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68

8.00
%

N/A

N/A

Tier 1 Capital (to Risk-Weighted Assets)
$
206,670

15.31
%

$
80,976

6.00
%

N/A

N/A

Tier 1 Capital (to Average Assets)
$
206,670

12.00
%

$
68,919

4.00
%

N/A

N/A

Bank - December 31, 2016

Common Equity Tier 1 (to Risk-Weighted Assets)
$
139,078

10.68
%

$
58,579

4.50
%

$
84,615

6.50
%
Total Capital (to Risk-Weighted Assets)
$
155,423

11.94
%

$
104,141

8.00
%

$
130,177

10.00
%
Tier 1 Capital (to Risk-Weighted Assets)
$
139,078

10.68
%

$
78,106

6.00
%

$
104,141

8.00
%
Tier 1 Capital (to Average Assets)
$
139,078

8.41
%

$
66,142

4.00
%

$
82,678

5.00
%
Consolidated - December 31, 2015

Common Equity Tier 1 (to Risk-Weighted Assets)
$
191,366

23.22
%

$
37,087

4.50
%

N/A

N/A

Total Capital (to Risk-Weighted Assets)
$
198,781

24.12
%

$
65,933

8.00
%

N/A

N/A

Tier 1 Capital (to Risk-Weighted Assets)
$
191,366

23.22
%

$
49,450

6.00
%

N/A

N/A

Tier 1 Capital (to Average Assets)
$
191,366

18.36
%

$
41,702

4.00
%

N/A

N/A

Bank - December 31, 2015

Common Equity Tier 1 (to Risk-Weighted Assets)
$
96,056

12.28
%

$
35,207

4.50
%

$
50,855

6.50
%
Total Capital (to Risk-Weighted Assets)
$
103,471

13.23
%

$
62,591

8.00
%

$
78,238

10.00
%
Tier 1 Capital (to Risk-Weighted Assets)
$
96,056

12.28

%

$
46,943

6.00
%

$
62,591

6.00
%
Tier 1 Capital (to Average Assets)
$
96,056

9.75
%

$
39,398

4.00
%

$
49,248

5.00
%
(1) Prompt corrective action provisions are not applicable at the bank holding company level.

72

Table of Contents

Contractual Obligations

The following table presents the Company's significant fixed and determinable contractual obligations by payment date as of December 31, 2017. 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	$979,981	$979,981	$—	$—	$—
Time deposits	1,280,282	892,164	222,361	89,683	76,074
Long term borrowings	26,564	853	5,386	20,325	—
Operating lease obligations	2,836	964	1,173	469	230
Total	$2,289,663	$1,873,962	$228,920	$110,477	$76,304

As of December 31, 2017 and 2016, the Company had commitments for on-balance sheet instruments in the amount of $3.5 million and $4.9 million, respectively.

Off-Balance Sheet Arrangements

In the normal course of operations, the Company engages in a variety of financial transactions that, in accordance with accounting principles generally accepted in the United States of America, are not recorded in the consolidated financial statements. These transactions involve, to varying degrees, elements of credit, interest rate and liquidity risk. Such transactions are used primarily to manage customers' requests for funding and take the form of loan or investment commitments, lines of credit and letters of credit.

The contractual amounts of commitments to extend credit represent the amounts of potential accounting loss should the contract be fully drawn upon, the customer defaults and any existing collateral has no value. The Company uses the same credit policies in making commitments and conditional obligations as the Company does for on-balance sheet instruments. Financial instruments whose contract amounts represent credit risk at December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Commitments to extend credit (1)	$1,701,137	$1,342,271	$737,572
Standby letters of credit	2,298	343	—
Solar purchase commitments	106,921	—	—
Airplane purchase agreement commitments	25,450	21,500	—
Total commitments	$1,835,806	$1,364,114	$737,572

(1) 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 may require payment of a fee and generally have fixed expiration dates or other termination clauses.

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.

Table of Contents

Accounting policies, as described in detail in the notes to the Company's consolidated financial statements, 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 combinations 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.

Non-GAAP Measures

Some of the financial measures included in our selected historical consolidated financial data and elsewhere in this Annual Report are not measures of financial performance recognized by GAAP. These non-GAAP financial measures are: "tangible shareholders' equity;" "tangible assets;" "tangible shareholders' equity to tangible assets;" "tangible book value per share;" "efficiency ratio;" "non-GAAP net income;" "noninterest income, as adjusted;" "provision for loan and lease losses, as adjusted;" "noninterest expense, as adjusted;" and "income tax expense, as adjusted." Management uses these non-GAAP financial measures in its analysis of the Company's performance.

