

**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
For the transition period from _____ to _____.
Commission file number: **001-37497**



LIVE OAK BANCSHARES, INC.
(Exact name of registrant as specified in its charter)

North Carolina
(State or other jurisdiction of incorporation or organization)

26-4596286
(I.R.S. Employer Identification No.)

1741 Tiburon Drive
Wilmington, North Carolina
(Address of principal executive offices)

28403
(Zip Code)

(910) 790-5867
(Registrant's telephone number, including area code)

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, smaller reporting company, or an emerging growth company. See 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES NO

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Voting Common Stock, no par value per share	LOB	The NASDAQ Stock Market LLC

APPLICABLE ONLY TO CORPORATE ISSUERS:

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

As of November 6, 2019, there were 36,471,738 shares of the registrant's voting common stock outstanding and 3,815,531 shares of the registrant's non-voting common stock outstanding.

Live Oak Bancshares, Inc.
Form 10-Q
For the Quarterly Period Ended September 30, 2019
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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Live Oak Bancshares, Inc.

Condensed Consolidated Balance Sheets

*As of September 30, 2019 (unaudited) and December 31, 2018**

(Dollars in thousands)

	September 30, 2019	December 31, 2018
Assets		
Cash and due from banks	\$ 159,527	\$ 316,823
Federal funds sold	88,919	—
Certificates of deposit with other banks	7,250	7,250
Investment securities available-for-sale	570,795	380,490
Loans held for sale	903,095	687,393
Loans and leases held for investment	2,441,953	1,843,419
Allowance for loan and lease losses	(42,944)	(32,434)
Net loans and leases	2,399,009	1,810,985
Premises and equipment, net	280,942	262,524
Foreclosed assets	5,702	1,094
Servicing assets	37,583	47,641
Operating lease right-of-use assets	1,890	—
Other assets	148,985	156,249
Total assets	<u>\$ 4,603,697</u>	<u>\$ 3,670,449</u>
Liabilities and Shareholders' Equity		
Liabilities		
Deposits:		
Noninterest-bearing	\$ 56,373	\$ 53,993
Interest-bearing	3,962,894	3,095,590
Total deposits	4,019,267	3,149,583
Short term borrowings	1,295	1,441
Long term borrowings	15	16
Operating lease liabilities	2,041	—
Other liabilities	52,860	25,849
Total liabilities	<u>4,075,478</u>	<u>3,176,889</u>
Shareholders' equity		
Preferred stock, no par value, 1,000,000 authorized, none issued or outstanding at September 30, 2019 and December 31, 2018	—	—
Class A common stock, no par value, 100,000,000 shares authorized, 36,457,377 and 35,512,262 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively	296,925	278,945
Class B common stock, no par value, 10,000,000 shares authorized, 3,815,531 and 4,643,530 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively	40,401	49,168
Retained earnings	174,641	167,124
Accumulated other comprehensive income (loss)	16,252	(1,677)
Total shareholders' equity	528,219	493,560
Total liabilities and shareholders' equity	<u>\$ 4,603,697</u>	<u>\$ 3,670,449</u>

* Derived from audited consolidated financial statements.

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Income
For the three and nine months ended September 30, 2019 and 2018 (unaudited)
(Dollars in thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Interest income				
Loans and fees on loans	\$ 55,939	\$ 37,724	\$ 150,819	\$ 106,682
Investment securities, taxable	4,001	2,528	11,434	6,175
Other interest earning assets	1,167	1,638	3,914	5,032
Total interest income	61,107	41,890	166,167	117,889
Interest expense				
Deposits	23,576	14,165	64,096	38,510
Borrowings	—	1	—	131
Total interest expense	23,576	14,166	64,096	38,641
Net interest income	37,531	27,724	102,071	79,248
Provision for loan and lease losses				
	7,160	(243)	13,365	6,236
Net interest income after provision for loan and lease losses	30,371	27,967	88,706	73,012
Noninterest income				
Loan servicing revenue	6,831	7,506	21,304	21,369
Loan servicing asset revaluation	(859)	(9,380)	(3,508)	(18,138)
Net gains on sales of loans	7,425	22,004	17,638	69,483
Equity method investments income (loss)	(2,370)	(360)	(6,120)	(1,397)
Equity security investments gains (losses), net	3,346	39	3,481	134
Gain on sale of investment securities available-for-sale	87	—	92	—
Lease income	2,361	2,194	7,055	5,722
Construction supervision fee income	360	578	1,525	1,954
Title insurance income	—	479	—	2,775
Other noninterest income	1,447	1,271	4,889	3,798
Total noninterest income	18,628	24,331	46,356	85,700
Noninterest expense				
Salaries and employee benefits	22,717	20,553	66,562	62,908
Travel expense	1,934	2,003	4,675	5,887
Professional services expense	2,073	1,228	5,876	3,645
Advertising and marketing expense	1,277	1,462	4,306	4,992
Occupancy expense	2,131	1,588	5,588	5,327
Data processing expense	3,072	3,661	7,418	9,404
Equipment expense	4,361	3,649	11,925	10,094
Other loan origination and maintenance expense	3,535	1,742	6,882	4,485
Renewable energy tax credit investment impairment	—	—	602	—
FDIC insurance	101	1,105	1,435	2,687
Title insurance closing services expense	—	114	—	912
Impairment expense on goodwill and other intangibles, net	—	2,680	—	2,680
Other expense	1,536	1,459	5,245	7,125
Total noninterest expense	42,737	41,244	120,514	120,146
Income before taxes				
	6,262	11,054	14,548	38,566
Income tax expense (benefit)	2,367	(3,198)	3,346	(2,392)
Net income	\$ 3,895	\$ 14,252	\$ 11,202	\$ 40,958
Basic earnings per share	\$ 0.10	\$ 0.36	\$ 0.28	\$ 1.02
Diluted earnings per share	\$ 0.09	\$ 0.34	\$ 0.27	\$ 0.98

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Comprehensive Income
For the three and nine months ended September 30, 2019 and 2018 (unaudited)
(Dollars in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income	\$ 3,895	\$ 14,252	\$ 11,202	\$ 40,958
Other comprehensive income (loss) before tax:				
Net unrealized gain (loss) on investment securities arising during the period	4,528	(2,094)	23,683	(7,014)
Reclassification adjustment for gain on sale of securities available-for-sale included in net income	(87)	—	(92)	—
Other comprehensive income (loss) before tax	4,441	(2,094)	23,591	(7,014)
Income tax (expense) benefit	(1,066)	502	(5,662)	1,683
Other comprehensive income (loss), net of tax	3,375	(1,592)	17,929	(5,331)
Total comprehensive income	<u>\$ 7,270</u>	<u>\$ 12,660</u>	<u>\$ 29,131</u>	<u>\$ 35,627</u>

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Changes in Shareholders' Equity
For the three and nine months ended September 30, 2019 and 2018 (unaudited)
(Dollars in thousands)

	Three Months Ended					Total equity
	Common stock		Amount	Retained earnings	Accumulated other comprehensive income (loss)	
	Class A	Class B				
Balance at June 30, 2019	<u>35,577,386</u>	<u>4,643,530</u>	<u>\$ 334,155</u>	<u>\$ 171,954</u>	<u>\$ 12,877</u>	<u>\$ 518,986</u>
Net income	—	—	—	3,895	—	3,895
Other comprehensive income	—	—	—	—	3,375	3,375
Issuance of restricted stock	18,891	—	—	—	—	—
Withholding cash issued in lieu of restricted stock issuance	—	—	(142)	—	—	(142)
Employee stock purchase program	15,434	—	255	—	—	255
Stock option exercises	17,667	—	115	—	—	115
Stock option based compensation expense	—	—	440	—	—	440
Restricted stock expense	—	—	2,503	—	—	2,503
Non-voting common stock converted to voting common stock in private sale	827,999	(827,999)	—	—	—	—
Cash dividends (\$0.03 per share)	—	—	—	(1,208)	—	(1,208)
Balance at September 30, 2019	<u>36,457,377</u>	<u>3,815,531</u>	<u>\$ 337,326</u>	<u>\$ 174,641</u>	<u>\$ 16,252</u>	<u>\$ 528,219</u>
Balance at June 30, 2018	<u>35,442,879</u>	<u>4,643,530</u>	<u>\$ 323,211</u>	<u>\$ 144,791</u>	<u>\$ (5,016)</u>	<u>\$ 462,986</u>
Net income	—	—	—	14,252	—	14,252
Other comprehensive loss	—	—	—	—	(1,592)	(1,592)
Issuance of restricted stock	20,029	—	—	—	—	—
Withholding cash issued in lieu of restricted stock issuance	—	—	(213)	—	—	(213)
Employee stock purchase program	7,317	—	177	—	—	177
Stock option exercises	26,662	—	335	—	—	335
Stock option based compensation expense	—	—	501	—	—	501
Restricted stock expense	—	—	1,988	—	—	1,988
Cash dividends (\$0.03 per share)	—	—	—	(1,204)	—	(1,204)
Balance at September 30, 2018	<u>35,496,887</u>	<u>4,643,530</u>	<u>\$ 325,999</u>	<u>\$ 157,839</u>	<u>\$ (6,608)</u>	<u>\$ 477,230</u>

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Changes in Shareholders' Equity (Continued)
For the three and nine months ended September 30, 2019 and 2018 (unaudited)
(Dollars in thousands)

	Nine Months Ended					
	Common stock			Retained earnings	Accumulated other comprehensive income (loss)	Total equity
	Shares		Amount			
	Class A	Class B				
Balance at December 31, 2018	35,512,262	4,643,530	\$ 328,113	\$ 167,124	\$ (1,677)	\$ 493,560
Net income	—	—	—	11,202	—	11,202
Other comprehensive income	—	—	—	—	17,929	17,929
Issuance of restricted stock	40,377	—	—	—	—	—
Withholding cash issued in lieu of restricted stock issuance	—	—	(228)	—	—	(228)
Employee stock purchase program	29,493	—	437	—	—	437
Stock option exercises	47,246	—	287	—	—	287
Stock option based compensation expense	—	—	1,310	—	—	1,310
Restricted stock expense	—	—	7,407	—	—	7,407
Non-voting common stock converted to voting common stock in private sale	827,999	(827,999)	—	—	—	—
Cumulative effect of accounting change for Accounting Standards Update 2016-02	—	—	—	(66)	—	(66)
Cash dividends (\$0.09 per share)	—	—	—	(3,619)	—	(3,619)
Balance at September 30, 2019	<u>36,457,377</u>	<u>3,815,531</u>	<u>\$ 337,326</u>	<u>\$ 174,641</u>	<u>\$ 16,252</u>	<u>\$ 528,219</u>
Balance at December 31, 2017	35,252,053	4,643,530	\$ 317,725	\$ 120,241	\$ (1,033)	\$ 436,933
Net income	—	—	—	40,958	—	40,958
Other comprehensive loss	—	—	—	—	(5,331)	(5,331)
Issuance of restricted stock	59,162	—	—	—	—	—
Withholding cash issued in lieu of restricted stock issuance	—	—	(708)	—	—	(708)
Employee stock purchase program	14,339	—	342	—	—	342
Stock option exercises	171,333	—	1,587	—	—	1,587
Stock option based compensation expense	—	—	1,310	—	—	1,310
Restricted stock expense	—	—	5,743	—	—	5,743
Reclassification of accumulated other comprehensive income due to tax rate change	—	—	—	244	(244)	—
Cash dividends (\$0.09 per share)	—	—	—	(3,604)	—	(3,604)
Balance at September 30, 2018	<u>35,496,887</u>	<u>4,643,530</u>	<u>\$ 325,999</u>	<u>\$ 157,839</u>	<u>\$ (6,608)</u>	<u>\$ 477,230</u>

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Cash Flows
For the nine months ended September 30, 2019 and 2018 (unaudited)
(Dollars in thousands)

	Nine Months Ended September 30,	
	2019	2018
<i>Cash flows from operating activities</i>		
Net income	\$ 11,202	\$ 40,958
Adjustments to reconcile net income to net cash used by operating activities:		
Depreciation and amortization	14,303	12,009
Provision for loan and lease losses	13,365	6,236
Amortization of premium on securities, net of accretion	429	576
Change in discount on unguaranteed loans	(6,815)	5,282
Impairment expense on goodwill and other intangibles, net	—	2,680
Deferred tax (benefit) expense	533	(2,392)
Originations of loans held for sale	(712,000)	(826,478)
Proceeds from sales of loans held for sale	310,852	966,076
Net gains on sale of loans held for sale	(17,638)	(69,483)
Net loss on sale of foreclosed assets	7	19
Net decrease in servicing assets	10,058	3,037
Gain on sale of securities available-for-sale	(92)	—
Net gain on disposal of long-lived asset	(357)	—
Net loss on disposal of property and equipment	109	37
Equity method investments (income) loss	6,120	1,397
Equity security investments (gains) losses, net	(3,481)	(134)
Renewable energy tax credit investment impairment	602	—
Stock option based compensation expense	1,310	1,310
Restricted stock expense	7,407	5,743
Stock based compensation expense tax (shortfall) benefit	(63)	110
Business combination contingent consideration fair value adjustment	—	(260)
Changes in assets and liabilities:		
Lease right-of-use assets and liabilities, net	87	—
Other assets	9,730	(5,421)
Other liabilities	1,526	2,665
Net cash (used) provided by operating activities	(352,806)	143,967
<i>Cash flows from investing activities</i>		
Purchases of securities available-for-sale	(230,256)	(327,422)
Proceeds from sales, maturities, calls, and principal paydown of securities available-for-sale	63,205	36,813
Proceeds from SBA reimbursement/sale of foreclosed assets	724	392
Maturities of certificates of deposits with other banks	—	2,250
Sale of title insurance business, net of cash sold	—	(209)
Loan and lease originations and principal collections, net	(396,548)	(332,115)
Proceeds from sale of long-lived asset	10,895	—
Proceeds from sale of premises and equipment	—	865
Purchases of premises and equipment, net	(30,003)	(87,831)
Net cash used by investing activities	(581,983)	(707,257)

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.**Condensed Consolidated Statements of Cash Flows (Continued)***For the three and nine months ended September 30, 2019 and 2018 (unaudited)*

(Dollars in thousands)

	Nine Months Ended September 30,	
	2019	2018
<i>Cash flows from financing activities</i>		
Net increase in deposits	\$ 869,684	\$ 664,025
Proceeds from long term borrowings	—	18
Repayment of long term borrowings	(3)	(25,076)
Repayment of short term borrowings	(146)	—
Stock option exercises	287	1,587
Employee stock purchase program	437	342
Withholding cash issued in lieu of restricted stock	(228)	(708)
Shareholder dividend distributions	(3,619)	(3,604)
Net cash provided by financing activities	866,412	636,584
Net (decrease) increase in cash and cash equivalents	(68,377)	73,294
<i>Cash and cash equivalents, beginning</i>	316,823	295,271
<i>Cash and cash equivalents, ending</i>	\$ 248,446	\$ 368,565
<i>Supplemental disclosures of cash flow information</i>		
Interest paid	\$ 62,963	\$ 38,598
Income tax received, net	(11,092)	(383)
<i>Supplemental disclosures of noncash operating, investing, and financing activities</i>		
Unrealized holding gains (losses) on available-for-sale securities, net of taxes	\$ 17,929	\$ (5,331)
Transfers from loans and leases to foreclosed real estate and other repossessions	5,058	346
Net transfers from SBA receivable to foreclosed real estate	281	213
Right-of-use assets obtained in exchange for lessee operating lease liabilities	2,241	—
Loans to finance sale of other assets	—	3,642
Transfer of loans held for sale to loans and leases held for investment	225,217	43,185
Transfer of loans and leases held for investment to loans held for sale	35,936	89,980
Accrued premises and equipment additions	2,927	10,518
Equity method investment commitments	16,751	—

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Basis of Presentation

Nature of Operations

Live Oak Bancshares, Inc. (the "Company" or "LOB") is a bank holding company headquartered in Wilmington, North Carolina incorporated under the laws of North Carolina in December 2008. The Company conducts business operations primarily through its commercial bank subsidiary, Live Oak Banking Company (the "Bank"). The Bank was organized and incorporated under the laws of the State of North Carolina on February 25, 2008 and commenced operations on May 12, 2008. The Bank specializes in providing lending services to small businesses nationwide. The Bank identifies and grows lending to credit-worthy borrowers both within specific industries, also called verticals, through expertise within those industries, and more broadly to select borrowers outside of those industries. A significant portion of the loans originated by the Bank are guaranteed by the Small Business Administration ("SBA") under the 7(a) Loan Program and the U.S. Department of Agriculture ("USDA") Rural Energy for America Program ("REAP"), Business & Industry ("B&I") and Water & Waste Disposal ("WEP") loan programs. On July 28, 2015 the Company completed its initial public offering with a secondary offering completed in August of 2017.

In 2010, the Bank formed Live Oak Number One, Inc., a wholly-owned subsidiary, to hold properties foreclosed on by the Bank.

In addition to the Bank, the Company owns Live Oak Grove, LLC, opened in September 2015 for the purpose of providing Company employees and business visitors an on-site restaurant location; Government Loan Solutions, Inc. ("GLS"), a management and technology consulting firm that specializes in the settlement, accounting, and securitization processes for government guaranteed loans, including loans originated under the SBA 7(a) loan program and USDA-guaranteed loans; and 504 Fund Advisors, LLC ("504FA"), formed to serve as the investment adviser to the 504 Fund, a closed-end mutual fund organized to invest in SBA section 504 loans. As of May 1, 2019, 504FA exited as advisor for the 504 Fund.

In August 2016, the Company formed Live Oak Ventures, Inc. (formerly known as "Canapi, Inc.") for the purpose of investing in businesses that align with the Company's strategic initiative to be a leader in financial technology.

In November 2016, the Company formed Live Oak Clean Energy Financing LLC ("LOCEF") for the purpose of providing financing to entities for renewable energy applications. During the first quarter of 2019, LOCEF became a wholly-owned subsidiary of the Bank.

On February 1, 2017, the Company completed its acquisition of Reltco Inc. and National Assurance Title, Inc. (collectively referred to as "Reltco"), two nationwide title agencies under common control based in Tampa, Florida. Effective August 1, 2018, Reltco was sold.

In June 2018, the Bank formed Live Oak Private Wealth, LLC for the purpose of providing high-net-worth individuals and families with strategic wealth and investment management services.

In September 2018, the Company formed Canapi Advisors, LLC for the purpose of providing investment advisory services to a series of new funds focused on providing venture capital to new and emerging financial service technology companies.

The Company generates revenue primarily from net interest income and the origination and sale of government guaranteed loans. Income from the retention of loans is comprised of interest income. Income from the sale of loans is comprised of loan servicing revenue and revaluation of related servicing assets along with net gains on sales of loans. Offsetting these revenues are the cost of funding sources, provision for loan and lease losses, any costs related to foreclosed assets and other operating costs such as salaries and employee benefits, travel, professional services, advertising and marketing and tax expense.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

General

In the opinion of management, all adjustments necessary for a fair presentation of the financial position and results of operations for the periods presented have been included, and all intercompany transactions have been eliminated in consolidation. Results of operations for the nine months ended September 30, 2019 are not necessarily indicative of the results of operations that may be expected for the year ending December 31, 2019. The consolidated balance sheet as of December 31, 2018 has been derived from the audited consolidated financial statements contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the Securities Exchange Commission on February 27, 2019 (SEC File No. 001-37497) (the "2018 Annual Report"). A summary description of the significant accounting policies followed by the Company is set forth in Note 1 of the Notes to Consolidated Financial Statements in the Company's 2018 Annual Report. These unaudited interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and footnotes in the Company's 2018 Annual Report.

The preparation of financial statements in conformity with United States generally accepted accounting principles, or GAAP, requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting period. Actual results could differ significantly from those estimates.

Amounts in all tables in the Notes to Unaudited Condensed Consolidated Financial Statements have been presented in thousands, except percentage, time period, stock option, share and per share data or where otherwise indicated.

Business Segments

Management has determined that the Company has one significant operating segment, which is providing a lending platform for small businesses nationwide. In determining the appropriateness of segment definition, the Company considers the materiality of a potential segment, the components of the business about which financial information is available, and components for which management regularly evaluates relative to resource allocation and performance assessment.

Reclassifications

Certain reclassifications have been made to the prior period's consolidated financial statements to place them on a comparable basis with the current year. Net income and shareholders' equity previously reported were not affected by these reclassifications.

Accounting Change

On January 1, 2019, the Company adopted Accounting Standards Update ("ASU") No. 2016-02 "Leases (Topic 842)," ("ASU 2016-02") and all subsequent ASUs that modified Topic 842. The Company elected to apply certain practical expedients provided under ASU 2016-02 whereby the Company will not reassess (i) whether any expired or existing contracts are or contain leases, (ii) the lease classification for any expired or existing leases and (iii) initial direct costs for any existing leases. The Company has also applied the practical expedient to use hindsight in determining the lease term and in assessing impairment of the right-of-use assets. The Company does not apply the recognition and measurement requirements to any short-term leases (as defined by ASU 2016-02). The Company accounts for lease and non-lease components separately because such amounts are readily determinable under the lease contracts. The Company utilized the modified-retrospective transition approach prescribed by ASU 2018-11, "Leases (Topic 842) Targeted Improvements" ("ASU 2018-11"). The implementation of the new standard resulted in the Company recording \$2.2 million of operating lease right-of-use ("ROU") assets, \$2.4 million of operating lease liabilities and a cumulative effect adjustment to opening retained earnings of \$66 thousand. The Company also recorded \$18 thousand of finance ROU assets and finance lease liabilities.

The Company determines if an arrangement is or contains a lease at inception. If it is determined to be or contain a lease, then the lease is classified as an operating or finance lease.

