18.3 million for the three and nine months ended September 30, 2019, respectively, and \$2.7 million and \$6.9 million for the same periods in 2018, and are included in net (losses) gains on sales of loans and leases. These amounts exclude the impacts from the interest rate lock commitments and forward loan sales commitments which are also included in net (losses) gains on sales of loans and leases.

Disclosures about Fair Value of Financial Instruments

Management discloses the estimated fair value of financial instruments, including assets and liabilities on and off the Consolidated Statements of Financial Condition, for which it is practicable to estimate fair value. These fair value estimates were made at September 30, 2019 and December 31, 2018 based on relevant market information and information about the financial instruments. Fair value estimates are intended to represent the price at which an asset could be sold or a liability could be settled. However, given there is no active market or observable market transactions for many of TCF's financial instruments, the estimates of fair value are subjective in nature, involve uncertainties and include matters of significant judgment. Changes in assumptions could significantly affect the estimated values.

The carrying amounts and estimated fair values of TCF's financial instruments, excluding short-term financial assets and liabilities as their carrying amounts approximate fair value and excluding financial instruments recorded at fair value on a recurring basis, were as follows. This information represents only a portion of TCF's Consolidated Statements of Financial Condition not recorded in their entirety on a recurring basis and not the estimated value of TCF as a whole. Non-financial instruments such as the intangible value of TCF's branches and core deposits, leasing operations, goodwill, premises and equipment and the future revenues from TCF's customers are not reflected in this disclosure. Therefore, this information is of limited use in assessing the value of TCF.

(In thousands)	Carrying Amount	At September 30, 2019				Total
		Estimated Fair Value			Total	
		Level 1	Level 2	Level 3		
Financial instrument assets						
FHLB and FRB stocks	\$ 290,238	\$ —	\$ 290,238	\$ —	\$ 290,238	
Investment securities held-to-maturity	144,000	—	146,252	3,676	149,928	
Loans and leases held-for-sale	100,216	—	84,959	18,331	103,290	
Net loans ⁽¹⁾	30,916,379	—	—	30,897,046	30,897,046	
Loan servicing rights	55,301	—	—	55,301	55,301	
Securitization receivable ⁽²⁾	19,624	—	—	19,355	19,355	
Deferred fees on commitments to extend credit	18,485	—	18,485	—	18,485	
Total financial instrument assets	\$ 31,544,243	\$ —	\$ 539,934	\$ 30,993,709	\$ 31,533,643	
Financial instrument liabilities						
Certificates of deposits	\$ 8,385,972	\$ —	\$ 8,385,496	\$ —	\$ 8,385,496	
Long-term borrowings	860,482	—	875,864	—	875,864	
Deferred fees on standby letters of credit	38	—	38	—	38	
Total financial instrument liabilities	\$ 9,246,492	\$ —	\$ 9,261,398	\$ —	\$ 9,261,398	

At December 31, 2018

(In thousands)	Carrying Amount	Estimated Fair Value			Total
		Level 1	Level 2	Level 3	
Financial instrument assets					
FHLB and FRB stocks	\$ 91,654	\$ —	\$ 91,654	\$ —	\$ 91,654
Investment securities held-to-maturity	148,852	—	146,467	2,800	149,267
Loans held-for-sale	72,594	—	—	74,078	74,078
Net loans ⁽¹⁾	16,384,702	—	—	16,399,551	16,399,551
Securitization receivable ⁽²⁾	19,432	—	—	19,025	19,025
Deferred fees on commitments to extend credit	18,555	—	18,555	—	18,555
Total financial instrument assets	\$ 16,735,789	\$ —	\$ 256,676	\$ 16,495,454	\$ 16,752,130
Financial instrument liabilities					
Certificates of deposits	\$ 4,790,680	\$ —	\$ 4,820,442	\$ —	\$ 4,820,442
Long-term borrowings	1,449,472	—	1,451,550	—	1,451,550
Deferred fees on standby letters of credit	77	—	77	—	77
Total financial instrument liabilities	\$ 6,240,229	\$ —	\$ 6,272,069	\$ —	\$ 6,272,069

(1) Expected credit losses are included in the estimated fair values.

(2) Carrying amounts are included in other assets.

Note 20. Revenue from Contracts with Customers

TCF earns a variety of revenue, including interest and fees, from customers, as well as revenues from noncustomers. The majority of TCF's sources of revenue are included in interest income and noninterest income and are outside of the scope of ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"). Other sources of revenue fall within the scope of ASC 606 and are mostly included in noninterest income.

TCF recognizes revenue when the performance obligations related to the transfer of goods or services under the terms of a contract are satisfied. Some obligations are satisfied at a point in time, while others are satisfied over a period of time. Revenue is recognized as the amount of consideration expected to be received in exchange for transferring goods or services to a customer and is segregated based on the nature of product and services offered as part of contractual arrangements. Revenue streams within the scope of ASC 606 are discussed below.

- *Fees and Service Charges on Deposit Accounts* Fees and service charges on deposit accounts includes fees and other charges TCF receives to provide various services, including but not limited to, service charges on deposit accounts and other fees including account analysis fees, monthly service fees, overdraft services, transferring funds, and accepting and executing stop-payment orders. TCF's performance obligation for account analysis fees and monthly service fees are generally satisfied and, therefore, revenue is recognized over the period in which the service is provided. Deposit account related fees are largely transactional based, and therefore, the performance obligation is satisfied and the related revenue is recognized at the point in time when the transaction occurs.
- *Wealth Management Revenue* Wealth management revenue includes fee income generated from personal and institutional customers. TCF also provides investment management services. Revenue is recognized over the period of time the services are rendered. Wealth management revenue also includes commissions that are earned for placing a brokerage transaction for execution. Revenue is recognized once the transaction is completed and TCF is entitled to receive consideration.
- *Card and ATM Revenue* Card and ATM revenue includes ATM surcharges and debit card related revenue. ATM surcharges and certain debit card fees are transactional based and, therefore, the performance obligation is satisfied and the related revenue is recognized at the point in time when the transaction occurs. Other debit card fees satisfied over a period of time are recognized over the period in which the service is provided.
- *Other Noninterest Income* Other noninterest income includes wire transfer fees, safe deposit box income and check orders. The consideration includes both fixed (e.g., safe deposit box fees) and transaction (i.e., wire-transfer fee and check orders) fees. Fixed fees are recognized over the period of time the service is provided, while transaction fees are recognized when a specific service is rendered to the customer.
- *Net Foreclosed Real Estate and Repossessed Assets Expense* Net foreclosed real estate and repossessed assets expense includes net gain or loss on sales of other real estate owned and repossessed assets. Revenue is recognized at the time the sale is complete and TCF is entitled to receive consideration, including sales that are seller financed as receipt of all payment is expected.

The following tables present total noninterest income segregated between contracts with customers within the scope of ASC 606 and those within the scope of other GAAP topics.

Three Months Ended September 30, 2019					
(In thousands)	Within the scope of ASC 606				Total
	Consumer Banking	Commercial Banking	Enterprise Services	Out of scope of ASC 606	
Noninterest income					
Fees and service charges on deposit accounts	\$ 29,198	\$ 1,308	\$ —	\$ 3,878	\$ 34,384
Wealth management revenue	1,047	—	—	3,194	\$ 4,241
Card and ATM revenue	21,476	23	—	1,816	\$ 23,315
Other noninterest income	137	(2,887)	2,610	(12,169)	\$ (12,309)
Total	\$ 51,858	\$ (1,556)	\$ 2,610	\$ (3,281)	\$ 49,631
Noninterest expense					
Net foreclosed real estate and repossessed assets	\$ (593)	\$ 214	\$ —	\$ 2,582	\$ 2,203

Three Months Ended September 30, 2018					
(In thousands)	Within the scope of ASC 606				Total
	Consumer Banking	Commercial Banking	Enterprise Services	Out of scope of ASC 606	
Noninterest income					
Fees and service charges on deposit accounts	\$ 28,055	\$ 1,082	\$ —	\$ 38	\$ 29,175
Wealth management revenue	—	—	—	—	\$ —
Card and ATM revenue	19,999	14	—	61	\$ 20,074
Other noninterest income	(100)	(2,649)	4,686	4,306	\$ 6,243
Total	\$ 47,954	\$ (1,553)	\$ 4,686	\$ 4,405	\$ 55,492
Noninterest expense					
Net foreclosed real estate and repossessed assets	\$ 215	\$ (59)	\$ —	\$ 3,724	\$ 3,880

Nine Months Ended September 30, 2019					
(In thousands)	Within the scope of ASC 606				Total
	Consumer Banking	Commercial Banking	Enterprise Services	Out of scope of ASC 606	
Noninterest income					
Fees and service charges on deposit accounts	\$ 81,098	\$ 3,504	\$ —	\$ 3,902	\$ 88,504
Wealth management revenue	1,047	—	—	3,194	\$ 4,241
Card and ATM revenue	60,581	62	—	1,827	\$ 62,470
Other noninterest income	1,504	(5,271)	9,986	(6,531)	\$ (312)
Total	\$ 144,230	\$ (1,705)	\$ 9,986	\$ 2,392	\$ 154,903
Noninterest expense					
Net foreclosed real estate and repossessed assets	\$ (152)	\$ 536	\$ —	\$ 8,897	\$ 9,281

Nine Months Ended September 30, 2018					
(In thousands)	Within the scope of ASC 606				Total
	Consumer Banking	Commercial Banking	Enterprise Services	Out of scope of ASC 606	
Noninterest income					
Fees and service charges on deposit accounts	\$ 80,468	\$ 3,137	\$ —	\$ 98	\$ 83,703
Wealth management revenue	—	—	—	—	\$ —
Card and ATM revenue	58,095	39	—	179	\$ 58,313
Other noninterest income	33,729	(6,771)	15,112	(21,450)	\$ 20,620
Total	\$ 172,292	\$ (3,595)	\$ 15,112	\$ (21,173)	\$ 162,636
Noninterest expense					
Net foreclosed real estate and repossessed assets	\$ 719	\$ (108)	\$ —	\$ 12,043	\$ 12,654

Contract Balances A contract asset balance occurs when an entity performs a service for a customer before the customer pays consideration (resulting in a contract receivable) or before payment is due (resulting in a contract asset). A contract liability balance is an entity's obligation to transfer a service to a customer for which the entity has already received payment (or payment is due) from the customer. TCF's noninterest income streams are largely based on transactional activity, or standard month-end revenue accruals such as asset management fees based on month-end market values. Consideration is most often received immediately or shortly after TCF satisfies its performance obligation and revenue is recognized. TCF does not typically enter into long-term revenue contracts with customers, and therefore, does not experience significant contract balances.

Note 21. Stock Based Compensation

Before the Merger, Chemical and Legacy TCF granted share-based awards under their respective share-based compensation plans, including the Chemical Stock Incentive Plan of 2019 (the "Stock Incentive Plan of 2019") and the TCF Financial 2015 Omnibus Incentive Plan (the "Legacy TCF Omnibus Incentive Plan"). At September 30, 2019, there were 2,270,795 shares reserved for issuance under the Legacy TCF Omnibus Incentive Plan and there were 1,914,083 shares reserved for issuance under the Stock Incentive Plan of 2019.

In connection with the Merger, each equity award granted under Legacy TCF's equity plans, including the Legacy Omnibus Incentive Plan, was legally assumed by the combined company and adjusted so that its holder is entitled to receive a number of shares of TCF Financial's common stock equal to the product of (a) the number of shares of Legacy TCF common stock subject to such award multiplied by (b) the Exchange Ratio and (c) rounded, as applicable, to the nearest whole share, and otherwise subject to the same terms and conditions (including, without limitation, with respect to vesting conditions (taking into account any vesting that occurred at the Merger Date) and cash dividend equivalent rights). For any Legacy TCF equity awards that were subject to performance-based vesting at multiple achievement levels, the number of shares of Legacy TCF common stock underlying such award was calculated and fixed as of the Merger Date assuming achievement of the applicable performance conditions at the greater of target level performance or the actual level of achievement of Legacy TCF's performance results through the latest practicable date before the Merger Date, and such awards converted into service-based vesting awards with the applicable vesting date to be the last day of the original performance period. For purposes of Legacy TCF equity awards for which performance was achievable at a single level, the performance condition was deemed satisfied as of the Merger Date.

In connection with the Merger, all outstanding stock options, performance-based restricted stock units and time-vesting restricted stock units of Chemical, which we refer to as the Chemical equity awards, which were outstanding immediately before the Merger Date continue to be awards in respect of TCF Financial common stock following the Merger, subject to the same terms and conditions that were applicable to such awards before the Merger Date, except with respect to performance-based restricted stock units. Because the Merger constituted a change in control for purposes of the Chemical equity awards, the performance-based restricted stock units for which performance results had not been measured were measured as of the latest practicable date before the Merger Date and the number of performance-based restricted stock units was fixed at the greater of the target (100%) performance level or actual performance, which we refer to as the "Chemical Earned Awards," and such Chemical Earned Awards will continue to vest based on the executive's continued service through the end of the applicable performance period.

The fair value of share-based awards is recognized as compensation expense over the requisite service or performance period. Compensation expense for share-based awards was \$4.8 million and \$9.5 million for the three and nine months ended September 30, 2019, respectively, and \$3.5 million and \$13.1 million for the same periods in 2018. The excess tax benefit realized from share-based compensation transactions during the three and nine months ended September 30, 2019 was a benefit of \$0.7 million and \$2.0 million, respectively, and \$0.3 million and \$2.4 million for the same periods in 2018.

Restricted Stock Units

We can grant performance-based restricted stock units ("PRSUs") and time-based restricted stock units ("TRSUs") (collectively referred to as "RSUs") under the Stock Incentive Plan of 2019 and the Legacy TCF Omnibus Incentive Plan; provided, that, RSUs granted under the Legacy TCF Omnibus Incentive Plan may only be granted to former employees of Legacy TCF. At September 30, 2019, there were no PRSUs outstanding dependent on achieving certain performance target levels and the grantee completing the requisite service period. The TRSUs vest upon satisfaction of a service condition. Upon achievement of the performance target level and/or satisfaction of a service condition, as applicable, the RSUs are converted into shares of TCF Financial's common stock on a one-to-one basis.

A summary of the activity for RSUs at and for the nine months ended September 30, 2019 is presented below:

	Number of Units	Weighted-average Grant Date Fair Value Per Unit
Outstanding at December 31, 2018	406,575	\$ 17.33
Outstanding at December 31, 2018 as adjusted for conversion	206,580	34.11
Granted	533,267	41.51
Converted in the Merger ⁽¹⁾	55,022	42.06
Acquired in the Merger	824,757	47.71
Forfeited/canceled	(20,648)	41.64
Vested	(104,652)	28.85
Outstanding at September 30, 2019	1,494,326	\$ 38.46

(1) In connection with the Merger, certain Legacy TCF PRSUs were converted at their maximum payout into 55,022 TRSUs.

Unrecognized compensation expense related to RSUs totaled \$45.8 million and is expected to be recognized over the remaining weighted-average period of 2.4 years at September 30, 2019.

Restricted Stock Awards

TCF's restricted stock award transactions were as follows:

	Number of Awards	Weighted-Average Grant Date Fair Value Per Award
Outstanding at December 31, 2018	2,289,446	\$ 16.70
Outstanding at December 31, 2018 as adjusted for conversion	1,163,232	32.87
Granted	269,915	40.82
Forfeited/canceled	(135,760)	34.15
Vested	(368,291)	31.07
Outstanding at September 30, 2019	929,096	\$ 40.47

At September 30, 2019, there were no shares of performance-based restricted stock awards outstanding. Unrecognized stock compensation expense for restricted stock awards was \$22.5 million with a weighted-average remaining amortization period of 2.5 years at September 30, 2019.

Stock Options

A summary of activity for TCF's stock options at and for the nine months ended September 30, 2019 is presented below:

	Non-Vested Stock Options Outstanding		Stock Options Outstanding	
	Number of Options	Weighted-average Exercise Price	Number of Options	Weighted-average Exercise Price
Outstanding at December 31, 2018	—	\$ —	—	\$ —
Acquired ⁽¹⁾	127,906	39.38	520,379	29.48
Forfeited/canceled	(3,094)	32.81	—	—
Expired	—	—	(756)	32.81
Vested	(1,144)	46.95	1,144	46.95
Outstanding at September 30, 2019	123,668	\$ 39.47	520,767	\$ 29.51
Exercisable/vested at September 30, 2019			520,767	\$ 29.51

(1) Options acquired in the Merger expire ten years from the date of grant and vest ratably over a five-year period.

The weighted-average remaining contractual term was 4.28 years for all outstanding stock options and 3.7 years for exercisable stock options at September 30, 2019. The intrinsic value of all outstanding in-the-money stock options and exercisable in-the-money stock options was \$5.8 million and \$5.3 million, respectively, at September 30, 2019. The aggregate intrinsic values of outstanding and exercisable options at September 30, 2019 were calculated based on the closing market price of TCF Financial's common stock on September 30, 2019 of \$38.07 per share less the

exercise price. Options with intrinsic values less than zero, or "out-of-the-money" options, are not included in the aggregate intrinsic value reported.

No cash was received from option exercises during the nine months ended September 30, 2019 and for the same period in 2018.

At September 30, 2019, unrecognized compensation expense related to stock options totaled \$0.7 million and is expected to be recognized over a remaining weighted average period of 1.88 years.

Note 22. Retirement Plans

TCF maintains four Legacy TCF employee benefit plans: (i) the TCF 401K Plan (the "TCF 401K"), (ii) the TCF 401k Supplemental Plan (the "Legacy TCF Supplemental Plan"), (iii) the TCF Cash Balance Pension Plan (the "Legacy TCF Pension Plan"), a defined benefit pension plan, and (iv) the TCF Postretirement Plan (the "Legacy TCF Postretirement Plan"), a postretirement benefit plan, each of which were discussed in Legacy TCF's Annual Report on Form 10-K for the year ended December 31, 2018.

TCF also maintains the Chemical employee benefit plans that existed before the Merger: (i) the Chemical Financial Corporation Nonqualified Postretirement Benefit Plan (the "Chemical Postretirement Benefit Plan"), a postretirement benefit plan, and (ii) the Chemical Financial Corporation 401k Savings Plan (the "Chemical 401k").

In addition, Chemical has a pension plan, the Chemical Pension Plan, which is a qualified defined-benefit, noncontributory pension plan. However, the termination of the Chemical Pension Plan was approved effective August 31, 2019. The discount rate was adjusted to 3.48% based on the remeasurement of the Chemical Pension Plan required due to the Merger and the termination. At the time of the Merger, as a result the pending termination, TCF recognized a prepaid asset representing the funded status of the Chemical Pension Plan, net of estimated settlement costs, and the balance previously in accumulated other comprehensive income was eliminated. The purchase accounting adjustment, as a result of the Merger, was reported in goodwill. The Chemical Pension Plan was fully funded as of September 30, 2019.