- "Tangible shareholders' equity" is total shareholders' equity less goodwill and other intangible assets. Management has not considered loan servicing rights as an intangible asset for purposes of this calculation.
- "Tangible assets" is total assets less goodwill and other intangible assets. Management has not considered loan servicing rights as an intangible asset for purposes of this calculation.
- "Tangible shareholders' equity to tangible assets" is defined as the ratio of shareholders' equity less goodwill and other intangible assets, divided by total assets less goodwill and other intangible assets. Management believes this measure is important because it shows relative changes from period to period in equity and total assets, each exclusive of changes in intangible assets. Management has not considered loan servicing rights as an intangible asset for purposes of this calculation.
- "Tangible book value per share" is defined as total equity reduced by goodwill and other intangible assets divided by total common shares outstanding. Management believes this measure is important because it shows changes from period to period in book value per share exclusive of changes in intangible assets. Management has not considered loan servicing rights as an intangible asset for purposes of this calculation.
- "Efficiency ratio" is defined as total noninterest expense divided by the sum of net interest income and noninterest income less gain (loss) on sale of securities. Management believes this measure is important as an indicator of productivity because it shows the amount of noninterest expense that was required to generate a dollar of revenue. While the efficiency ratio is a measure of productivity, its value reflects the unique attributes of the "high-touch business model" the Company employs.

Table of Contents

- “Non-GAAP net income” is defined as net income adjusted to exclude significant non-routine sources of income and uses of expenses and an estimated corporate income tax expense across all periods being compared. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Noninterest income, as adjusted” is defined as noninterest income adjusted to exclude significant non-routine sources of income, including the gain on contribution to equity method investment and a loss associated with the 2016 renewable energy tax credit investment. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- "Provision for loan and lease losses, as adjusted" is defined as provision for loan and lease losses adjusted to exclude significant non-routine sources of provision, including provision for loans reclassified from held for sale to held for investment. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Noninterest expense, as adjusted” is defined as noninterest expense adjusted to exclude significant non-routine sources of expenses, including stock based compensation expense of restricted stock awards for key employee retention with an effective date of May 24, 2016, merger costs associated with the Reltco acquisition and Apiture investment, trade-in loss on an aircraft and a contract modification for Reltco. Other non-routine sources of noninterest expense included impairments of: an aircraft held for sale, goodwill and other intangibles and the 2016 renewable energy tax credit investment. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Income tax (benefit) expense, as adjusted” is defined as income tax expense adjusted to exclude significant non-routine sources of expense or income, as discussed above, the impact of revaluing the Company's net deferred tax liability as a result of reduced federal tax rates arising from the December 22, 2017 Tax Act legislation, other renewable energy tax expense and renewable energy tax credits arising from the 2016 investment. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.

The Company believes these non-GAAP financial measures provide useful information to management and investors that is supplementary to the financial condition, results of operations and cash flows computed in accordance with GAAP; however, the Company acknowledges that non-GAAP financial measures have a number of limitations. As such, you should not view these measures as a substitute for results determined in accordance with GAAP, and they are not necessarily comparable to non-GAAP financial measures that other companies use. The following table provides a reconciliation of these non-GAAP financial measures to the most closely related GAAP measure.

Table of Contents

	Years Ended December 31,		
	2017	2016	2015
Total shareholders' equity	$436,933	$222,847	$199,488
Less:			
Goodwill	—	—	—
Other intangible assets	4,264	—	—
Tangible shareholders' equity (a)	$432,669	$222,847	$199,488
Shares outstanding (c)	39,895,583	34,253,602	34,172,899
Total assets	$2,758,474	$1,755,261	$1,052,622
Less:			
Goodwill	—	—	—
Other intangible assets	4,264	—	—
Tangible assets (b)	$2,754,210	$1,755,261	$1,052,622
Tangible shareholders' equity to tangible assets (a/b)	15.71 %	12.70 %	18.95 %
Tangible book value per share (a/c)	10.85	6.51	5.84
Efficiency ratio:			
Noninterest expense (d)	$143,165	$106,445	$71,715
Net interest income	78,034	42,649	25,589
Noninterest income	172,921	93,539	84,328
Less: gain (loss) on sale of securities	—	1	13
Adjusted operating revenue (e)	$250,955	$136,187	$109,904
Efficiency ratio (d/e)	57.05 %	78.16 %	65.25 %