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Right-of-use ("ROU") assets represent the Company's right to use an underlying asset for the lease term. Lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and liabilities are measured on commencement date based on the present value of the lease payments over the lease term, discounted using the discount rate for the lease at commencement. The discount rate shall be the rate implicit in the lease, however, if that is not readily determinable, the Company will use its incremental borrowing rate. The ROU asset also includes any lease payments made before the commencement date and initial direct costs and excludes any lease incentives received. The lease terms may include options to extend or terminate the lease when it is reasonably certain that the option will be exercised. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Operating leases are included in operating lease right-of-use assets and operating lease liabilities in the consolidated balance sheets. Finance leases are included in other assets and long term borrowings in the consolidated balance sheets. Lease expense for operating leases and finance leases is included in occupancy expense in the consolidated statements of income and interest expense for finance leases is included in other interest expense in the consolidated statements of income.

Note 2. Recent Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). This new guidance replaces the incurred loss impairment methodology in current standards with an expected credit loss methodology and requires consideration of a broader range of information to determine credit loss estimates. ASU 2016-13 requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts and requires enhanced disclosures related to the significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio. In addition, ASU 2016-13 amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. ASU 2016-13 will be effective for the Company on January 1, 2020. An update on the Company's readiness is as follows:

- The Company's cross-functional working group continues to make progress in accordance with its implementation plan for adoption as of the effective date. With the assistance of a third-party vendor, the Company has selected and been deeply involved in the development of a new expected credit losses model using the discounted cash flow (DCF) method.
- Incorporating reasonable and supportable forecasts of economic conditions into the estimate of expected credit losses will require significant judgment, such as selecting economic variables and forecast scenarios as well as determining the appropriate length of the forecast horizon. Management expects to initially estimate credit losses over a one-year forecast horizon and revert to long term historical loss experience on a straight-line basis over a one-year period. The duration of the forecast period, the method of reversion, and the duration of the reversion period will all be reevaluated at each reporting period to ensure those judgements are appropriate. Management expects to include forecasted levels of employment as the primary economic variable it believes to be most relevant based on the nature and composition of the loan portfolio. Management currently intends to leverage economic projections from a reputable and independent third party to inform its reasonable and supportable forecasts over the forecast period. Other internal and external indicators of economic forecasts will also be considered by management when developing the forecast metrics.
- The Company's DCF model is currently in the process of refinement through parallel runs throughout 2019 as the processes, controls and policies are also finalized. Key model assumptions continue to be refined, and as a result the Company is currently unable to reasonably estimate the impact of adopting ASU 2016-13.
- The impact of this adoption will ultimately be significantly influenced by the composition, characteristics and quality of loan and securities portfolios as well as the economic conditions and forecasts as of the adoption date. The impact of this standard could also be subject to further regulatory or accounting guidance.

In June 2018, the FASB issued ASU No. 2018-07, "Compensation - Stock Compensation (Topic 718) Improvements to Nonemployee Share-Based Payment Accounting" ("ASU 2018-07"). ASU 2018-07 amends Accounting Standard Codification 718 to largely align accounting for share-based payment awards issued to employees and nonemployees. Under the new guidance, existing employee guidance will generally apply to nonemployee share-based transactions, except for specific

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guidance on inputs into option pricing models and the attribution of cost. The Company adopted the standard on January 1, 2019 with no material effect on its consolidated financial statements.

In March 2019, the FASB issued ASU 2019-01, “Leases (Topic 842): Codification Improvements” (“ASU 2019-01”). ASU 2019-01 provides updates to Topic 842 including: (i) guidance on how to determine fair value of leased items for lessors who are not dealers or manufacturers, (ii) cash flow presentation for lessors of sales-type and direct financing leases and (iii) clarifies that certain transition disclosures. The amendments are effective for the Company on January 1, 2020. The Company does not expect these amendments to have a material effect on its consolidated financial statements.

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” (“ASU 2019-04”). ASU 2019-04 provides clarification and minor improvements related to ASU 2016-01 “Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities,” ASU 2016-13 “Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments” and ASU 2017-12 “Derivatives and Hedging (Topic 815) - Targeted Improvements to Accounting for Hedging Activities.” The standard will be effective for the Company on January 1, 2020 with early adoption permitted. The Company does not expect this standard to have a material effect on its consolidated financial statements.

In May 2019, the FASB issued ASU No. 2019-05, “Financial Instruments – Credit Losses (Topic 326): Targeted Transition Relief” (“ASU 2019-05”). ASU 2019-05 allows entities an option to irrevocably elect the fair value option for eligible instruments upon adoption of Topic 326. The amendments are effective for the Company on January 1, 2020. See discussion of ASU 2016-13 above for impact to the consolidated financial statements.

Note 3. Earnings Per Share

Basic and diluted earnings per share are computed based on the weighted average number of shares outstanding during each period. Diluted earnings per share reflects the potential dilution that could occur, upon the exercise of stock options or upon the vesting of restricted stock grants, any of which would result in the issuance of common stock that would then be shared in the net income of the Company.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Basic earnings per share:				
Net income available to common shareholders	\$ 3,895	\$ 14,252	\$ 11,202	\$ 40,958
Weighted-average basic shares outstanding	40,240,740	40,119,561	40,199,468	40,025,265
Basic earnings per share	\$ 0.10	\$ 0.36	\$ 0.28	\$ 1.02
Diluted earnings per share:				
Net income available to common shareholders, for diluted earnings per share	\$ 3,895	\$ 14,252	\$ 11,202	\$ 40,958
Total weighted-average basic shares outstanding	40,240,740	40,119,561	40,199,468	40,025,265
Add effect of dilutive stock options and restricted stock grants	872,835	1,568,869	812,140	1,561,722
Total weighted-average diluted shares outstanding	41,113,575	41,688,430	41,011,608	41,586,987
Diluted earnings per share	\$ 0.09	\$ 0.34	\$ 0.27	\$ 0.98
Anti-dilutive shares	1,100,645	—	1,100,645	—

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Note 4. Investment Securities

The carrying amount of investment securities and their approximate fair values are reflected in the following table:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
September 30, 2019				
US treasury securities	\$ 4,983	\$ 28	\$ —	\$ 5,011
US government agencies	32,566	500	1	33,065
Mortgage-backed securities	503,354	20,673	535	523,492
Municipal bonds	8,507	729	9	9,227
Total	\$ 549,410	\$ 21,930	\$ 545	\$ 570,795
December 31, 2018				
US treasury securities	\$ 4,969	\$ —	\$ 3	\$ 4,966
US government agencies	31,121	48	225	30,944
Mortgage-backed securities	345,606	1,340	3,365	343,581
Municipal bond	1,000	—	1	999
Total	\$ 382,696	\$ 1,388	\$ 3,594	\$ 380,490

During the three months ended September 30, 2019, four US government agencies totaling \$14.3 million were sold resulting in a net gain of \$87 thousand. There were no sales of securities during the three months ended September 30, 2018. During the nine months ended September 30, 2019, \$00 thousand of one municipal bond and four US government agencies totaling \$14.3 million were sold resulting in a net gain of \$92 thousand. There were no sales of securities during the nine months ended September 30, 2018.

The following tables show gross unrealized losses and fair value, aggregated by investment category and length of time that the individual securities have been in a continuous unrealized loss position.

	Less Than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
September 30, 2019						
US government agencies	\$ —	\$ —	\$ 2,498	\$ 1	\$ 2,498	\$ 1
Mortgage-backed securities	11,692	29	38,874	506	50,566	535
Municipal bonds	91	9	—	—	91	9
Total	\$ 11,783	\$ 38	\$ 41,372	\$ 507	\$ 53,155	\$ 545
December 31, 2018						
US treasury securities	\$ 4,966	\$ 3	\$ —	\$ —	\$ 4,966	\$ 3
US government agencies	—	—	16,268	225	16,268	225
Mortgage-backed securities	164,836	1,177	51,371	2,188	216,207	3,365
Municipal bond	999	1	—	—	999	1
Total	\$ 170,801	\$ 1,181	\$ 67,639	\$ 2,413	\$ 238,440	\$ 3,594

At September 30, 2019, there were twenty-two mortgage-backed securities and one US government agencies in unrealized loss positions for greater than 12 months and four mortgage-backed securities and one municipal bond in unrealized loss positions for less than 12 months. Unrealized losses at December 31, 2018 were comprised of thirty-one mortgage-backed securities and six US government agencies in unrealized loss positions for greater than 12 months and twenty-five mortgage-backed securities, one US treasury security and one municipal bond in unrealized loss positions for less than 12 months.

These unrealized losses are primarily the result of volatility in the market and are related to market interest rates. Since none of the unrealized losses relate to marketability of the securities or the issuer's ability to honor redemption obligations and the Company has the intent and ability to hold the securities for a sufficient period of time to recover unrealized losses, none of the securities are deemed to be other than temporarily impaired.

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All mortgage-backed securities in the Company's portfolio at September 30, 2019 and December 31, 2018 were backed by U.S. government sponsored enterprises ("GSEs").

The following is a summary of investment securities by maturity:

	September 30, 2019	
	Amortized cost	Fair value
US treasury securities		
Within one year	\$ 4,983	\$ 5,011
Total	4,983	5,011
US government agencies		
Within one year	6,999	7,013
One to five years	22,653	22,997
Five to ten years	2,914	3,055
Total	32,566	33,065
Mortgage-backed securities		
One to five years	2,459	2,471
Five to ten years	156,961	165,507
After 10 years	343,934	355,514
Total	503,354	523,492
Municipal bonds		
After 10 years	8,507	9,227
Total	8,507	9,227
Total	<u>\$ 549,410</u>	<u>\$ 570,795</u>

The table above reflects contractual maturities. Actual results will differ as the loans underlying the mortgage-backed securities may repay sooner than scheduled.

There were no investment securities pledged at September 30, 2019. At December 31, 2018, investment securities with a fair market value of \$100 thousand was pledged to the Ohio State Treasurer to allow the Company's trust department to conduct business in the State of Ohio and \$2.5 million were pledged to the Company's trust department for uninsured trust assets held by the trust department.

Note 5. Loans and Leases Held for Investment and Allowance for Loan and Lease Losses

Loan and Lease Portfolio Segments

The following describes the risk characteristics relevant to each of the portfolio segments. Each loan and lease category is assigned a risk grade during the origination and closing process based on criteria described later in this section.

Commercial and Industrial

Commercial and industrial loans (C&I) receive similar underwriting treatment as commercial real estate loans in that the repayment source is analyzed to determine its ability to meet cash flow coverage requirements as set forth by Bank policies. Repayment of the Bank's C&I loans generally comes from the generation of cash flow as the result of the borrower's business operations. This business cycle itself brings a certain level of risk to the portfolio. In some instances, these loans may carry a higher degree of risk due to a variety of reasons – illiquid collateral, specialized equipment, highly depreciable assets, uncollectable accounts receivable, revolving balances, or simply being unsecured. As a result of these characteristics, the SBA guarantee on these loans is an important factor in mitigating risk.

Construction and Development

Construction and development loans are for the purpose of acquisition and development of land to be improved through the construction of commercial buildings. Such loans are usually paid off through the conversion to permanent financing for the long-term benefit of the borrower's ongoing operations. At the completion of the project, if the loan is converted to permanent financing or if scheduled loan amortization begins, it is then reclassified to the "Commercial Real Estate" segment. Underwriting of construction and development loans typically includes analysis of not only the borrower's financial condition and ability to meet the required debt obligations, but also the general market conditions associated with the area and type of project being funded.

Commercial Real Estate

Commercial real estate loans are extensions of credit secured by owner occupied and non-owner occupied collateral. Underwriting generally involves intensive analysis of the financial strength of the borrower and guarantor, liquidation value of the subject collateral, the associated unguaranteed exposure, and any available secondary sources of repayment, with the greatest emphasis given to a borrower's capacity to meet cash flow coverage requirements as set forth by Bank policies. Such repayment of commercial real estate loans is commonly derived from the successful ongoing operations of the business occupying the property. These typically include small businesses and professional practices.

Commercial Land

Commercial land loans are extensions of credit secured by farmland. Such loans are often for land improvements related to agricultural endeavors that may include construction of new specialized facilities. These loans are usually repaid through the conversion to permanent financing, or if scheduled loans amortization begins, for the long-term benefit of the borrower's ongoing operations. Underwriting generally involves intensive analysis of the financial strength of the borrower and guarantor, liquidation value of the subject collateral, the associated unguaranteed exposure, and any available secondary sources of repayment, with the greatest emphasis given to a borrower's capacity to meet cash flow coverage requirements as set forth by Bank policies.

Each of the loan types referenced in the sections above is further segmented into verticals in which the Bank chooses to operate. The Bank chooses to finance businesses operating in specific industries because of certain similarities. The similarities range from historical default and loss characteristics to business operations. However, there are differences that create the necessity to underwrite these loans according to varying criteria and guidelines. When underwriting a loan, the Bank considers numerous factors such as cash flow coverage, the credit scores of the guarantors, revenue growth, practice ownership experience and debt service capacity. Minimum guidelines have been set with regard to these various factors and deviations from those guidelines require compensating strengths when considering a proposed loan.

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Loans and leases consist of the following:

	September 30, 2019	December 31, 2018
Commercial & Industrial		
Agriculture	\$ 8,119	\$ 6,400
Funeral Home & Cemetery	26,450	17,378
Healthcare	44,411	51,082
Independent Pharmacies	110,678	108,783
Registered Investment Advisors	100,477	94,338
Veterinary Industry	48,858	45,604
Other Industries	478,698	295,163
Total	817,691	618,748
Construction & Development		
Agriculture	38,719	43,454
Funeral Home & Cemetery	10,304	9,874
Healthcare	86,678	81,619
Independent Pharmacies	454	2,149
Registered Investment Advisors	2,274	1,232
Veterinary Industry	24,439	14,094
Other Industries	164,819	96,482
Total	327,687	248,904
Commercial Real Estate		
Agriculture	49,733	53,085
Funeral Home & Cemetery	93,682	71,344
Healthcare	234,884	188,531
Independent Pharmacies	26,686	20,597
Registered Investment Advisors	7,387	7,905
Veterinary Industry	137,310	136,721
Other Industries	401,351	260,847
Total	951,033	739,030
Commercial Land		
Agriculture	341,078	243,798
Total	341,078	243,798
Total Loans ¹	2,437,489	1,850,480
Net Deferred Costs	10,772	5,960
Discount on SBA 7(a) Unguaranteed ²	(6,308)	(13,021)
Loans, Net of Unearned	\$ 2,441,953	\$ 1,843,419

1 Total loans and leases include \$628.7 million and \$305.4 million of U.S. government guaranteed loans as of September 30, 2019 and December 31, 2018, respectively.

2 The Company measures the carrying value of the retained portion of loans sold at fair value under ASC Subtopic 825-10. The value of these retained loan balances is discounted based on the estimates derived from comparable unguaranteed loan sales.

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Credit Risk Profile

The Bank uses internal loan and lease reviews to assess the performance of individual loans and leases by industry segment. An independent review of the loan and lease portfolio is performed annually by an external firm. The goal of the Bank's annual review of select borrowers' financial performance is to validate the adequacy of the risk grade assigned.

The Bank uses a grading system to rank the quality of each loan and lease. The grade is periodically evaluated and adjusted as performance dictates. Loan and lease grades 1 through 4 are passing grades and grade 5 is special mention. Collectively, grades 6 through 8 represent classified loans and leases in the Bank's portfolio. The following guidelines govern the assignment of these risk grades:

Exceptional (1 Rated): These loans and leases are of the highest quality, with strong, well-documented sources of repayment. These loans and leases will typically have multiple demonstrated sources of repayment with no significant identifiable risk to collection, exhibit well-qualified management, and have liquid financial statements relative to both direct and indirect obligations.

Quality (2 Rated): These loans and leases are of very high credit quality, with strong, well-documented sources of repayment. These loans and leases exhibit very strong, well defined primary and secondary sources of repayment, with no significant identifiable risk of collection and have internally generated cash flow that more than adequately covers current maturities of long-term debt.

Satisfactory (3 rated): These loans and leases exhibit satisfactory credit risk and have excellent sources of repayment, with no significant identifiable risk of collection. These loans and leases have documented historical cash flow that meets or exceeds required minimum Bank guidelines, or that can be supplemented with verifiable cash flow from other sources. They have adequate secondary sources to liquidate the debt, including combinations of liquidity, liquidation of collateral, or liquidation value to the net worth of the borrower or guarantor.

Acceptable (4 rated): These loans and leases show signs of weakness in either adequate sources of repayment or collateral but have demonstrated mitigating factors that minimize the risk of delinquency or loss. These loans and leases may have unproved, insufficient or marginal primary sources of repayment that appear sufficient to service the debt at this time. Repayment weaknesses may be due to minor operational issues, financial trends, or reliance on projected performance. They may also contain marginal or unproven secondary sources to liquidate the debt, including combinations of liquidation of collateral and liquidation value to the net worth of the borrower or guarantor.

Special mention (5 rated): These loans and leases show signs of weaknesses in either adequate sources of repayment or collateral. These loans and leases may contain underwriting guideline tolerances and/or exceptions with no mitigating factors; and/or instances where adverse economic conditions develop subsequent to origination that do not jeopardize liquidation of the debt but substantially increase the level of risk.

Substandard (6 rated): Loans and leases graded Substandard are inadequately protected by current sound net worth, paying capacity of the obligor, or pledged collateral. Loans and leases classified as Substandard must have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt; are characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected. These loans and leases are consistently not meeting the repayment schedule.

Doubtful (7 rated): Loans and leases graded Doubtful have all the weaknesses inherent in those classified as Substandard, plus the added characteristic that the weaknesses make collection or liquidation in full on the basis of currently existing facts, conditions, and values highly questionable and improbable. The ability of the borrower to service the debt is extremely weak, overdue status is constant, the debt has been placed on non-accrual status, and no definite repayment schedule exists. Once the loss position is determined, the amount is charged off.

Loss (8 rated): Loss rated loans and leases are considered uncollectible and of such little value that their continuance as assets is not warranted. This classification does not mean that the asset has absolutely no recovery or salvage value, but rather that it is not practical or desirable to defer writing off this credit even though partial recovery may be affected in the future.

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The following tables summarize the risk grades of each category:

	Risk Grades 1 - 4	Risk Grade 5	Risk Grades 6 - 8	Total
September 30, 2019				
Commercial & Industrial				
Agriculture	\$ 7,538	\$ 225	\$ 356	\$ 8,119
Funeral Home & Cemetery	24,473	1,977	—	26,450
Healthcare	34,346	1,729	8,336	44,411
Independent Pharmacies	96,146	6,915	7,617	110,678
Registered Investment Advisors	96,849	1,927	1,701	100,477
Veterinary Industry	45,093	1,101	2,664	48,858
Other Industries	425,936	41,206	11,556	478,698
Total	730,381	55,080	32,230	817,691
Construction & Development				
Agriculture	38,719	—	—	38,719
Funeral Home & Cemetery	10,304	—	—	10,304
Healthcare	82,726	3,242	710	86,678
Independent Pharmacies	454	—	—	454
Registered Investment Advisors	2,274	—	—	2,274
Veterinary Industry	24,439	—	—	24,439
Other Industries	153,211	11,608	—	164,819
Total	312,127	14,850	710	327,687
Commercial Real Estate				
Agriculture	46,507	1,103	2,123	49,733
Funeral Home & Cemetery	85,574	6,152	1,956	93,682
Healthcare	202,421	6,699	25,764	234,884
Independent Pharmacies	17,473	2,127	7,086	26,686
Registered Investment Advisors	7,094	293	—	7,387
Veterinary Industry	119,416	4,844	13,050	137,310
Other Industries	381,563	14,952	4,836	401,351
Total	860,048	36,170	54,815	951,033
Commercial Land				
Agriculture	306,966	8,265	25,847	341,078
Total	306,966	8,265	25,847	341,078
Total	\$ 2,209,522	\$ 114,365	\$ 113,602	\$ 2,437,489

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	Risk Grades 1 - 4	Risk Grade 5	Risk Grades 6 - 8	Total ¹
December 31, 2018				
Commercial & Industrial				
Agriculture	\$ 6,187	\$ 213	\$ —	\$ 6,400
Funeral Home & Cemetery	17,085	287	6	17,378
Healthcare	38,908	2,502	9,672	51,082
Independent Pharmacies	93,976	5,734	9,073	108,783
Registered Investment Advisors	88,614	2,381	3,343	94,338
Veterinary Industry	42,175	1,190	2,239	45,604
Other Industries	272,771	18,463	3,929	295,163
Total	559,716	30,770	28,262	618,748
Construction & Development				
Agriculture	43,454	—	—	43,454
Funeral Home & Cemetery	9,874	—	—	9,874
Healthcare	79,814	1,805	—	81,619
Independent Pharmacies	2,149	—	—	2,149
Registered Investment Advisors	1,232	—	—	1,232
Veterinary Industry	14,094	—	—	14,094
Other Industries	96,482	—	—	96,482
Total	247,099	1,805	—	248,904
Commercial Real Estate				
Agriculture	52,518	567	—	53,085
Funeral Home & Cemetery	64,487	3,711	3,146	71,344
Healthcare	161,026	7,696	19,809	188,531
Independent Pharmacies	12,509	2,495	5,593	20,597
Registered Investment Advisors	7,780	125	—	7,905
Veterinary Industry	117,879	4,205	14,637	136,721
Other Industries	255,651	5,196	—	260,847
Total	671,850	23,995	43,185	739,030
Commercial Land				
Agriculture	223,826	8,914	11,058	243,798
Total	223,826	8,914	11,058	243,798
Total	\$ 1,702,491	\$ 65,484	\$ 82,505	\$ 1,850,480

1 Total loans and leases include \$628.7 million of U.S. government guaranteed loans as of September 30, 2019, segregated by risk grade as follows: Risk Grades 1 – 4 = \$520.4 million, Risk Grade 5 = \$27.6 million, Risk Grades 6 – 8 = \$80.7 million. As of December 31, 2018, total loans and leases include \$305.4 million of U.S. government guaranteed loans, segregated by risk grade as follows: Risk Grades 1 – 4 = \$236.1 million, Risk Grade 5 = \$10.1 million, Risk Grades 6 – 8 = \$59.2 million.