The Chemical Postretirement Benefit Plan provides medical and dental benefits, upon retirement, to a limited number of active and retired employees. The majority of the retirees are required to make contributions toward the cost of their benefits based on their years of credited service and age at retirement. Covered employees include those who were at least age 50 as of January 1, 2012, that retire at age 60 or older, have at least twenty-five years of service with Chemical and are participants in the active employee group health insurance plan. Eligible employees may also cover their spouse until age 65 as long as the spouse is not offered health insurance coverage through his or her employer. Employees and their spouses eligible to participate in the Chemical Postretirement Benefit Plan are required to make contributions toward the cost of their benefits upon retirement, with the contribution levels designed to cover the projected overall cost of these benefits over the long-term. Retiree contributions are generally adjusted annually. The accounting for these postretirement benefits anticipates changes in future cost-sharing features such as retiree contributions, deductibles, copayments and coinsurance. The benefits can be amended, modified or terminated by us at any time.

The Chemical 401k is available to all former Chemical employees that continue to be employed following the Merger Date, and provides tax deferred salary deductions and alternative investment options. We provide a safe harbor matching contribution of the participants elective deferrals up to a maximum of 6.0% of eligible compensation up to the maximum amount allowed under the Internal Revenue Code. The Chemical 401k provides the option to invest in TCF Financial common stock.

The Board of Directors approved the termination of the Legacy TCF Pension Plan effective November 1, 2019. The Legacy TCF Pension Plan was fully funded as of September 30, 2019. The weighted-average interest crediting rate was 2.24% as of September 30, 2019. TCF does not consolidate the assets and liabilities associated with the Legacy TCF Pension Plan.

The net periodic benefit plan (income) cost for defined benefit pension plans and postretirement benefit plans were as follows:

(In thousands)	Defined Benefit Pension Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Interest cost	\$ 1,046	\$ 246	\$ 1,574	\$ 738
Service cost	—	—	—	—
Contractual termination cost	—	—	—	—
Return on plan assets	(949)	(133)	(1,223)	(397)
Amortization of prior service credit	—	—	—	—
Amortization of unrecognized net loss	—	—	—	—
Recognized actuarial (gain) loss	—	—	—	—
Net periodic benefit plan (income) cost	\$ 97	\$ 113	\$ 351	\$ 341

(In thousands)	Postretirement Benefit Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Interest cost	\$ 41	\$ 28	\$ 101	\$ 83
Service cost	—	—	—	—
Recognized actuarial (gain) loss	—	—	—	—
Amortization of prior service cost	(11)	(12)	(35)	(35)
Amortization of unrecognized net loss	—	—	—	—
Net periodic benefit plan (income) cost	\$ 30	\$ 16	\$ 66	\$ 48

TCF made no cash contributions to the defined benefit pension plans during the three and nine months ended September 30, 2019 and 2018. TCF contributed \$0.1 million and \$0.3 million to the Legacy TCF Postretirement Plan during the three and nine months ended September 30, 2019, and \$0.1 million and \$0.3 million during the same periods in 2018.

The TCF match under both the Legacy TCF 401k and the Chemical 401k was \$4.3 million and \$11.4 million for the three and nine months ended September 30, 2019, and \$2.5 million and \$9.7 million during the same periods in 2018.

Note 23. Earnings Per Common Share

The number of shares issued and outstanding, earnings per share, additional paid-in-capital and all references to share quantities of TCF have been retrospectively adjusted to reflect the equivalent number of shares issued in the Merger. The computations of basic and diluted earnings per common share and the anti-dilutive shares outstanding not included in the computation of diluted earnings per share were as follows:

(Dollars in thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Basic earnings per common share				
Net income attributable to TCF Financial Corporation	\$ 22,148	\$ 86,196	\$ 183,069	\$ 218,706
Preferred stock dividends	2,494	2,494	7,481	9,094
Impact of preferred stock redemption ⁽¹⁾	—	—	—	3,481
Net income available to common shareholders	19,654	83,702	175,588	206,131
Less: Earnings allocated to participating securities	—	13	19	30
Earnings allocated to common stock	\$ 19,654	\$ 83,689	\$ 175,569	\$ 206,101
Weighted-average common shares outstanding used in basic earnings per common share calculation	128,575,171	83,762,625	97,876,262	84,522,519
Basic earnings per common share	\$ 0.15	\$ 1.00	\$ 1.79	\$ 2.44
Diluted earnings per common share				
Earnings allocated to common stock	\$ 19,654	\$ 83,689	\$ 175,569	\$ 206,101
Weighted-average common shares outstanding used in basic earnings per common share calculation	128,575,171	83,762,625	97,876,262	84,522,519
Net dilutive effect of:				
Non-participating restricted stock	73,698	—	139,795	—
Stock options	105,719	—	39,222	1,670
Warrants	—	45,438	—	266,935
Weighted-average common shares outstanding used in diluted earnings per common share calculation	128,754,588	83,808,063	98,055,279	84,791,124
Diluted earnings per common share	\$ 0.15	\$ 1.00	\$ 1.79	\$ 2.43
Anti-dilutive shares outstanding not included in the computation of diluted earnings per common share				
Non-participating restricted stock	1,369,025	1,058,202	1,369,025	1,058,202

(1) Represents the amount of deferred stock issuance costs originally recorded in preferred stock that were reclassified to retained earnings.

Note 24. Other Noninterest Expense

Other noninterest expense was as follows:

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Outside processing	\$ 12,084	\$ 5,052	\$ 23,475	\$ 15,936
Loan and lease expense	9,323	3,313	15,986	10,430
Professional fees	7,113	5,949	18,026	16,035
Advertising and marketing	7,101	7,674	19,229	22,075
FDIC insurance	6,298	4,376	11,708	12,165
Card processing and issuance costs	5,746	4,090	14,437	12,759
Consumer Financial Protection Bureau and OCC settlement charge	—	—	—	32,000
Other	40,111	25,231	91,920	79,908
Total other noninterest expense	\$ 87,776	\$ 55,685	\$ 194,781	\$ 201,308

Note 25. Reportable Segments

TCF's reportable segments are Consumer Banking, Commercial Banking and Enterprise Services. Consumer Banking is comprised of all of TCF's consumer-facing businesses and includes retail banking, consumer lending, wealth management and small business banking. Commercial Banking, previously named Wholesale Banking, is comprised of commercial and industrial and commercial real estate banking and lease financing. Enterprise Services is comprised of (i) corporate treasury, which includes TCF's investment and borrowing portfolios and management of capital, debt and market risks, (ii) corporate functions, such as information technology, risk and credit management, bank operations, finance, investor relations, corporate development, internal audit, legal and human capital management that provide services to the operating segments, (iii) the Holding Company and (iv) eliminations.

In connection with the Merger, effective August 1, 2019, TCF renamed its Wholesale Banking segment to Commercial Banking to align with the way TCF is now managed. In addition, activity that was related to small business banking and private banking were moved from the Wholesale Banking (now named Commercial Banking) segment to the Consumer Banking segment. The revised presentation of previously reported segment data has been applied retroactively to all periods presented in these financial statements.

TCF evaluates performance and allocates resources based on each reportable segment's net income or loss. The reportable segments follow GAAP as described in Note 1. Basis of Presentation, except for the accounting for intercompany interest income and interest expense, which are eliminated in consolidation and presenting net interest income on a fully tax-equivalent basis. TCF generally accounts for inter-segment sales and transfers at cost.

Certain information for each of TCF's reportable segments, including reconciliations of TCF's consolidated totals, was as follows:

(In thousands)	Consumer Banking	Commercial Banking	Enterprise Services	Consolidated
At or For the Three Months Ended September 30, 2019				
Net interest income (expense)	\$ 191,940	\$ 157,437	\$ 22,416	\$ 371,793
Provision for credit losses	4,489	22,699	—	27,188
Net interest income (expense) after provision for credit losses	187,451	134,738	22,416	344,605
Noninterest income	57,102	47,929	(10,773)	94,258
Noninterest expense	210,728	102,841	112,051	425,620
Income tax expense (benefit)	6,817	8,172	(26,724)	(11,735)
Income (loss) after income tax expense (benefit)	27,008	71,654	(73,684)	24,978
Income attributable to non-controlling interest	—	2,830	—	2,830
Preferred stock dividends	—	—	2,494	2,494
Net income (loss) available to common shareholders	\$ 27,008	\$ 68,824	\$ (76,178)	\$ 19,654
Total assets ⁽¹⁾	\$ 14,906,457	\$ 22,076,203	\$ 8,709,851	\$ 45,692,511
At or For the Three Months Ended September 30, 2018				
Net interest income (expense)	\$ 143,015	\$ 94,252	\$ 16,235	\$ 253,502
Provision (benefit) for credit losses	(953)	3,223	—	2,270
Net interest income (expense) after provision for credit losses	143,968	91,029	16,235	251,232
Noninterest income	66,621	44,934	509	112,064
Noninterest expense	162,034	77,863	6,526	246,423
Income tax expense (benefit)	11,613	12,813	3,608	28,034
Income (loss) after income tax expense (benefit)	36,942	45,287	6,610	88,839
Income attributable to non-controlling interest	—	2,643	—	2,643
Preferred stock dividends	—	—	2,494	2,494
Net income (loss) available to common shareholders	\$ 36,942	\$ 42,644	\$ 4,116	\$ 83,702
Total assets	\$ 8,226,522	\$ 11,553,453	\$ 3,124,810	\$ 22,904,785

(1) As a result of the Merger, we recorded \$1.1 billion of goodwill. Due to the timing of the Merger, we are in the process of completing our analysis of the allocation of goodwill across business segments, and, therefore, goodwill is presented as part of Enterprise Services at September 30, 2019.

(In thousands)	Consumer Banking	Commercial Banking	Enterprise Services	Consolidated
At or For the Nine Months Ended September 30, 2019				
Net interest income (expense)	\$ 470,738	\$ 350,848	\$ 58,693	\$ 880,279
Provision for credit losses	16,406	34,473	—	50,879
Net interest income (expense) after provision for credit losses	454,332	316,375	58,693	829,400
Noninterest income	183,767	132,883	(9,170)	307,480
Noninterest expense	520,007	267,147	128,390	915,544
Income tax expense (benefit)	26,529	30,271	(27,934)	28,866
Income (loss) after income tax expense (benefit)	91,563	151,840	(50,933)	192,470
Income attributable to non-controlling interest	—	9,401	—	9,401
Preferred stock dividends	—	—	7,481	7,481
Net income (loss) available to common shareholders	\$ 91,563	\$ 142,439	\$ (58,414)	\$ 175,588
Total assets	\$ 14,906,457	\$ 22,076,203	\$ 8,709,851	\$ 45,692,511
At or For the Nine Months Ended September 30, 2018				
Net interest income (expense)	\$ 429,132	\$ 289,315	\$ 36,895	\$ 755,342
Provision for credit losses	18,900	8,974	—	27,874
Net interest income (expense) after provision for credit losses	410,232	280,341	36,895	727,468
Total noninterest income	196,827	132,794	908	330,529
Total noninterest expense	511,915	229,094	23,433	764,442
Income tax expense (benefit)	23,037	40,505	2,541	66,083
Income (loss) after income tax expense (benefit)	72,107	143,536	11,829	227,472
Income attributable to non-controlling interest	—	8,766	—	8,766
Preferred stock dividends	—	—	9,094	9,094
Impact of preferred stock redemption	—	—	3,481	3,481
Net income (loss) available to common shareholders	\$ 72,107	\$ 134,770	\$ (746)	\$ 206,131
Total assets	\$ 8,226,522	\$ 11,553,453	\$ 3,124,810	\$ 22,904,785

Note 26. Commitments, Contingent Liabilities and Guarantees

Financial Instruments with Off-Balance Sheet Risk In the normal course of business, TCF enters into financial instruments with off-balance sheet risk, primarily to meet the financing needs of its customers. These financial instruments, which are issued or held for purposes other than trading, involve elements of credit and interest-rate risk in excess of the amounts recognized in the Consolidated Statements of Financial Condition.

TCF's exposure to credit loss, in the event of non-performance by the counterparty to the financial instrument is represented by the contractual amount of the commitments. TCF uses the same credit policies in making these commitments as it does for making direct loans. TCF evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained is based on a credit evaluation of the customer.

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

(In thousands)	At September 30, 2019	At December 31, 2018
Commitments to extend credit:		
Commercial	\$ 5,269,843	\$ 1,280,707
Consumer	2,266,913	1,627,960
Total commitments to extend credit	7,536,756	2,908,667
Standby letters of credit and guarantees on industrial revenue bonds	125,438	20,662
Total	\$ 7,662,194	\$ 2,929,329

Commitments to Extend Credit Commitments to extend credit are agreements to lend provided there is no violation of any condition in the contract. These commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since a certain amount of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. Collateral to secure any funding of these commitments predominantly consists of residential and commercial real estate mortgages.

Standby Letters of Credit and Guarantees on Industrial Revenue Bonds Standby letters of credit and guarantees on industrial revenue bonds are conditional commitments issued by TCF guaranteeing the performance of a customer to a third party. These conditional commitments expire in various years through 2039. The majority of these standby letters of credit are collateralized. Collateral held consists primarily of commercial real estate mortgages. Since the conditions under which TCF is required to fund these commitments may not materialize, the cash requirements are expected to be less than the total outstanding commitments.

Contingencies and Guarantees TCF has originated and sold certain loans, and additionally acquired the potential liability for those historical originated and sold loans by merged or acquired entities, for which the buyer has limited recourse to us in the event the loans do not perform as specified in the agreements. The outstanding balance and the maximum potential amount of undiscounted future payments that TCF could be required to make in the event of nonperformance by the borrower totaled \$0.7 million at September 30, 2019. In the event of nonperformance, TCF has rights to the underlying collateral securing the loans. At September 30, 2019, TCF had recorded a liability of \$0.1 million, in connection with the recourse agreements, in other liabilities.

In addition, TCF acquired certain Small Business Administration ("SBA") guaranteed loans in which the guaranteed portion had been sold to a third party investor. In the event these loans default and the SBA guaranty is no longer intact (i.e. an issue found to have occurred during the origination or the liquidation of the loans) TCF would be liable to make the loan whole to the third party investor. The maximum potential amount of undiscounted future payments that TCF could be required to make in the event of default by the borrower was \$17.6 million at September 30, 2019. In the event of default, TCF has rights to the underlying collateral securing the loans. At September 30, 2019, TCF had recorded a liability of \$0.9 million, in other liabilities.

Representations, Warranties and Contractual Liabilities In connection with TCF's residential mortgage loan sales, and the historical sales of merged or acquired entities, TCF makes certain representations and warranties that the loans meet certain criteria, such as collateral type, underwriting standards and the manner in which the loans will be serviced. TCF may be required to repurchase individual loans and/or indemnify the purchaser against losses if the loan fails to meet established criteria. In addition, some agreements contain a requirement to repurchase loans as a result of early payoffs by the borrower, early payment default of the borrower or the failure to obtain valid title. At September 30, 2019 and December 31, 2018 the liability recorded in connection with these representations and warranties was \$4.0 million and \$1.3 million, respectively, included in other liabilities.

Litigation Contingencies From time to time, TCF is a party to legal proceedings arising out of its lending, leasing and deposit operations, including foreclosure proceedings and other collection actions as part of its lending and leasing collections activities. TCF may also be subject to regulatory examinations and enforcement actions brought by federal regulators, including the SEC, the Federal Reserve, the OCC and the Consumer Financial Protection Bureau which may impose sanctions on TCF for failures related to regulatory compliance. From time to time borrowers and other customers, and employees and former employees have also brought actions against TCF, in some cases claiming substantial damages. TCF and other financial services companies are subject to the risk of class action litigation. Litigation is often unpredictable and the actual results of litigation cannot be determined and therefore the ultimate resolution of a matter and the possible range of loss associated with certain potential outcomes cannot be established. Based on our current understanding of TCF's pending legal proceedings, management does not believe that judgments or settlements arising from pending or threatened legal matters, individually or in the aggregate, would have a material adverse effect on the consolidated financial position, operating results or cash flows of TCF.

Note 27. Parent Company Financial Information

TCF Financial's condensed statements of financial condition, income and cash flows were as follows:

Condensed Statements of Financial Condition

(In thousands)	September 30, 2019		December 31, 2018	
Assets				
Cash and cash equivalents	\$	165,457	\$	91,132
Premises and equipment, net		3,883		78
Deferred tax asset		13,485		2,974
Investment in TCF Bank		5,483,484		2,426,329
Accounts receivable from TCF Bank		19,849		23,780
Other assets		25,823		1,201
Total assets	\$	5,711,981	\$	2,545,494
Liabilities and Equity				
Long term borrowings	\$	19,005	\$	—
Other liabilities		22,872		7,693
Total liabilities		41,877		7,693
Equity		5,670,104		2,537,801
Total liabilities and equity	\$	5,711,981	\$	2,545,494

Condensed Statements of Income

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Interest income	\$ 89	\$ 48	\$ 166	160
Interest expense	199	—	199	—
Net interest income	(110)	48	(33)	160
Noninterest income				
Dividends from TCF Bank	—	32,001	150,001	331,000
Management fees	—	—	—	—
Other	1,979	5,383	8,742	14,352
Total noninterest income	1,979	37,384	158,743	345,352
Noninterest expense				
Compensation and employee benefits	4,838	4,739	12,255	15,320
Occupancy and equipment	141	82	296	220
Other	1,675	1,420	3,689	4,186
Total noninterest expense	6,654	6,241	16,240	19,726
Income (loss) before income tax benefit and equity in undistributed earnings (loss) of TCF Bank	(58,744)	31,191	77,970	325,786
Income tax benefit	11,409	116	14,572	1,633
Income before equity in undistributed earnings (loss) of TCF Bank	(47,335)	31,307	92,542	327,419
Equity in undistributed earnings (loss) of TCF Bank	69,483	54,892	90,527	(108,713)
Net income	22,148	86,199	183,069	218,706
Preferred stock dividends	2,494	2,493	7,482	12,574
Impact of preferred stock redemption	—	—	—	—
Net income available to common shareholders	\$ 19,654	\$ 83,706	\$ 175,587	\$ 206,132

Condensed Statements of Cash Flows

(In thousands)	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities		
Net income	\$ 183,069	\$ 218,706
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Equity in undistributed (earnings) loss of TCF Bank	(90,527)	108,713
Share-based compensation expense	17,762	14,041
Depreciation and amortization	99	26
Provision (benefit) for deferred income taxes	14	—
Net (losses) gains on sales of assets	(8)	(387)
Net change in other assets	(887)	975
Net change in other liabilities	(13,104)	(374)
Other, net	(2,756)	(100)
Net cash provided by (used in) operating activities	93,662	341,600
Cash flows from investing activities		
Purchases of premises and equipment and lease equipment	(51)	(3)
Proceeds from sales of premises and equipment	28	17
Net cash acquired in business combination	155,154	—
Other, net	—	665
Net cash provided by (used in) investing activities	155,131	679
Cash flows from financing activities		
Redemption of Series B preferred stock	—	(100,000)
Repurchases of common stock	(58,805)	(149,912)
Common shares sold to TCF employee benefit plans	—	715
Dividends paid on preferred stock	(7,482)	(9,094)
Dividends paid on common stock	(102,368)	(74,916)
Payments related to tax-withholding upon conversion of share-based awards	(5,813)	(6,563)
Exercise of stock options	—	(998)
Net cash provided by (used in) financing activities	(174,468)	(340,768)
Net change in cash and cash equivalents	74,325	1,511
Cash and cash equivalents at beginning of period	91,132	80,471
Cash and cash equivalents at end of period	\$ 165,457	\$ 81,982

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

Forward-looking Information

Any statements contained in this Quarterly Report on Form 10-Q regarding the outlook for our businesses and our respective markets, such as projections of future performance, targets, guidance, statements regarding our plans and objectives, forecasts of market trends and other matters are forward-looking statements based on our assumptions and beliefs. Such statements may be identified by such words or phrases as "will," "believe," "expect," "will likely result," "are expected to," "will continue," "outlook," "will benefit," "is anticipated," "estimate," "project," "management believes" or similar expressions. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those discussed in such statements and no assurance can be given that the results in any forward-looking statement will be achieved. For these statements, TCF claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Any forward-looking statement speaks only as of the date on which it is made and we disclaim any obligation to subsequently revise any forward-looking statement to reflect events or circumstances after such date or to reflect the occurrence of anticipated or unanticipated events, except as required by law.