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Past Due Loans and Leases

Loans and leases are considered past due if the required principal and interest payments have not been received as of the date such payments were due. Loans and leases less than 30 days past due and accruing are included within current loans and leases shown below. The following tables show an age analysis of past due loans and leases as of the dates presented.

	Less Than 30 Days Past Due & Not Accruing	30-89 Days Past Due & Accruing	30-89 Days Past Due & Not Accruing	Greater Than 90 Days Past Due	Total Not Accruing & Past Due Loans	Current Loans	Total Loans	Loans 90 Days or More Past Due & Still Accruing
September 30, 2019								
Commercial & Industrial								
Agriculture	\$ 269	\$ 87	\$ —	\$ —	\$ 356	\$ 7,763	\$ 8,119	\$ —
Funeral Home & Cemetery	—	—	—	—	—	26,450	26,450	—
Healthcare	1,204	15	1,521	4,084	6,824	37,587	44,411	—
Independent Pharmacies	1,319	60	2,262	3,976	7,617	103,061	110,678	—
Registered Investment Advisors	—	—	1,173	279	1,452	99,025	100,477	—
Veterinary Industry	—	—	521	1,458	1,979	46,879	48,858	—
Other Industries	533	552	3,514	4,385	8,984	469,714	478,698	—
Total	3,325	714	8,991	14,182	27,212	790,479	817,691	—
Construction & Development								
Agriculture	—	—	—	—	—	38,719	38,719	—
Funeral Home & Cemetery	—	—	—	—	—	10,304	10,304	—
Healthcare	—	—	—	—	—	86,678	86,678	—
Independent Pharmacies	—	—	—	—	—	454	454	—
Registered Investment Advisors	—	—	—	—	—	2,274	2,274	—
Veterinary Industry	—	—	—	—	—	24,439	24,439	—
Other Industries	—	—	—	—	—	164,819	164,819	—
Total	—	—	—	—	—	327,687	327,687	—
Commercial Real Estate								
Agriculture	2,123	—	—	—	2,123	47,610	49,733	—
Funeral Home & Cemetery	132	—	—	1,824	1,956	91,726	93,682	—
Healthcare	—	—	1,870	11,109	12,979	221,905	234,884	—
Independent Pharmacies	—	—	—	5,761	5,761	20,925	26,686	—
Registered Investment Advisors	—	—	—	—	—	7,387	7,387	—
Veterinary Industry	1,790	—	—	4,771	6,561	130,749	137,310	—
Other Industries	—	—	—	1,465	1,465	399,886	401,351	—
Total	4,045	—	1,870	24,930	30,845	920,188	951,033	—
Commercial Land								
Agriculture	21,911	—	1,503	—	23,414	317,664	341,078	—
Total	21,911	—	1,503	—	23,414	317,664	341,078	—
Total¹	\$ 29,281	\$ 714	\$ 12,364	\$ 39,112	\$ 81,471	\$ 2,356,018	\$ 2,437,489	\$ —

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

	Less Than 30 Days Past Due & Not Accruing	30-89 Days Past Due & Accruing	30-89 Days Past Due & Not Accruing	Greater Than 90 Days Past Due	Total Not Accruing & Past Due Loans	Current Loans	Total Loans	Loans 90 Days or More Past Due & Still Accruing
December 31, 2018								
Commercial & Industrial								
Agriculture	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 6,400	\$ 6,400	\$ —
Funeral Home & Cemetery	—	—	—	—	—	17,378	17,378	—
Healthcare	41	1,027	665	6,821	8,554	42,528	51,082	—
Independent Pharmacies	1,399	29	—	7,570	8,998	99,785	108,783	—
Registered Investment Advisors	—	232	320	2,741	3,293	91,045	94,338	—
Veterinary Industry	—	—	600	906	1,506	44,098	45,604	—
Other Industries	2,669	166	—	504	3,339	291,824	295,163	—
Total	4,109	1,454	1,585	18,542	25,690	593,058	618,748	—
Construction & Development								
Agriculture	—	—	—	—	—	43,454	43,454	—
Funeral Home & Cemetery	—	—	—	—	—	9,874	9,874	—
Healthcare	—	—	—	—	—	81,619	81,619	—
Independent Pharmacies	—	—	—	—	—	2,149	2,149	—
Registered Investment Advisors	—	—	—	—	—	1,232	1,232	—
Veterinary Industry	—	—	—	—	—	14,094	14,094	—
Other Industries	—	—	—	—	—	96,482	96,482	—
Total	—	—	—	—	—	248,904	248,904	—
Commercial Real Estate								
Agriculture	—	—	—	—	—	53,085	53,085	—
Funeral Home & Cemetery	248	—	—	2,762	3,010	68,334	71,344	—
Healthcare	42	1,668	—	7,417	9,127	179,404	188,531	—
Independent Pharmacies	—	3,400	—	2,193	5,593	15,004	20,597	—
Registered Investment Advisors	—	—	—	—	—	7,905	7,905	—
Veterinary Industry	1,644	3,757	2,899	5,191	13,491	123,230	136,721	—
Other Industries	—	10,743	—	—	10,743	250,104	260,847	—
Total	1,934	19,568	2,899	17,563	41,964	697,066	739,030	—
Commercial Land								
Agriculture	6,277	—	—	4,781	11,058	232,740	243,798	—
Total	6,277	—	—	4,781	11,058	232,740	243,798	—
Total¹	\$ 12,320	\$ 21,022	\$ 4,484	\$ 40,886	\$ 78,712	\$ 1,771,768	\$ 1,850,480	\$ —

1 Total loans and leases include \$628.7 million of U.S. government guaranteed loans as of September 30, 2019, of which \$31.3 million is greater than 90 days past due, \$8.5 million is 30-89 days past due and \$588.9 million is included in current loans and leases as presented above. As of December 31, 2018, total loans and leases include \$305.4 million of U.S. government guaranteed loans, of which \$33.4 million is greater than 90 days past due, \$9.0 million is 30-89 days past due and \$263.0 million is included in current loans and leases as presented above.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

Nonaccrual Loans and Leases

Loans and leases that become 90 days delinquent, or in cases where there is evidence that the borrower's ability to make the required payments is impaired, are placed in nonaccrual status and interest accrual is discontinued. If interest on nonaccrual loans and leases had been accrued in accordance with the original terms, interest income would have increased by approximately \$1.1 million and \$800 thousand for the three months ended September 30, 2019 and 2018, respectively, and for the nine months ended September 30, 2019 and 2018 interest income would have increased approximately \$3.3 million and \$1.8 million, respectively. All nonaccrual loans and leases are included in the held for investment portfolio.

Nonaccrual loans and leases as of September 30, 2019 and December 31, 2018 are as follows:

	Loan Balance	Guaranteed Balance	Unguaranteed Exposure
September 30, 2019			
Commercial & Industrial			
Agriculture	\$ 269	\$ 215	\$ 54
Healthcare	6,809	5,799	1,010
Independent Pharmacies	7,557	6,650	907
Registered Investment Advisors	1,452	1,089	363
Veterinary Industry	1,979	1,830	149
Other Industries	8,432	5,926	2,506
Total	26,498	21,509	4,989
Commercial Real Estate			
Agriculture	2,123	1,592	531
Funeral Home & Cemetery	1,956	1,368	588
Healthcare	12,979	7,754	5,225
Independent Pharmacies	5,761	5,022	739
Veterinary Industry	6,561	5,406	1,155
Other Industries	1,465	1,465	—
Total	30,845	22,607	8,238
Commercial Land			
Agriculture	23,414	16,825	6,589
Total	23,414	16,825	6,589
Total	\$ 80,757	\$ 60,941	\$ 19,816
December 31, 2018			
Commercial & Industrial			
Healthcare	\$ 7,527	\$ 6,517	\$ 1,010
Independent Pharmacies	8,969	7,896	1,073
Registered Investment Advisors	3,061	2,427	634
Veterinary Industry	1,506	1,361	145
Other Industries	3,173	2,147	1,026
Total	24,236	20,348	3,888
Commercial Real Estate			
Funeral Home & Cemetery	3,010	2,260	750
Healthcare	7,459	4,963	2,496
Independent Pharmacies	2,193	1,863	330
Veterinary Industry	9,734	8,271	1,463
Total	22,396	17,357	5,039
Commercial Land			
Agriculture	11,058	5,497	5,561
Total	11,058	5,497	5,561
Total	\$ 57,690	\$ 43,202	\$ 14,488

Allowance for Loan and Lease Loss Methodology

The methodology and the estimation process for calculating the Allowance for Loan and Lease Losses (“ALLL”) is described below:

Estimated credit losses should meet the criteria for accrual of a loss contingency, i.e., a provision to the ALLL, set forth in GAAP. The Company’s methodology for determining the ALLL is based on the requirements of GAAP, the Interagency Policy Statement on the Allowance for Loan and Lease Losses and other regulatory and accounting pronouncements. The ALLL is determined by the sum of three separate components: (i) the impaired loan and lease component, which addresses specific reserves for impaired loans and leases; (ii) the general reserve component, which addresses reserves for pools of homogeneous loans and leases; and (iii) an unallocated reserve component (if any) based on management’s judgment and experience. The loan and lease pools and impaired loans and leases are mutually exclusive; any loan or lease that is impaired is excluded from its homogenous pool for purposes of that pool’s reserve calculation, regardless of the level of impairment.

The ALLL policy for pooled loans and leases is governed in accordance with banking regulatory guidance for homogenous pools of non-impaired loans and leases that have similar risk characteristics. The Company follows a consistent and structured approach for assessing the need for reserves within each individual loan and lease pool.

Loans and leases are considered impaired when, based on current information and events, it is probable that the creditor will be unable to collect all interest and principal payments due according to the originally contracted, or reasonably modified, terms of the loan or lease agreement. The Company has determined that loans and leases that meet the criteria defined below must be reviewed quarterly to determine if they are impaired.

- All commercial loans and leases classified substandard or worse.
- Any other delinquent loan or lease that is in a nonaccrual status, or any loan or lease that is delinquent 90 days or more and still accruing interest.
- Any loan or lease which has been modified such that it meets the definition of a Troubled Debt Restructuring (TDR).

The Company’s policy for impaired loan and lease accounting subjects all loans and leases to impairment recognition; however, loan and lease relationships with unguaranteed credit exposure of less than \$100,000 are generally not evaluated on an individual basis for impairment and instead are evaluated collectively using a methodology based on historical specific reserves on similar sized loans and leases. Any loan or lease not meeting the above criteria and determined to be impaired is subjected to an impairment analysis, which is a calculation of the probable loss on the loan or lease. This portion is the loan’s or lease’s “impairment,” and is established as a specific reserve against the loan or lease, or charged against the ALLL.

Individual specific reserve amounts imply probability of loss and may not be carried in the reserve indefinitely. When the amount of the actual loss becomes reasonably quantifiable, the amount of the loss is charged off against the ALLL, whether or not all liquidation and recovery efforts have been completed. If the total amount of the individual specific reserve that will eventually be charged off cannot yet be sufficiently quantified but some portion of the impairment can be viewed as a confirmed loss, then the confirmed loss portion should be charged off against the ALLL and the individual specific reserve reduced by a corresponding amount.

For impaired loans or leases, the reserve amount is calculated on a loan or lease-specific basis. The Company utilizes two methods of analyzing impaired loans and leases not guaranteed by the SBA:

- The Fair Market Value of Collateral method utilizes the value at which the collateral could be sold considering the appraised value, appraisal discount rate, prior liens and selling costs. The amount of the reserve is the deficit of the estimated collateral value compared to the loan or lease balance.
- The Present Value of Future Cash Flows method takes into account the amount and timing of cash flows and the effective interest rate used to discount the cash flows.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

The following table details activity in the allowance for loan and lease losses by portfolio segment allowance for the periods presented:

	Construction & Development	Commercial Real Estate	Commercial & Industrial	Commercial Land	Total
Three Months Ended					
September 30, 2019					
Beginning Balance	\$ 2,924	\$ 12,589	\$ 16,907	\$ 5,628	\$ 38,048
Charge offs	—	(1,103)	(1,060)	(149)	(2,312)
Recoveries	—	6	42	—	48
Provision	(629)	284	7,175	330	7,160
Ending Balance	<u>\$ 2,295</u>	<u>\$ 11,776</u>	<u>\$ 23,064</u>	<u>\$ 5,809</u>	<u>\$ 42,944</u>
September 30, 2018					
Beginning Balance	\$ 2,227	\$ 11,408	\$ 13,377	\$ 2,338	\$ 29,350
Charge offs	—	(397)	(1,966)	(106)	(2,469)
Recoveries	—	141	18	—	159
Provision	(555)	(1,115)	(148)	1,575	(243)
Ending Balance	<u>\$ 1,672</u>	<u>\$ 10,037</u>	<u>\$ 11,281</u>	<u>\$ 3,807</u>	<u>\$ 26,797</u>
Nine Months Ended					
September 30, 2019					
Beginning Balance	\$ 2,042	\$ 11,044	\$ 14,562	\$ 4,786	\$ 32,434
Charge offs	—	(1,104)	(1,698)	(327)	(3,129)
Recoveries	—	29	240	5	274
Provision	253	1,807	9,960	1,345	13,365
Ending Balance	<u>\$ 2,295</u>	<u>\$ 11,776</u>	<u>\$ 23,064</u>	<u>\$ 5,809</u>	<u>\$ 42,944</u>
September 30, 2018					
Beginning Balance	\$ 2,030	\$ 9,180	\$ 10,751	\$ 2,229	\$ 24,190
Charge offs	—	(816)	(3,187)	(106)	(4,109)
Recoveries	—	174	306	—	480
Provision	(358)	1,499	3,411	1,684	6,236
Ending Balance	<u>\$ 1,672</u>	<u>\$ 10,037</u>	<u>\$ 11,281</u>	<u>\$ 3,807</u>	<u>\$ 26,797</u>

The following tables detail the recorded allowance for loan and lease losses and the investment in loans and leases related to each portfolio segment, disaggregated on the basis of impairment evaluation methodology:

	Construction & Development	Commercial Real Estate	Commercial & Industrial	Commercial Land	Total
September 30, 2019					
Allowance for loan and lease losses:					
Loans and leases individually evaluated for impairment	\$ 20	\$ 3,150	\$ 6,354	\$ 4,665	\$ 14,189
Loans and leases collectively evaluated for impairment	2,275	8,626	16,710	1,144	28,755
Total allowance for loan and lease losses	<u>\$ 2,295</u>	<u>\$ 11,776</u>	<u>\$ 23,064</u>	<u>\$ 5,809</u>	<u>\$ 42,944</u>
Loans and leases receivable ¹ :					
Loans and leases individually evaluated for impairment	\$ 725	\$ 59,374	\$ 32,809	\$ 43,068	\$ 135,976
Loans and leases collectively evaluated for impairment	326,962	891,659	784,882	298,010	2,301,513
Total loans and leases receivable	<u>\$ 327,687</u>	<u>\$ 951,033</u>	<u>\$ 817,691</u>	<u>\$ 341,078</u>	<u>\$ 2,437,489</u>

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

December 31, 2018	Construction & Development	Commercial Real Estate	Commercial & Industrial	Commercial Land	Total
Allowance for loan and lease losses:					
Loans and leases individually evaluated for impairment	\$ 118	\$ 2,424	\$ 2,598	\$ 3,951	\$ 9,091
Loans and leases collectively evaluated for impairment	1,924	8,620	11,964	835	23,343
Total allowance for loan and lease losses	\$ 2,042	\$ 11,044	\$ 14,562	\$ 4,786	\$ 32,434
Loans and leases receivable ¹ :					
Loans and leases individually evaluated for impairment	\$ 5,027	\$ 46,731	\$ 28,659	\$ 21,997	\$ 102,414
Loans and leases collectively evaluated for impairment	243,877	692,299	590,089	221,801	1,748,066
Total loans and leases receivable	\$ 248,904	\$ 739,030	\$ 618,748	\$ 243,798	\$ 1,850,480

1 Loans and leases receivable includes \$628.7 million of U.S. government guaranteed loans as of September 30, 2019, of which \$96.4 million are impaired. As of December 31, 2018, loans and leases receivable includes \$305.4 million of U.S. government guaranteed loans, of which \$72.4 million are considered impaired.

Loans and leases classified as impaired as of the dates presented are summarized in the following tables.

September 30, 2019	Recorded Investment	Guaranteed Balance	Unguaranteed Exposure
Commercial & Industrial			
Agriculture	\$ 368	\$ 289	\$ 79
Healthcare	8,363	5,800	2,563
Independent Pharmacies	7,619	6,649	970
Registered Investment Advisors	1,696	1,089	607
Veterinary Industry	2,718	2,239	479
Other Industries	12,045	6,332	5,713
Total	32,809	22,398	10,411
Construction & Development			
Healthcare	725	533	192
Total	725	533	192
Commercial Real Estate			
Agriculture	2,123	1,592	531
Funeral Home & Cemetery	1,961	1,368	593
Healthcare	25,868	17,204	8,664
Independent Pharmacies	7,096	6,016	1,080
Veterinary Industry	13,721	9,689	4,032
Other Industries	8,605	6,127	2,478
Total	59,374	41,996	17,378
Commercial Land			
Agriculture	43,068	31,436	11,632
Total	43,068	31,436	11,632
Total	\$ 135,976	\$ 96,363	\$ 39,613

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

<u>December 31, 2018</u>	<u>Recorded Investment</u>	<u>Guaranteed Balance</u>	<u>Unguaranteed Exposure</u>
Commercial & Industrial			
Agriculture	\$ 7	\$ —	\$ 7
Funeral Home & Cemetery	6	—	6
Healthcare	9,668	7,229	2,439
Independent Pharmacies	9,356	7,896	1,460
Registered Investment Advisors	3,347	2,427	920
Veterinary Industry	2,326	1,819	507
Other Industries	3,949	2,304	1,645
Total	28,659	21,675	6,984
Construction & Development			
Agriculture	5,027	3,704	1,323
Total	5,027	3,704	1,323
Commercial Real Estate			
Agriculture	1,798	1,299	499
Funeral Home & Cemetery	3,143	2,261	882
Healthcare	20,442	14,559	5,883
Independent Pharmacies	5,633	4,079	1,554
Veterinary Industry	15,715	11,613	4,102
Total	46,731	33,811	12,920
Commercial Land			
Agriculture	21,997	13,177	8,820
Total	21,997	13,177	8,820
Total	\$ 102,414	\$ 72,367	\$ 30,047

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

The following table presents evaluated balances of loans and leases classified as impaired at the dates presented that carried an associated reserve as compared to those with no reserve. The recorded investment includes accrued interest and net deferred loan and lease fees or costs.

	September 30, 2019				
	Recorded Investment			Unpaid Principal Balance	Related Allowance Recorded
	With a Recorded Allowance	With No Recorded Allowance	Total		
Commercial & Industrial					
Agriculture	\$ 363	\$ 5	\$ 368	\$ 379	\$ 11
Healthcare	8,363	—	8,363	9,065	1,085
Independent Pharmacies	7,619	—	7,619	8,702	422
Registered Investment Advisors	1,696	—	1,696	1,771	403
Veterinary Industry	2,550	168	2,718	3,013	79
Other Industries	12,045	—	12,045	11,965	4,354
Total	32,636	173	32,809	34,895	6,354
Construction & Development					
Healthcare	725	—	725	710	20
Total	725	—	725	710	20
Commercial Real Estate					
Agriculture	2,123	—	2,123	2,123	54
Funeral Home & Cemetery	1,829	132	1,961	2,091	94
Healthcare	23,839	2,029	25,868	25,782	1,608
Independent Pharmacies	7,096	—	7,096	7,377	51
Veterinary Industry	12,073	1,648	13,721	14,892	1,292
Other Industries	7,718	887	8,605	9,650	51
Total	54,678	4,696	59,374	61,915	3,150
Commercial Land					
Agriculture	43,068	—	43,068	43,329	4,665
Total	43,068	—	43,068	43,329	4,665
Total Impaired Loans and Leases	\$ 131,107	\$ 4,869	\$ 135,976	\$ 140,849	\$ 14,189

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

	December 31, 2018				
	Recorded Investment			Unpaid Principal Balance	Related Allowance Recorded
	With a Recorded Allowance	With No Recorded Allowance	Total		
Commercial & Industrial					
Agriculture	\$ —	\$ 7	\$ 7	\$ 6	\$ —
Funeral Home & Cemetery	—	6	6	6	—
Healthcare	9,604	64	9,668	10,432	827
Independent Pharmacies	9,032	324	9,356	10,564	478
Registered Investment Advisors	3,347	—	3,347	3,839	811
Veterinary Industry	2,160	166	2,326	2,593	65
Other Industries	3,496	453	3,949	4,097	417
Total	27,639	1,020	28,659	31,537	2,598
Construction & Development					
Agriculture	5,027	—	5,027	4,939	118
Total	5,027	—	5,027	4,939	118
Commercial Real Estate					
Agriculture	1,798	—	1,798	1,732	93
Funeral Home & Cemetery	2,859	284	3,143	3,281	30
Healthcare	20,211	231	20,442	20,461	1,145
Independent Pharmacies	5,184	449	5,633	5,884	220
Veterinary Industry	15,606	109	15,715	16,677	936
Total	45,658	1,073	46,731	48,035	2,424
Commercial Land					
Agriculture	21,997	—	21,997	22,147	3,951
Total	21,997	—	21,997	22,147	3,951
Total Impaired Loans and Leases	\$ 100,321	\$ 2,093	\$ 102,414	\$ 106,658	\$ 9,091

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

The following table presents the average recorded investment of impaired loans and leases for each period presented and interest income recognized during the period in which the loans and leases were considered impaired.