Certain factors could cause our future results to differ materially from those expressed or implied in any forward-looking statements contained herein. These factors include the factors discussed in Item 1A. in each of TCF's and Legacy TCF's Annual Reports on Form 10-K for the year ended December 31, 2018, and in TCF's other SEC filings, including the Joint Proxy Statement/Prospectus regarding the Merger that TCF filed with the SEC on May 3, 2019 pursuant to Rule 424(b)(3), the factors discussed below and any other cautionary statements, written or oral, which may be made or referred to in connection with any such forward-looking statements. Since it is not possible to foresee all such factors, these factors should not be considered as complete or exhaustive: deterioration in general economic, political and banking industry conditions; cyber-security breaches, hacking, denial of service, security breaches, loss or theft of information, or other cyber-attacks that disrupt our business operations or damage our reputation; fluctuation in interest rates that result in decreases in the value of assets or a mismatch between yields earned on our interest-earning assets and the rates paid on our deposits and borrowings; lack of access to liquidity; inability to pay and receive dividends; adverse effects related to competition from traditional competitors, non-bank providers of financial services and new technologies; soundness of other financial institutions and other counterparty risk, including the risk of default, operational disruptions, security breaches, or diminished availability of counterparties who satisfy our credit quality requirements; adverse developments affecting our branches, including supermarket branches; risks related to developing new products, markets or lines of business; the possible unavailability of LIBOR as a published benchmark rate and the potential uncertainties it could create for market participants, including TCF; changes in the allowance for loan and lease losses dictated by new market conditions, regulatory requirements or accounting standards, including CECL; new consumer protection and supervisory requirements or regulatory reform related to capital, leverage, liquidity or risk management; adverse changes in monetary, fiscal or tax policies; heightened regulatory practices or requirements related to enterprise risk management, the Bank Secrecy Act and anti-money laundering compliance activity; deficiencies in our compliance programs or risk mitigation frameworks; the effect of any negative publicity or reputational damage; technological or operational difficulties; failure to keep pace with technological change, including with respect to customer demands or system upgrades; risks related to our loan sales activity; dependence on accurate and complete information from customers and counterparties; the failure to attract and retain key employees; inability to successfully execute on our growth strategy through acquisitions or expanding existing business relationships; changes in accounting standards or interpretations of existing standards; adverse federal, state or foreign tax assessments; risks associated with actual or potential litigation or investigations by customers, regulatory agencies or others; ineffective internal controls; the effects of man-made and natural disasters, any of which may negatively affect our operations and/or our customers; the possibility that the anticipated benefits of the Merger, including anticipated cost savings and strategic gains, are not realized when expected or at all, including as a result of the impact of, or problems arising from, the integration of the two companies or as a result of the strength of the economy, competitive factors in the areas where TCF does business, or as a result of other unexpected factors or events; the impact of purchase accounting with respect to the Merger, or any change in the assumptions used regarding the assets purchased and liabilities assumed to determine their fair value; diversion of management's attention from ongoing business operations and opportunities as a result of the Merger; potential adverse reactions or changes to business or employee relationships, including those resulting from the completion of the Merger; the integration of the businesses and operations of Legacy TCF and Chemical may take longer than anticipated or be more costly than anticipated or have unanticipated adverse results relating to our businesses; business disruptions resulting from the Merger; and the potential impact of the Merger on relationships with third parties, including customers, vendors, employees and competitors.

Overview

On August 1, 2019 (the "Merger Date"), TCF Financial Corporation, a Delaware corporation ("Legacy TCF"), merged with and into Chemical Financial Corporation, a Michigan corporation ("Chemical"), with Chemical continuing as the surviving corporation (the "Merger"). Immediately following the Merger, Chemical's wholly owned bank subsidiary, Chemical Bank, a Michigan state-chartered bank, merged with and into Legacy TCF's wholly owned bank subsidiary, TCF National Bank, a national banking association, with TCF National Bank surviving the merger ("TCF Bank"). Upon completion of the Merger, Chemical was renamed TCF Financial Corporation. TCF Financial Corporation (together with its direct and indirect subsidiaries, "we," "us," "our," "TCF" or the "Corporation"), is a financial holding company, headquartered in Detroit, Michigan. TCF Bank with its main office in Sioux Falls, South Dakota. References herein to "TCF Financial" or the "Holding Company" refer to TCF Financial Corporation on an unconsolidated basis.

The Merger was accounted for as a reverse merger using the acquisition method of accounting, which means that for accounting and financial reporting purposes, Legacy TCF was deemed to have acquired Chemical in the Merger, even though Chemical was the legal acquirer. Accordingly, Legacy TCF's historical financial statements are the historical financial statements of the combined company for all periods before the Merger Date. Our results of operations for the third quarter of 2019 and the first nine months of 2019 include the results of operations of Chemical on and after August 1, 2019. Results for periods before August 1, 2019 reflect only those of Legacy TCF and do not include the results of operations of Chemical. Accordingly, comparisons of our results for the third quarter of 2019 and the first nine months of 2019 with those of prior periods may not be meaningful. The number of shares issued and outstanding, earnings per share, additional paid-in-capital and all references to share quantities of TCF have been retrospectively adjusted to reflect the equivalent number of shares issued in the Merger. See Note 2. Merger of the Notes to Consolidated Financial Statements for further information. In addition, the assets, including the intangible assets identified, and liabilities of Chemical as of the Merger Date have been recorded at their estimated fair value and added to those of Legacy TCF.

As of September 30, 2019, TCF had more than 500 branches primarily located in Michigan, Illinois and Minnesota with additional locations in Arizona, Colorado, Indiana, Ohio, South Dakota and Wisconsin. TCF also conducts business across all 50 states and Canada through its specialty lending and leasing businesses. Through its direct subsidiaries, TCF provides consumer and commercial banking, trust and wealth management, and specialty leasing and lending products and services to consumers, small businesses and commercial customers.

Net interest income, the difference between interest income earned on loans and leases, investments securities and other earning assets (interest income) and interest paid on deposits and borrowings (interest expense), represented 79.8% and 74.1% of our total revenue for the three and nine months ended September 30, 2019, respectively, compared with 69.3% and 69.6% for the same periods in 2018. Net interest income can change significantly from period to period based on interest rates, customer prepayment patterns and the volume and mix of interest earning assets, noninterest-bearing deposits and interest-bearing liabilities. We manage the risk of changes in interest rates on our net interest income through TCF's Asset & Liability Committee ("ALCO") and through related interest rate risk monitoring and management policies. See "Part I, Item 3. Quantitative and Qualitative Disclosures about Market Risk" for further discussion.

Noninterest income is a significant source of our revenue and an important component of our results of operations. The significant components of noninterest income are from leasing revenue, fees and service charges on deposit accounts and card and ATM revenue. Leasing revenue generates noninterest income primarily from operating and sales-type leases. Providing a wide range of consumer banking services is an integral component of our business philosophy. Primary drivers of fees and service charges include the number of customers we attract, the customers' level of engagement and the frequency with which the customer uses our solutions.

The following portions of this Management's Discussion and Analysis of Financial Condition and Results of Operations ("Management's Discussion and Analysis") focus in more detail on the results of operations for the three and nine months ended September 30, 2019 and 2018 and on information about TCF's financial condition, loan and lease portfolio, liquidity management, capital and other matters. This discussion should be read in conjunction with the Consolidated Financial Statements and accompanying notes appearing in this report and in conjunction with the Consolidated Financial Statements and related notes and disclosures in the Legacy TCF 2018 Annual Report on Form 10-K filed as Exhibit 99.1 to TCF's Current Report on Form 8-K filed with the SEC on August 1, 2019.

LIBOR Transition

In 2017, the U.K. Financial Conduct Authority (the "FCA") noted that market conditions raised serious questions about the future sustainability of LIBOR benchmarks. Many financial products, including mortgages and other consumer loans, commercial loans, corporate loans, various types of debt, derivatives and other securities, reference LIBOR to determine their applicable interest rate. The expected cessation of publication of LIBOR will impact the mechanics of floating rate financial instruments and contracts that reference LIBOR and mature after 2021. Certain of these financial products do not provide for alternative reference rates, and those that do may differ from the prior benchmark rates. The FCA subsequently announced that it had secured voluntary panel bank support of LIBOR through only 2021. As a result, central banks and regulators have convened working groups to find a suitable replacement index for LIBOR, and TCF is working to identify, assess and monitor risks associated with the expected discontinuation or unavailability of LIBOR, achieve operational readiness and engage impacted customers in connection with the transition.

Critical Accounting Estimates

TCF's Consolidated Financial Statements are prepared in accordance with United States generally accepted accounting principles ("GAAP"), Securities and Exchange Commission ("SEC") rules and interpretive releases and general practices within the industry in which we operate. Application of these principles requires management to make estimates, assumptions and complex judgments that affect the amounts reported in our Consolidated Financial Statements and accompanying notes. These estimates, assumptions and judgments are based on information available as of the date of the financial statements; accordingly, as this information changes, our Consolidated Financial Statements could reflect different estimates, assumptions and judgments. Actual results could differ significantly from those estimates. Certain policies inherently have a greater reliance on the use of estimates, assumptions and judgments and, as such, have a greater possibility of producing results that could be materially different than originally reported. We use third-party sources to assist us with developing certain estimates, assumptions and judgments regarding certain amounts reported in our Consolidated Financial Statements and accompanying notes. When using third-party sources, management remains responsible for complying with GAAP. To execute management's responsibilities, we have processes in place to develop an understanding of the third-party methodologies and to design and implement specific internal controls over valuation.

As a result of the Merger, we have updated our critical accounting estimates. We have identified the determination of the allowance for loan and lease losses, accounting for business combinations (including fair value of purchased loans), and the evaluation of goodwill impairment to be the accounting areas that require the most subjective or complex judgments and, as such, could be most subject to revision as new or additional information becomes available or circumstances change, including overall changes in the economic climate and/or market interest rates. Therefore, we consider them to be critical accounting estimates and discuss them directly with the Audit Committee of our board of directors.

Our significant accounting estimates related to the allowance for loan and lease losses is more fully described in Note 2 to the Legacy TCF audited Consolidated Financial Statements and notes thereto at and for the year ended December 31, 2018, filed as Exhibit 99.1 to TCF's Current Report on Form 8-K filed with the SEC on August 1, 2019.

Updates to Critical Accounting Estimates

Accounting for Business Combinations

Pursuant to the guidance of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 805, Business Combinations ("ASC 805"), we recognize assets acquired, including identified intangible assets, and the liabilities assumed in acquisitions at their fair values as of the acquisition date, with the merger-related transaction costs expensed in the period incurred. Determining the fair value of assets acquired, including identified intangible assets, and liabilities assumed often involves estimates based on third-party valuations, such as appraisals, or internal valuations based on discounted cash flow analysis or other valuation techniques that may include estimates of attrition, inflation, asset growth rates, discount rates, multiples of earnings or other relevant factors. In addition, the determination of the useful lives over which an intangible asset will be amortized is subjective.

Accounting for Loans Acquired in a Business Combination

We record loans and leases acquired in a business combination at fair value at the acquisition date and the fair value discount or premium is recognized as an adjustment to yield over the remaining life of each loan or lease. Credit

discounts are included in the determination of fair value; therefore, an allowance for loan and lease losses is not recorded at the acquisition date. Purchased loans are evaluated at the acquisition date and classified as either (i) loans purchased without evidence of deteriorated credit quality since origination, referred to as purchased loans, or (ii) loans purchased with evidence of deteriorated credit quality since origination for which it is probable that all contractually required payments will not be collected, referred to as purchased credit impaired ("PCI") loans.

PCI loans are considered to be impaired and are accounted for under ASC Topic 310-30, Loans and Debt Securities Acquired with Deteriorated Credit Quality ("ASC 310-30"). In determining whether a purchased loan should be classified as a PCI loan, we must make numerous assumptions, interpretations and judgments using internal and third-party credit quality information to determine whether or not it is probable that we will be able to collect all contractually required payments. This is a point in time assessment and is inherently subjective due to the nature of the available information and judgment involved. Evidence of credit quality deterioration as of the acquisition date may include statistics such as past due and nonaccrual status, recent borrower credit scores and loan-to-value percentages. The excess of cash flows expected to be collected over the estimated fair value of PCI loans is referred to as the accretable yield and is accreted into interest income over the estimated remaining life of the loan using the effective yield method. We estimate the expected cash flows based on the expected remaining life of the loans, which includes the effects of estimated prepayments and estimates of future credit losses. Cash flow evaluations are inherently subjective as they require material estimates, all of which may be susceptible to significant change. The difference between the contractually required payments and the cash flows expected to be collected at acquisition, is referred to as the nonaccretable difference.

We do not classify PCI loans as nonperforming loans subsequent to acquisition because the loans are recorded at net realizable value based on the principal and interest expected to be collected on the loan. Judgment is required to estimate the timing and amount of cash flows expected to be collected when the loans are not performing in accordance with the original contractual terms.

Purchased loans outside the scope of ASC 310-30 are accounted for under ASC 310-20, Receivables - Nonrefundable Fees and Other Costs. For purchased loans, credit discounts representing the principal losses expected over the life of the loan are a component of the initial fair value and the discount is accreted to interest income over the life of the loan. Subsequent to the purchase date, the method used to evaluate the sufficiency of the credit discount is similar to originated loans, and if necessary, additional reserves are recognized in the allowance for loan and lease losses.

Goodwill

Goodwill represents the excess of the purchase price of our business acquisition and other purchases of bank branches and other businesses over the fair value of the net assets acquired. Goodwill totaled \$1.3 billion at September 30, 2019, compared with \$154.8 million at December 31, 2018. The increase in goodwill during the nine months ended September 30, 2019 was due to the Merger. Goodwill is not amortized, but rather is tested by management annually for impairment, or more frequently if triggering events occur and indicate potential impairment, in accordance with ASC Topic 350-20, Goodwill (ASC 350-20). ASC 350-20 allows an entity to assess qualitative factors to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. ASC 350-20 also allows an entity to bypass the qualitative assessment approach and determine if goodwill is impaired utilizing a quantitative assessment approach.

In evaluating whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount, we assess relevant events and circumstances, including macroeconomic conditions, industry and market considerations, overall financial performance, changes in the composition or carrying amount of assets and liabilities, the market price of our common stock, and other relevant factors. TCF has historically performed its annual assessment as of December 31st. As a result of its Merger, TCF has elected to perform its annual test in the fourth quarter utilizing September 30th financial data. The change in assessment date is not material to the financial statements and allows management more time to perform the analysis of the significant goodwill generated as a result of the merger. We do not believe that any events or circumstances changed as of September 30, 2019 that would indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. However, we could incur impairment charges related to goodwill in the future due to changes in financial results or other matters that could affect the fair value of our reporting units.

Selected Financial Data

The following table provides our selected financial information for the periods and at the dates indicated. This information should be read together with our Consolidated Financial Statements and the related notes thereto, which are included elsewhere in this report. Our financial results were significantly impacted by the Merger, and periods before the Merger reflect financial data of Legacy TCF, while periods after the Merger reflect financial data for the combined company. Earnings per share and share quantities of TCF have been retrospectively adjusted to reflect the equivalent number of shares issued in the Merger. As noted in the following table, we have included certain non-GAAP financial measures, which should be read in conjunction with the section entitled "Non-GAAP Financial Measures" and the accompanying table entitled "Reconciliation of Non-GAAP Operating Results," for reconciliation of non-GAAP measures to the most directly comparable GAAP financial measure. Historical data is not necessarily indicative of TCF's future results of operations or financial condition.

(Dollars in thousands, except per share data)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2019	2018	2019	2018
Consolidated Income:				
Interest income	\$ 459,808	\$ 291,707	\$ 1,077,483	\$ 861,420
Interest expense	88,015	38,205	197,204	106,078
Net interest income	371,793	253,502	880,279	755,342
Noninterest income	94,258	112,064	307,480	330,529
Total revenue	466,051	365,566	1,187,759	1,085,871
Provision for credit losses	27,188	2,270	50,879	27,874
Noninterest expense	425,620	246,423	915,544	764,442
Income before income tax expense	13,243	116,873	221,336	293,555
Income tax (benefit) expense	(11,735)	28,034	28,866	66,083
Income attributable to non-controlling interest	2,830	2,643	9,401	8,766
Net income attributable to TCF	22,148	86,196	183,069	218,706
Preferred stock dividends	2,494	2,494	7,481	9,094
Impact of preferred stock redemption	—	—	—	3,481
Net income available to common shareholders	\$ 19,654	\$ 83,702	\$ 175,588	\$ 206,131
Earnings per common share:				
Basic	\$ 0.15	\$ 1.00	\$ 1.79	\$ 2.44
Diluted	0.15	1.00	1.79	2.43
Financial Ratios:				
Return on average assets ("ROAA") ⁽¹⁾	0.26 %	1.55 %	0.88 %	1.32 %
Return on average common equity ("ROACE") ⁽¹⁾	1.75	14.44	7.50	11.80
Return on average tangible common equity ("ROATCE") ⁽¹⁾⁽²⁾	2.68	15.76	9.05	12.89
Net interest margin (FTE) ⁽¹⁾⁽³⁾⁽⁴⁾	4.14	4.73	4.36	4.70
Dividend payout ratio	233.33	29.41	52.54	36.59
Efficiency ratio	91.32	67.41	77.08	70.40
Credit Quality Ratios:				
Net charge-offs as a percentage of average loans and leases ⁽¹⁾	0.39	0.15	0.36	0.24
Adjusted Financial Results (non-GAAP):				
Adjusted net income attributable to TCF ⁽²⁾	\$ 128,301	\$ 86,196	\$ 299,638	\$ 244,215
Adjusted diluted earnings per common share ⁽²⁾	\$ 0.98	\$ 1.00	\$ 2.98	\$ 2.73
Adjusted ROAA ⁽¹⁾⁽²⁾	1.34 %	1.55 %	1.41 %	1.46 %
Adjusted ROACE ⁽¹⁾⁽²⁾	11.21	14.44	12.48	13.26
Adjusted ROATCE ⁽¹⁾⁽²⁾	14.96	15.76	14.90	14.47
Adjusted efficiency ratio (non-GAAP) ⁽²⁾	58.74	64.91	61.57	65.08

(1) Annualized.

(2) See section entitled "Non-GAAP Financial Measures" for further information.

(3) Net interest income on a fully tax-equivalent ("FTE") basis divided by average interest-earning assets.

(4) Presented on a tax-equivalent basis using a 21% tax rate for each period presented.

(Dollars in thousands)	At 9/30/2019	At December 31, 2018
Consolidated Financial Condition:		
Loans and leases	\$ 33,510,752	\$ 19,073,020
Total assets	45,692,511	23,699,612
Deposits	35,286,074	18,903,686
Borrowings	3,467,782	1,449,472
Total equity	5,693,417	2,556,260
Financial Ratios:		
Common equity to assets	12.04%	9.99%
Tangible common equity as a percent of tangible assets (non-GAAP) ⁽¹⁾	9.09%	9.32%
Total risk-based capital ratio	12.63%	13.38%
Book value per common share	\$ 35.82	\$ 26.85
Tangible book value per common share (non-GAAP) ⁽¹⁾	26.18	24.87
Credit Quality Ratios:		
Nonaccrual loans and leases as a percentage of total loans and leases	0.54%	0.56%
Nonperforming assets as a percentage of total loans and leases and other real estate owned	0.62%	0.65%
Allowance for loan and lease losses as a percentage of total nonaccrual loans and leases	66.67%	148.65%

(1) See section entitled "Non-GAAP Financial Measures" for further information.

Results of Operations

Performance Summary TCF reported net income of \$22.1 million and \$183.1 million for the three and nine months ended September 30, 2019, respectively, compared with \$86.2 million and \$218.7 million for the same periods in 2018. For the three and nine months ended September 30, 2019, net income included merger-related expenses of \$111.3 million in addition to non-core items of \$41.1 million. Non-core items, for both the three and nine months ended September 30, 2019, included the loss on transfer of legacy TCF auto finance portfolio to held-for-sale (\$19.3 million), the termination of interest rate swaps (\$17.3 million), the write-down of company-owned vacant land parcels due to an intent to sell (\$5.9 million), and loan servicing rights impairment (\$4.5 million), partially offset by the gain on sale of certain investment securities (\$5.9 million). Net income included non-core items for the nine months ended September 30, 2018 a \$32.0 million charge related to the settlement with the Consumer Financial Protection Bureau (the "CFPB") and Office of the Comptroller of the Currency (the "OCC"). Adjusted net income, excluding merger-related expenses and the identified non-core items, net of tax, a non-GAAP financial measure, was \$128.3 million and \$299.6 million for the three and nine months ended September 30, 2019, respectively, compared to \$86.2 million and \$244.2 million for the same periods in 2018. See "Non-GAAP Financial Measures" in this Management's Discussion and Analysis for further information.

TCF reported diluted earnings per common share of \$0.15 and \$1.79 for the three and nine months ended September 30, 2019, respectively, compared with \$1.00 and \$2.43 for the same periods in 2018. Adjusted diluted earnings per common share, a non-GAAP financial measure, for the three and nine months ended September 30, 2019 was \$0.98 and \$2.98, respectively, excluding merger-related expenses and non-core items. Adjusted diluted earnings per common share, a non-GAAP financial measure, for the three and nine months ended September 30, 2018 was \$1.00 and \$2.73, respectively. See "Non-GAAP Financial Measures" in this Management's Discussion and Analysis for further information.

The following table provides TCF's financial ratios and the adjusted ratios, a non-GAAP financial measure which excludes merger expenses and non-core items.

Summary of Financial Ratios

	Three Months Ended September 30,		Nine Months Ended September 30,		Change From	
	2019	2018	2019	2018	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2018
(Dollars in thousands, except per share data)						
Return on average assets ("ROAA") ⁽¹⁾	0.26%	1.55%	0.88%	1.32%	(129) bps	(44) bps
ROACE ⁽¹⁾	1.75	14.44	7.50	11.80	(1,269)	(430)
ROATCE (non-GAAP) ⁽¹⁾⁽²⁾	2.68	15.76	9.05	12.89	(1,308)	(384)
Adjusted Financial Results (non-GAAP)						
Adjusted ROAA ⁽¹⁾⁽²⁾	1.34%	1.55%	1.41%	1.46%	(21) bps	(5) bps
Adjusted ROACE ⁽¹⁾⁽²⁾	11.21	14.44	12.48	13.26	(323)	(78)
Adjusted ROATCE ⁽¹⁾⁽²⁾	14.96	15.76	14.90	14.47	(80)	43

(1) Annualized.

(2) See section entitled "Non-GAAP Financial Measures" in this Management's Discussion and Analysis for further information.

Consolidated Income Statement Analysis

Net Interest Income Net interest income was \$371.8 million and \$880.3 million for the three and nine months ended September 30, 2019, respectively, compared with \$253.5 million and \$755.3 million for the same periods in 2018. Net interest income, our largest source of net revenue (net interest income plus noninterest income), represented 79.78% and 74.11% of our total revenue for the three and nine months ended September 30, 2019, respectively, compared with 69.35% and 69.56% for the same periods in 2018. The increases in net interest income for the three and nine months ended September 30, 2019, compared to the same periods in 2018, were primarily attributable to the increase in interest-earning assets acquired in the Merger, partially offset by the increase in interest-bearing liabilities acquired in the Merger.

Net interest income, on a fully tax-equivalent ("FTE") basis, is the difference between interest income and interest expense adjusted for the tax benefit received on tax-exempt loans, leases and investment securities. Net interest margin (FTE) is calculated by dividing net interest income (FTE) by average interest-earning assets, expressed as a percentage, annualized as applicable. Net interest income and net interest margin are affected by (i) changes in prevailing short- and long-term interest rates, (ii) loan, lease and deposit pricing strategies and competitive conditions, (iii) the volume and mix of interest-earning assets, noninterest-bearing deposits and interest-bearing liabilities, (iv) the level of nonaccrual loans and leases and other real estate owned and (v) the impact of modified loans and leases. Net interest margin (FTE) was 4.14% and 4.36% for the three and nine months ended September 30, 2019, respectively, compared with 4.73% and 4.70% for the same periods in 2018. The decrease in net interest margin (FTE) for the three and nine months ended September 30, 2019, compared to the same periods in 2018, was primarily due to a decrease in the yield earned on loans and leases added as a result of the lower average yields added to the portfolio through the Merger.

The following tables present the average balances of our major categories of assets and liabilities, interest income and expense on a FTE basis, average interest rates earned and paid on the assets and liabilities, net interest income (FTE), net interest spread and net interest margin for the three months ended September 30, 2019 and September 30, 2018 and for the nine months ended September 30, 2019 and September 30, 2018. The presentation of net interest income on a FTE basis is not in accordance with GAAP but is customary in the banking industry. This non-GAAP measure ensures comparability of net interest income arising from both taxable and tax-exempt loans and investment securities.

	Three Months Ended September 30,					
	2019			2018		
(Dollars in thousands)	Average Balance	Interest ⁽¹⁾	Yields and Rates ⁽¹⁾⁽²⁾	Average Balance	Interest ⁽¹⁾	Yields and Rates ⁽¹⁾⁽²⁾
Assets:						
Federal Home Loan Bank and Federal Reserve Bank stocks	\$ 230,767	\$ 806	1.39%	\$ 87,485	\$ 1,057	4.81%
Investment securities held-to-maturity	143,078	602	1.68	153,652	988	2.57
Investment securities available-for-sale:						
Taxable	4,232,878	30,436	2.88	1,525,665	10,511	2.76
Tax-exempt ⁽³⁾	643,576	4,283	2.66	823,854	5,478	2.66
Loans and leases held-for-sale	118,482	1,408	4.74	216,669	3,625	6.64
Loans and leases ⁽¹⁾⁽³⁾⁽⁴⁾	29,503,475	418,960	5.62	18,416,310	270,129	5.82
Interest-bearing deposits with banks and other	933,014	5,800	2.44	218,771	2,031	3.69
Total interest-earning assets	35,805,270	462,295	5.11	21,442,406	293,819	5.44
Other assets	3,289,096			1,461,998		
Total assets	\$ 39,094,366			\$ 22,904,404		
Liabilities and Equity:						
Noninterest-bearing deposits	\$ 6,564,195			\$ 3,874,421		
Interest-bearing deposits:						
Checking	4,805,843	5,520	0.46	2,427,288	234	0.04
Savings	7,676,165	14,110	0.73	5,620,161	4,994	0.35
Money market	3,490,922	13,037	1.48	1,496,223	2,941	0.78
Certificates of deposit	7,320,720	38,233	2.07	4,868,286	19,310	1.57
Total interest-bearing deposits	23,293,650	70,900	1.21	14,411,958	27,479	0.76
Total deposits	29,857,845	70,900	0.94	18,286,379	27,479	0.60
Borrowings:						
Short-term borrowings	1,884,228	5,345	1.11	3,357	21	2.44
Long-term borrowings	1,472,150	11,769	3.17	1,351,585	10,705	3.13
Total borrowings	3,356,378	17,114	2.01	1,354,942	10,726	3.13
Total interest-bearing liabilities	26,650,028	88,014	1.31	15,766,900	38,205	0.96
Total deposits and borrowings	33,214,223	88,014	1.05	19,641,321	38,205	0.77
Accrued expenses and other liabilities	1,197,014			751,100		
Total liabilities	34,411,237			20,392,421		
Total TCF Financial Corporation shareholders' equity	4,657,613			2,488,435		
Non-controlling interest in subsidiaries	25,516			23,548		
Total equity	4,683,129			2,511,983		
Total liabilities and equity	\$ 39,094,366			\$ 22,904,404		
Net interest spread (FTE)			4.06			4.67
Net interest income (FTE) and net interest margin (FTE)		\$ 374,281	4.14		\$ 255,614	4.73
Reconciliation to Reported Net Interest Income						
Net interest income (FTE)		\$ 374,281			\$ 255,614	
Adjustments for taxable equivalent interest ⁽¹⁾⁽³⁾						
Loans and leases		\$ (1,590)			\$ (962)	
Tax-exempt investment securities		(898)			(1,150)	
Total FTE adjustments		(2,488)			(2,112)	
Net interest income (GAAP)		\$ 371,793			\$ 253,502	
Net interest margin (GAAP)		4.12%			4.69%	

(1) Interest and yields are presented on a FTE basis.

(2) Annualized.

(3) The yield on tax-exempt loans, leases and investment securities available-for-sale is computed on a FTE basis using a statutory federal income tax rate of 21%.

(4) Average balances of loans and leases include nonaccrual loans and leases and are presented net of unearned income.

	Nine Months Ended September 30,					
	2019			2018		
(Dollars in thousands)	Average Balance	Interest ⁽¹⁾	Yields and Rates ⁽¹⁾⁽²⁾	Average Balance	Interest ⁽¹⁾	Yields and Rates ⁽¹⁾⁽²⁾
Assets:						
Federal Home Loan Bank and Federal Reserve Bank stocks	\$ 149,801	\$ 2,860	2.55%	\$ 90,600	\$ 2,698	3.98%
Investment securities held-to-maturity	145,627	2,061	1.89	156,170	3,005	2.57
Investment securities available-for-sale:						
Taxable	3,029,754	67,684	2.98	1,258,708	24,487	2.59
Tax-exempt ⁽³⁾	461,499	9,210	2.66	824,551	16,444	2.66
Loans and leases held-for-sale	71,739	2,832	5.27	108,992	5,281	6.48
Loans and leases ⁽¹⁾⁽³⁾⁽⁴⁾	22,681,170	987,504	5.80	18,918,591	809,751	5.71
Interest-bearing deposits with banks and other	494,007	10,878	2.92	225,203	6,023	3.58
Total interest-earning assets	27,033,597	1,083,029	5.33	21,582,815	867,689	5.36
Other assets	2,249,678			1,448,293		
Total assets	\$29,283,275			\$23,031,108		
Liabilities and Equity:						
Noninterest-bearing deposits	\$ 4,831,271			\$ 3,833,543		
Interest-bearing deposits:						
Checking	3,256,409	6,347	0.26	2,449,723	466	0.03
Savings	6,799,432	37,094	0.73	5,520,287	11,895	0.29
Money market	2,144,697	22,078	1.38	1,588,210	7,970	0.67
Certificates of deposit	5,500,105	83,635	2.03	4,924,804	53,897	1.46
Total interest-bearing deposits	17,700,643	149,154	1.13	14,483,024	74,228	0.69
Total deposits	22,531,914	149,154	0.88	18,316,567	74,228	0.54
Borrowings:						
Short-term borrowings	838,750	9,433	1.48	3,473	58	2.23
Long-term borrowings	1,543,398	38,616	3.32	1,435,088	31,792	2.94
Total borrowings	2,382,148	48,049	2.67	1,438,561	31,850	2.93
Total interest-bearing liabilities	20,082,791	197,203	1.31	15,921,585	106,078	0.89
Total deposits and borrowings	24,914,062	197,203	1.06	19,755,128	106,078	0.72
Accrued expenses and other liabilities	1,052,709			741,222		
Total liabilities	25,966,771			20,496,350		
Total TCF Financial Corp. shareholders' equity	3,289,946			2,509,625		
Non-controlling interest in subsidiaries	26,558			25,133		
Total equity	3,316,504			2,534,758		
Total liabilities and equity	\$29,283,275			\$23,031,108		
Net interest spread (FTE)			4.27			4.64
Net interest income (FTE) and net interest margin (FTE)		\$ 885,826	4.36		\$ 761,611	4.70
Reconciliation to Reported Net Interest Income						
Net interest income (FTE)		\$ 885,826			\$ 761,611	
Adjustments for taxable equivalent interest ⁽¹⁾⁽³⁾						
Loans		(3,614)			(2,816)	
Tax-exempt investment securities		(1,933)			(3,453)	
Total FTE adjustments		(5,547)			(6,269)	
Net interest income (GAAP)		\$ 880,279			\$ 755,342	
Net interest margin (GAAP)		4.35%			4.68%	

(1) Interest and yields are presented on a FTE basis.

(2) Annualized.

(3) The yield on tax-exempt loans, leases and investment securities available-for-sale is computed on a FTE basis using a statutory federal income tax rate of 21%.

(4) Average balances of loans and leases include nonaccrual loans and leases and are presented net of unearned income.

Volume and Rate Variance Analysis

(Dollars in thousands)	Three Months Ended September 30, 2019 vs. 2018			Nine Months Ended September 30, 2019 vs. 2018		
	Increase (Decrease) Due to Changes in		Total Change	Increase (Decrease) Due to Changes in		Total Change
	Average Volume ⁽¹⁾	Average Yield/Rate ⁽¹⁾		Average Volume ⁽¹⁾	Average Yield/Rate ⁽¹⁾	
Changes in Interest Income on Interest-Earning Assets:						
Federal Home Loan Bank and Federal Reserve Bank stocks	\$ 873	\$ (1,124)	\$ (251)	\$ 1,355	\$ (1,193)	\$ 162
Investment securities held to maturity	(64)	(322)	(386)	(192)	(752)	(944)
Investment securities available for sale:						
Taxable	19,446	479	19,925	39,077	4,120	43,197
Tax-exempt	(1,200)	5	(1,195)	(7,246)	12	(7,234)
Loans and leases held for sale	(1,358)	(859)	(2,217)	(1,586)	(863)	(2,449)
Loans and leases	158,371	(9,540)	148,831	164,581	13,172	177,753
Interest-bearing deposits with banks and other	4,670	(901)	3,769	6,149	(1,294)	4,855
Total interest-earning assets	\$ 180,738	\$ (12,262)	\$ 168,476	\$ 202,138	\$ 13,202	\$ 215,340
Changes in Interest Expense on Interest-Bearing Liabilities:						
Interest-bearing deposits:						
Checking	\$ 435	\$ 4,851	\$ 5,286	\$ 202	\$ 5,679	\$ 5,881
Savings	2,325	6,791	9,116	3,311	21,888	25,199
Money market	6,028	4,068	10,096	3,527	10,581	14,108
Certificates of deposit	11,616	7,307	18,923	6,865	22,873	29,738
Interest-bearing deposits	20,404	23,017	43,421	13,905	61,021	74,926
Short-term borrowings	5,342	(18)	5,324	9,401	(26)	9,375
Long-term borrowings	940	124	1,064	2,516	4,308	6,824
Total interest-bearing liabilities	\$ 26,686	\$ 23,123	\$ 49,809	\$ 25,822	\$ 65,303	\$ 91,125
Total change in net interest income (FTE)⁽²⁾	\$ 154,052	\$ (35,385)	\$ 118,667	\$ 176,316	\$ (52,101)	\$ 124,215

- (1) Changes attributable to the combined impact of volume and rate have been allocated proportionately to the change due to volume and the change due to rate.
(2) FTE basis using a federal income tax rate of 21% for the three and nine months ended September 30, 2019 and 2018. The presentation of net interest income on a FTE basis is not in accordance with GAAP, but is customary in the banking industry.

Provision for Credit Losses The provision for credit losses was \$27.2 million and \$50.9 million for the three and nine months ended September 30, 2019, respectively, compared with \$2.3 million and \$27.9 million for the same periods in 2018. The increases from both the three and nine months ended September 30, 2018 were primarily due to an increase in commercial and industrial net charge-offs in the three and nine months ended September 30, 2019 primarily due to one loan relationship. The provision for credit losses is predominantly a function of our reserving methodology used to determine the appropriate level of the allowance for loan and lease losses, which is a critical accounting estimate.

An analysis of the allowance for loan and leases losses is presented under "Consolidated Financial Condition Analysis — Credit Quality" in this Management's Discussion and Analysis.

Noninterest Income The components of noninterest income were as follows:

(Dollars in thousands)	Three Months Ended September 30,		Change	
	2019	2018	\$	% / bps
Fees and service charges on deposit accounts	\$ 34,384	\$ 29,175	\$ 5,209	17.9%
Leasing revenue	39,590	41,944	(2,354)	(5.6)
Wealth management revenue	4,241	—	4,241	N.M.
Card and ATM revenue	23,315	20,074	3,241	16.1
Net (losses) gains on sales of loans and leases	(5,984)	8,502	(14,486)	N.M.
Servicing fee revenue	5,121	6,032	(911)	(15.1)
Net gains (losses) on investment securities	5,900	94	5,806	N.M.
Other	(12,309)	6,243	(18,552)	N.M.
Total noninterest income	\$ 94,258	\$ 112,064	\$ (17,806)	(15.9)
Total noninterest income as a percentage of total revenue	20.2%	30.7%		(1,050) bps

(Dollars in thousands)	Nine Months Ended September 30,		Change	
	2019	2018	\$	%
Fees and service charges on deposit accounts	\$ 88,504	\$ 83,703	\$ 4,801	5.7%
Leasing revenue	117,032	121,001	(3,969)	(3.3)
Wealth management revenue	4,241	—	4,241	N.M.
Card and ATM revenue	62,470	58,313	4,157	7.1
Net (losses) gains on sales of loans and leases	13,374	24,900	(11,526)	(46.3)
Servicing fee revenue	14,754	21,811	(7,057)	(32.4)
Net gains (losses) on investment securities	7,417	181	7,236	N.M.
Other	(312)	20,620	(20,932)	N.M.
Total noninterest income	\$ 307,480	\$ 330,529	\$ (23,049)	(7.0)
Total noninterest income as a percentage of total revenue	25.9%	30.4%		(450) bps

N.M. Not Meaningful

Noninterest income was \$94.3 million and \$307.5 million in the three and nine months ended September 30, 2019, compared to \$112.1 million and \$330.5 million for the same periods in 2018. Following the Merger, we repositioned our balance sheet to lower our risk profile, reduce asset sensitivity and enhance capital and efficiency. As a result, noninterest income included the following balance sheet repositioning actions considered to be non-core items in the three and nine months ended September 30, 2019: a \$19.3 million loss related to the transfer of the Legacy TCF auto finance portfolio to held-for-sale (net (losses) gains on sales of loans and leases), a \$17.3 million loss related to the termination of interest rate swaps (other noninterest income) and a gain of \$5.9 million related to the sale of \$1.6 billion of certain investment securities (net gains on investment securities). Noninterest income in the three and nine months ended September 30, 2019 additionally included \$4.5 million of loan servicing rights impairment (other noninterest income), also considered a non-core item. Excluding the non-core items, adjusted noninterest income, a non-GAAP financial measure, was \$129.5 million and \$342.7 million in the three and nine months ended September 30, 2019, compared to \$112.1 million and \$330.5 million for the same periods in 2018. See "Non-GAAP Financial Measures" in this Management's Discussion and Analysis for further information.