	Three Months Ended September 30, 2019		Three Months Ended September 30, 2018	
	Average Balance	Interest Income Recognized	Average Balance	Interest Income Recognized
Commercial & Industrial				
Agriculture	\$ 366	\$ 1	\$ —	\$ —
Funeral Home & Cemetery	—	—	6	—
Healthcare	9,074	35	7,152	28
Independent Pharmacies	7,771	12	10,325	4
Registered Investment Advisors	1,890	5	3,589	7
Veterinary Industry	2,744	13	2,423	16
Other Industries	12,004	30	1,822	17
Total	33,849	96	25,317	72
Construction & Development				
Healthcare	724	4	2,162	12
Total	724	4	2,162	12
Commercial Real Estate				
Agriculture	2,179	—	—	—
Funeral Home & Cemetery	1,964	—	3,098	24
Healthcare	23,850	259	18,765	150
Independent Pharmacies	7,114	25	2,739	—
Veterinary Industry	13,772	113	16,731	98
Other Industries	10,662	68	—	—
Total	59,541	465	41,333	272
Commercial Land				
Agriculture	41,716	226	21,792	38
Total	41,716	226	21,792	38
Total	\$ 135,830	\$ 791	\$ 90,604	\$ 394

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

	Nine Months Ended September 30, 2019		Nine Months Ended September 30, 2018	
	Average Balance	Interest Income Recognized	Average Balance	Interest Income Recognized
Commercial & Industrial				
Agriculture	\$ 366	\$ 1	\$ —	\$ —
Funeral Home & Cemetery	—	—	7	—
Healthcare	9,585	100	7,232	59
Independent Pharmacies	7,466	27	10,180	31
Registered Investment Advisors	1,969	15	3,007	31
Veterinary Industry	2,691	40	2,488	54
Other Industries	12,200	54	1,875	22
Total	34,277	237	24,789	197
Construction & Development				
Healthcare	724	4	2,162	63
Total	724	4	2,162	63
Commercial Real Estate				
Agriculture	2,191	—	—	—
Funeral Home & Cemetery	1,972	2	3,115	88
Healthcare	23,818	746	17,535	230
Independent Pharmacies	6,813	92	2,763	1
Veterinary Industry	14,197	319	17,081	333
Other Industries	12,398	129	—	—
Total	61,389	1,288	40,494	652
Commercial Land				
Agriculture	34,254	744	21,803	68
Total	34,254	744	21,803	68
Total	\$ 130,644	\$ 2,273	\$ 89,248	\$ 980

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

The following tables represent the types of TDRs that were made during the periods presented:

	Three Months Ended September 30, 2019			Three Months Ended September 30, 2018		
	All Restructurings			All Restructurings		
	Number of Loans	Pre- modification Recorded Investment	Post- modification Recorded Investment	Number of Loans	Pre- modification Recorded Investment	Post- modification Recorded Investment
<i>Interest Only</i>						
Commercial & Industrial						
Other Industries	1	\$ 350	\$ 350	—	\$ —	\$ —
<i>Total Interest Only</i>	1	350	350	—	—	—
<i>Interest Only & Rate Concession</i>						
Commercial Land						
Agriculture	—	—	—	4	10,276	10,276
<i>Total Interest Only & Rate Concession</i>	—	—	—	4	10,276	10,276
<i>Extended Amortization</i>						
Commercial Land						
Agriculture	—	—	—	1	8	8
<i>Total Extend Amortization</i>	—	—	—	1	8	8
<i>Extended Amortization & Rate Concession</i>						
Commercial Land						
Agriculture	4	7,940	7,940	—	—	—
<i>Total Extend Amortization & Rate Concession</i>	4	7,940	7,940	—	—	—
<i>Payment Deferral & Rate Concession</i>						
Commercial Real Estate						
Other Industries	2	3,710	3,710	—	—	—
<i>Total Payment Deferral & Rate Concession</i>	2	3,710	3,710	—	—	—
Total	7	\$ 12,000	\$ 12,000	5	\$ 10,284	\$ 10,284

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

	Nine Months Ended September 30, 2019			Nine Months Ended September 30, 2018		
	All Restructurings			All Restructurings		
	Number of Loans	Pre- modification Recorded Investment	Post- modification Recorded Investment	Number of Loans	Pre- modification Recorded Investment	Post- modification Recorded Investment
<i>Interest Only</i>						
Construction and Development						
Healthcare	—	\$ —	\$ —	1	\$ 612	\$ 612
Commercial & Industrial						
Other Industries	1	350	350	—	—	—
<i>Total Interest Only</i>	1	350	350	1	612	612
<i>Interest Only & Rate Concession</i>						
Commercial Land						
Agriculture	—	—	—	4	10,276	10,276
<i>Total Interest Only & Rate Concession</i>	—	—	—	4	10,276	10,276
<i>Extended Amortization</i>						
Commercial Land						
Agriculture	1	3,489	3,489	1	8	8
<i>Total Extended Amortization</i>	1	3,489	3,489	1	8	8
<i>Extended Amortization & Rate Concession</i>						
Commercial Land						
Agriculture	4	7,940	7,940	—	—	—
<i>Total Extended Amortization & Rate Concession</i>	4	7,940	7,940	—	—	—
<i>Payment Deferral</i>						
Commercial & Industrial						
Healthcare	1	144	144	—	—	—
Commercial Real Estate						
Healthcare	1	1,853	1,853	—	—	—
<i>Total Payment Deferral</i>	2	1,997	1,997	—	—	—
<i>Payment Deferral & Rate Concession</i>						
Commercial Real Estate						
Other Industries	2	3,710	3,710	—	—	—
<i>Total Payment Deferral & Rate Concession</i>	2	3,710	3,710	—	—	—
Total	10	\$ 17,486	\$ 17,486	\$ 6	\$ 10,896	\$ 10,896

Concessions made to improve a loan or lease's performance have varying degrees of success. Two TDRs were modified within the twelve months ended September 30, 2019 and subsequently defaulted during the three and nine months ended September 30, 2019. One TDR default was a commercial real estate healthcare loan that was previously modified for payment deferral and had a recorded investment of \$1.8 million at September 30, 2019. The second TDR default was a commercial & industrial healthcare loan that was previously modified for payment deferral and had a recorded investment of \$574 thousand at September 30, 2019. No TDRs that were modified within the twelve months ended September 30, 2018 subsequently defaulted during the three and nine months ended September 30, 2018.

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Notes to Unaudited Condensed Consolidated Financial Statements

Note 6. Leases

Lessor Equipment Leasing

The Company purchases new equipment for the purpose of leasing such equipment to customers within its verticals. Equipment purchased to fulfill commitments to commercial renewable energy projects is rented out under operating leases while leases of equipment outside of the renewable energy vertical are generally direct financing leases. Accordingly, leased assets under operating leases are included in premises and equipment while leased assets under direct financing leases are included in loans and leases held for investment.

Direct Financing Leases

Interest income on direct financing leases is recognized when earned. Unearned interest is recognized over the lease term on a basis which results in a constant rate of return on the unrecovered lease investment. The term of each lease is generally 3-7 years which is consistent with the useful life of the equipment with no residual value. The gross lease payments receivable and the net investment included in accounts receivable for such leases are as follows:

	September 30, 2019	December 31, 2018
Gross direct finance lease payments receivable	\$ 14,717	\$ 12,541
Less – unearned interest	(2,807)	(2,635)
Net investment in direct financing leases	<u>\$ 11,910</u>	<u>\$ 9,906</u>

Future minimum lease payments under finance leases are as follows:

As of September 30, 2019	Amount
2019	\$ 775
2020	3,034
2021	2,981
2022	2,717
2023	2,266
Thereafter	2,944
Total	<u>\$ 14,717</u>

Interest income of \$244 thousand and \$100 thousand was recognized in the three months ended September 30, 2019 and 2018, respectively. Interest income of \$745 thousand and \$220 thousand was recognized in the nine months ended September 30, 2019 and 2018, respectively.

Operating Leases

The term of each operating lease is generally 10 to 15 years. The Company retains ownership of the equipment and associated tax benefits such as investment tax credits and accelerated depreciation. At the end of the lease term, the lessee has the option to renew the lease for two additional terms or purchase the equipment at the then current fair market value.

Rental revenue from operating leases is recognized on a straight-line basis over the term of the lease. Rental equipment is recorded at cost and depreciated to an estimated residual value on a straight-line basis over the estimated useful life. The useful lives generally range from 20 to 25 years and residual values generally range from 20% to 50%, however, they are subject to periodic evaluation. Changes in useful lives or residual values will impact depreciation expense and any gain or loss from the sale of used equipment. The estimated useful lives and residual values of the Company's leasing equipment are based on industry disposal experience and the Company's expectations for future sale prices.

If the Company decides to sell or otherwise dispose of rental equipment, it is carried at the lower of cost or fair value less costs to sell or dispose. Repair and maintenance costs that do not extend the lives of the rental equipment are charged to direct operating expenses at the time the costs are incurred.

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As of September 30, 2019 and December 31, 2018, the Company had a net investment of \$145.0 million and \$148.8 million, respectively, in assets included in premises and equipment that are subject to operating leases. Of the net investment, the gross balance of the assets was \$162.6 million and \$159.2 million and accumulated depreciation was \$17.6 million and \$10.4 million as of September 30, 2019 and December 31, 2018, respectively. Depreciation expense recognized on these assets for the three months ended September 30, 2019 and 2018 was \$2.4 million, and \$2.2 million, respectively. Depreciation expense recognized on these assets for the nine months ended September 30, 2019 and 2018 was \$7.2 million and \$5.9 million, respectively.

Lease income of \$2.4 million and \$2.2 million was recognized in the three months ended September 30, 2019 and 2018, respectively. Lease income of \$7.0 million and \$5.7 million was recognized in the nine months ended September 30, 2019 and 2018, respectively.

A maturity analysis of future minimum lease payments under non-cancelable operating leases is as follows:

<u>As of September 30, 2019</u>	<u>Amount</u>
2019	\$ 2,001
2020	8,883
2021	8,930
2022	8,924
2023	8,956
Thereafter	48,267
Total	<u>\$ 85,961</u>

Lessee Lease Arrangements

The Company has operating leases for real property, land, copiers and other equipment. These leases have remaining lease terms of 1 year to 27 years, some of which include options to extend the leases for up to 20 years, and some of which include options to terminate the leases. The Company has concluded that it is reasonably certain it will exercise the options to extend for only one lease, which was therefore recognized as part of the ROU asset and lease liability.

The Company has a finance lease for fitness equipment and it has a remaining lease term of approximately 3.17 years. There are no options to extend or terminate this lease.

The components of lease expense are as follows:

	<u>Three Months Ended September 30, 2019</u>	<u>Nine Months Ended September 30, 2019</u>
Operating lease cost	\$ 157	\$ 483
Short-term lease cost	147	522
Finance lease cost:		
Amortization of right-of-use assets	1	3
Interest expense on lease liabilities	—	—
Sublease income	(9)	(27)
Total net lease cost	<u>\$ 296</u>	<u>\$ 981</u>

Supplemental disclosure for the consolidated balance sheet related to finance leases is as follows:

	<u>September 30, 2019</u>
Finance lease right-of-use asset	\$ 15
Finance lease liability	15

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

The weighted average remaining lease term and weighted average discount rate for leases are as follows:

	As of September 30, 2019
Weighted average remaining lease term (years)	
Operating leases	15.65
Finance lease	3.17
Weighted average discount rate	
Operating leases	3.51%
Finance lease	3.10%

A maturity analysis of operating and finance lease liabilities is as follows:

As of September 30, 2019	Operating Leases	Finance Leases
2019	\$ 178	\$ 2
2020	521	5
2021	306	5
2022	276	4
2023	143	—
Thereafter	1,285	—
Total lease payments	2,709	16
Less: imputed interest	(668)	(1)
Total lease liabilities	\$ 2,041	\$ 15

Note 7. Servicing Assets

Loans serviced for others are not included in the accompanying balance sheet. The unpaid principal balances of loans serviced for others requiring recognition of a servicing asset were \$2.27 billion and \$2.63 billion at September 30, 2019 and December 31, 2018, respectively. The unpaid principal balance for all loans serviced for others was \$3.01 billion and \$3.22 billion at September 30, 2019 and December 31, 2018, respectively.

The following summarizes the activity pertaining to servicing rights:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Balance at beginning of period	\$ 41,687	\$ 52,689	\$ 47,641	\$ 52,298
Additions, net	1,057	5,558	2,388	14,634
Fair value changes:				
Due to changes in valuation inputs or assumptions	(1,542)	(5,336)	(1,850)	(7,336)
Decay due to increases in principal paydowns or runoff	(3,619)	(3,650)	(10,596)	(10,335)
Balance at end of period	\$ 37,583	\$ 49,261	\$ 37,583	\$ 49,261

The fair value of servicing rights was determined using a weighted average discount rate of 14.1% on September 30, 2019 and 16.1% on September 30, 2018. The fair value of servicing rights was determined using a weighted average prepayment speed of 15.7% on September 30, 2019 and 11.1% on September 30, 2018, depending on the stratification of the specific right. Changes to fair value are reported in loan servicing asset revaluation within the consolidated statements of income.

The fair value of servicing rights is highly sensitive to changes in underlying assumptions. Changes in prepayment speed assumptions have the most significant impact on the fair value of servicing rights. Generally, as interest rates rise on variable rate loans, loan prepayments increase due to an increase in refinance activity, which results in a decrease in the fair value of servicing assets. Measurement of fair value is limited to the conditions existing and the assumptions used as of a particular point in time, and those assumptions may not be appropriate if they are applied at a different time.

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Notes to Unaudited Condensed Consolidated Financial Statements

Note 8. Borrowings

Total outstanding short and long term borrowings consisted of the following:

	<u>September 30, 2019</u>	<u>December 31, 2018</u>
<u>Short term borrowings</u>		
On September 18, 2014, the Company entered into a note payable revolving line of credit of \$1 million with an unaffiliated commercial bank. On April 18, 2017, the Company renewed and increased the revolving line of credit to \$25 million. The note was unsecured and accrued interest at Prime minus 0.50% for a term of 24 months. Payments were interest only with all principal and accrued interest due on April 30, 2019. The terms of this loan required the Company to maintain minimum capital, liquidity and Texas ratios. This line of credit was paid in full on August 25, 2017. This line of credit matured on April 30, 2019 and there is no available credit at September 30, 2019.	\$ —	\$ —
On February 23, 2015, the Company transferred two related party loans to an unaffiliated commercial bank in exchange for \$4.7 million. The exchange price equated to the unpaid principal balance plus accrued but uncollected interest at the time of transfer. The terms of the transfer agreement with the unaffiliated commercial bank identified the transaction as a secured borrowing for accounting purposes. One of the loans with an outstanding balance of \$1.3 million was paid in full on August 17, 2018. Interest accrues at prime plus 1% with monthly principal and interest payments over a term of 60 months. The interest rate at September 30, 2019 is 6.50%. The maturity date is October 5, 2019. The pledged collateral is classified in other assets with a fair value of \$1.3 million at September 30, 2019. The underlying loan carries a risk grade of 3 and is current with no delinquency.	1,295	1,441
Total short term borrowings	<u>\$ 1,295</u>	<u>\$ 1,441</u>

	<u>September 30, 2019</u>	<u>December 31, 2018</u>
<u>Long term borrowings</u>		
In October 2017, the Company entered into a capital lease of \$19 thousand with an unaffiliated equipment lease company, secured by fitness equipment which is included in other assets on the consolidated balance sheet. Payments are principal and interest due monthly starting December 15, 2017 over a term of 60 months. At the end of the lease term there is a \$1.00 bargain purchase option. As of January 1, 2019, this borrowing was revised in accordance with ASU 2016-02.	\$ 15	\$ 16
On October 20, 2017, the Company entered into a revolving line of credit of \$20 million with an unaffiliated commercial bank. On September 20, 2019, the Company renewed and increased the revolving line of credit from \$20 million to \$50 million. The note is unsecured and accrues interest at LIBOR plus 1.150% for a term of 13 months. Payments are interest only with all principal and accrued interest due on October 20, 2020. No advances have been made to this line of credit and there is \$50 million of available credit at September 30, 2019.	-	-
Total long term borrowings	<u>\$ 15</u>	<u>\$ 16</u>

The Company may purchase federal funds through unsecured federal funds lines of credit with various correspondent banks, which totaled \$72.5 million as of September 30, 2019 and December 31, 2018. These lines are intended for short-term borrowings and are subject to restrictions limiting the frequency and terms of advances. These lines of credit are payable on demand and bear interest based upon the daily federal funds rate. The Company had no outstanding balances on the lines of credit as of September 30, 2019 and December 31, 2018.

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The Company has entered into a repurchase agreement with a third party for \$5.0 million as of September 30, 2019 and December 31, 2018. At the time the Company enters into a transaction with the third party, the Company must transfer securities or other assets against the funds received. The terms of the agreement are set at market conditions at the time the Company enters into such transaction. The Company had no outstanding balance on the repurchase agreement as of September 30, 2019 and December 31, 2018.

On June 18, 2018, the Company entered into a borrowing agreement with the Federal Home Loan Bank of Atlanta. These borrowings must be secured with eligible collateral approved by the Federal Home Loan Bank of Atlanta. At September 30, 2019 and December 31, 2018, the Company had approximately \$ 1.1 billion and \$849.1 million, respectively, in borrowing capacity available under these agreements. There is no collateral pledged and no advances outstanding as of September 30, 2019 and December 31, 2018.

The Company may borrow funds through the Federal Reserve Bank's discount window. These borrowings are secured by a blanket floating lien on qualifying loans with a balance of \$541.4 million and \$395.2 million as of September 30, 2019 and December 31, 2018, respectively. At September 30, 2019 and December 31, 2018, the Company had approximately \$308.4 million and \$218.0 million, respectively, in borrowing capacity available under these arrangements with no outstanding balance as of September 30, 2019 and December 31, 2018.

Note 9. Income Taxes

The Company's effective tax rate increased to exceed the U.S. statutory rate primarily because of changes in forecasted results, including reduced levels of anticipated investment tax credits, during the remainder of 2019. The Company's effective tax rate in the future will depend on the actual investment tax credits earned as a part of its financing renewable energy applications.

Note 10. Fair Value of Financial Instruments

Fair Value Hierarchy

There are three levels of inputs in the fair value hierarchy that may be used to measure fair value. Financial instruments are considered Level 1 when valuation can be based on quoted prices in active markets for identical assets or liabilities. Level 2 financial instruments are valued using quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or models using inputs that are observable or can be corroborated by observable market data of substantially the full term of the assets or liabilities. Financial instruments are considered Level 3 when their values are determined using pricing models, discounted cash flow methodologies or similar techniques and at least one significant model assumption or input is unobservable and when determination of the fair value requires significant management judgment or estimation.

Financial Instruments Measured at Fair Value

The following sections provide a description of the valuation methodologies used for instruments measured at fair value, as well as the general classification of such instruments pursuant to the fair value hierarchy:

Investment securities: Where quoted prices are available in an active market, securities are classified within Level 1 of the valuation hierarchy. Level 1 securities would include highly liquid government bonds, mortgage products and exchange traded equities. If quoted market prices are not available, then fair values are estimated by using pricing models, quoted prices of securities with similar characteristics, discounted cash flow or at net asset value per share. Level 2 securities would include U.S. government agency securities, mortgage-backed securities, obligations of states and political subdivisions and certain corporate, asset backed mutual fund and other securities. In certain cases where there is limited activity or less transparency around inputs to the valuation, securities are classified within Level 3 of the valuation hierarchy.

Impaired loans: Impairment of a loan is based on the fair value of the collateral of the loan for collateral-dependent loans. Fair value of the loan's collateral, when the loan is dependent on collateral, is determined by appraisals or independent valuation which is then adjusted for the cost related to liquidation of the collateral. For non-collateral dependent loans, impairment is determined by the present value of expected future cash flows. Impaired loans classified as Level 3 are based on management's judgment and estimation.

Servicing assets: Servicing rights do not trade in an active, open market with readily observable prices. While sales of servicing rights do occur, the precise terms and conditions typically are not readily available. Accordingly, the Company estimates the fair value of servicing rights using discounted cash flow models incorporating numerous assumptions from the perspective of a market participant including servicing income, servicing costs, market discount rates and prepayment speeds. Due to the nature of the valuation inputs, servicing rights are classified within Level 3 of the valuation hierarchy.

Foreclosed assets: Foreclosed real estate is adjusted to fair value less selling costs upon transfer of the loans to foreclosed real estate. Subsequently, foreclosed real estate is carried at the lower of carrying value or fair value less selling costs. Fair value is based upon independent market prices, appraised values of the collateral or management's estimation of the value of the collateral. Given the lack of observable market prices for identical properties and market discounts applied to appraised values, the Company generally classifies foreclosed assets as nonrecurring Level 3.

Mutual fund: The following mutual fund is registered with the Securities and Exchange Commission as a closed-end, non-diversified management investment company and operates as an interval fund. The fund primarily invests in the unguaranteed portion of SBA504 First Lien Loans secured by owner-occupied commercial real estate. This investment is valued using quoted prices in markets that are not active and is classified as Level 2 within the valuation hierarchy.

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Equity warrant assets: Fair value measurements of equity warrant assets of private companies are priced based on a Black-Scholes option pricing model to estimate the asset value by using stated strike prices, option expiration dates, risk-free interest rates and option volatility assumptions. Option volatility assumptions used in the Black-Scholes model are based on public companies that operate in similar industries as the companies in our private company portfolio. Option expiration dates are modified to account for estimates to actual life relative to stated expiration. Values are further adjusted for a general lack of liquidity due to the private nature of the associated underlying company. The Company classifies equity warrant assets within Level 3 of the valuation hierarchy.

Equity security investment with a non-readily determinable fair value: The following equity security investment is measured at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. When an observable price change in an orderly transaction occurs, the investment is classified as nonrecurring Level 1 within the valuation hierarchy.

Recurring Fair Value

The tables below present the recorded amount of assets and liabilities measured at fair value on a recurring basis.

September 30, 2019	Total	Level 1	Level 2	Level 3
Investment securities available-for-sale				
US treasury securities	\$ 5,011	\$ —	\$ 5,011	\$ —
US government agencies	33,065	—	33,065	—
Mortgage-backed securities	523,492	—	523,492	—
Municipal bonds ¹	9,227	—	9,136	91
Servicing assets ²	37,583	—	—	37,583
Mutual fund	2,201	—	2,201	—
Equity warrant assets ³	688	—	—	688
Total assets at fair value	<u>\$ 611,267</u>	<u>\$ —</u>	<u>\$ 572,905</u>	<u>\$ 38,362</u>

December 31, 2018	Total	Level 1	Level 2	Level 3
Investment securities available-for-sale				
US treasury securities	\$ 4,966	\$ —	\$ 4,966	\$ —
US government agencies	30,944	—	30,944	—
Mortgage-backed securities	343,581	—	343,581	—
Municipal bond ¹	999	—	—	999
Servicing assets ²	47,641	—	—	47,641
Mutual fund	2,099	—	2,099	—
Equity warrant assets ³	527	—	—	527
Total assets at fair value	<u>\$ 430,757</u>	<u>\$ —</u>	<u>\$ 381,590</u>	<u>\$ 49,167</u>

1 During the nine months ended September 30, 2019, the Company sold \$900 thousand of a municipal bond to a third party and recorded a fair value adjustment loss of \$9 thousand. During the three months ended September 30, 2019, the Company recorded a fair value adjustment loss of \$ thousand.

2 See Note 7 for a rollforward of recurring Level 3 fair values for servicing assets.

3 During the nine months ended September 30, 2019, the Company recorded net gains on derivative instruments of \$61 thousand, respectively. During the three months ended September 30, 2019, the Company recorded net losses on derivative instruments of \$32 thousand. During the nine months ended September 30, 2018, the Company entered into equity warrant assets with a fair value of \$551 thousand at the time of issuance and recorded net losses on derivative instruments of \$13 thousand. During the three months ended September 30, 2018, the Company entered into equity warrant assets with a fair value of \$152 thousand at the time of issuance and recorded net losses on derivative instruments of \$3 thousand.

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Non-recurring Fair Value

The tables below present the recorded amount of assets and liabilities measured at fair value on a non-recurring basis.

September 30, 2019	Total	Level 1	Level 2	Level 3
Impaired loans	\$ 116,927	\$ —	\$ —	\$ 116,927
Foreclosed assets	5,702	—	—	5,702
Equity security investment with a non-readily determinable fair value	8,738	8,738	—	—
Total assets at fair value	<u>\$ 131,367</u>	<u>\$ 8,738</u>	<u>\$ —</u>	<u>\$ 122,629</u>

December 31, 2018	Total	Level 1	Level 2	Level 3
Impaired loans	\$ 91,230	\$ —	\$ —	\$ 91,230
Foreclosed assets	1,094	—	—	1,094
Total assets at fair value	<u>\$ 92,324</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 92,324</u>

Level 3 Analysis

For Level 3 assets and liabilities measured at fair value on a recurring or non-recurring basis as of September 30, 2019 and December 31, 2018 the significant unobservable inputs used in the fair value measurements were as follows:

September 30, 2019

Level 3 Assets with Significant Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Municipal bond	\$ 91	Discounted expected cash flows	Discount rate Prepayment speed	4.35% 5.00%
Impaired loans	\$ 116,927	Discounted appraisals Discounted expected cash flows	Appraisal adjustments (1) Interest rate & repayment term	10% to 50% Weighted average discount rate 6.89%
Foreclosed assets	\$ 5,702	Discounted appraisals	Appraisal adjustments (1)	10% to 37%
Equity warrant assets	\$ 688	Black-Scholes option pricing model	Volatility Risk-free interest rate Marketability discount Remaining life	21.10% 1.73% 20.00% 8 - 9 years

December 31, 2018

Level 3 Assets with Significant Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Municipal bond	\$ 999	Discounted expected cash flows	Discount rate Prepayment speed	5.14% 5.00%
Impaired loans	\$ 91,230	Discounted appraisals Discounted expected cash flows	Appraisal adjustments (1) Interest rate & repayment term	8% to 48% Weighted average discount rate 6.58%
Foreclosed assets	\$ 1,094	Discounted appraisals	Appraisal adjustments (1)	9% to 37%
Equity warrant assets	\$ 527	Black-Scholes option pricing model	Volatility Risk-free interest rate Marketability discount Remaining life	20.40% 2.69% 20.00% 9 - 10 years

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(1) Appraisals may be adjusted by management for customized discounting criteria, estimated sales costs, and proprietary qualitative adjustments.

Estimated Fair Value of Other Financial Instruments

GAAP also requires disclosure of the fair value of financial instruments carried at book value on the consolidated balance sheets.

The carrying amounts and estimated fair values of the Company's financial instruments are as follows:

	Carrying Amount	Quoted Price In Active Markets for Identical Assets /Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
September 30, 2019					
Financial assets					
Cash and due from banks	\$ 159,527	\$ 159,527	\$ —	\$ —	\$ 159,527
Federal funds sold	88,919	88,919	—	—	88,919
Certificates of deposit with other banks	7,250	7,625	—	—	7,625
Investment securities, available-for-sale	570,795	—	570,704	91	570,795
Loans held for sale	903,095	—	—	956,764	956,764
Loans and leases, net of allowance for loan and lease losses	2,399,009	—	—	2,468,211	2,468,211
Servicing assets	37,583	—	—	37,583	37,583
Accrued interest receivable	19,860	19,860	—	—	19,860
Mutual fund	2,201	—	2,201	—	2,201
Equity warrant assets	688	—	—	688	688
Financial liabilities					
Deposits	4,019,267	—	4,036,336	—	4,036,336
Accrued interest payable	1,994	1,994	—	—	1,994
Short term borrowings	1,295	—	—	1,296	1,296
Long term borrowings	15	—	—	15	15
December 31, 2018					
Financial assets					
Cash and due from banks	\$ 316,823	\$ 316,823	\$ —	\$ —	\$ 316,823
Certificates of deposit with other banks	7,250	7,442	—	—	7,442
Investment securities, available-for-sale	380,490	—	379,491	999	380,490
Loans held for sale	687,393	—	—	695,154	695,154
Loans and leases, net of allowance for loan and lease losses	1,810,985	—	—	1,807,528	1,807,528
Servicing assets	47,641	—	—	47,641	47,641
Accrued interest receivable	15,895	15,895	—	—	15,895
Mutual fund	2,099	—	2,099	—	2,099
Equity warrant assets	527	—	—	527	527
Financial liabilities					
Deposits	3,149,583	—	3,117,941	—	3,117,941
Accrued interest payable	861	861	—	—	861
Short term borrowings	1,441	—	—	1,441	1,441
Long term borrowings	16	—	—	16	16

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Note 11. Commitments and Contingencies

Litigation

In the normal course of business the Company is involved in various legal proceedings. Management believes that the outcome of such proceedings will not materially affect the financial position, results of operations or cash flows of the Company.

Financial Instruments with Off-balance-sheet Risk

The Company is party to financial instruments with off-balance-sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. These instruments involve, to varying degrees, credit risk in excess of the amount recognized in the balance sheet.

The Company's exposure to credit loss in the event of nonperformance by the other party to the financial instrument for commitments to extend credit and standby letters of credit is represented by the contractual amount of those instruments. The Company uses the same credit policies in making commitments and conditional obligations as for on-balance-sheet instruments. A summary of the Company's commitments is as follows:

	September 30, 2019	December 31, 2018
Commitments to extend credit	\$ 1,701,121	\$ 1,435,024
Standby letters of credit	25,653	2,150
Solar purchase commitments	2,400	—
Airplane purchase agreement commitments	—	10,450
Total unfunded off-balance-sheet credit risk	<u>\$ 1,729,174</u>	<u>\$ 1,447,624</u>

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Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by the Company upon extension of credit, is based on management's credit evaluation of the party. Collateral held varies, but may include accounts receivable, inventory, property and equipment, residential real estate and income-producing commercial properties. In 2012, the Company began issuing commitment letters after approval of the loan by the Credit Department. Commitment letters generally expire ninety days after issuance.

Standby letters of credit are conditional commitments issued by the Company to guarantee the performance of a customer to a third party. Those guarantees are primarily issued to support public and private borrowing arrangements. The credit risk involved in issuing letters of credit is essentially the same as that involved in extending loan facilities to customers. Collateral held varies as specified above and is required in instances which the Company deems necessary.

As of September 30, 2019 and December 31, 2018, the Company had unfunded commitments to provide capital contributions for on-balance-sheet investments in the amount of \$17.9 million and \$2.8 million, respectively.

Concentrations of Credit Risk

Although the Company is not subject to any geographic concentrations, a substantial amount of the Company's loans, leases, and commitments to extend credit have been granted to customers in the agriculture, healthcare and veterinary verticals. The concentrations of credit by type of loan are set forth in Note 5. The distribution of commitments to extend credit approximates the distribution of loans outstanding. The Company does not have a significant number of credits to any single borrower or group of related borrowers whereby their retained unguaranteed exposure exceeds \$7.5 million, except for 20 relationships that have a retained unguaranteed exposure of \$218.7 million of which \$154.4 million of the unguaranteed exposure has been disbursed.

Additionally, the Company has future minimum lease payments due under non-cancelable operating leases totaling \$86.0 million, of which \$62.5 million is due from four relationships.

The Company from time-to-time may have cash and cash equivalents on deposit with financial institutions that exceed federally-insured limits.

Note 12. Stock Plans

On March 20, 2015, the Company adopted the 2015 Omnibus Stock Incentive Plan which replaced the previously existing Amended Incentive Stock Option Plan and Nonstatutory Stock Option Plan. Subsequently on May 24, 2016, the 2015 Omnibus Stock Incentive Plan was amended to authorize awards covering a maximum of 7,000,000 common voting shares and has an expiration date of March 20, 2025. On May 15, 2018, the Amended and Restated 2015 Omnibus Stock Incentive Plan was amended to authorize awards covering a maximum of 8,750,000 common voting shares. Options or restricted shares granted under the Amended and Restated 2015 Omnibus Stock Incentive Plan (the "Plan") expire no more than 10 years from the date of grant. Exercise prices under the Plan are set by the Board of Directors at the date of grant, but shall not be less than 100% of fair market value of the related stock at the date of the grant. Options vest over a minimum of three years from the date of the grant. Restricted stock grants vest in equal installments ranging from immediate vesting to over a seven year period from the date of the grant. Market Restricted Stock Units also have a restriction based on the passage of time and non-market-related performance criteria, but also have a restriction based on market price criteria related to the Company's share price closing at or above a specified price defined at time of grant.

Stock Options

Compensation cost relating to share-based payment transactions are recognized in the financial statements with measurement based upon the fair value of the equity or liability instruments issued. For the three months ended September 30, 2019 and 2018, the Company recognized \$395 thousand and \$470 thousand in compensation expense for stock options, respectively. For the nine months ended September 30, 2019 and 2018, the Company recognized \$1.2 million and \$1.2 million in compensation expense for stock options, respectively.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

Stock option activity under the Plan during the nine month periods ended September 30, 2019 and 2018, is summarized below.

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2018	2,656,855	\$ 11.27		
Exercised ¹	48,301	6.31		
Forfeited	55,355	9.47		
Granted	—	—		
Outstanding at September 30, 2019	<u>2,553,199</u>	<u>\$ 11.40</u>	<u>5.27 years</u>	<u>\$ 17,319,078</u>
Exercisable at September 30, 2019	<u>1,045,576</u>	<u>\$ 10.97</u>	<u>5.12 years</u>	<u>\$ 7,545,508</u>

¹ Exercised stock options include 1,055 stock options that were surrendered for taxes and not issued.

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Outstanding at December 31, 2017	3,058,459	\$ 11.30		
Exercised	171,333	9.26		
Forfeited	174,845	13.69		
Granted	—	—		
Outstanding at September 30, 2018	<u>2,712,281</u>	<u>\$ 11.27</u>	<u>6.28 years</u>	<u>\$ 47,005,905</u>
Exercisable at September 30, 2018	<u>813,730</u>	<u>\$ 10.67</u>	<u>6.11 years</u>	<u>\$ 14,587,733</u>

The following is a summary of non-vested stock option activity for the Company for the nine months ended September 30, 2019 and 2018.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2018	1,839,830	\$ 4.60
Granted	—	—
Vested	(276,852)	4.92
Forfeited	(55,355)	9.47
Non-vested at September 30, 2019	<u>1,507,623</u>	<u>11.70</u>

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2017	2,364,999	\$ 4.65
Granted	—	—
Vested	(291,603)	3.95
Forfeited	(174,845)	5.98
Non-vested at September 30, 2018	<u>1,898,551</u>	<u>4.63</u>

The total intrinsic value of options exercised at September 30, 2019 and 2018, was \$209 thousand and \$493 thousand, respectively.

At September 30, 2019, unrecognized compensation costs relating to stock options amounted to \$1.6 million which will be recognized over a weighted average period of 2.8 years.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

The weighted average fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The expected volatility is based on historical volatility. The risk-free interest rates for periods within the contractual life of the awards are based on the U.S. Treasury yield curve in effect at the time of the grant. The expected life is based on historical exercise experience. The dividend yield assumption is based on the Company's history and expectation of dividend payouts. There were no stock options granted during the three and nine months ended September 30, 2019 and 2018.

Restricted Stock

Restricted stock awards are authorized in the form of restricted stock awards or units ("RSU"s) and restricted stock awards or units with a market price condition ("Market RSU"s).

RSUs have a restriction based on the passage of time and may also have a restriction based on a non-market-related performance criteria. The fair value of the RSUs is based on the closing price on the date of the grant.

Market RSUs also have a restriction based on the passage of time and non-market-related performance criteria, but also have a restriction based on market price criteria related to the Company's share price closing at or above a specified price ranging from \$34.00 to \$55.00 per share for at least twenty (20) consecutive trading days at any time prior to expiration date. The amount of Market RSUs earned will not exceed 100% of the Market RSUs awarded. The fair value of the Market RSUs and the implied service period is calculated using the Monte Carlo simulation method.

RSU stock activity under the Plan during the nine months of 2019 is summarized below.

	Shares		Weighted Average Grant Date Fair Value
Non-vested at December 31, 2018	388,187	\$	23.85
Granted	130,176		16.73
Vested	(54,063)		25.21
Forfeited	(16,029)		20.44
Non-vested at September 30, 2019	448,271		21.74

For the three months ended September 30, 2019 and 2018, the Company recognized \$518 thousand and \$401 thousand in compensation expense for RSUs, respectively. For the nine months ended September 30, 2019 and 2018, the Company recognized \$1.6 million and \$2.2 million in compensation expense for RSUs, respectively.

At September 30, 2019, unrecognized compensation costs relating to RSUs amounted to \$8.5 million which will be recognized over a weighted average period of 4.8 years.

Market RSU stock activity under the Plan during the nine months of 2019 is summarized below.

	Shares		Weighted Average Grant Date Fair Value
Non-vested at December 31, 2018	2,709,202	\$	9.87
Granted	500,000		8.81
Vested	—		—
Forfeited	(52,878)		9.22
Non-vested at September 30, 2019	3,156,324		8.44

The compensation expense for Market RSUs is measured based on their grant date fair value as calculated using the Monte Carlo simulation and is recognized on a straight-line basis over the average vesting period. The Monte Carlo simulation used 100,000 simulation paths to assess the expected date of achieving the market price criteria.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

Related to the 500,000 Market RSUs granted on February 11, 2019, the share price simulation was based on the Cox, Ross & Rubinstein option pricing methodology for a period of 10.0 years. The implied term of the restricted stock ranges from 4.5 to 5.8 years. The Monte Carlo Simulation used various assumptions that included a risk free rate of return of 2.62%, expected volatility of 37.6% and a dividend yield of 0.78%.

On February 11, 2019, 75,000 Market RSUs granted on May 14, 2018 to one employee were modified to lengthen the vesting term from 7 to 10 years and change the target stock price from \$48.00 to a range of \$35.00 to \$48.00 per share for at least twenty (20) consecutive trading days. Additionally, 410,000 Market RSUs granted on August 10, 2018 to eleven employees were modified to lengthen the vesting term from 7 to 10 years and change the amount of Market RSUs that vest at various target stock prices to 20% per tier. As a result of modification, the Company recognized additional compensation expense of \$155 thousand and \$388 thousand for the three and nine months periods ended September 30, 2019, respectively.

For the three months ended September 30, 2019 and 2018, the Company recognized \$2.0 million and \$1.6 million in compensation expense for Market RSUs, respectively. For the nine months ended September 30, 2019 and 2018, the Company recognized \$5.8 million and \$3.5 million in compensation expense for Market RSUs, respectively.

At September 30, 2019, unrecognized compensation costs relating to Market RSUs amounted to \$16.8 million which will be recognized over a weighted average period of 3.1 years.

Employee Stock Purchase Plan

The Company adopted an Employee Stock Purchase Plan on October 8, 2014. On May 24, 2016, the plan was amended and the Amended and Restated Employee Stock Purchase Plan (the "ESPP") became effective within the meaning of Section 423 of the Internal Revenue Code of 1986, as amended. Under the ESPP, eligible employees are able to purchase available shares with post-tax dollars as of the grant date. In order for employees to be eligible to participate in the ESPP they must be employed or on an authorized leave of absence from the Company or any subsidiary immediately prior to the grant date. ESPP stock purchases cannot exceed \$25 thousand in fair market value per employee per calendar year. Options to purchase shares under the ESPP are granted at a 15% discount to fair market value. For the three months ended September 30, 2019 and 2018, the company recognized \$45 thousand and \$31 thousand, respectively. For the nine months ended September 30, 2019 and 2018, the Company recognized \$77 thousand and \$60 thousand in expense, respectively.

Note 13. Subsequent Event

On October 30, 2019, the Company was notified that 203,283 shares of Class B common stock (non-voting) were converted to Class A common stock (voting) under a private placement sale of shares effective September 24, 2019. The Company's consolidated financial statements as of September 30, 2019 have been updated accordingly.

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

The following presents management's discussion and analysis of the financial condition and results of operations of Live Oak Bancshares, Inc. (the "Company" or "LOB"). This discussion should be read in conjunction with the financial statements and related notes included elsewhere in this quarterly report on Form 10-Q and with the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018 (the "2018 Annual Report"). Results of operations for the periods included in this quarterly report on Form 10-Q are not necessarily indicative of results to be obtained during any future period.

Important Note Regarding Forward-Looking Statements

This quarterly report on Form 10-Q contains statements that management believes are forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995. These statements generally relate to the Company's financial condition, results of operations, plans, objectives, future performance or business. They usually can be identified by the use of forward-looking terminology, such as "believes," "expects," or "are expected to," "plans," "projects," "goals," "estimates," "will," "may," "should," "could," "would," "continues," "intends to," "outlook" or "anticipates," or variations of these and similar words, or by discussions of strategies that involve risks and uncertainties. You should not place undue reliance on these statements, as they are subject to risks and uncertainties, including but not limited to, those described in this quarterly report on Form 10-Q. When considering these forward-looking statements, you should keep in mind these risks and uncertainties, as well as any cautionary statements management may make. Moreover, you should treat these statements as speaking only as of the date they are made and based only on information actually known to the Company at the time. Management undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise. Forward-looking statements contained in this quarterly report on Form 10-Q are based on current expectations, estimates and projections about the Company's business, management's beliefs and assumptions made by management. These statements are not guarantees of the Company's future performance and involve certain risks, uncertainties and assumptions, which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in the forward-looking statements. These risks, uncertainties and assumptions include, without limitation:

- deterioration in the financial condition of borrowers resulting in significant increases in the Company's loan and lease losses and provisions for those losses and other adverse impacts to results of operations and financial condition;
- changes in Small Business Administration ("SBA") rules, regulations and loan products, including specifically the Section 7(a) program, changes in SBA standard operating procedures or changes to the status of Live Oak Banking Company (the "Bank") as an SBA Preferred Lender;
- changes in rules, regulations or procedures for other government loan programs, including those of the USDA;
- changes in interest rates that affect the level and composition of deposits, loan demand and the values of loan collateral, securities, and interest sensitive assets and liabilities;
- the failure of assumptions underlying the establishment of reserves for possible loan and lease losses;
- changes in loan underwriting, credit review or loss reserve policies associated with economic conditions, examination conclusions, or regulatory developments;
- a reduction in or the termination of the Company's ability to use the technology-based platform that is critical to the success of the Company's business model, including a failure in or a breach of the Company's operational or security systems or those of its third-party service providers;
- changes in financial market conditions, either internationally, nationally or locally in areas in which the Company conducts operations, including reductions in rates of business formation and growth, demand for the Company's products and services, commercial and residential real estate development and prices, premiums paid in the secondary market for the sale of loans, and valuation of servicing rights;
- changes in accounting principles, policies, and guidelines applicable to bank holding companies and banking;
- fluctuations in markets for equity, fixed-income, commercial paper and other securities, which could affect availability, market liquidity levels, and pricing;

- the effects of competition from other commercial banks, non-bank lenders, consumer finance companies, credit unions, securities brokerage firms, insurance companies, money market and mutual funds, and other financial institutions operating in the Company's market area and elsewhere, including institutions operating regionally, nationally and internationally, together with such competitors offering banking products and services by mail, telephone and the Internet;
- the Company's ability to attract and retain key personnel;
- changes in governmental monetary and fiscal policies as well as other legislative and regulatory changes, including with respect to SBA or USDA lending programs and investment tax credits;
- changes in political and economic conditions;
- the impact of heightened regulatory scrutiny of financial products and services, primarily led by the Consumer Financial Protection Bureau;
- the Company's ability to comply with any requirements imposed on it by regulators, and the potential negative consequences that may result;
- operational, compliance and other factors, including conditions in local areas in which the Company conducts business such as inclement weather or a reduction in the availability of services or products for which loan proceeds will be used, that could prevent or delay closing and funding loans before they can be sold in the secondary market;
- the effect of any mergers, acquisitions or other transactions, to which the Company or the Bank may from time to time be a party, including management's ability to successfully integrate any businesses acquired;
- other risk factors listed from time to time in reports that the Company files with the SEC, including in the Company's 2018 Annual Report; and
- the success at managing the risks involved in the foregoing.