Fees and service charges on deposit accounts Fees and service charges on deposit accounts were \$34.4 million and \$88.5 million for the three and nine months ended September 30, 2019, respectively, compared with \$29.2 million and \$83.7 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily attributable to incremental fees resulting from the Merger.

Leasing revenue Leasing revenue was \$39.6 million and \$117.0 million for the three and nine months ended September 30, 2019, respectively, compared with \$41.9 million and \$121.0 million for the same periods in 2018. The decrease from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to decreases in operating lease revenue and sales-type lease revenue.

Wealth management Wealth management revenue is comprised of investment fees that are generally based on the market value of assets within a trust account, custodial fees and fees from the sale of investment products. Revenues from wealth management were \$4.2 million for both the three and nine months ended September 30, 2019. Wealth management revenues are a new revenue stream as a result of the Merger.

Card and ATM revenue Card and ATM revenue was \$23.3 million and \$62.5 million for the three and nine months ended September 30, 2019, respectively, compared with \$20.1 million and \$58.3 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to incremental revenue resulting from the Merger.

Net (losses) gains on sales of loans and leases Net losses on sales of loans and leases were \$6.0 million and a net gains of \$13.4 million for the three and nine months ended September 30, 2019, respectively, compared with net gains of \$8.5 million and \$24.9 million for the same periods in 2018. The decreases in the three and nine months ended September 30, 2019, compared to the same periods in 2018, were primarily due to a \$19.3 million loss related to the transfer of the Legacy TCF auto finance portfolio to held-for-sale. Excluding the loss related to the auto finance portfolio transfer, the increase from both the three and nine months ended September 30, 2018 was primarily due to higher volume of consumer loans sold resulting from the Merger. We sold \$457.9 million and \$1.0 billion of consumer real estate loans during the three and nine months ended September 30, 2019, respectively, compared with \$391.8 million and \$908.2 million during the same periods in 2018.

Servicing fee revenue Servicing fee revenue was \$5.1 million and \$14.8 million for the three and nine months ended September 30, 2019, respectively, compared with \$6.0 million and \$21.8 million for the same periods in 2018. The decrease from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to the continued run-off in the auto finance serviced for others portfolio, partially offset by the incremental revenue to the servicing portfolio resulting from the Merger.

Net gains (losses) on investment securities Net gains on investment securities were \$5.9 million and \$7.4 million for the three and nine months ended September 30, 2019, respectively, compared with \$0.1 million and \$0.2 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to a gain of \$5.9 million related to the sale of \$1.6 billion of investment securities resulting from the balance sheet repositioning following the completion of the Merger.

Other Other noninterest income was a loss of \$12.3 million and a loss of \$0.3 million for the three and nine months ended September 30, 2019, respectively, compared with income of \$6.2 million and income of \$20.6 million for the same periods in 2018. The decrease from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to a \$17.3 million loss related to the termination of interest rate swaps and the recognition of \$4.5 million of loan servicing rights impairment, partially offset by an increase in incremental revenue resulting from the Merger.

Noninterest Expense The components of noninterest expense were as follows:

(Dollars in thousands)	Three Months Ended September 30,		Change	
	2019	2018	\$	% / bps
Compensation and employee benefits	\$ 155,745	\$ 124,996	\$ 30,749	24.6%
Occupancy and equipment	49,229	42,337	6,892	16.3
Lease financing equipment depreciation	19,408	19,525	(117)	(0.6)
Net foreclosed real estate and repossessed assets	2,203	3,880	(1,677)	(43.2)
Merger-related expenses	111,259	—	111,259	N.M.
Other	87,776	55,685	32,091	57.6
Total noninterest expense	\$ 425,620	\$ 246,423	\$ 179,197	72.7
Full-time equivalent staff (at period end)	7,374	4,872	2,502	51.4
Efficiency ratio	91.32%	67.41%		2,391 bps
Adjusted efficiency ratio, Non-GAAP ⁽¹⁾	58.74	64.91		(617)

(Dollars in thousands)	Nine Months Ended September 30,		Change	
	2019	2018	\$	%
Compensation and employee benefits	\$ 395,953	\$ 372,174	\$ 23,779	6.4%
Occupancy and equipment	132,789	123,562	9,227	7.5
Lease financing equipment depreciation	57,797	54,744	3,053	5.6
Net foreclosed real estate and repossessed assets	9,281	12,654	(3,373)	(26.7)
Merger-related expenses	124,943	—	124,943	N.M.
Other	194,781	201,308	(6,527)	(3.2)
Total noninterest expense	\$ 915,544	\$ 764,442	\$ 151,102	19.8
Efficiency ratio	77.08%	70.40%		668 bps
Adjusted efficiency ratio, Non-GAAP ⁽¹⁾	61.57	65.08		(351)

N.M. Not Meaningful

(1) See "Consolidated Financial Condition Analysis - Non-GAAP Financial Measures" in this Management's Discussion and Analysis for further information.

Compensation and employee benefits expense Compensation and employee benefits expense was \$155.7 million and \$396.0 million for the three and nine months ended September 30, 2019, respectively, compared with \$125.0 million and \$372.2 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to the staff additions resulting from the Merger.

Occupancy and equipment Occupancy and equipment expense was \$49.2 million and \$132.8 million for the three and nine months ended September 30, 2019, respectively, compared with \$42.3 million and \$123.6 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to the incremental operating costs associated with the Merger.

Lease financing equipment depreciation Lease financing equipment depreciation was \$19.4 million and \$57.8 million for the three and nine months ended September 30, 2019, respectively, compared with \$19.5 million and \$54.7 million for the same periods in 2018. Shifts in lease financing equipment depreciation are the result of changes in balances of leased equipment.

Net foreclosed real estate and repossessed assets Net foreclosed real estate and repossessed assets expense was \$2.2 million and \$9.3 million for the three and nine months ended September 30, 2019, respectively, compared with \$3.9 million and \$12.7 million for the same periods in 2018.

Merger-related expenses Merger-related expenses related to the Merger were \$111.3 million and \$124.9 million for the three and nine months ended September 30, 2019, respectively, and consisted primarily of professional fees and employment related expenses.

Other noninterest expense Other noninterest expense was \$87.8 million and \$194.8 million for the three and nine months ended September 30, 2019, respectively, compared with \$55.7 million and \$201.3 million for the same periods in 2018. The increase from the three months ended September 30, 2018 was primarily due to a \$5.9 million expense related to the write-down of company-owned vacant land parcels and incremental costs associated with the Merger. The decrease from the nine months ended September 30, 2018 was primarily due to the \$32.0 million settlement with the CFPB and OCC, partially offset by the \$5.9 million expense related to the write-down of company-owned vacant land parcels and incremental costs due to the Merger.

Income Tax (Benefit) Expense Income tax benefit was \$11.7 million and expense was \$28.9 million, or 13.0% of income before income tax expense, for the three and nine months ended September 30, 2019, respectively, compared with expense of \$28.0 million, or 24.0% of income before income tax expense, and expense of \$66.1 million, or 22.5% of income before income tax expense, for the same periods in 2018. The three and nine months ended September 30, 2019 included an \$8.0 million tax basis adjustment benefit in addition to a \$5.7 million benefit provided by the repricing of TCF's net deferred tax position in connection with the completion of the Merger. The fluctuations in TCF's effective income tax rate reflect changes each period in the proportion of interest income exempt from federal taxation, nondeductible transaction costs and other nondeductible expenses relative to pretax income and tax credits.

Reportable Segment Results In connection with the Merger, effective August 1, 2019, we renamed our Wholesale Banking segment to Commercial Banking to align with the way we are now managed. In addition, activity that was related to small business banking and private banking were moved from the Wholesale Banking (now named Commercial Banking) segment to the Consumer Banking segment. The revised presentation of previously reported segment data has been applied retroactively to all periods presented in these financial statements. Our reportable segments are Consumer Banking, Commercial Banking and Enterprise Services. Due to the timing of the Merger, TCF is in the process of completing its analysis of the allocation of the goodwill across business segments, therefore goodwill is presented as part of Enterprise Services at September 30, 2019. See Note 25. Reportable Segments of the Notes to Consolidated Financial Statements for further information regarding net income (loss), revenues and assets for each of our reportable segments.

Consumer Banking

Consumer Banking is comprised of all of the consumer and small business-facing businesses and includes Retail Banking, Wealth Management, Residential Lending, Consumer Lending and Business Banking. Our consumer banking strategy is primarily to generate deposits and originate high credit quality loans for investment and sale. Deposits are generated from consumers and small businesses to provide a source of low cost funds, with a focus on building and maintaining quality customer relationships.

Consumer Banking generated net income available to common shareholders of \$27.0 million and \$91.6 million for the three and nine months ended September 30, 2019, respectively, compared with \$36.9 million and \$72.1 million for the same periods in 2018.

Consumer Banking net interest income was \$191.9 million and \$470.7 million for the three and nine months ended September 30, 2019, respectively, compared with \$143.0 million and \$429.1 million for the same periods in 2018. The increase in net interest income from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily attributable to the impact of the loans acquired in the Merger, partially offset by the deposits acquired in the Merger.

Consumer Banking provision for credit losses was \$4.5 million and \$16.4 million for the three and nine months ended September 30, 2019, respectively, compared with a benefit of \$953 thousand and a provision of \$18.9 million for the same periods in 2018. The increase from the three months ended September 30, 2018 was primarily due to a decrease in recoveries on previous charge-offs related to consumer loans. The decrease from the nine months ended September 30, 2018 was primarily due to a decrease in the provision for credit losses attributable to run-off and maturation of the auto finance portfolio. The provision for credit losses is predominantly a function of our reserving methodology used to determine the appropriate level of the allowance for loan and lease losses. For further information, see "Consolidated Income Statement Analysis — Provision for Credit Losses" and "Consolidated Financial Condition Analysis — Credit Quality" in this Management's Discussion and Analysis and Note 7. Allowance for Loan and Lease Losses and Credit Quality of the Notes to Consolidated Financial Statements.

Consumer Banking noninterest income was \$57.1 million and \$183.8 million for the three and nine months ended September 30, 2019, respectively, compared with \$66.6 million and \$196.8 million for the same periods in 2018. The decrease in noninterest income from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to a \$19.3 million loss related to the transfer of the Legacy TCF auto finance portfolio to held-for-sale. Excluding the loss related to the auto finance portfolio transfer, the increase from both the three and nine months ended September 30, 2018 was primarily due to a higher volume of consumer loans sold resulting from the Merger. Servicing fee income attributable to the Consumer Banking segment was \$32.4 million and \$84.3 million for the three and nine months ended September 30, 2019, respectively, compared with \$28.1 million and \$80.6 million for the same periods in 2018. Average Consumer Banking loans serviced for others were \$6.9 billion and \$4.4 billion for the three and nine months ended September 30, 2019, respectively, compared with \$3.3 billion and \$3.7 billion for the same periods in 2018.

Consumer Banking noninterest expense was \$210.7 million and \$520.0 million for the three and nine months ended September 30, 2019, respectively, compared with \$162.0 million and \$511.9 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to the incremental operating cost due to the Merger.

Commercial Banking

Commercial Banking is comprised of commercial banking, leasing and equipment finance, and inventory finance. Our wholesale banking strategy is primarily to originate high credit quality secured loans and leases for investment.

Commercial Banking generated net income available to common shareholders of \$68.8 million and \$142.4 million for the three and nine months ended September 30, 2019, respectively, compared with \$42.6 million and \$134.8 million for the same periods in 2018.

Commercial Banking net interest income was \$157.4 million and \$350.8 million for the three and nine months ended September 30, 2019, respectively, compared with \$94.3 million and \$289.3 million for the same periods in 2018. The increase in net interest income from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to the impact of the loans acquired in the Merger, partially offset by the deposits acquired in the Merger.

Commercial Banking provision for credit losses was \$22.7 million and \$34.5 million for the three and nine months ended September 30, 2019, respectively, compared with \$3.2 million and \$9.0 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to an increase in commercial and industrial net charge-offs in the three months ended September 30, 2019 primarily resulting from one loan relationship. The provision for credit losses is predominantly a function of our reserving methodology used to determine the appropriate level of the allowance for loan and lease losses. For further information, see "Consolidated Income Statement Analysis — Provision for Credit Losses" and "Consolidated Financial Condition Analysis — Credit Quality" in this Management's Discussion and Analysis and Note 7. Allowance for Loan and Lease Losses and Credit Quality of the Notes to Consolidated Financial Statements.

Commercial Banking noninterest income was \$47.9 million and \$132.9 million for the three and nine months ended September 30, 2019, respectively, compared with \$44.9 million and \$132.8 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to incremental revenue resulting from the Merger, partially offset by a decrease in leasing and equipment finance noninterest income as a result of decreased operating lease revenue and sales-type lease revenue.

Commercial Banking noninterest expense was \$102.8 million and \$267.1 million for the three and nine months ended September 30, 2019, respectively, compared with \$77.9 million and \$229.1 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to an increase in merger-related expenses and other expenses related to the incremental costs due to the Merger.

Enterprise Services

Enterprise Services is comprised of (i) corporate treasury, which includes our investment and borrowing portfolios and management of capital, debt and market risks, (ii) corporate functions, such as information technology, risk and credit management, bank operations, finance, investor relations, corporate development, internal audit, legal and human capital management that provide services to the operating segments, (iii) the Holding Company and (iv) eliminations. Our investment portfolio accounts for our earning assets within this segment. Borrowings may be used to offset reductions in deposits or to support lending activities. This segment also includes residual revenues and expenses representing the difference between actual amounts incurred by Enterprise Services and amounts allocated to the operating segments, including interest rate risk residuals such as funds transfer pricing mismatches.

Enterprise Services generated net loss available to common shareholders of \$76.2 million and \$58.4 million for the three and nine months ended September 30, 2019, respectively, compared with net income available to common shareholders of \$4.1 million and a net loss available to common shareholders of \$0.7 million for the same periods in 2018.

Enterprise Services net interest income was \$22.4 million and \$58.7 million for the three and nine months ended September 30, 2019, respectively, compared with \$16.2 million and \$36.9 million for the same periods in 2018. The increase in from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to the increase in average balances of investment securities acquired in the Merger.

Enterprise Services noninterest expense was \$112.1 million and \$128.4 million for the three and nine months ended September 30, 2019, respectively, compared with \$6.5 million and \$23.4 million for the same periods in 2018. The increase from the three months ended September 30, 2018 and from the nine months ended September 30, 2018 was primarily due to an increase in merger-related expenses and other expenses related to the incremental costs due to the Merger.

Preferred stock dividends were \$2.5 million and \$7.5 million for the three and nine months ended September 30, 2019, respectively, compared with \$2.5 million and \$9.1 million for preferred stock dividends and the impact of the preferred stock redemption for the same periods in 2018. The decrease was due to the redemption of the 6.45% Series B non-cumulative perpetual preferred stock in the first quarter of 2018.

Consolidated Financial Condition Analysis

Investment Securities Total investment securities available-for-sale, at fair value, were \$5.6 billion at September 30, 2019, compared with \$2.5 billion at December 31, 2018. Our investment securities available-for-sale are debt securities consisting primarily of fixed-rate mortgage-backed securities issued by the Federal National Mortgage Association ("FNMA") and the Federal Home Loan Mortgage Corporation ("FHLMC"), and obligations of states and political subdivisions. Total investment securities held-to-maturity were \$144.0 million at September 30, 2019, compared with \$148.9 million at December 31, 2018. Our investment securities held-to-maturity portfolio consists primarily of fixed-rate mortgage-backed securities issued by the FNMA. The increase in investment securities was primarily due to the addition of \$3.8 billion of investment securities as a result of the Merger, partially offset by the subsequent sale of \$1.6 billion of investment securities during the three months ended September 30, 2019 as we repositioned our balance sheet. See Note 2. Merger for further information. We may, from time to time, sell investment securities available-for-sale and utilize the proceeds to reduce borrowings, fund growth in loans and leases or for other corporate purposes. We sold \$1.6 billion and \$2.0 billion of investment securities during the three and nine months ended September 30, 2019, respectively, which included select floating rate, corporate, non-agency and municipal securities. There were no sales of available-for-sale investment securities during the three and nine months ended September 30, 2018.

The carrying value of investment securities available-for-sale and held-to-maturity were as follows:

(In thousands)	At September 30, 2019		At December 31, 2018	
Investment securities available-for-sale, at fair value				
Debt securities:				
Government and government-sponsored enterprises	\$	247,147	\$	—
Obligations of states and political subdivisions		789,671		556,871
Mortgage-backed securities		4,542,592		1,913,194
Corporate debt and trust preferred securities		425		—
Total debt securities available-for-sale		5,579,835		2,470,065
Total investment securities available-for-sale		5,579,835		2,470,065
Investment securities held-to-maturity				
Mortgage-backed securities		140,324		146,052
Corporate debt and trust preferred securities		3,676		2,800
Total investment securities held-to-maturity		144,000		148,852
Total investment securities	\$	5,723,835	\$	2,618,917

The carrying value and FTE yield of investment securities available-for-sale and investment securities held-to-maturity by final contractual maturity were as follows. The final contractual maturities do not consider possible prepayments and therefore expected maturities may differ because borrowers may have the right to prepay.