Except as otherwise disclosed, forward-looking statements do not reflect: (i) the effect of any acquisitions, divestitures or similar transactions that have not been previously disclosed; (ii) any changes in laws, regulations or regulatory interpretations; or (iii) any change in current dividend or repurchase strategies, in each case after the date as of which such statements are made. All forward-looking statements speak only as of the date on which such statements are made, and the Company undertakes no obligation to update any statement, to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

Amounts in all tables in Management's Discussion and Analysis of Financial Condition and Results of Operations have been presented in thousands, except percentage, time period, stock option, share and per share data or where otherwise indicated.

Nature of Operations

LOB is a bank holding company headquartered in Wilmington, North Carolina incorporated under the laws of North Carolina in December 2008. The Company conducts business operations primarily through its commercial bank subsidiary, Live Oak Banking Company (the "Bank"). The Bank was incorporated in February 2008 as a North Carolina-chartered commercial bank. The Bank specializes in providing lending services to small businesses nationwide. The Bank identifies and grows within selected industry sectors, or verticals, by leveraging expertise within those industries, and more broadly to select borrowers outside of those industries. A significant portion of the loans originated by the Bank are guaranteed by the SBA under the 7(a) Loan Program and the U.S. Department of Agriculture ("USDA") Rural Energy for America Program ("REAP"), Business & Industry ("B&I") and Water & Waste Disposal ("WEP") loan programs.

Effective July 29, 2016, the Company elected to become a “financial holding company” within the meaning of the Bank Holding Company Act. A financial holding company, and the nonbank companies under its control, are permitted to engage in activities considered financial in nature or incidental to financial activities. For the Company to become and remain eligible for financial holding company status, it and the Bank must meet certain criteria, including capital, management and Community Reinvestment Act (“CRA”) requirements. The failure to meet such criteria could, depending on which requirements were not met, result in the Company facing restrictions on new financial activities or acquisitions or being required to discontinue existing activities that are not otherwise permissible for bank holding companies.

During the fourth quarter of 2018, the Company began implementing a strategic decision to retain a larger portion of its loans eligible for sale on its balance sheet. Management believes this decision will reduce future earnings volatility and maximize long-term profitability. This strategic change had immediate impacts through the reclassification of \$80.3 million in guaranteed loans from held-for-sale to held-for-investment status. Other effects of this change are reflected in the financial statements in the fourth quarter of 2018 and in the first nine months of 2019 with significantly fewer loans sold during the respective quarters and the consequential effect of increased net interest income and increased loans held for sale and held for investment along with lower gains on loan sales.

In 2018, the Bank formed Live Oak Private Wealth, LLC, a registered investment advisor that provides high-net-worth individuals and families with strategic wealth and investment management services; and the Company formed Canapi Advisors, LLC for the purpose of providing investment advisory services to a series of new funds focused on providing venture capital to new and emerging financial services technology companies. In 2017, the Bank entered into a joint venture, Apiture LLC (“Apiture”), with First Data Corporation for the purpose of creating next generation technology for financial institutions. In August 2018, the Company exited the title insurance business by financing the sale of its entire ownership interest in Reltco, Inc. and National Assurance Title, Inc. for \$3.0 million. This divestiture was driven by lower expectations of future profitability for this business. The title insurance business was acquired in 2017. In 2016, the Company formed Live Oak Clean Energy Financing LLC (“LOCEF”), for the purpose of providing financing to entities for renewable energy applications. During the three months ended March 31, 2019, LOCEF became a subsidiary of the Bank. In addition to the Bank, the Company owns Live Oak Ventures, Inc. (formerly known as “Canapi, Inc.”), formed in August 2016 for the purpose of investing in businesses that align with the Company's strategic initiative to be a leader in financial technology; Live Oak Grove, LLC, formed in February 2015 for the purpose of providing Company employees and business visitors an on-site restaurant location; Government Loan Solutions, Inc. (“GLS”), a management and technology consulting firm that specializes in the settlement, accounting, and securitization processes for government guaranteed loans, including loans originated under the SBA 7(a) loan program and USDA-guaranteed loans; and 504 Fund Advisors, LLC (“504FA”), formed to serve as the investment advisor to The 504 Fund, a closed-end mutual fund organized to invest in SBA section 504 loans. During the first half of 2019, 504FA completed the transfer of its advisory agreement and no longer serves as the investment advisor to The 504 Fund.

The Company generates revenue primarily from net interest income and the origination and sale of government guaranteed loans. Income from the retention of loans is comprised principally of interest income. Income from the sale of loans is comprised of loan servicing revenue and revaluation of related servicing assets along with net gains on sales of loans. Offsetting these revenues are the cost of funding sources, provision for loan and lease losses, any costs related to foreclosed assets and other operating costs such as salaries and employee benefits, travel, professional services, advertising and marketing and tax expense.

Business Outlook

Below is a discussion of management’s current expectations regarding company performance over the near-term based on market conditions, the regulatory environment and business strategies as of the time the Company filed this Report. Actual outcomes and results may differ materially from what is expressed or forecasted in these forward-looking statements. See “Important Note Regarding Forward-Looking Statements” in this Report for more information on forward-looking statements.

We believe our strategic decision to retain a larger portion of loans eligible for sale on our balance sheet will reduce future earnings volatility and maximize long-term profitability. As a result of this decision, we anticipate that gains on the sale of loans will comprise a diminishing component of our revenue in 2019. Management anticipates that the Company's held-for-sale and held-for-investment loan portfolios will continue to grow as a result of ongoing origination volumes and higher levels of loan retention intended to promote long-term recurring revenue and profitability, including the continued pursuit of potential opportunities in conventional lending outside of SBA or other government guarantee programs.

The Company expects its effective tax rate will approximate 20% to 25% for 2019. This estimate is subject to change dependent upon the nature and amount of future income, expenses and investments that may have unexpected tax consequences.

Results of Operations

Performance Summary

Three months ended September 30, 2019 compared with three months ended September 30, 2018

For the three months ended September 30, 2019, the Company reported net income of \$3.9 million, or \$0.09 per diluted share, as compared to \$14.3 million, or \$0.34 per diluted share, for the third quarter of 2018. This decrease in net income is primarily due to the following items:

- The Company's strategic shift in the latter part of 2018 to hold substantially more of its eligible-for-sale production on balance sheet resulted in lower net income in the near-term by decreasing net gains on sales of loans by \$14.6 million, or 66.3%. The volume of guaranteed loan sales in the third quarter of 2019 declined to \$100.5 million compared to \$298.1 million in the third quarter of 2018;
- The provision for loan and lease losses increased \$7.4 million due primarily to accommodate significant portfolio growth combined with an increase in criticized and classified loans and leases; and
- Income tax expense increased \$5.6 million. This increase was largely the result of forecasted reductions in targeted solar panel leasing activity and related investment tax credits for the remainder of the year which negatively impacted the annual effective tax rate.

The primary factors partially offsetting the above decrease in net income were:

- Increase in net interest income of \$9.8 million, or 35.4%, predominately driven by the above referenced strategic growth in loan and lease portfolios combined with higher investment security holdings which benefited from rising interest rates; and
- Net negative loan servicing revaluation decreased by \$8.5 million, or 90.8%, principally due to improving market conditions, such as increased premiums, for sold loans.

Nine Months Ended September 30, 2019 compared with nine months ended September 30, 2018

For the nine months ended September 30, 2019, the Company reported net income of \$11.2 million, or \$0.27 per diluted share, as compared to \$41.0 million, or \$0.98 per diluted share, for the nine months ended September 30, 2018. This decrease in net income is primarily due to the following items:

- The Company's above referenced strategic shift in the latter part of 2018 to hold substantially more of its eligible-for-sale production on balance sheet resulted in lower net income in the near-term by decreasing net gains on sales of loans by \$51.8 million, or 74.6%. The volume of guaranteed loan sales in the first nine months of 2019 declined to \$235.4 million compared to \$840.5 million in the first nine months of 2018, a 72.0% decrease;
- The provision for loan and lease losses increased \$7.1 million primarily due to significant portfolio growth combined with an increase in criticized and classified loans and leases;
- The flow-through loss from investments accounted for under the equity method totaled \$6.1 million compared to \$1.4 for the nine months ended September 30, 2018; and
- Income tax expense increased \$5.7 million. This increase was largely the result of forecasted reductions in the targeted solar panel leasing activity for the remainder of the year which negatively impacted the annual effective tax rate.

The primary factors partially offsetting the above decrease in net income were:

- Increase in net interest income of \$22.8 million, or 28.8%, predominately driven by the above referenced strategic growth in loan and lease portfolios combined with higher investment security holdings which benefited from rising interest rates; and

- Net negative loan servicing revaluation decreased by \$14.6 million, or 80.7%, principally due to improving market conditions, such as increased premiums, for sold loans.

Net Interest Income and Margin

Net interest income represents the difference between the income that the Company earns on interest-earning assets and the cost it incurs on interest-bearing liabilities. The Company's net interest income depends upon the volume of interest-earning assets and interest-bearing liabilities and the interest rates that the Company earns or pays on them. Net interest income is affected by changes in the amount and mix of interest-earning assets and interest-bearing liabilities, referred to as "volume changes." It is also affected by changes in yields earned on interest-earning assets and rates paid on interest-bearing deposits and other borrowed funds, referred to as "rate changes." Without a branch network, the Bank generates deposits over the Internet and in the community in which it is headquartered. Due to the nature of a branchless bank and the relatively low overhead required for deposit gathering, the rates that the Bank offers are generally above the industry average.

Three months ended September 30, 2019 compared with three months ended September 30, 2018

For the three months ended September 30, 2019, net interest income increased \$9.8 million, or 35.4%, to \$37.5 million compared to \$27.7 million for the three months ended September 30, 2018. This increase was principally due to the significant growth in the combined held for sale and held for investment loan and lease portfolios along with higher investment security holdings reflecting the Company's ongoing initiative to grow recurring revenue sources and deploy liquidity while improving the asset-liability repricing mix. Average interest earning assets increased by \$940.2 million, or 30.9%, to \$3.98 billion for the three months ended September 30, 2019, compared to \$3.04 billion for the three months ended September 30, 2018, while the yield on average interest earning assets increased sixty-two basis points to 6.08%. The cost of funds on interest bearing liabilities for the three months ended September 30, 2019 increased fifty-one basis points to 2.44%, and the average balance of interest bearing liabilities increased by \$921.4 million, or 31.7%, over the same period in 2019. As indicated in the rate/volume table below, the increase in interest earning assets outpaced the higher volume and increased cost of interest bearing liabilities, resulting in increased interest income of \$19.2 million and increased interest expense of \$9.4 million for the three months ended September 30, 2019 compared to the three months ended September 30, 2018. For the three months ended September 30, 2018 compared to the three months ended September 30, 2019, net interest margin increased from 3.61% to 3.74%, respectively, principally due to the volume of interest earnings assets outpacing the growth in the volume of interest bearing liabilities.

Nine Months Ended September 30, 2019 compared with nine months ended September 30, 2018

For the nine months ended September 30, 2019, net interest income increased \$22.8 million, or 28.8%, to \$102.1 million compared to \$79.2 million for the nine months ended September 30, 2018. This increase was principally due to the significant growth in the combined held for sale and held for investment loan and lease portfolios along with higher investment security holdings reflecting the Company's ongoing initiative to grow recurring revenue sources and deploy liquidity while improving the asset-liability repricing mix. Average interest earning assets increased by \$746.6 million, or 25.3%, to \$3.70 billion for the nine months ended September 30, 2019, compared to \$2.95 billion for the nine months ended September 30, 2018, while the yield on average interest earning assets increased sixty-seven basis points to 6.01%. The cost of funds on interest bearing liabilities for the nine months ended September 30, 2019 increased fifty-seven basis points to 2.41%, and the average balance of interest bearing liabilities increased by \$743.8 million, or 26.5%, over the same period in 2018. As indicated in the rate/volume table below, the increase in interest earning assets and corresponding yields outpaced the higher volume and increased cost of interest bearing liabilities, resulting in increased interest income of \$48.3 million and increased interest expense of \$25.5 million for the nine months ended September 30, 2019 compared to the nine months ended September 30, 2018. For the nine months ended September 30, 2018 compared to the nine months ended September 30, 2019, net interest margin increased from 3.59% to 3.69%, respectively, principally due to the growth in the volume of interest earnings assets outpacing the growth in interest bearing liabilities.

Average Balances and Yields. The following table presents information regarding average balances for assets and liabilities, the total dollar amounts of interest income and dividends from average interest-earning assets, the total dollar amount of interest expense on average interest-bearing liabilities, and the resulting average yields and costs. The yields and costs for the periods indicated are derived by dividing the income or expense by the average balances for assets or liabilities, respectively, for the periods presented and annualizing that result. Loan fees are included in interest income on loans.

	Three Months Ended September 30,					
	2019			2018		
	Average Balance	Interest	Average Yield/Rate	Average Balance	Interest	Average Yield/Rate
Interest earning assets:						
Federal funds sold and interest earning balances in other banks	\$ 205,342	\$ 1,167	2.25%	\$ 349,739	\$ 1,638	1.86%
Investment securities	554,871	4,001	2.86	388,520	2,528	2.58
Loans held for sale	910,837	15,982	6.96	693,517	11,270	6.45
Loans and leases held for investment ⁽¹⁾	2,313,615	39,957	6.85	1,612,699	26,454	6.51
Total interest earning assets	3,984,665	61,107	6.08	3,044,475	41,890	5.46
Less: Allowance for loan and lease losses	(37,995)			(29,266)		
Non-interest earning assets	501,369			434,963		
Total assets	\$ 4,448,039			\$ 3,450,172		
Interest bearing liabilities:						
Interest bearing checking	\$ —	\$ —	—%	\$ 31,950	\$ 87	1.08%
Savings	1,036,858	5,501	2.10	943,958	4,026	1.69
Money market accounts	91,813	179	0.77	120,702	314	1.03
Certificates of deposit	2,701,350	17,896	2.63	1,810,040	9,738	2.13
Total deposits	3,830,021	23,576	2.44	2,906,650	14,165	1.93
Other borrowings	1,359	—	—	3,365	1	0.12
Total interest bearing liabilities	3,831,380	23,576	2.44	2,910,015	14,166	1.93
Non-interest bearing deposits	51,781			46,272		
Non-interest bearing liabilities	35,654			21,804		
Shareholders' equity	529,224			472,081		
Total liabilities and shareholders' equity	\$ 4,448,039			\$ 3,450,172		
Net interest income and interest rate spread		\$ 37,531	3.64%		\$ 27,724	3.53%
Net interest margin			3.74			3.61
Ratio of average interest-earning assets to average interest-bearing liabilities			104.00%			104.62%

(1) Average loan and lease balances include non-accruing loans.

Nine Months Ended September 30,

	2019			2018		
	Average Balance	Interest	Average Yield/Rate	Average Balance	Interest	Average Yield/Rate
Interest earning assets:						
Federal funds sold and interest earning balances in other banks	\$ 224,278	\$ 3,914	2.33%	\$ 403,024	\$ 5,032	1.67%
Investment securities	527,799	11,434	2.90	315,120	6,175	2.62
Loans held for sale	834,043	42,948	6.88	722,308	34,423	6.37
Loans and leases held for investment(1)	2,109,775	107,871	6.84	1,508,833	72,259	6.40
Total interest earning assets	3,695,895	166,167	6.01	2,949,285	117,889	5.34
Less: Allowance for loan and lease losses	(35,215)			(27,157)		
Non-interest earning assets	484,194			422,295		
Total assets	\$ 4,144,874			\$ 3,344,423		
Interest bearing liabilities:						
Interest bearing checking	\$ 55	\$ —	—%	\$ 37,448	\$ 290	1.04%
Savings	985,050	15,522	2.11	922,028	11,206	1.62
Money market accounts	87,063	448	0.69	147,002	1,297	1.18
Certificates of deposit	2,480,273	48,126	2.59	1,697,620	25,717	2.03
Total deposits	3,552,441	64,096	2.41	2,804,098	38,510	1.84
Other borrowings	1,410	—	—	5,998	131	2.92
Total interest bearing liabilities	3,553,851	64,096	2.41	2,810,096	38,641	1.84
Non-interest bearing deposits	50,101			52,225		
Non-interest bearing liabilities	25,638			20,691		
Shareholders' equity	515,284			461,411		
Total liabilities and shareholders' equity	\$ 4,144,874			\$ 3,344,423		
Net interest income and interest rate spread		\$ 102,071	3.60%		\$ 79,248	3.50%
Net interest margin			3.69%			3.59%
Ratio of average interest-earning assets to average interest-bearing liabilities			104.00%			104.95%

(1) Average loan and lease balances include non-accruing loans.

Rate/Volume Analysis. The following table sets forth the effects of changing rates and volumes on net interest income. The rate column shows the effects attributable to changes in rate (changes in rate multiplied by prior volume). The volume column shows the effects attributable to changes in volume (changes in volume multiplied by prior rate). The total column represents the sum of the prior columns. For purposes of this table, increases or decreases attributable to changes in both rate and volume that cannot be segregated have been allocated proportionally based on the changes due to rate and the changes due to volume.

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2019 vs. 2018			2019 vs. 2018		
	Increase (Decrease) Due to			Increase (Decrease) Due to		
	Rate	Volume	Total	Rate	Volume	Total
Interest income:						
Federal funds sold and interest earning balances in other banks	\$ 277	\$ (748)	\$ (471)	\$ 1,558	\$ (2,676)	\$ (1,118)
Investment securities	332	1,141	1,473	872	4,387	5,259
Loans held for sale	1,040	3,672	4,712	2,986	5,539	8,525
Loans and leases held for investment	1,702	11,801	13,503	5,859	29,753	35,612
Total interest income	3,351	15,866	19,217	11,275	37,003	48,278
Interest expense:						
Interest bearing checking	—	(87)	(87)	(145)	(145)	(290)
Savings	1,030	445	1,475	3,436	880	4,316
Money market accounts	(69)	(66)	(135)	(430)	(419)	(849)
Certificates of deposit	2,808	5,350	8,158	8,888	13,521	22,409
Other borrowings	(1)	—	(1)	(81)	(50)	(131)
Total interest expense	3,768	5,642	9,410	11,668	13,787	25,455
Net interest income	\$ (417)	\$ 10,224	\$ 9,807	\$ (393)	\$ 23,216	\$ 22,823

Provision for Loan and Lease Losses

The provision for loan and lease losses represents the amount necessary to be charged against the current period's earnings to maintain the allowance for loan and lease losses at a level that is appropriate in relation to the estimated losses inherent in the loan and lease portfolio. A number of factors are considered in determining the required level of loan and lease loss reserves and the provision required to achieve the appropriate reserve level, including loan and lease growth, credit risk rating trends, nonperforming loan and lease levels, delinquencies, loan and lease portfolio concentrations and economic and market trends.

Losses inherent in loan relationships are mitigated if a portion of the loan is guaranteed by the SBA or USDA. A typical SBA 7(a) loan carries a 75% guarantee while USDA guarantees range from 60% to 80% depending on loan size, which serve to reduce the risk profile of these loans. The Company believes that its focus on compliance with regulations and guidance from the SBA and USDA are key factors to managing this risk.

For the third quarter of 2019 the provision for loan and lease losses was \$7.2 million compared to a negative provision of \$243 thousand for the same period in 2018, an increase of \$7.4 million. The increase in the provision for loan and lease losses compared to the prior year quarter was primarily the result of a growing loan portfolio through robust loan originations and higher balance sheet retention rates combined with an increase in criticized and classified loans.

Loans and leases held for investment were \$2.44 billion as of September 30, 2019, increasing by \$810.6 million, or 49.7%, compared to September 30, 2018. This growth was fueled by strong loan origination volumes and the above referenced strategic shift to retain substantially more loans on the balance sheet.

Net charge-offs were \$2.3 million, or 0.39% of average quarterly loans and leases held for investment on an annualized basis, for the three months ended September 30, 2019, compared to \$2.3 million, or 0.57%, for the three months ended September 30, 2018. For the nine months ended September 30, 2019, net charge-offs totaled \$2.9 million compared to \$3.6 million for the nine months ended September 30, 2018, a decrease of \$774 thousand, or 21.3%. Net charge-offs are a key element of historical experience in the Company's estimation of the allowance for loan and lease losses.

In addition, at September 30, 2019, nonperforming loans and leases not guaranteed by the SBA totaled \$19.8 million, which was 0.81% of the held-for-investment loan and lease portfolio compared to \$12.9 million, or 0.79% of loans and leases held for investment at September 30, 2018.

Noninterest Income

Noninterest income is principally comprised of net gains from the sale of SBA and USDA-guaranteed loans along with loan servicing revenue and related revaluation of the servicing asset. Revenue from the sale of loans depends upon the volume, maturity structure and rates of underlying loans as well as the pricing and availability of funds in the secondary markets prevailing in the period between completed loan funding and closing of sale. In addition, the loan servicing revaluation is significantly impacted by changes in market rates and other underlying assumptions such as prepayment speeds and default rates. Noninterest income also commonly includes equity method investments income (loss), lease income, construction supervision fee income and in prior periods title insurance income. Other less common elements of noninterest income include nonrecurring gains and losses on investments.

The following table shows the components of noninterest income and the dollar and percentage changes for the periods presented.

	Three Months Ended September 30,		2019/2018 Increase (Decrease)	
	2019	2018	Amount	Percent
Noninterest income				
Loan servicing revenue	\$ 6,831	\$ 7,506	\$ (675)	(8.99)%
Loan servicing asset revaluation	(859)	(9,380)	8,521	90.84
Net gains on sales of loans	7,425	22,004	(14,579)	(66.26)
Equity method investments income (loss)	(2,370)	(360)	(2,010)	558.33
Equity security investments gains (losses)	3,346	39	3,307	8,479.49
Gain on sale of investment securities available-for-sale	87	—	87	100.00
Lease income	2,361	2,194	167	7.61
Construction supervision fee income	360	578	(218)	(37.72)
Title insurance income	—	479	(479)	(100.00)
Other noninterest income	1,447	1,271	176	13.85
Total noninterest income	\$ 18,628	\$ 24,331	\$ (5,703)	(23.44)%

	Nine Months Ended September 30,		2019/2018 Increase (Decrease)	
	2019	2018	Amount	Percent
Noninterest income				
Loan servicing revenue	\$ 21,304	\$ 21,369	\$ (65)	(0.30)%
Loan servicing asset revaluation	(3,508)	(18,138)	14,630	80.66
Net gains on sales of loans	17,638	69,483	(51,845)	(74.62)
Equity method investments income (loss)	(6,120)	(1,397)	(4,723)	338.08
Equity security investments gains (losses)	3,481	134	3,347	2,497.76
Gain on sale of investment securities available-for-sale	92	—	92	100.00
Lease income	7,055	5,722	1,333	23.30
Construction supervision fee income	1,525	1,954	(429)	(21.95)
Title insurance income	—	2,775	(2,775)	(100.00)
Other noninterest income	4,889	3,798	1,091	28.73
Total noninterest income	\$ 46,356	\$ 85,700	\$ (39,344)	(45.91)%

For the three months ended September 30, 2019, noninterest income decreased by \$5.7 million, or 23.4%, compared to the three months ended September 30, 2018. The decrease from the prior year is primarily the result of the aforementioned strategic decision to sell fewer loans, resulting in net gains on sales of loans declining to \$7.4 million in the third quarter of 2019 compared to \$22.0 million in the third quarter of 2018, a reduction of \$14.6 million, or 66.3%. The flow-through loss from investments accounted for under the equity method increased \$2.0 million for the third quarter of 2019 compared to the third quarter of 2018. These flow-through losses reflect the Company's pro-rata portion of operating results for certain strategic start-up investments. Partially offsetting the overall decrease in noninterest income was a \$8.5 million, or 90.8%, decrease in the net negative loan servicing revaluation principally due to improving market conditions, such as increased premiums, combined with an increase in net gains on equity security investments of \$3.3 million. The Company's equity security portfolio is largely comprised of investments in strategic start-ups.

For the nine months ended September 30, 2019, noninterest income decreased by \$39.3 million, or 45.9%, compared to the nine months ended September 30, 2018. The decrease from the prior year is also primarily the result of the aforementioned strategic decision to sell fewer loans, resulting in net gains on sales of loans declining to \$17.6 million for the nine months ended September 30, 2019, compared to \$69.5 million for the nine months ended September 30, 2018, a reduction of \$51.8 million, or 74.6%. The flow-through loss from investments accounted for under the equity method increased \$4.7 million for the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018. Also impacting the overall decrease in noninterest income was a decline in title insurance income of \$2.8 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, due to the sale of the title insurance business in third quarter of 2018. Partially offsetting the overall decrease in noninterest income was a \$14.6 million, or 80.7%, decrease in the net negative loan servicing revaluation principally due to improving market conditions, such as increased premiums, combined with an increase in net gains on equity security investments of \$3.3 million.

The following table reflects loan and lease production, sales of guaranteed loans and the aggregate balance in guaranteed loans sold. These components are key drivers of the Company's noninterest income.

	Three months ended September 30,		Three months ended June 30,		Three months ended March 31,	
	2019	2018	2019	2018	2019	2018
Amount of loans and leases originated	\$ 562,259	\$ 377,337	\$ 525,088	\$ 491,797	\$ 390,851	\$ 397,559
Guaranteed portions of loans sold	100,498	298,073	71,934	295,216	62,940	247,243
Outstanding balance of guaranteed loans sold (1)	2,802,073	3,102,820	2,870,108	2,951,379	2,952,774	2,812,108

	Nine Months Ended September 30,		For years ended December 31,			
	2019	2018	2018	2017	2016	2015
Amount of loans and leases originated	\$ 1,478,198	\$ 1,266,693	\$ 1,765,680	\$ 1,934,238	\$ 1,537,010	\$ 1,158,640
Guaranteed portions of loans sold	235,372	840,532	945,178	787,926	761,933	640,886
Outstanding balance of guaranteed loans sold (1)	2,802,073	3,102,820	3,045,460	2,680,641	2,278,618	1,779,989

(1) This represents the outstanding principal balance of guaranteed loans serviced, as of the last day of the applicable period, which have been sold into the secondary market.

Changes in various components of noninterest income are discussed in more detail below.

Loan Servicing Revaluation: The Company revalues its serviced loan portfolio at least quarterly. The revaluation considers the amortization of the portfolio, current market conditions for loan sale premiums, and current prepayment speeds. For the three months ended September 30, 2019, there was a net negative loan servicing revaluation adjustment of \$859 thousand compared to a net negative adjustment of \$9.4 million for the three months ended September 30, 2018. For the nine months ended September 30, 2019, there was a net negative loan servicing revaluation adjustment of \$3.5 million compared to a net negative loan servicing revaluation adjustment of \$18.1 million for the nine months ended September 30, 2018. The lower revaluation amount for the quarter and year to date periods ended September 30, 2019 as compared to the corresponding periods of 2018 was primarily a result of improving market conditions.

Net Gains on Sale of Loans: For the three months ended September 30, 2019, net gains on sales of loans decreased \$14.6 million, or 66.3%, compared to the three months ended September 30, 2018. For the three months ended September 30, 2019, the volume of guaranteed loans sold decreased \$197.6 million, or 66.3%, to \$100.5 million from \$298.1 million for the three months ended September 30, 2018. For the nine months ended September 30, 2019, net gains on sale of loans totaled \$17.6 million, a \$51.8 million decrease from the nine months ended September 30, 2018, as the volume of guaranteed loans sold decreased \$605.2 million to \$235.4 million, or 72.0%. The volume-driven decrease in the net gain on loan sales was offset by higher average premiums paid in the secondary market in both the quarter and year to date periods ended September 30, 2019 compared to the corresponding periods in 2018. Excluding fair value fluctuations in exchange traded-interest rate lock commitments, the average net gain on sale of loans for the three and nine months ended September 30, 2019 was higher at \$95 thousand and \$93 thousand for each \$1 million in loans sold, respectively, compared to \$69 thousand and \$81 thousand for the three and nine months ended September 30, 2018, respectively.

Noninterest Expense

Noninterest expense comprises all operating costs of the Company, such as employee related costs, travel, professional services, advertising and marketing expenses, exclusive of interest and income tax expense.

The following table shows the components of noninterest expense and the related dollar and percentage changes for the periods presented.

	Three Months Ended September 30,		2019/2018 Increase (Decrease)	
	2019	2018	Amount	Percent
Noninterest expense				
Salaries and employee benefits	\$ 22,717	\$ 20,553	\$ 2,164	10.53%
Non-staff expenses:				
Travel expense	1,934	2,003	(69)	(3.44)
Professional services expense	2,073	1,228	845	68.81
Advertising and marketing expense	1,277	1,462	(185)	(12.65)
Occupancy expense	2,131	1,588	543	34.19
Data processing expense	3,072	3,661	(589)	(16.09)
Equipment expense	4,361	3,649	712	19.51
Other loan origination and maintenance expense	3,535	1,742	1,793	102.93
FDIC insurance	101	1,105	(1,004)	(90.86)
Title insurance closing services expense	—	114	(114)	(100.00)
Impairment expense on goodwill and other intangibles, net	—	2,680	(2,680)	(100.00)
Other expense	1,536	1,459	77	5.28
Total non-staff expenses	20,020	20,691	(671)	(3.24)
Total noninterest expense	\$ 42,737	\$ 41,244	\$ 1,493	3.62%

	Nine Months Ended September 30,		2019/2018 Increase (Decrease)	
	2019	2018	Amount	Percent
Noninterest expense				
Salaries and employee benefits	\$ 66,562	\$ 62,908	\$ 3,654	5.81%
Non-staff expenses:				
Travel expense	4,675	5,887	(1,212)	(20.59)
Professional services expense	5,876	3,645	2,231	61.21
Advertising and marketing expense	4,306	4,992	(686)	(13.74)
Occupancy expense	5,588	5,327	261	4.90
Data processing expense	7,418	9,404	(1,986)	(21.12)
Equipment expense	11,925	10,094	1,831	18.14
Other loan origination and maintenance expense	6,882	4,485	2,397	53.44
Renewable energy tax credit investment impairment	602	—	602	100.00
FDIC insurance	1,435	2,687	(1,252)	(46.59)
Title insurance closing services expense	—	912	(912)	(100.00)
Impairment expense on goodwill and other intangibles, net	—	2,680	(2,680)	(100.00)
Other expense	5,245	7,125	(1,880)	(26.39)
Total non-staff expenses	53,952	57,238	(3,286)	(5.74)
Total noninterest expense	\$ 120,514	\$ 120,146	\$ 368	0.31%

Total noninterest expense for the three and nine months ended September 30, 2019 increased \$1.5 million, or 3.6%, and \$368 thousand, or 0.3%, respectively, compared to the same periods in 2018. The increase in noninterest expense was largely driven by salaries and employee benefits, professional services, and loan related expenses. Changes in various components of noninterest expense are discussed below.

Salaries and employee benefits: Total personnel expense for the three and nine months ended September 30, 2019 increased by \$2.2 million, or 10.5%, and \$3.7 million, or 5.8%, respectively, compared to the same periods in 2018. While personnel expense is carefully managed, the Company continues to invest in human capital to support a variety of initiatives by the Company, including growing loan production and financial services technology. Total full-time equivalent employees increased from 504 at September 30, 2018 to 569 at September 30, 2019. Salaries and employee benefits expense included \$2.9 million and \$8.7 million of stock-based compensation expense in the three and nine months ended September 30, 2019, respectively, compared to \$2.5 million and \$7.1 million for the three and nine months ended September 30, 2018, respectively. Expenses related to the employee stock purchase program, stock grants, stock option compensation and restricted stock expense are all considered stock-based compensation.

Of the total stock-based compensation included in salaries and employee benefits, \$360 thousand for both the third quarter of 2019 and 2018, and \$1.1 million for both the first nine months of 2019 and 2018 were related to restricted stock unit ("RSU") awards for key employee retention with an effective grant date of May 24, 2016.

Travel expense: For the three and nine months ended September 30, 2019, total travel services expense decreased \$69 thousand, or 3.4% and \$1.2 million, or 20.6%, respectively compared to the same periods in 2018. This decrease was principally due to a reduction in repairs and maintenance costs associated with an older aircraft that was sold during the first quarter of 2019, higher deferred travel costs as more loans were retained, and general improvements in operational efficiency.

Professional services expense: For the three and nine months ended September 30, 2019, total professional services expense increased \$845 thousand, or 68.9%, and \$2.2 million, or 61.2%, respectively compared to the same periods in 2018. This increase was driven by legal, accounting, and consulting fees incurred for various strategic initiatives, such as the Company's investments in Apiture and Canapi Advisors, LLC.

Data processing expense: For the three and nine months ended September 30, 2018, total data processing expense decreased \$589 thousand, or 16.1%, and \$2.0 million, or 21.1%, respectively, compared to the same periods in 2018. The decrease is primarily the result of the expiration of software development services provided by Apiture directly to the Company at the end of 2018 combined with the capitalization of certain software development costs during the 2019.

Equipment expense: For the three and nine months ended September 30, 2019, equipment expense increased \$712 thousand, or 19.5%, and \$1.8 million, or 18.1%, respectively, compared to the same periods in 2018. Primary factors contributing to this increase were the depreciation of solar panels arising from operating lease activities and a new aircraft placed in service in the third quarter of 2019.

Other loan origination and maintenance expense: For the three and nine months ended September 30, 2019, other loan origination and maintenance expense increased \$1.8 million and \$2.4 million, respectively, compared to the same periods in 2018. This increase was due principally to expenses associated with the repurchase of certain guaranteed loans in the portfolio during the third quarter of 2019 along with increases in the ongoing guarantee fees arising from holding a higher volume of loans on balance sheet.

FDIC insurance: For the three and nine months ended September 30, 2019, FDIC insurance decreased \$1.0 million and \$1.3 million, respectively, compared to the same periods in 2018. This decrease was due to lower required premiums.

Impairment expense on goodwill and other intangibles: During the third quarter of 2018, the Company incurred a one-time impairment expense of \$2.7 million on goodwill and other intangibles associated with the sale of Reltco, Inc.

Other expenses: For the three and nine months ended September 30, 2019, other expenses increased \$77 thousand and decreased \$1.9 million, respectively, compared to the same periods in 2018. The \$1.9 million decline in other expenses is attributable to the elimination of costs associated with the operation of the title insurance business, which was sold in the third quarter of 2018, and impairment related expenses recognized in the third quarter of 2018 with the transfer of the title business to held for sale.

Income Tax Expense

The effective tax rate for the both the three and nine months ended September 30, 2019 was 37.8% and 23.0%, respectively, compared to the effective rate of (28.9)% and (6.2)%, respectively, for the same periods in 2018. The Company's effective tax rate is influenced by the leasing of renewable energy assets which generate investment tax credits. The significant increase in the effective tax rate compared to 2018 is largely the result of forecasted reductions in the targeted solar panel leasing activity for the remainder of the year.

Discussion and Analysis of Financial Condition

September 30, 2019 vs. December 31, 2018

Total assets at September 30, 2019 were \$4.60 billion, an increase of \$933.2 million, or 25.4%, compared to total assets of \$3.67 billion at December 31, 2018. The growth in total assets was principally driven by the following:

- Increased investment securities available-for-sale of \$190.3 million which was driven by the Company's strategic plan to enhance liquidity and improve asset-liability repricing mix; and
- Growth in loans and leases held for sale and held for investment of \$814.2 million resulting from strong originations and higher levels of balances being retained to support the Company's strategic plan to hold more loans.

Cash and cash equivalents, comprised of cash and due from banks and federal funds sold, was \$248.4 million at September 30, 2019, a decrease of \$68.4 million, or 21.1%, compared to \$316.8 million at December 31, 2018. This decrease reflects the Company's maximization of returns on liquid assets by redeployment of funds into higher-yielding available-for-sale securities.

Total investment securities increased \$190.3 million during the first nine months of 2019, from \$380.5 million at December 31, 2018, to \$570.8 million at September 30, 2019, an increase of 50.0%. The Company increased its investment securities position during the first quarter of 2019 as part of its strategy to improve the returns of an enhanced liquidity profile and improve asset-liability repricing mix. At September 30, 2019, the investment portfolio was comprised of U.S. treasury, U.S. government agency, mortgage-backed securities and municipal bonds.

Loans held for sale increased \$215.7 million, or 31.4%, during the first nine months of 2019, from \$687.4 million at December 31, 2018, to \$903.1 million at September 30, 2019. This increase reflected the impact of a significantly lower volume of loan sales combined with strong origination activity during the first nine months of 2019.

Loans and leases held for investment increased \$598.5 million, or 32.5%, during the first nine months of 2019, from \$1.84 billion at December 31, 2018, to \$2.44 billion at September 30, 2019. The increase was primarily the result of \$1.48 billion in loan and lease origination activities during the first nine months of 2019 combined with the earlier mentioned strategic shift to retain higher levels of loans on the balance sheet.

Premises and equipment, net, increased \$18.4 million, or 7.0%, during the first nine months of 2019 which was primarily driven by construction of new facilities and infrastructure to accommodate Company growth and the addition of solar panels to meet leasing obligations earlier in the year.

Foreclosed assets increased \$4.6 million, or 421.2%, during the first nine months of 2019 to \$5.7 million compared to \$1.1 million at December 31, 2018. The increase in foreclosed assets arose from two relationships in agriculture and healthcare verticals. The underlying loans were subject to an SBA guarantee and the total current estimated exposure to the Company is considered negligible for these new foreclosures.

Servicing assets decreased \$10.1 million, or 21.1%, to \$37.6 million during the first nine months of 2019 due to the reduced level of loan sales during the quarter combined with amortization of the outstanding balance of guaranteed loans sold. At September 30, 2019, the outstanding balance of government guaranteed loans sold in the secondary market was \$2.80 billion compared to \$3.05 billion at December 31, 2018.

Operating leases right-of-use assets and operating lease liabilities were additions to the balance sheet pursuant to the adoption of the new lease standard (ASU No. 2016-02) effective January 1, 2019. These balance sheet accounts reflect the Company's rights and obligations created by almost all leases in which it is a lessee with remaining terms of more than 12 months. See Note 1. Basis of Presentation and Note 6. Leases for more information on the adoption of this new standard.

Other assets decreased \$7.3 million, or 4.6% from \$156.2 million at December 31, 2018 to \$149.0 million at September 30, 2019. This decrease was principally the result of a reduction in taxes receivable of \$15.1 million, largely comprised of a 2019 tax refund, the sale of corporate aircraft carried at \$10.5 million which was classified as held-for-sale during the fourth quarter of 2018 and \$6.1 million in equity method investment flow-through losses. Partially offsetting these decreases in other assets was a \$16.8 million increase in unfunded investment commitments to a series of new funds advised by Canapi Advisors combined with a \$5.7 million increase in the carrying amount of an equity security investment for a non-cash gain arising from observable fair market value changes in a recent capital raise. Investments giving rise to these increases in other assets are in new and emerging financial services technology companies.

Total deposits were \$4.02 billion at September 30, 2019, an increase of \$869.7 million, or 27.6%, from \$3.15 billion at December 31, 2018. The increase in deposits was driven by the combined success of deposit gathering campaigns to support the growth in loan and lease originations and balance sheet management initiatives.

Other liabilities were \$52.9 million at September 30, 2019, an increase of \$27.0 million, or 104.5%, from \$25.8 million at December 31, 2018. The increase in other liabilities was largely driven by the above discussed \$16.8 million increase in unfunded investment commitments to a series of new funds advised by Canapi Advisors and an increased deferred tax liability of \$5.7 million related to unrealized gains on the Company's growing investment securities available-for-sale portfolio.

Shareholders' equity at September 30, 2019 was \$528.2 million as compared to \$493.6 million at December 31, 2018. The book value per share was \$13.12 at September 30, 2019 compared to \$12.29 at December 31, 2018. Average equity to average assets was 12.4% for the nine months ended September 30, 2019 compared to 13.8% for the full year ended December 31, 2018. The increase in shareholders' equity was principally the result of net income to common shareholders for the nine months ended September 30, 2019 of \$11.2 million combined with other comprehensive income of \$17.9 million and stock-based compensation expense of \$8.7 million, partially offset by \$3.6 million in dividends.

During the third quarter of 2019, 827,999 shares of Class B common stock (non-voting) were converted to Class A common stock (voting) under a private sale. The conversion decreased the value of Class B common stock (non-voting) and increased the value of Class A common stock (voting) by \$8.8 million.

Asset Quality

Management considers asset quality to be of primary importance. A formal loan review function, independent of loan origination, is used to identify and monitor problem loans. This function reports directly to the Audit & Risk Committee of the Board of Directors.

Nonperforming Assets

The Bank places loans on nonaccrual status when they become 90 days past due as to principal or interest payments, or prior to that if management has determined based upon current information available to them that the timely collection of principal or interest is not probable. When a loan is placed on nonaccrual status, any interest previously accrued as income but not actually collected is reversed and recorded as a reduction of loan interest and fee income. Typically, collections of interest and principal received on a nonaccrual loan are applied to the outstanding principal as determined at the time of collection of the loan.

Troubled debt restructurings occur when, because of economic or legal reasons pertaining to the debtor's financial difficulties, debtors are granted concessions that would not otherwise be considered. Such concessions would include, but are not limited to, the transfer of assets or the issuance of equity interests by the debtor to satisfy all or part of the debt, modification of the terms of debt or the substitution or addition of debtor(s).

The following table provides information with respect to nonperforming assets and troubled debt restructurings at the dates indicated.