		At 9/30/2019									
		Government and Government- sponsored Enterprises		Obligations of States and Political Subdivisions		Mortgage-backed Securities		Corporate Debt And Trust Preferred Securities		Total	
(Dollars in thousands)		Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
Investment securities available-for-sale											
Due in one year or less	\$	—	—%	\$ 60,652	2.23%	\$ —	—%	\$ —	—%	\$ 60,652	2.23%
Due in 1-5 years		—	—	169,736	2.61	29,663	1.93	—	—	199,399	2.51
Due in 5-10 years		27,186	3.60	161,469	2.76	304,100	2.60	—	—	492,755	2.71
Due after 10 years		219,961	3.44	397,814	2.89	4,208,829	2.95	425	6.87	4,827,029	2.97
Total	\$	247,147	3.46	\$ 789,671	2.75	\$ 4,542,592	2.92	\$ 425	6.87	\$ 5,579,835	2.92
Investment securities held-to-maturity											
Due in one year or less	\$	—	—%	\$ —	—%	\$ —	—%	\$ —	—%	\$ —	—%
Due in 1-5 years		—	—	—	—	—	—	3,150	2.82	3,150	2.82
Due in 5-10 years		—	—	—	—	60	6.50	400	3.00	460	3.46
Due after 10 years		—	—	—	—	140,264	2.47	126	6.00	140,390	2.47
Total	\$	—	—	\$ —	—	\$ 140,324	2.47	\$ 3,676	2.95	\$ 144,000	2.48

See Note 6. Investment Securities of Notes to Consolidated Financial Statements for further information regarding our investment securities available-for-sale and investment securities held-to-maturity.

Loans and Leases Held-for-Sale

Our loans and leases held-for-sale were \$1.4 billion at September 30, 2019, an increase of \$1.3 billion, compared to \$90.7 million at December 31, 2018. The increase was primarily due to the transfer of \$1.2 billion of Legacy TCF auto finance portfolio to held-for-sale.

Loans and Leases

Our commercial loan and lease portfolio is comprised of commercial and industrial loans, commercial real estate loans, and lease financing. Our consumer loan portfolio is comprised of residential mortgages, consumer installment loans and home equity loans and lines of credit. Our lending markets generally consist of communities throughout our primary banking markets including Michigan, Minnesota, Illinois, Ohio, Indiana, Colorado, Wisconsin, Arizona and South Dakota.

Total loans and leases were \$33.5 billion at September 30, 2019, an increase of \$14.4 billion, or 75.7%, compared to December 31, 2018. The increase was primarily due to \$15.7 billion of loans and leases acquired in the Merger, partially offset by the transfer of the Legacy TCF auto finance portfolio to held-for-sale which had a balance of \$1.2 billion at September 30, 2019.

Information about our loans and leases was as follows:

(Dollars in thousands)	At September 30, 2019		At December 31, 2018		Change	
	Amount	% of Total	Amount	% of Total	\$	%
Commercial loan and lease portfolio:						
Commercial and industrial	\$ 10,810,534	32.3%	\$ 6,220,632	32.6%	\$ 4,589,902	73.8%
Commercial real estate	8,876,779	26.5	2,908,313	15.2	5,968,466	205.2
Lease financing	2,594,373	7.7	2,530,163	13.3	64,210	2.5
Total commercial loan and lease portfolio	22,281,686	66.5	11,659,108	61.1	10,622,578	91.1
Consumer loan portfolio:						
Residential mortgage	6,057,404	18.0	2,335,835	12.2	3,721,569	159.3
Consumer installment	1,562,252	4.7	2,003,572	10.5	(441,320)	(22.0)
Home equity	3,609,410	10.8	3,074,505	16.2	534,905	17.4
Total consumer loan portfolio	11,229,066	33.5	7,413,912	38.9	3,815,154	51.5
Total loans and leases	\$ 33,510,752	100.0%	\$ 19,073,020	100.0%	\$ 14,437,732	75.7%

Commercial Loan and Lease Portfolio

Our commercial loan and lease portfolio was \$22.3 billion at September 30, 2019, an increase of \$10.6 billion, or 91.1%, compared to \$11.7 billion at December 31, 2018, primarily due to the \$9.8 billion of commercial loans and leases acquired as a result of the Merger. Our commercial loan and lease portfolio is well diversified across business lines and has no concentration in any one industry.

Commercial and industrial Commercial and industrial loans and lines of credit include loans to varying types of businesses, including equipment dealers, municipalities, school districts and nonprofit organizations, for the purpose of supporting working capital and operational needs and term financing of equipment. Commercial and industrial loans are secured by various types of business assets including inventory, floorplan equipment, receivables, equipment or financial instruments. Origination levels related to equipment dealers are impacted by the velocity of fundings and repayments with dealers.

Commercial real estate Commercial real estate loans include loans that are secured by real estate occupied by the borrower for ongoing operations, non-owner occupied real estate leased to one or more tenants and construction and development loans primarily originated for construction of commercial properties. Construction and development loans often convert to a commercial real estate loan at the completion of the construction period. Commercial real estate loans are primarily secured by commercial real estate, including multi-family housing, office buildings, health care facilities, warehouse and industrial buildings, hotel and motel buildings, self-storage buildings and retail services buildings.

Lease financing We provide a broad range of comprehensive lease products addressing the diverse financing needs of small to large companies in a growing number of select market segments including specialty vehicles, construction equipment, golf cart and turf equipment, manufacturing equipment, medical equipment, trucks and trailers, furniture and fixtures, technology and data processing equipment and agriculture equipment. The uninstalled backlog of approved transactions was \$626.3 million at September 30, 2019, compared with \$572.4 million at December 31, 2018.

Consumer Loan Portfolio

Our consumer loan portfolio was \$11.2 billion at September 30, 2019, an increase of \$3.8 billion, or 51.5%, compared to \$7.4 billion at December 31, 2018, primarily due to \$5.9 billion of consumer loans acquired as a result of the Merger, partially offset by the \$1.2 billion of Legacy TCF auto loan portfolio transferred to held-for-sale.

Residential mortgage Residential mortgage loans consist primarily of one- to four-family residential loans with fixed and adjustable interest rates, with amortization periods generally from 15 to 30 years. The loan-to-value ratio at the time of origination is generally 90% or less. Loans with more than an 80% loan-to-value ratio generally require private mortgage insurance. Residential mortgage loans also include loans to consumers for the construction of single family residences that are secured by these properties.

Consumer installment Consumer installment loans consist of relatively small loan amounts to consumers to finance personal items (primarily automobiles, recreational vehicles and marine vehicles) and are comprised primarily of indirect loans purchased from dealerships. Consumer rates are both fixed and variable, with negotiable terms. Our consumer installment loans typically amortize over periods up to 60 months. Consumer loans not secured by real estate are generally considered to have greater risk than first or second mortgages on real estate because they may be unsecured, or, if they are secured, the value of the collateral may be difficult to assess and more likely to decrease in value, and is more difficult to control, than real estate.

Home equity Home equity loans and lines of credit are comprised of loans to consumers who utilize equity in their personal residence, including junior lien mortgages, as collateral to secure the loan or line-of-credit. The majority of our home equity lines of credit are comprised of loans with a 10-year interest-only draw period and a 20-year amortization repayment period. These home equity lines of credit can include junior lien mortgages whereby the first lien mortgage is held by a nonaffiliated financial institution.

Credit Quality The following summarizes our loan and lease portfolio based on the credit quality factors that we believe are important and should be considered to understand the overall condition of our loan portfolios. See Note 8. Allowance for Loan and Lease Losses and Credit Quality of Notes to Consolidated Financial Statements for further information.

Past Due Loans and Leases Over 90-day delinquent loans and leases by type, excluding nonaccrual loans and leases, were as follows. Delinquent balances are determined based on the contractual terms of the loan or lease.

(Dollars in thousands)	At September 30, 2019		At December 31, 2018	
	90 Days or More Delinquent and Accruing ⁽¹⁾	Percentage of Period-end Loans and Leases	90 Days or More Delinquent and Accruing ⁽¹⁾	Percentage of Period-end Loans and Leases
Commercial loan and lease portfolio:				
Commercial and industrial	\$ 2,241	0.02%	\$ 760	0.01%
Commercial real estate	8,054	0.09	—	—
Lease financing	2,421	0.09	1,882	0.07
Total commercial loan and lease portfolio	12,716	0.06	2,642	0.02
Consumer loan portfolio:				
Residential mortgage	886	0.01	1,275	0.06
Consumer installment	6	—	3,349	0.17
Total consumer loan portfolio	892	0.01	4,624	0.06
Portfolios acquired with deteriorated credit quality	16,052	5.47	178	4.65
Total	\$ 29,660	0.09%	\$ 7,444	0.04%

(1) Excludes nonaccrual loans and leases

Loan Modifications Troubled debt restructuring ("TDR") loans were as follows:

(Dollars in thousands)	At September 30, 2019			At December 31, 2018		
	Accruing TDR Loans	Nonaccrual TDR Loans	Total TDR Loans	Accruing TDR Loans	Nonaccrual TDR Loans	Total TDR Loans
Commercial loan and lease portfolio	\$ 10,068	\$ 1,953	\$ 12,021	\$ 12,665	\$ 6,153	\$ 18,818
Consumer loan portfolio	75,836	19,284	95,120	85,794	22,554	108,348
Total	\$ 85,904	\$ 21,237	\$ 107,141	\$ 98,459	\$ 28,707	\$ 127,166
Over 90-day delinquency as a percentage of total accruing TDR loans	34.53%	N.A.	N.A.	7.56%	N.A.	N.A.

N.A. Not Applicable

Loan modifications to borrowers who have not been granted concessions are not considered TDR loans and therefore are not included in the table above. TDR loans with an interest rate consistent with market rates on loans with comparable risk at the time of restructuring and performing based on the restructured terms are no longer disclosed as TDR loans in the calendar years after modification; however, these loans are still considered impaired and follow our impaired loan reserve policies.

TDRs typically involve a deferral of the principal balance of the loan, a reduction of the stated interest rate of the loan or, in certain limited circumstances, a reduction of the principal balance of the loan or the loan's accrued interest.

Nonperforming Assets Nonperforming assets, consisting of nonaccrual loans and leases and other real estate owned, were as follows:

(Dollars in thousands)	At September 30, 2019	At December 31, 2018
Commercial loan and lease portfolio:		
Commercial and industrial	\$ 55,039	\$ 26,061
Commercial real estate	26,518	4,518
Lease financing	11,503	7,993
Total commercial loan and lease portfolio	93,060	38,572
Consumer loan portfolio:		
Residential mortgage	48,816	33,111
Consumer installment	636	8,581
Home equity	39,296	25,654
Total consumer loan portfolio	88,748	67,346
Nonaccrual loans and leases	181,808	105,918
Other real estate owned	27,638	17,403
Total nonperforming assets	\$ 209,446	\$ 123,321
Nonaccrual loans and leases as a percentage of total loans and leases	0.54%	0.56%
Nonperforming assets as a percentage of total loans and leases and other real estate owned	0.62	0.65
Allowance for loan and lease losses as a percentage of nonaccrual loans and leases	66.67	148.65

Nonperforming assets were \$209.4 million at September 30, 2019, compared with \$123.3 million at December 31, 2018. The increase was primarily due to loans acquired in the Merger.

Loans and leases are generally placed on nonaccrual status when the collection of interest or principal is 90 days or more past due unless, in the case of commercial loans, they are well secured and in process of collection. Delinquent consumer real estate home equity loans with a junior lien position are also placed on nonaccrual status when there is evidence that the related third-party first lien mortgage may be 90 days or more past due, or foreclosure, charge-off or collection action has been initiated. TDR loans are placed on nonaccrual status prior to the past due thresholds outlined above if repayment under the modified terms is not likely after performing a well-documented credit analysis. Loans on nonaccrual status are generally reported as nonaccrual loans until there is sustained repayment performance for six consecutive months, with the exception of loans not reaffirmed upon discharge under Chapter 7 bankruptcy, which remain on nonaccrual status until a well-documented credit analysis indicates full repayment of the remaining pre-discharged contractual principal and interest is likely. We do not classify PCI loans as nonaccrual loans because the loans are recorded at net realizable value based on the principal and interest expected to be collected on the loan.

The majority of our nonaccrual loans are secured by real estate. Given the nature of these assets and the related mortgage foreclosure, property sale and, if applicable, mortgage insurance claims processes, it can take 18 months or longer for a loan to migrate from initial delinquency to final disposition. This resolution process generally takes much longer for loans secured by real estate than for unsecured loans or loans secured by other property primarily due to state real estate foreclosure laws.

Changes in the amount of nonaccrual loans and leases were as follows:

(In thousands)	At or For the Three Months Ended September 30, 2019		
	Consumer Loan Portfolio	Commercial Loan and Lease Portfolio	Total
Balance, beginning of period	\$ 76,079	\$ 31,914	\$ 107,993
Acquired	16,414	64,830	81,244
Additions	24,592	54,059	78,651
Charge-offs	(2,020)	(18,257)	(20,277)
Transfers to other assets	(5,227)	(4,294)	(9,521)
Transfers (to) from loans and leases held for sale	(9,454)	—	(9,454)
Return to accrual status	(3,048)	(10,419)	(13,467)
Payments received	(8,597)	(25,274)	(33,871)
Other, net	9	501	510
Balance, end of period	\$ 88,748	\$ 93,060	\$ 181,808

(In thousands)	At or For the Nine Months Ended September 30, 2019		
	Consumer Loan Portfolio	Commercial Loan and Lease Portfolio	Total
Balance, beginning of period	\$ 67,346	\$ 38,572	\$ 105,918
Acquired	16,414	64,830	81,244
Additions	60,875	94,190	155,065
Charge-offs	(6,407)	(29,693)	(36,100)
Transfers to other assets	(14,530)	(12,174)	(26,704)
Transfers (to) from loans and leases held-for-sale	(9,454)	—	(9,454)
Return to accrual status	(6,443)	(17,636)	(24,079)
Payments received	(18,676)	(48,000)	(66,676)
Other, net	(377)	2,971	2,594
Balance, end of period	\$ 88,748	\$ 93,060	\$ 181,808

Loan and Lease Credit Classifications We assess the risks in our loan and lease portfolio utilizing numerous risk characteristics as outlined in the previous sections. Credit classifications are an additional characteristic monitored in the overall credit risk process. Loan and lease credit classifications are derived from standard regulatory rating definitions, which include: non-classified (pass and special mention) and classified (substandard and doubtful). Classified loans and leases have well-defined weaknesses, but may never result in a loss.

Loans and leases by portfolio and regulatory classification were as follows:

(In thousands)	At September 30, 2019				
	Non-classified		Classified		Total
	Pass	Special Mention	Substandard	Doubtful	
Commercial loan and lease portfolio:					
Commercial and industrial	\$ 10,307,229	\$ 309,440	\$ 193,865	\$ —	\$ 10,810,534
Commercial real estate	8,645,910	150,132	80,737	—	8,876,779
Lease financing	2,540,637	27,007	26,729	—	2,594,373
Total commercial loan and lease portfolio	21,493,776	486,579	301,331	—	22,281,686
Consumer loan portfolio:					
Residential mortgage	6,001,380	1,543	54,481	—	6,057,404
Consumer installment	1,561,506	—	746	—	1,562,252
Home equity	3,565,763	1,284	42,363	—	3,609,410
Total consumer loan portfolio	11,128,649	2,827	97,590	—	11,229,066
Total loans and leases	\$ 32,622,425	\$ 489,406	\$ 398,921	\$ —	\$ 33,510,752

At December 31, 2018

(In thousands)	Non-classified		Classified		Total
	Pass	Special Mention	Substandard	Doubtful	
Commercial loan and lease portfolio:					
Commercial and industrial	\$ 5,955,713	\$ 158,296	\$ 106,623	\$ —	6,220,632
Commercial real estate	2,869,711	12,864	25,738	—	2,908,313
Lease financing	2,480,964	25,195	24,004	—	2,530,163
Total commercial loan and lease portfolio	11,306,388	196,355	156,365	—	11,659,108
Consumer loan portfolio:					
Residential mortgage	2,294,740	3,606	37,489	—	2,335,835
Consumer installment	1,981,844	1,302	20,426	—	2,003,572
Home equity	3,043,296	3,747	27,462	—	3,074,505
Total consumer loan portfolio	7,319,880	8,655	85,377	—	7,413,912
Total loans and leases	\$ 18,626,268	\$ 205,010	\$ 241,742	\$ —	\$ 19,073,020

Total classified loans and leases in the commercial loan and lease portfolio were \$398.9 million at September 30, 2019, compared with \$241.7 million at December 31, 2018. The increase was primarily due to loans acquired in the Merger.

Allowance for Loan and Lease Losses The determination of the allowance for loan and lease losses is a critical accounting estimate. Our evaluation of incurred losses is based on historical loss rates multiplied by the respective portfolio's loss emergence period. Factors we use in the determination of the amount of the allowance include historical trends in loss rates, a portfolio's overall risk characteristics, changes in its character or size, risk rating migration, delinquencies, collateral values, economic outlook and prevailing economic conditions. We review the various factors used in our methodologies on a periodic basis.

The allowance for loan and leases losses on loans and leases acquired in the Merger was not carried over on the Merger Date. Instead, the acquired loans and leases were recorded at their estimated fair including a component for expected credit losses.

We consider our allowance for loan and lease losses of \$121.2 million appropriate to cover losses incurred in the loan and lease portfolios at September 30, 2019. However, no assurance can be given that we will not, in any particular period, sustain loan and lease losses that are sizable in relation to the amount reserved or will not require significant changes in the balance of the allowance for loan and lease losses due to subsequent evaluations of the loan and lease portfolios, in light of factors then prevailing, including economic conditions, information obtained during our ongoing credit review process or regulatory requirements. Among other factors, an economic slowdown, increasing levels of unemployment, a decline in collateral values and/or rising interest rates may have an adverse impact on the current adequacy of our allowance for loan and lease losses by increasing credit risk and the risk of potential loss.

The total allowance for loan and lease losses is expected to absorb losses from any segment of the portfolio. The allocation of our allowance for loan and lease losses disclosed in the following table is subject to change based on changes in the criteria used to evaluate the allowance and is not necessarily indicative of the trend of future losses in any particular portfolio.

Detailed Information regarding our allowance for loan and lease losses was as follows:

(Dollars in thousands)	At September 30, 2019		At December 31, 2018	
	Credit Loss Reserves		Credit Loss Reserves	
	Amount	As a Percentage of Portfolio	Amount	As a Percentage of Portfolio
Commercial loan and lease portfolio:				
Commercial and industrial	\$ 39,974	0.37%	\$ 41,103	0.66%
Commercial real estate	24,090	0.27	22,877	0.79
Lease financing	14,367	0.55	13,449	0.53
Total commercial loan and lease portfolio	78,431	0.35	77,429	0.66
Consumer loan portfolio:				
Residential mortgage	19,816	0.33	21,436	0.92
Consumer installment	1,859	0.12	35,151	1.75
Home equity	21,112	0.58	23,430	0.76
Total consumer loan portfolio	42,787	0.38	80,017	1.08
Total allowance for loan and lease losses	121,218	0.36	157,446	0.83
Credit discount on acquired loans	177,402			
Total allowance and discount on acquired loans	298,620	0.89		
Other credit loss reserves:				
Reserves for unfunded commitments	3,461	N.A.	1,429	N.A.
Total credit loss reserves	\$ 302,081	0.90%	\$ 158,875	0.83%

N.A. Not Applicable

Net loan and lease charge-offs for the three and nine months ended September 30, 2019 were \$28.6 million, or 0.39% of average loans and leases (annualized), and \$61.3 million, or 0.36% of average loans and leases (annualized), respectively, compared with \$6.8 million, or 0.15%, and \$33.7 million, or 0.24%, for the same periods ended September 30, 2018. The increases from both the three and nine months ended September 30, 2018 was primarily due to an increase in commercial and industrial net charge-offs in the three months ended September 30, 2019 primarily due to one loan relationship.