	September 30, 2019	December 31, 2018
Nonaccrual loans and leases:		
Total nonperforming loans and leases (all on nonaccrual)	\$ 80,757	\$ 57,690
Total accruing loans and leases past due 90 days or more	—	—
Foreclosed assets	5,702	1,094
Total troubled debt restructurings	43,359	27,495
Less nonaccrual troubled debt restructurings	(15,700)	(6,494)
Total performing troubled debt restructurings	27,659	21,001
Total nonperforming assets and troubled debt restructurings	\$ 114,118	\$ 79,785
Total nonperforming loans and leases to total loans and leases held for investment	3.31%	3.13%
Total nonperforming loans and leases to total assets	1.75%	1.57%
Total nonperforming assets and troubled debt restructurings to total assets	2.48%	2.17%

	September 30, 2019	December 31, 2018
Nonaccrual loans and leases guaranteed by U.S. government:		
Total nonperforming loans and leases guaranteed by the SBA (all on nonaccrual)	\$ 60,941	\$ 43,202
Total accruing loans and leases past due 90 days or more guaranteed by the SBA	—	—
Foreclosed assets guaranteed by the SBA	4,560	946
Total troubled debt restructurings guaranteed by the SBA	30,712	19,780
Less nonaccrual troubled debt restructurings guaranteed by the SBA	(10,900)	(5,684)
Total performing troubled debt restructurings guaranteed by SBA	19,812	14,096
Total nonperforming assets and troubled debt restructurings guaranteed by the SBA	\$ 85,313	\$ 58,244
Total nonperforming loans and leases not guaranteed by the SBA to total held for investment loans and leases	0.81%	0.79%
Total nonperforming loans and leases not guaranteed by the SBA to total assets	0.43%	0.39%
Total nonperforming assets and troubled debt restructurings not guaranteed by the SBA to total assets	0.63%	0.59%

Total nonperforming assets and troubled debt restructurings at September 30, 2019 were \$114.1 million, which represented a \$34.3 million, or 43.0%, increase from December 31, 2018. Total nonperforming assets at September 30, 2019 were comprised of \$80.8 million in nonaccrual loans and \$5.7 million in foreclosed assets. Of the \$114.1 million of nonperforming assets and troubled debt restructurings ("TDRs"), \$85.3 million carried an SBA guarantee, leaving an unguaranteed exposure of \$28.8 million in total nonperforming assets and TDRs at September 30, 2019. This represents an increase of \$7.3 million, or 33.7%, from an unguaranteed exposure of \$21.5 million at December 31, 2018. The vast majority of this increase in nonperforming assets and TDRs arose from our mature verticals. See the below discussion related to the change in potential problem and impaired loans for management's overall observations regarding growth in this area.

As a percentage of the Bank's total capital, nonperforming loans represented 16.8% at September 30, 2019, compared to 14.8% at December 31, 2018. Adjusting the ratio to include only the unguaranteed portion of nonperforming loans to reflect management's belief that the greater magnitude of risk resides in this portion, the ratios at September 30, 2019 and December 31, 2018 were 4.1% and 3.7%, respectively.

As of September 30, 2019, and December 31, 2018, potential problem (also referred to as criticized) and classified loans and leases totaled \$228.0 million and \$148.0 million, respectively. Risk Grades 5 through 8 represent the spectrum of criticized and classified loans and leases. At September 30, 2019, the portion of criticized loans and leases guaranteed by the SBA or USDA totaled \$108.3 million resulting in unguaranteed exposure risk of \$119.7 million, or 6.6% of total held for investment unguaranteed exposure. This compares to the December 31, 2018 portion of criticized loans and leases guaranteed by the SBA or USDA which totaled \$69.3 million resulting in unguaranteed exposure risk of \$78.7 million, or 5.1% of total held for investment unguaranteed exposure. As of September 30, 2019, loans and leases in Other Industries, Healthcare, Agriculture, Independent Pharmacies and Veterinary verticals comprise the largest portion of the total potential problem and classified loans at 36.9%, 20.4%, 16.6%, 10.4% and 9.5%, respectively. Of the 36.9% of total potential problem and classified loans and leases in the Other Industries, 12.0% was related to Government Contractors, 7.9% was related to Wine and Craft Beverage and 6.9% was related to Hotels. As of December 31, 2018, loans and leases in the Healthcare, Other Industries, Independent Pharmacies and Veterinary Industry verticals comprise the largest portion of the total potential problem and impaired loans and leases at 28.0%, 18.6%, 15.5% and 15.0%, respectively. Of the 18.6% of total potential problem and impaired loans and leases in the Other Industries, 8.7% was related to Government Contractors and 6.8% was related to Wine and Craft Beverage industries. The majority of the increase in potential problem and classified loans and leases was comprised of a relatively small number of borrowers largely concentrated in our more mature verticals. Furthermore, the Company believes that its underwriting and credit quality standards have improved as the business has matured. However, systemic issues have begun to emerge during the latter part of 2019 related to higher than expected levels of competition in the Wine and Craft Beverage and Family Entertainment Center Verticals. This unexpected level of competition has begun to result in lower revenues for these borrowers which has resulted in heightened levels of criticized loans. In addition, the increase in the Government Contractors criticized loan portfolio was principally comprised of one loan due to a covenant violation which management believes will be remedied in the fourth quarter of 2019.

The Bank does not classify loans and leases that experience insignificant payment delays and payment shortfalls as impaired. The Bank considers an “insignificant period of time” from payment delays to be a period of 90 days or less. The Bank would consider a modification for a customer experiencing what is expected to be a short-term event that has temporarily impacted cash flow. This could be due, among other reasons, to illness, weather, impact from a one-time expense, slower than expected start-up, construction issues or other short-term issues. In all cases, credit personnel will review the request to determine if the customer is stressed and how the event has impacted the ability of the customer to repay the loan or lease long term. To date, the only types of short-term modifications the Bank has given are payment deferral and interest only extensions. The Bank does not typically alter the rate or lengthen the amortization of the note due to insignificant payment delays. Short term modifications are not classified as TDRs, because they do not meet the definition set by the applicable accounting standards and the Federal Deposit Insurance Corporation.

Management endeavors to be proactive in its approach to identify and resolve problem loans and leases and is focused on working with the borrowers and guarantors of these loans and leases to provide loan and lease modifications when warranted. Management implements a proactive approach to identifying and classifying loans and leases as special mention (also referred to as criticized), Risk Grade 5. For example, at September 30, 2019, and December 31, 2018, Risk Grade 5 loans and leases totaled \$114.4 million and \$65.5 million, respectively. The increase in Risk Grade 5 loans during the first nine months of 2019 was principally confined to nine relationships across five verticals; Government Contractors (\$11.7 million or 23.9%), Self Storage (\$10.9 million or 22.4%), Hotels (\$8.2 million or 16.8%), Wine and Craft Beverage (\$6.2 million or 12.6% of increase) and Funeral Home & Cemetery (\$4.1 million or 8.5%). The increase in risk grade 5 loans in 2019 was primarily due to the continued maturity of these verticals combined with the above mentioned issues that have begun to emerge in certain verticals. At September 30, 2019, approximately 100.0% of loans classified as Risk Grade 5 are performing with no current payments past due more than 30 days. While the level of nonperforming assets fluctuates in response to changing economic and market conditions, in light of the relative size and composition of the loan and lease portfolio and management’s degree of success in resolving problem assets, management believes that a proactive approach to early identification and intervention is critical to successfully managing a small business loan portfolio.

Allowance for Loan and Lease Losses

The allowance for loan and lease losses (“ALLL”), a material estimate which could change significantly in the near-term in the event of rapidly deteriorating credit quality, is established through a provision for loan and lease losses charged to earnings to account for losses that are inherent in the loan and lease portfolio and estimated to occur, and is maintained at a level that management considers appropriate to absorb potential losses in the portfolio. Loan and lease losses are charged against the ALLL when management believes that the collectability of the principal loan and lease balance is unlikely. Subsequent recoveries, if any, are credited to the ALLL when received.

Judgment in determining the adequacy of the ALLL is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available and as situations and information change.

The ALLL is evaluated on a quarterly basis by management and takes into consideration such factors as changes in the nature and volume of the loan and lease portfolio, overall portfolio quality, review of specific problem loans and leases and current economic conditions and trends that may affect the borrower’s ability to repay.

Estimated credit losses should meet the criteria for accrual of a loss contingency, i.e., a provision to the ALLL, set forth in accounting principles generally accepted in the United States of America (“GAAP”). Methodology for determining the ALLL is generally based on GAAP, the Interagency Policy Statement on the Allowance for Loan and Lease Losses and other regulatory and accounting pronouncements. The ALLL is determined by the sum of three separate components: (i) the impaired loan or lease component, which addresses specific reserves for impaired loans or leases; (ii) the general reserve component, which addresses reserves for pools of homogeneous loans and leases; and (iii) an unallocated reserve component (if any) based on management’s judgment and experience. The loan and lease pools and impaired loans and leases are mutually exclusive; any loan or lease that is impaired should be excluded from its homogeneous pool for purposes of that pool’s reserve calculation, regardless of the level of impairment.

The ALLL of \$32.4 million at December 31, 2018 increased by \$10.5 million, or 32.4%, to \$42.9 million at September 30, 2019. The ALLL, as a percentage of loans and leases held for investment, amounted to 1.8% at both September 30, 2019 and December 31, 2018. The increase in the allowance for loan and lease losses was largely attributable to continued growth in the loan and lease portfolio combined with the above discussed increased levels of criticized and classified loans and leases, as addressed more fully in the Provision for Loan and Lease Losses section of Results of Operations. General reserves as a percentage of non-impaired loans amounted to 1.25% at September 30, 2019 and 1.34% at December 31, 2018. Also, see the aforementioned Provision for Loan and Lease Losses section for a discussion of the Company’s charge-off experience.

Actual past due held for investment loans and leases have decreased by \$14.2 million since December 31, 2018. Of this decrease, \$7.9 million was related to a single loan which was temporarily past due at year end and returned to current status early in the first quarter of 2019. Excluding this single loan, total past dues decreased \$6.3 million since December 31, 2018. Total loans 90 or more days past due decreased \$1.8 million, or 4.3%, compared to December 31, 2018. The decrease was primarily the result of the decline in the guaranteed portion of past due loans which declined \$2.1 million compared to December 31, 2018. At September 30, 2019 and December 31, 2018, total held for investment unguaranteed loans and leases past due as a percentage of total held for investment unguaranteed loans and leases was 0.69% and 1.56%, respectively. Management continues to actively monitor and work to improve asset quality. Management believes the ALLL of \$42.9 million at September 30, 2019 is appropriate in light of the risk inherent in the loan and lease portfolio. Management's judgments are based on numerous assumptions about current events that it believes to be reasonable, but which may or may not be valid. Thus, there can be no assurance that loan and lease losses in future periods will not exceed the current ALLL or that future increases in the ALLL will not be required. No assurance can be given that management's ongoing evaluation of the loan and lease portfolio in light of changing economic conditions and other relevant circumstances will not require significant future additions to the ALLL, thus adversely affecting the Company's operating results. Additional information on the ALLL is presented in Note 5 - Loans and Leases Held for Investment and Allowance for Loan and Lease Losses of the Notes to the Unaudited Condensed Consolidated Financial Statements in this report.

Liquidity Management

Liquidity management refers to the ability to meet day-to-day cash flow requirements based primarily on activity in loan and deposit accounts of the Company's customers. Liquidity is immediately available from four major sources: (a) cash on hand and on deposit at other banks; (b) the outstanding balance of federal funds sold; (c) the market value of unpledged investment securities; and (d) availability under lines of credit. At September 30, 2019, the total amount of these four items was \$1.26 billion, or 27.4% of total assets, an increase of \$219.9 million from \$1.04 billion, or 28.4% of total assets, at December 31, 2018.

Loans and other assets are funded by loan sales, wholesale deposits and core deposits. To date, an increasing retail deposit base and an increased long term wholesale deposit base have been adequate to meet loan obligations, while maintaining the desired level of immediate liquidity. Additionally, the investment securities portfolio is available for both immediate and secondary liquidity purposes.

At September 30, 2019, none of the investment securities portfolio was pledged to secure public deposits or pledged to retail repurchase agreements, leaving \$570.8 million available as lendable collateral.

Contractual Obligations

The following table presents the Company's significant fixed and determinable contractual obligations by payment date as of September 30, 2019. The payment amounts represent those amounts contractually due to the recipient. The table excludes liabilities recorded where management cannot reasonably estimate the timing of any payments that may be required in connection with these liabilities.

	Payments Due by Period				
	Total	Less than One Year	One to Three Years	Three to Five Years	More than Five Years
Contractual Obligations					
Deposits without stated maturity	\$ 1,230,975	\$ 1,230,975	\$ —	\$ —	\$ —
Time deposits	2,788,292	2,111,127	531,476	85,199	60,490
Short term borrowings	1,295	1,295	—	—	—
Long term borrowings	15	5	9	1	—
Operating lease obligations	2,319	825	905	512	77
Total	<u>\$ 4,022,896</u>	<u>\$ 3,344,227</u>	<u>\$ 532,390</u>	<u>\$ 85,712</u>	<u>\$ 60,567</u>

1 The following obligations only include base rent and does not include any additional payments such as taxes, insurance, maintenance and repairs or common area maintenance.

As of September 30, 2019, and December 31, 2018, the Company had unfunded commitments to provide capital contributions for on-balance sheet investments in the amount of \$17.9 million and \$2.8 million, respectively.

Asset/Liability Management and Interest Rate Sensitivity

One of the primary objectives of asset/liability management is to maximize the net interest margin while minimizing the earnings risk associated with changes in interest rates. One method used to manage interest rate sensitivity is to measure, over various time periods, the interest rate sensitivity positions, or gaps. This method, however, addresses only the magnitude of asset and liability repricing timing differences as of the report date and does not address earnings, market value nor growth. Therefore, management uses an earnings simulation model to prepare, on a regular basis, earnings projections based on a range of interest rate scenarios to more accurately measure interest rate risk.

The balance sheet is asset-sensitive with a total cumulative gap position of 1.7% at September 30, 2019. The asset sensitivity is relatively stable from the prior quarter. An asset-sensitive position means that net interest income will generally move in the same direction as interest rates. For instance, if interest rates increase, net interest income can be expected to increase, and if interest rates decrease, net interest income can be expected to decrease. The Company attempts to mitigate interest rate risk by match funding assets and liabilities with similar rate instruments. The quarterly revaluation adjustment to the servicing asset, however, adjusts in an opposite direction to interest rate changes. Asset/liability sensitivity is primarily derived from the prime-based loans that adjust as the prime interest rate changes and the longer duration of indeterminate term deposits.

Capital

The maintenance of appropriate levels of capital is a management priority and is monitored on a regular basis. The Company's principal goals related to the maintenance of capital are to provide adequate capital to support the Company's risk profile consistent with the risk appetite approved by the Board of Directors; provide financial flexibility to support future growth and client needs; comply with relevant laws, regulations, and supervisory guidance; achieve optimal credit ratings for the Company and its subsidiaries; and provide a competitive return to shareholders. Management regularly monitors the capital position of the Company on both a consolidated and bank level basis. In this regard, management's goal is to maintain capital at levels that are in excess of the regulatory "well capitalized" levels. Risk-based capital ratios, which include Tier 1 Capital, Total Capital and Common Equity Tier 1 Capital, are calculated based on regulatory guidance related to the measurement of capital and risk-weighted assets.

Capital amounts and ratios as of September 30, 2019 and December 31, 2018, are presented in the table below.

	Actual		Minimum Capital Requirement		Minimum To Be Well Capitalized Under Prompt Corrective Action Provisions (1)	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Consolidated - September 30, 2019						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 489,901	15.22%	\$ 144,830	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 530,164	16.47%	\$ 257,476	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 489,901	15.22%	\$ 193,107	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 489,901	11.12%	\$ 176,300	4.00%	N/A	N/A
Bank - September 30, 2019						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 439,813	13.86%	\$ 142,820	4.50%	\$ 206,295	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 479,525	15.11%	\$ 253,902	8.00%	\$ 317,378	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 439,813	13.86%	\$ 190,427	6.00%	\$ 253,902	8.00%
Tier 1 Capital (to Average Assets)	\$ 439,813	10.02%	\$ 175,618	4.00%	\$ 219,523	5.00%
Consolidated - December 31, 2018						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 467,033	17.10%	\$ 122,937	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 499,467	18.28%	\$ 218,555	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 467,033	17.10%	\$ 163,917	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 467,033	13.40%	\$ 139,453	4.00%	N/A	N/A
Bank - December 31, 2018						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 385,030	14.35%	\$ 120,706	4.50%	\$ 174,353	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 417,609	15.57%	\$ 214,588	8.00%	\$ 268,235	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 385,030	14.35%	\$ 160,941	6.00%	\$ 214,588	8.00%
Tier 1 Capital (to Average Assets)	\$ 385,030	11.22%	\$ 137,304	4.00%	\$ 171,630	5.00%

(1) Prompt corrective action provisions are not applicable at the bank holding company level.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements in accordance with GAAP requires the Company to make estimates and judgments that affect reported amounts of assets, liabilities, income and expenses and related disclosure of contingent assets and liabilities. The Company bases estimates on historical experience and on various other assumptions that are believed to be reasonable under current circumstances, results of which form the basis for making judgments about the carrying value of certain assets and liabilities that are not readily available from other sources. Estimates are evaluated on an ongoing basis. Actual results may differ from these estimates under different assumptions or conditions.

Accounting policies, as described in detail in the Notes to the Company's Unaudited Condensed Consolidated Financial Statements in this report, are an integral part of the Company's consolidated financial statements. A thorough understanding of these accounting policies is essential when reviewing the Company's reported results of operations and financial position. Management believes that the critical accounting policies and estimates listed below require the Company to make difficult, subjective or complex judgments about matters that are inherently uncertain.

- Determination of the allowance for loan and lease losses;
- Valuation of servicing assets;
- Income taxes;
- Restricted stock unit awards with market price conditions;
- Valuation of foreclosed assets;
- Business combination and goodwill; and

- Unconsolidated joint ventures.

Changes in these estimates, that are likely to occur from period to period, or the use of different estimates that the Company could have reasonably used in the current period, would have a material impact on the Company's financial position, results of operations or liquidity.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Management considers interest rate risk the most significant market risk. Interest rate risk is the exposure to adverse changes in net interest income due to changes in interest rates. Consistency of net interest income is largely dependent upon the effective management of interest rate risk.

The Company's Asset/Liability Management Committee ("ALCO"), which includes senior management representatives and reports to the Board of Directors, monitors and manages interest rate risk. See "Asset/Liability Management and Interest Rate Sensitivity" in Item 2 of this Form 10-Q for further discussion.

The objective of asset/liability management is the maximization of net interest income within the Company's risk guidelines. This objective is accomplished through management of the balance sheet composition, maturities, liquidity, and interest rate risk exposures arising from changing economic conditions, interest rates and customer preferences.

To identify and manage its interest rate risk, the Company employs an earnings simulation model to analyze net interest income sensitivity to changing interest rates. The model is based on contractual cash flows and repricing characteristics and incorporates market-based assumptions regarding the effect of changing interest rates on the prepayment rates of certain assets and liabilities. The model also includes management projections for activity levels in each of the product lines offered by the Bank. Assumptions are inherently uncertain, and the measurement of net interest income or the impact of rate fluctuations on net interest income cannot be precisely predicted. Actual results may differ materially from simulated results due to timing, magnitude, and frequency of interest rate changes as well as changes in market conditions and management strategies.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

An evaluation of the Company's disclosure controls and procedures (as defined in Rules 13(a)-15(e) and 15(d)-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), was carried out under the supervision and with the participation of the Company's Chief Executive Officer and Chief Financial Officer as of September 30, 2019, the last day of the period covered by this Quarterly Report. The Company's Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of September 30, 2019 in ensuring that the information required to be disclosed in the reports the Company files or submits under the Exchange Act is (i) accumulated and communicated to management (including the Company's Chief Executive Officer and Chief Financial Officer) as appropriate to allow timely decisions regarding required disclosures, and (ii) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms.

Changes in Internal Control Over Financial Reporting

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

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

In the ordinary course of operations, the Company is party to various legal proceedings. The Company is not involved in, nor has it terminated during the three months ended September 30, 2019, any pending legal proceedings other than nonmaterial proceedings occurring in the ordinary course of business.

Item 1A. Risk Factors

There have been no material changes to the risk factors that have been previously disclosed in the Company's 2018 Annual Report filed with the SEC.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits.

Exhibits to this report are listed in the Index to Exhibits section of this report.

INDEX TO EXHIBITS

Exhibit No.	Description of Exhibit
3.1	Amended and Restated Articles of Incorporation of Live Oak Bancshares, Inc. (incorporated by reference to Exhibit 3.1 of the registration statement on Form S-1, filed on June 19, 2015)
3.2	Amended Bylaws of Live Oak Bancshares, Inc. (incorporated by reference to Exhibit 3.2 of the amended registration statement on Form S-1, filed on July 13, 2015)
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the registration statement on Form S-1, filed on June 19, 2015)
4.2	Registration and Other Rights Agreement between Live Oak Bancshares, Inc. and Wellington purchasers (incorporated by reference to Exhibit 4.2 of the registration statement on Form S-1, filed on June 19, 2015)
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
101	Interactive data files pursuant to Rule 405 of Regulation S-T, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of September 30, 2019 and December 31, 2018; (ii) Condensed Consolidated Statements of Income for the Three and Nine Months Ended September 30, 2019 and 2018; (iii) Condensed Consolidated Statements of Comprehensive Income for the Three and Nine Months Ended September 30, 2019 and 2018; (iv) Condensed Consolidated Statements of Changes in Shareholders' Equity for the Three and Nine Months Ended September 30, 2019 and 2018; (v) Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2019 and 2018; and (vi) Notes to Unaudited Condensed Consolidated Financial Statements*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Indicates a document being filed with this Form 10-Q.

** Furnished herewith. This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

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.

Live Oak Bancshares, Inc.

(Registrant)

Date: November 7, 2019

By: /s/ S. Brett Caines

S. Brett Caines

Chief Financial Officer

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

I, James S. Mahan III, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Live Oak Bancshares, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

/s/ James S. Mahan III
James S. Mahan III
Chief Executive Officer
(principal executive officer)

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

I, S. Brett Caines, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Live Oak Bancshares, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

/s/ S. Brett Caines

S. Brett Caines
Chief Financial Officer
(principal financial officer)

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Live Oak Bancshares, Inc., a North Carolina corporation (the "Company"), does hereby certify that:

The Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 (the "Form 10-Q") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2019

/s/ James S. Mahan III
James S. Mahan III
Chief Executive Officer
(principal executive officer)

Date: November 7, 2019

/s/ S. Brett Caines
S. Brett Caines
Chief Financial Officer
(principal financial officer)

This certification is being furnished solely to accompany the Form 10-Q pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing of the registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of the Form 10-Q, irrespective of any general incorporation language contained in such filing.

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.