Liquidity Management TCF manages its liquidity to ensure that its funding needs are met both promptly and in a cost-effective manner. Asset liquidity arises from liquid assets that can be sold or pledged as collateral, amortization, prepayment or maturity of assets and from the ability of TCF to sell loans. Liability liquidity results from the ability of TCF to maintain a diverse set of funding sources to promptly meet funding requirements.

TCF Bank had \$442.6 million of net liquidity qualifying interest-bearing deposits at the Federal Reserve Bank at September 30, 2019, compared with \$208.4 million at December 31, 2018. Certain investment securities held-to-maturity and investment securities carried at fair value provide the ability to liquidate or pledge unencumbered securities as needed. At September 30, 2019, securities with a carrying value of \$5.7 billion were held, of which \$761.4 million was pledged as collateral to secure certain deposits and borrowings.

TCF Financial had net liquidity qualifying cash of \$164.4 million at September 30, 2019, compared with \$90.4 million at December 31, 2018.

Deposits are the primary source of TCF's funds for use in lending and for other general business purposes. In addition to deposits, TCF receives funds from loan and lease repayments, loan sales and borrowings. Borrowings may be used to compensate for reductions in normal sources of funds, such as deposit inflows at less than projected levels, net deposit outflows or to fund balance sheet growth. TCF primarily borrows from the Federal Home Loan Bank (the "FHLB") of Des Moines. TCF had \$3.6 billion of additional borrowing capacity at the FHLB of Des Moines at September 30, 2019, as well as access to the Federal Reserve Discount Window. In addition, TCF maintains a diversified set of unsecured and uncommitted funding sources, including access to overnight federal funds purchased lines, brokered deposits and capital markets. Lending activities, such as loan originations, loan purchases and equipment purchases for lease financing are the primary uses of TCF's funds.

On August 5, 2019, TCF Financial entered into a \$50.0 million unsecured revolving credit facility with an unaffiliated bank. The revolving credit facility contains several restrictive covenants, including the maintenance of various capital adequacy levels, asset quality and profitability ratios, and certain restrictions on levels of indebtedness. At September 30, 2019, TCF had no outstanding balance under the revolving credit facility and was in compliance with all such covenants. The revolving credit facility is available to be used, as needed, to fund growth, common stock repurchases or other general corporate purposes. TCF was in compliance with all the covenants at September 30, 2019.

TCF Commercial Finance Canada, Inc. ("TCFCFC") maintains a \$20.0 million Canadian dollar-denominated line of credit facility with a counterparty, which is guaranteed by TCF Bank. TCFCFC had no (USD) outstanding under the line of credit with the counterparty at September 30, 2019 and at December 31, 2018.

Deposits Deposits were \$35.3 billion at September 30, 2019, compared with \$18.9 billion at December 31, 2018. The increase in deposits was primarily due to the \$16.4 billion deposits acquired in the Merger.

Noninterest bearing checking accounts represented 22.56% of total deposits at September 30, 2019, compared with 20.75% of total deposits at December 31, 2018. TCF's weighted-average interest rate for deposits, including noninterest bearing deposits, was 0.88% the nine months ended September 30, 2019, respectively, compared with 0.54% for the same periods in 2018.

Certificates of deposit were \$8.4 billion at September 30, 2019, compared with \$4.8 billion at December 31, 2018. The maturities of certificates of deposit with denominations equal to or greater than \$100,000 at September 30, 2019 were as follows:

(In thousands)

Three months or less	\$	1,683,346
Over three through six months		1,574,030
Over six through 12 months		1,445,375
Over 12 months		392,054
Total	\$	5,094,805

Borrowings Borrowings were \$3.5 billion at September 30, 2019, compared with \$1.4 billion at December 31, 2018. The increase in borrowings was primarily due to \$3.1 billion of borrowings assumed in the Merger, partially offset by subsequent repayments of long-term FHLB advances. In addition, on July 2, 2019, TCF Bank issued \$150.0 million of 4.125% fixed-to-floating rate subordinated notes. The subordinated notes qualify as Tier 2 capital of TCF Financial Corporation and TCF Bank under the capital adequacy rules established by the Federal Reserve Board and the OCC, respectively, subject to applicable limitations. The proceeds are to be used for general corporate purposes which may include capital to support asset growth and reducing long-term borrowings. On August 5, 2019, TCF Financial entered into a \$50.0 million revolving credit facility that was available to be used, as needed, to fund growth, common stock repurchases or other general corporate purposes. Through September 30, 2019, TCF Financial had not drawn on the revolving credit facility.

Information regarding short-term borrowings was as follows:

(Dollars in thousands)	At or For the Three Months Ended September 30,		At or For the Nine Months Ended September 30,	
	2019	2018	2019	2018
FHLB advances				
Maximum outstanding at any month-end	\$ 2,440,000	\$ —	\$ 2,440,000	\$ —
Balance outstanding at end of period	2,335,960	—	2,335,960	—
Weighted average interest rate at end of period	1.63%	—%	1.63%	—%
Average balance outstanding	\$ 1,698,763	\$ —	\$ 773,576	\$ —
Weighted average interest rate	1.62%	—%	2.07%	—%
Federal funds purchased				
Maximum outstanding at any month-end	\$ —	\$ —	\$ —	\$ —
Balance outstanding at end of period	—	—	—	—
Weighted average interest rate at end of period	—%	—%	—%	—%
Average balance outstanding	\$ 283	\$ 283	\$ 209	\$ 209
Weighted average interest rate	2.37%	2.19%	2.53%	1.90%
Collateralized Deposits				
Maximum outstanding at any month-end	\$ 271,249	\$ —	\$ 271,249	\$ —
Balance outstanding at end of period	271,340	—	271,340	—
Weighted average interest rate at end of period	1.00%	—%	1.00%	—%
Average balance outstanding	\$ 184,290	\$ 1,669	\$ 63,771	\$ 2,077
Weighted average interest rate	1.01%	2.24%	0.55%	2.07%
Line-of-credit: TCF Commercial Finance Canada, Inc.				
Maximum outstanding at any month-end	\$ 1,516	\$ 2,324	\$ 10,455	\$ 8,565
Balance outstanding at end of period	—	2,324	—	—
Weighted average interest rate at end of period	—%	2.75%	—%	—%
Average balance outstanding	\$ 892	\$ 1,405	\$ 1,194	\$ 1,187
Weighted average interest rate	2.94%	2.74%	2.99%	2.59%

Long-term borrowings were as follows:

(In thousands)	September 30, 2019	December 31, 2018
FHLB advances	\$ 322,674	\$ 1,100,000
Subordinated debt	430,178	253,391
Discounted lease rentals	104,571	92,976
Capital lease obligation	3,059	3,105
Total long-term borrowings	\$ 860,482	\$ 1,449,472

See Note 15 Borrowings of Notes to Consolidated Financial Statements for further information regarding TCF's long-term borrowings.

Contractual Obligations and Commitments As discussed in the Notes to Consolidated Financial Statements, TCF has certain obligations and commitments to make future payments under contracts.

At September 30, 2019, the aggregate contractual obligations and commitments were as follows:

(In thousands)	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Contractual Obligations:					
Certificates of deposit	\$ 8,385,972	\$ 4,813,249	\$ 3,404,739	\$ 137,962	\$ 30,022
Long-term borrowings	860,482	11,138	179,782	132,681	536,881
Lease obligations	399,825	9,517	59,709	53,990	276,609
Other contractual obligations ⁽¹⁾	129,916	12,256	115,786	1,026	848
Marketing related contracts	246,100	46,793	79,497	63,450	56,360
Construction contracts and land purchase commitments for future branch sites	13,313	13,313	—	—	—
Liabilities related to acquisition and portfolio purchase ⁽²⁾	8,288	—	4,089	1,024	3,175
Total	\$ 10,043,896	\$ 4,906,266	\$ 3,843,602	\$ 390,133	\$ 903,895

(1) Includes commitments to fund qualified low income housing and other tax investment projects, private equity capital investments and other similar types of investments.

(2) Relates to TCF's acquisition of EFLC and a leasing and equipment finance loan and lease portfolio purchase in 2017.

(In thousands)	Amount of Commitment - Expiration by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Commitments:					
Commitments to extend credit:					
Consumer	\$ 2,266,913	\$ 116,212	\$ 133,673	\$ 181,397	\$ 1,835,631
Commercial	5,269,843	2,616,356	1,442,146	894,466	316,875
Total commitments to extend credit	7,536,756	2,732,568	1,575,819	1,075,863	2,152,506
Standby letters of credit and guarantees on industrial revenue bonds	125,438	70,662	26,574	19,356	8,846
Total	\$ 7,662,194	\$ 2,803,230	\$ 1,602,393	\$ 1,095,219	\$ 2,161,352

Unrecognized tax benefits, projected benefit obligations, demand deposits with indeterminate maturities and discretionary credit facilities that do not obligate us to lend have been excluded from the contractual obligations table above.

Capital Management TCF is committed to managing capital to maintain protection for shareholders, depositors and creditors. TCF employs a variety of capital management tools to achieve its capital goals, including, but not limited to, dividends, public offerings of preferred and common stock, common stock repurchases, redemption of preferred stock and the issuance or redemption of subordinated debt and other capital instruments. TCF maintains a Capital Planning and Dividend Policy which applies to TCF Financial and incorporates TCF Bank's Capital Planning and Dividend Policy. These policies ensure that capital strategy actions, including the addition of new capital, if needed, common stock repurchases, redemption of preferred stock or the declaration of preferred stock, common stock and bank dividends are prudent, efficient and provide value to TCF's shareholders, while ensuring that past and prospective earnings retention is consistent with TCF's capital needs for growth, as well as asset quality and overall financial condition. TCF and TCF Bank manage their capital levels to exceed all regulatory capital requirements.

On October 24, 2019, our board of directors approved an authorization to repurchase up to \$150 million of our common stock. The repurchase program has no expiration, and permits shares to be repurchased in compliance with Rule 10b-18 of the Exchange Act, through one or more broker-dealers as part of "block purchases" made by TCF, and/or through privately negotiated purchases, accelerated stock repurchase agreements, or Rule 10b5-1 plans at the discretion of the Corporation. Through November 11, 2019, we repurchased 190,977 shares of our common stock totaling \$8.0 million.

At September 30, 2019 and December 31, 2018, TCF Bank's capital ratios exceeded the quantitative capital ratios required for an institution to be considered "well-capitalized." Significant factors that may affect capital adequacy include, but are not limited to, a disproportionate growth in assets versus capital and a change in mix or credit quality of assets. There are no conditions or events since September 30, 2019 that management believes have changed TCF Bank's status as well-capitalized.

Equity Total equity was \$5.7 billion, or 12.5% of total assets, at September 30, 2019, compared with \$2.6 billion, or 10.8% of total assets, at December 31, 2018. The increase in equity during the nine months ended September 30, 2019 was primarily attributable to the 81.9 million shares of common stock issued in the Merger. See Note 2 Merger of Notes to Consolidated Financial Statements for further information.

Treasury Stock and Other Treasury stock and other was \$27.4 million at September 30, 2019, compared with \$252.2 million at December 31, 2018. The \$27.4 million at September 30, 2019 was comprised of shares held in trust for deferred compensation plans. The decrease was primarily due to the elimination of all previously outstanding Legacy TCF treasury stock in connection with the close of the Merger.

Common Stock Dividends Dividends to common shareholders on a per share basis were 35 cents for the three months ended September 30, 2019, and as adjusted to reflect the Merger Exchange Ratio, 94 cents for the nine months ended September 30, 2019. Dividends to common shareholders on a per share basis, adjusted to reflect the Merger Exchange Ratio, were 29.5 cents for the three months ended September 30, 2018 and 88.5 cents for the nine months ended September 30, 2018. TCF Financial's common stock dividend payout ratio was 233.3% and 52.5% for the three and nine months ended September 30, 2019, compared with 29.4% and 36.6% for the same periods in 2018. TCF Financial's primary funding sources for dividends are dividends received from TCF Bank.

On October 24, 2019, our board of directors declared a regular quarterly cash dividend of \$0.35 per common share payable on December 2, 2019 to shareholders of record at the close of business on November 15, 2019, and declared a quarterly cash dividend of \$0.35625 per depository share payable on December 2, 2019 to shareholders of record of the depository shares, each representing a 1/1,000th interest in a share of the 5.70% Series C Non-Cumulative Perpetual Preferred Stock, at the close of business on November 15, 2019.

Common Shareholders' Equity Total common shareholders' equity was \$5.5 billion, or 12.04% of total assets, at September 30, 2019, compared with \$2.4 billion, or 9.99%, at December 31, 2018. Tangible common equity was \$4.0 billion, or 9.09% of total tangible assets, at September 30, 2019, compared with \$2.2 billion, or 9.32%, at December 31, 2018. Book value per common share was \$35.82 at September 30, 2019, compared with \$26.85 at December 31, 2018. Tangible book value per common share was \$26.18 at September 30, 2019, compared with \$24.87 at December 31, 2018. See "Consolidated Financial Condition Analysis — Non-GAAP Financial Measures" in this Management's Discussion and Analysis for further information.

Non-GAAP Financial Measures

This report contains references to financial measures that are not defined in GAAP. Such non-GAAP financial measures include our tangible book value per common share; tangible common shareholders' equity; presentation of net interest income and net interest margin on a fully tax-equivalent ("FTE") basis; our adjusted efficiency ratio (which excludes merger-related expenses, loss on transfer of legacy TCF auto loans to held-for-sale, termination of interest rate swaps, write-down of company-owned vacant land parcels, gains from sale of certain investment securities, loan servicing rights impairment, CFPB/OCC settlement adjustment, lease financing equipment depreciation, net interest income FTE adjustment and amortization of intangible assets); and other adjusted information presented excluding merger-related expenses and non-core items (defined as loss on transfer of legacy TCF auto loans to held-for-sale, termination of interest rate swaps, write-down of company-owned vacant land parcels, gains from sale of certain investment securities, loan servicing rights impairment and CFPB/OCC settlement adjustment) including net income, diluted earnings per share, return on average assets, return on average common shareholders' equity, return on average tangible common shareholders' equity tangible book value per common share and tangible common equity to tangible assets. Management believes that the presentation of these non-GAAP financial measures (i) provides important supplemental information that contributes to a proper understanding of our operating performance, (ii) enables a more complete understanding of factors and trends affecting our business and (iii) allows investors to evaluate our performance in a manner similar to management, the financial services industry, bank stock analysts, and bank regulators. Management uses non-GAAP financial measures internally in the preparation of our operating budgets, monthly financial performance reporting, and in our presentation to investors of our performance. Non-GAAP financial measures are not defined by GAAP and other entities may calculate them differently than TCF does. Non-GAAP financial measures have inherent limitations and are not required to be uniformly applied. Although non-GAAP financial measures are frequently used by stakeholders in the evaluation of a company, they have limitations as analytical tools and should not be considered in isolation or as a substitute for analyses of results as reported under GAAP.

The following tables provide a reconciliation of each non-GAAP financial measure to the most directly comparable GAAP financial measure. A reconciliation of net interest income and net interest margin (FTE) to the most directly comparable GAAP financial measure can be found within the Net Interest Income subheading of this report.

The computation of the adjusted diluted earnings per common share was as follows:

(Dollars in thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income available to common shareholders	\$ 19,654	\$ 83,702	\$ 175,588	\$ 206,131
Less: Earnings allocated to participating securities	—	13	19	30
Earnings allocated to common shareholders (a)	19,654	83,689	175,569	206,101
Plus: Merger-related expenses	111,259	—	124,943	—
Non-core items:				
Plus: Loss on transfer of legacy TCF auto finance portfolio to held-for-sale ⁽¹⁾	19,264	—	19,264	—
Plus: Termination of interest rate swaps ⁽²⁾	17,302	—	17,302	—
Less: Gain on sale of certain investment securities ⁽³⁾	(5,869)	—	(5,869)	—
Plus: Write-down of company-owned vacant land parcels ⁽⁴⁾	5,890	—	5,890	—
Plus: Loan servicing rights impairment ⁽²⁾	4,520	—	4,520	—
Plus: CFPB/OCC settlement adjustment ⁽⁴⁾	—	—	—	32,000
Total non-core items	41,107	—	41,107	32,000
Less: Related income tax expense, net of benefits ⁽⁵⁾	46,213	—	49,481	6,491
Total adjustments, net of tax	106,153	—	116,569	25,509
Adjusted earnings allocated to common stock (b)	\$ 125,807	\$ 83,689	\$ 292,138	\$ 231,610
Weighted-average common shares outstanding used in diluted earnings per common share calculation ⁽⁶⁾ (c)	128,754,588	83,808,063	98,055,279	84,791,124
Diluted earnings per common share (a) / (c)	\$ 0.15	\$ 1.00	\$ 1.79	\$ 2.43
Adjusted diluted earnings per common share (b) / (c)	0.98	1.00	2.98	2.73
Net income attributable to TCF	\$ 22,148	\$ 86,196	\$ 183,069	\$ 218,706
Total adjustments, net of tax	106,153	—	116,569	25,509
Adjusted net income attributable to TCF	\$ 128,301	\$ 86,196	\$ 299,638	\$ 244,215

⁽¹⁾ Included within Net (losses) gains on sales of loans and leases

⁽²⁾ Included within Other noninterest income.

⁽³⁾ Included within Net gains (losses) on investment securities.

⁽⁴⁾ Included within Other noninterest expense.

⁽⁵⁾ Included within Income tax (benefit) expense.

⁽⁶⁾ Assumes conversion of common shares, as applicable.

The computation of the adjusted net interest income and margin was as follows:

(Dollars in thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net Interest Income	\$ 371,793	\$ 253,502	\$ 880,279	\$ 755,342
Purchase accounting accretion and amortization	28,411	—	28,411	—
Net interest income, excluding purchase accounting accretion and amortization	\$ 343,382	\$ 253,502	\$ 851,868	\$ 755,342
Net interest margin (FTE)	4.14%	4.73%	4.36%	4.70%
Purchase accounting accretion and amortization	0.31	—	0.14	—
Net interest margin, excluding purchase accounting accretion and amortization (FTE)	3.83%	4.73%	4.22%	4.70%

The computation of the adjusted return on average assets, common equity, average tangible common equity and average tangible common equity was as follows:

(Dollars in thousands)		Three Months Ended September 30,		Nine Months Ended September 30,	
		2019	2018	2019	2018
Adjusted net income after tax expense:					
Income after tax expense	(a)	\$ 24,978	\$ 88,839	\$ 192,470	\$ 227,472
Plus: Merger-related expenses		111,259	—	124,943	—
Plus: Non-core items		41,107	—	41,107	32,000
Less: Related income tax expense, net of tax benefits		46,213	—	49,481	25,509
Adjusted net income after tax expense for ROAA calculation	(b)	\$ 131,131	\$ 88,839	\$ 309,039	\$ 233,963
Net income available to common shareholders	(c)	\$ 19,654	\$ 83,702	\$ 175,588	\$ 206,131
Plus: Other intangibles amortization		4,544	911	6,154	2,572
Less: Related income tax expense		1,085	220	1,470	620
Net income available to common shareholders used in ROATCE calculation	(d)	\$ 23,113	\$ 84,393	\$ 180,272	\$ 208,083
Adjusted net income available to common shareholders:					
Net income available to common shareholders		\$ 19,654	\$ 83,702	\$ 175,588	\$ 206,131
Plus: Non-core items		41,107	—	41,107	32,000
Plus: Merger-related expenses		111,259	—	124,943	—
Less: Related income tax expense, net of tax benefits		46,213	—	49,481	25,509
Net income available to common shareholders used in adjusted ROACE calculation	(e)	125,807	83,702	292,157	212,622
Plus: Other intangibles amortization		4,544	911	6,154	2,572
Less: Related income tax expense		1,085	220	1,470	620
Net income available to common shareholders used in adjusted ROATCE calculation	(f)	\$ 129,266	\$ 84,393	\$ 296,841	\$ 214,574
Average balances:					
Average assets	(g)	\$ 39,094,366	\$ 22,904,404	\$ 29,283,275	\$ 23,031,108
Total average equity		\$ 4,683,129	\$ 2,511,983	\$ 3,316,504	\$ 2,534,758
Less: Non-controlling interest in subsidiaries		25,516	23,548	26,558	25,133
Total TCF Financial Corporation shareholders' equity		4,657,613	2,488,435	3,289,946	2,509,625
Less: Preferred stock		169,302	169,302	169,302	169,302
Average total common shareholders' equity used in ROACE calculation	(h)	\$ 4,488,311	\$ 2,319,133	\$ 3,120,644	\$ 2,340,323
Less: Average goodwill, net		890,155	154,757	402,583	154,757
Less: Average other intangibles, net		142,925	21,772	61,208	22,549
Average tangible common shareholders' equity used in ROATCE calculation	(i)	\$ 3,455,231	\$ 2,142,604	\$ 2,656,853	\$ 2,163,017
ROAA ⁽¹⁾	(a) / (g)	0.26%	1.55%	0.88%	1.32%
Adjusted ROAA ⁽¹⁾	(b) / (g)	1.34	1.55	1.41	1.46
ROACE ⁽¹⁾	(c) / (h)	1.75	14.44	7.50	11.80
Adjusted ROACE ⁽¹⁾	(e) / (h)	11.21	14.44	12.48	13.26
ROATCE ⁽¹⁾	(d) / (i)	2.68	15.76	9.05	12.89
Adjusted ROATCE ⁽¹⁾	(f) / (i)	14.96	15.76	14.90	14.47

⁽¹⁾ Annualized.

The computation of the adjusted efficiency ratio was as follows:

(Dollars in thousands)		Three Months Ended September 30,		Nine Months Ended September 30,	
		2019	2018	2019	2018
Noninterest expense	(a)	\$ 425,620	\$ 246,423	\$ 915,544	\$ 764,442
Less: Merger-related expenses		111,259	—	124,943	—
Less: CFPB/OCC settlement adjustment		—	—	—	32,000
Less: Write-down of company-owned vacant land parcels		5,890	—	5,890	—
Adjusted noninterest expense		\$ 308,471	\$ 246,423	\$ 784,711	\$ 732,442
Less: Lease financing equipment depreciation		19,408	19,525	57,797	54,744
Less: Other intangibles amortization		4,544	911	6,154	2,572
Adjusted noninterest expense, efficiency ratio	(b)	\$ 284,519	\$ 225,987	\$ 720,760	\$ 675,126
Net interest income		\$ 371,793	\$ 253,502	\$ 880,279	\$ 755,342
Noninterest income		94,258	112,064	307,480	330,529
Total revenue	(c)	\$ 466,051	\$ 365,566	\$ 1,187,759	\$ 1,085,871
Noninterest income		\$ 94,258	\$ 112,064	\$ 307,480	\$ 330,529
Plus: Loss on transfer of legacy TCF auto loans to held-for-sale		19,264	—	19,264	—
Plus: Termination of interest rate swaps		17,302	—	17,302	—
Less: Gain on sales of certain investment securities		(5,869)	—	(5,869)	—
Plus: Loan servicing rights impairment		4,520	—	4,520	—
Adjusted noninterest income		129,475	112,064	342,697	330,529
Net interest income		371,793	253,502	880,279	755,342
Plus: Net interest income FTE adjustment		2,488	2,112	5,547	6,269
Adjusted net interest income		374,281	255,614	885,826	761,611
Less: Lease financing equipment depreciation		19,408	19,525	57,797	54,744
Adjusted total revenue, efficiency ratio	(d)	\$ 484,348	\$ 348,153	\$ 1,170,726	\$ 1,037,396
Efficiency ratio	(a) / (c)	91.32%	67.41%	77.08%	70.40%
Adjusted efficiency ratio	(b) / (d)	58.74	64.91	61.57	65.08

The computations of tangible common equity to tangible assets and tangible book value per common share were as follows:

(Dollars in thousands, except per share data)		At September 30, 2019	At December 31, 2018
Total equity		\$ 5,693,417	\$ 2,556,260
Less: Non-controlling interest in subsidiaries		23,313	18,459
Total TCF Financial Corporation shareholders' equity		5,670,104	2,537,801
Less: Preferred share		169,302	169,302
Total common shareholders' equity	(a)	5,500,802	2,368,499
Less: Goodwill		1,265,111	154,757
Less: Other intangibles, net		215,910	20,496
Tangible common shareholders' equity	(b)	\$ 4,019,781	\$ 2,193,246
Total assets	(c)	\$ 45,692,511	\$ 23,699,612
Less: Goodwill		1,265,111	154,757
Less: Other intangibles, net		215,910	20,496
Tangible assets	(d)	\$ 44,211,490	\$ 23,524,359
Common stock shares outstanding	(e)	153,571,381	88,198,460
Common equity to assets	(a) / (c)	12.04%	9.99%
Tangible common equity to tangible assets	(b) / (d)	9.09	9.32
Book value per common share	(a) / (e)	\$ 35.82	\$ 26.85
Tangible book value per common share	(b) / (e)	26.18	24.87

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

TCF's results of operations depend, to a large degree, on its net interest income and its ability to manage interest rate risk. Although TCF manages other risks in the normal course of business, such as credit risk, liquidity risk and foreign currency risk, the Corporation considers interest rate risk to be one of its more significant market risks.

Interest Rate Risk

TCF's ALCO and the Finance Committee of TCF Financial Corporation's Board of Directors have established interest rate risk policy limits. Interest rate risk is defined as the exposure of net interest income and fair value of financial instruments (interest earning assets, deposits and borrowings) to movements in interest rates. The major sources of the Corporation's interest rate risk are timing differences in the maturity and repricing characteristics of assets and liabilities, changes in the shape of the yield curve, changes in consumer behavior and changes in relationships between rate indices (basis risk). Management measures these risks and their impact in various ways, including through the use of simulation and valuation analyses. The interest rate scenarios may include gradual or rapid changes in interest rates, spread narrowing and widening, yield curve twists and changes in assumptions about consumer behavior in various interest rate scenarios. A mismatch between maturities, interest rate sensitivities and prepayment characteristics of assets and liabilities results in interest rate risk. TCF, like most financial institutions, has material interest rate risk exposure to changes in both short- and long-term interest rates, as well as variable interest rate indices (e.g., the prime rate or London Interbank Offered Rate).

TCF's ALCO is responsible for reviewing the Corporation's interest rate sensitivity position and establishing policies to monitor and limit exposure to interest rate risk. ALCO manages TCF's interest rate risk based on interest rate expectations and other factors. The principal objective of TCF in managing its assets and liabilities is to provide maximum levels of net interest income and facilitate the funding needs of the Corporation, while maintaining acceptable levels of interest rate risk and liquidity risk.

ALCO primarily uses two interest rate risk tools with policy limits to evaluate TCF's interest rate risk: net interest income simulation and economic value of equity ("EVE") analysis.

Management utilizes net interest income simulation models to estimate the near-term effects of changing interest rates on its net interest income. Net interest income simulation involves forecasting net interest income under a variety of scenarios, including the level of interest rates, the shape of the yield curve and the spreads between market interest rates. Management exercises its best judgment in making assumptions regarding events that management can influence, such as non-contractual deposit repricings and events outside management's control, including consumer behavior on loan and deposit activity and the effect that competition has on both loan and deposit pricing. These assumptions are subjective and, as a result, net interest income simulation results will differ from actual results due to the timing, magnitude and frequency of interest rate changes and changes in market conditions, consumer behavior and management strategies, among other factors. TCF performs various sensitivity analyses on new loan spreads, prepayment rates, basis risk and deposit assumptions.

The following table presents changes in TCF's net interest income over a twelve month period if short- and long-term interest rates were to sustain an immediate change. These projections were based on our assets and liabilities remaining static over the next twelve months and factored into the simulation model.

(Dollars in millions)	Impact on Net Interest Income	
	September 30, 2019	
Immediate change in interest rates:		
+200 basis points	\$ 59,400	3.9%
+100 basis points	35,500	2.3
-100 basis points	(74,700)	(4.9)

Management also uses EVE to measure risk in the balance sheet that might not be taken into account in the net interest income simulation analysis. Net interest income simulation highlights exposure over a relatively short time period, while EVE analysis incorporates all cash flows over the estimated remaining life of all balance sheet positions. The valuation of the balance sheet, at a point in time, is defined as the discounted present value of asset cash flows minus the discounted present value of liability cash flows. EVE analysis addresses only the current balance sheet and does not incorporate the planned changes to interest-earning assets. As with the net interest income simulation model, EVE analysis is based on key assumptions about the timing and variability of balance sheet cash flows and does not take into account any potential responses by management to anticipated changes in interest rates.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures TCF carried out an evaluation, under the supervision and with the participation of TCF's management, including TCF's Chief Executive Officer (Principal Executive Officer), Chief Financial Officer (Principal Financial Officer) and Chief Accounting Officer (Principal Accounting Officer), of the effectiveness of the design and operation of TCF's disclosure controls and procedures pursuant to Rules 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, TCF's Principal Executive Officer and Principal Financial Officer concluded that TCF's disclosure controls and procedures were effective as of September 30, 2019.

Any system of disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. The design of a control system inherently has limitations and the benefits of controls must be weighed against their costs. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. Therefore, no assessment of a cost-effective system of internal controls can provide absolute assurance that all control issues and instances of fraud, if any, will be detected.

Disclosure controls and procedures are designed to ensure that information required to be disclosed by TCF in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls are also designed with the objective of ensuring that such information is accumulated and communicated to TCF's management, including the Chief Executive Officer (Principal Executive Officer), Chief Financial Officer (Principal Financial Officer) and Chief Accounting Officer (Principal Accounting Officer), as appropriate, to allow for timely decisions regarding required disclosure. TCF's disclosure controls also include internal controls that are designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use and that transactions are properly recorded and reported.

Changes in Internal Control Over Financial Reporting Management is responsible for establishing and maintaining adequate internal control over financial reporting for TCF. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of TCF; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of TCF are only being made in accordance with authorizations of management and directors of TCF; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of TCF's assets that could have a material effect on the financial statements.

The Merger, which was completed on August 1, 2019, had a material impact on the financial position, results of operations and cash flows of the combined company from the date of acquisition through September 30, 2019. The Merger also resulted in significant changes to the combined company's internal controls over financial reporting. We are in the process of assessing, as well as planning for the integration of, internal controls over financial reporting for the combined company and will report on our assessment of our internal controls over financial reporting in our next annual report.

Part II - Other Information

Item 1. Legal Proceedings.

From time to time, TCF is a party to legal proceedings arising out of its lending, leasing and deposit operations, including foreclosure proceedings and other collection actions as part of its lending and leasing collections activities. TCF may also be subject to regulatory examinations and enforcement actions brought by federal regulators, including the Securities and Exchange Commission, the Federal Reserve, the Office of the Comptroller of the Currency and the Consumer Financial Protection Bureau which may impose sanctions on TCF for failures related to regulatory compliance. From time to time borrowers and other customers, and employees and former employees have also brought actions against TCF, in some cases claiming substantial damages. TCF and other financial services companies are subject to the risk of class action litigation. Litigation is often unpredictable and the actual results of litigation cannot be determined and therefore the ultimate resolution of a matter and the possible range of loss associated with certain potential outcomes cannot be established. Based on our current understanding of TCF's pending legal proceedings, management does not believe that judgments or settlements arising from pending or threatened legal matters, individually or in the aggregate, would have a material adverse effect on the consolidated financial position, operating results or cash flows of TCF.

Item 1A. Risk Factors.

There were no material changes in the risk factors for TCF in the quarter covered by this report. You should carefully consider the risks and risk factors included under Part 1, Item 1A. in each of TCF's and Legacy TCF's Annual Reports on Form 10-K for the year ended December 31, 2018, and in TCF's other SEC filings, including the Joint Proxy Statement/Prospectus regarding the Merger that TCF filed with the SEC on May 3, 2019 pursuant to Rule 424(b)(3). TCF's business, financial condition or results of operations could be materially adversely affected by any of these risks.

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

Share repurchase activity for the quarter ended September 30, 2019 was as follows:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan
July 1 to July 31, 2019			
Share repurchase program ⁽¹⁾	780,716	\$ 41.39	780,716
Employee transactions ⁽²⁾	2,153	41.33	N.A.
August 1 to August 31, 2019			
Employee transactions ⁽²⁾	6,899	38.14	N.A.
September 1 to September 30, 2019			
Employee transactions ⁽²⁾	2,777	37.44	N.A.
Total			
Share repurchase program ⁽¹⁾	780,716	\$ 41.39	780,716
Employee transactions ⁽²⁾	11,829	38.55	N.A.

N.A. Not Applicable

- (1) On July 25, 2018, the Legacy TCF Board of Directors approved a \$150.0 million increase to Legacy TCF's common stock repurchase program, with repurchases to be based on market conditions, the trading price of TCF shares and other factors. This repurchase authorization was terminated in connection with the completion of the Merger effective August 1, 2019. The total number of shares purchased and the average price paid have been retrospectively adjusted to reflect the equivalent number of shares issued in the Merger.
- (2) Represents restricted stock withheld pursuant to the terms of awards granted under either the Legacy TCF Financial Incentive Stock Program or the Legacy TCF Omnibus Incentive Plan to offset tax withholding obligations that occur upon vesting and release of restricted stock. Both plans provide that the value of shares withheld shall be the average of the high and low prices of common stock of Legacy TCF on the date the relevant transaction occurs. With respect to employee transactions from July 1 to July 31, 2019, the total number of shares purchased and the average price paid have been retrospectively adjusted to reflect the equivalent number of shares issued in the Merger.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

The following information is being filed herewith in lieu of filing such information on a Current Report on Form 8-K under Item 5.02, Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers:

Amendment and Restatement of Employment Agreement with Craig R. Dahl

On November 6, 2019, TCF made and entered into an amended and restated employment agreement (the “**Employment Agreement**”) with Craig R. Dahl in order to align certain terms of Mr. Dahl’s employment with those of other executive officers of the Corporation.

The Employment Agreement changed certain terms of Mr. Dahl’s employment that were contained in that certain Amended and Restated Employment Agreement (the “**Merger Employment Agreement**”), dated January 27, 2019, which became effective on August 1, 2019. Below is a summary of the materially changed terms of Mr. Dahl’s employment following execution of the Employment Agreement:

- The cash payment called for in the event of a termination by the Corporation without Cause, or by Mr. Dahl with Good Reason was changed from 2.5 times the sum of (i) his Annual Base Salary and (ii) his annual bonus (which was set as to equal 100% of his salary) to 2.5 times the sum of (i) Mr. Dahl’s Annual Base Salary and (ii) the average of Mr. Dahl’s annual bonus for the three most recently completed fiscal years;
- in the event of a termination by the Corporation without Cause, by Mr. Dahl for Good Reason, or upon death, disability or retirement on one year’s notice, all of Mr. Dahl’s outstanding equity awards will vest; and
- The definition of Change in Control was changed by increasing the percentage of securities of the Corporation that any person would have to become the beneficial owner of in order to qualify as a Change in Control from 30% to 40% and the definition was expanded to include an “Active Change in Control Proposal Period” as defined in the Employment Agreement;

Other than as described above, the material terms of Mr. Dahl’s employment contained in the Merger Employment Agreement remain unchanged, and the description of them contained in the Corporation’s Current Report on Form 8-K filed on January 28, 2019 is incorporated herein by reference.

The foregoing description of the Employment Agreement is qualified in all respects by reference to the full text of the Employment Agreement, a copy of which is attached as Exhibit 10(a) to this Quarterly Report on Form 10-Q.

Item 6. Exhibits.

Exhibit Number	Description
2(a)	Agreement and Plan of Merger between Chemical Financial Corporation and TCF Financial Corporation dated as of January 27, 2019 [incorporated by reference to Exhibit 2.1 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on January 28, 2019 (No. 19545732)]
3(a)	Restated Articles of Incorporation of TCF Financial Corporation [incorporated by reference to Exhibit 3.1 to our Form 10-Q for the quarter ended March 31, 2017 (No. 17829102)]
3(b)	Amendment to the Restated Articles of Incorporation of TCF Financial Corporation, including the Certificate of Designations of 5.70% Series C Non-Cumulative Perpetual Preferred Stock [incorporated by reference to Exhibit 3.2 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on August 1, 2019 (No. 19993087)]
3(c)	Bylaws of TCF Financial Corporation, as of August 1, 2019 [incorporated by reference to Exhibit 3.3 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on August 1, 2019 (No. 19993087)]
4(a)	Description of Capital Stock [incorporated by reference to Exhibit 4.1 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on August 1, 2019 (No. 19993087)]
10(a)##	Amended and Restated Employment Agreement between Craig R. Dahl and TCF Financial Corporation, dated as of November 6, 2019
10(b)*	Letter Agreement dated July 31, 2019 between Chemical Financial Corporation and Brennan Ryan [incorporated by reference to Exhibit 10.2 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on August 1, 2019 (No. 19993087)]
10(c)*	Amended and Restated Employment Agreement dated July 31, 2019 between Chemical Financial Corporation and Thomas C. Shafer [incorporated by reference to Exhibit 10.23 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on August 1, 2019 (No. 19993087)]
10(d)*	Form of Retention Time-Vesting Restricted Stock Unit Agreement [incorporated by reference to Exhibit 10.4 of TCF Financial Corporation's Current Report on Form 8-K filed with the SEC on August 1, 2019 (No. 19993087)]
31.1#	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2#	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1#	Certification of the Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2#	Certification of the Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH#	XBRL Taxonomy Extension Schema Document
101.CAL#	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF#	XBRL Taxonomy Extension Definitions Linkbase Document
101.LAB#	XBRL Taxonomy Extension Label Linkbase Document
101.PRE#	XBRL Taxonomy Extension Presentation Linkbase Document

* Executive Contract

Filed herein

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.

TCF FINANCIAL CORPORATION

/s/ Craig R. Dahl

Craig R. Dahl,
Chief Executive Officer and President
(Principal Executive Officer)

/s/ Dennis L. Klaeser

Dennis L. Klaeser,
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

/s/ Kathleen S. Wendt

Kathleen S. Wendt,
Executive Vice President and Chief Accounting Officer
(Principal Accounting Officer)

Dated: November 12, 2019