Table of Contents

	Years Ended December 31,		
	2017	2016	2015
Reconciliation of net income to non-GAAP net income adjusted for non-routine income and expenses:			
Net income attributable to Live Oak Bancshares, Inc.	$100,499	$13,773	$20,625
Gain on sale of investment in non-consolidated affiliate	—	—	(3,782)
Provision for loans reclassified as held for investment	—	4,023	—
Gain on contribution to equity method investment	(68,000)	—	—
Stock based compensation expense for restricted stock awards with an effective date of May 24, 2016, as discussed in Note 10 of the Notes to Unaudited Consolidated Financial Statements included in our March 31, 2016 Form 10-Q	1,370	8,973	—
Merger costs associated with Reltco acquisition and Apiture investment	2,874	—	—
Trade-in loss on aircraft	206	—	—
Impairment charge taken on aircraft held for sale	—	1,422	—
Impairment expense on goodwill and other intangibles	3,648	—	—
Contract modification of Reltco	1,600	—	—
Renewable energy tax credit investment income, impairment and loss	690	3,239	—
Income tax effects and adjustments for non-GAAP items*	23,045	(7,062)	1,513
Deferred tax liability revaluation	(18,921)	—	—
Other renewable energy tax expense	176	176	—
Renewable energy tax credit	—	(4,396)	—
Non-GAAP net income	$47,187	$20,148	$18,356
*Estimated at 40.0%			
Earnings per share:			
Basic	$1.29	$0.59	$0.59
Diluted	$1.25	$0.57	$0.57
Weighted-average shares outstanding:			
Basic	36,592,893	34,202,168	31,079,032
Diluted	37,859,535	35,086,959	31,973,146
Reconciliation of financial statement line items as reported to adjusted for non-routine income and expenses:			
Noninterest income, as reported	$172,921	$93,539	$84,328
Gain on sale of investment in non-consolidated affiliate	—	—	(3,782)
Gain on contribution to equity method investment	(68,000)	—	—
Renewable energy tax credit investment loss	—	42	—
Noninterest income, as adjusted	104,921	93,581	80,546
Provision for loan and lease losses, as reported	9,536	12,536	3,806
Provision for loans reclassified as held for investment	—	(4,023)	—
Provision for loan and lease losses, as adjusted	$9,536	$8,513	$3,806

Table of Contents

	Years Ended December 31,		
	2017	2016	2015
Noninterest expense, as reported	$143,165	$106,445	$71,715
Stock based compensation expense	(1,370)	(8,973)	—
Merger costs associated with Reltco acquisition and Apiture investment	(2,874)	—	—
Trade-in loss on aircraft	(206)	—	—
Impairment charge taken on aircraft held for sale	—	(1,422)	—
Impairment expense on goodwill and other intangibles	(3,648)	—	—
Contract modification of Reltco	(1,600)	—	—
Renewable energy tax credit investment impairment and loss	(690)	(3,197)	—
Noninterest expense, as adjusted	132,777	92,853	71,715
Income tax (benefit) expense, as reported	(2,245)	3,443	13,795
Income tax effects and adjustment for non-routine income and expenses	(23,045)	7,062	(1,513)
Deferred tax liability revaluation	18,921	—	—
Other renewable energy tax expense	(176)	(176)	—
Renewable energy tax credit	—	4,396	—
Income tax (benefit) expense, as adjusted	$(6,545)	$14,725	$12,282

Table of Contents

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest rate risk is a significant market risk and can result from timing and volume differences in the repricing of rate-sensitive assets and liabilities, widening or tightening of credit spreads, changes in the general level of market interest rates and changes in the shape and level of market yield curves. The Company manages the interest rate sensitivity of interest-bearing liabilities and interest-earning assets in an effort to minimize the adverse effects of changes in the interest rate environment. Management of interest rate risk is carried out primarily through strategies involving available-for-sale securities, loan and lease portfolio, and available funding sources.

The Company has a total cumulative gap in interest-earning assets and interest-bearing liabilities of 3.92% as of December 31, 2017, indicating that, overall, assets will reprice before liabilities. The majority of both the Company's loans and leases and deposits have short-term repricing capabilities. The Company has a funding model which differs from that of traditional banks. The majority of the Company's revenue is attributable to non-interest income so the Company is less dependent on net interest income when compared to a traditional bank model. With the Company's non-traditional funding model, the Company does not have the traditional bank branch network and can operate with lower overhead costs to offset the higher cost of funds used to attract deposits.

The Company has an Asset/Liability Committee to communicate, coordinate and control all aspects involving interest rate risk management. The Asset/Liability Committee, which includes five members of our board of directors, establishes and monitors the volume, maturities, pricing and mix of assets and funding sources with the objective of managing assets and funding sources to provide results that are consistent with liquidity, growth, risk limits and profitability goals. Adherence to relevant policies is monitored on an ongoing basis by the Asset/Liability Committee.

The matching of assets and liabilities may be analyzed by examining the extent to which such assets and liabilities are "interest rate sensitive." An asset or liability is said to be interest rate sensitive within a specific time period if it will mature or reprice within that time period. The Company analyzes interest rate sensitivity position to manage the risk associated with interest rate movements through the use of two simulation models: economic value of equity, or EVE, and net interest income, or NII, simulations. The EVE simulation provides a long-term view of interest rate risk because it analyzes all of the Bank's future cash flows. EVE is defined as the present value of the Bank's assets, less the present value of its liabilities, adjusted for any off-balance sheet items. The results show a theoretical change in the economic value of shareholders' equity as interest rates change.

EVE and NII simulations are completed quarterly and presented to the Asset/Liability Committee. The simulations provide an estimate of the impact of changes in interest rates on equity and net interest income under a range of assumptions. The numerous assumptions used in the simulation process are reviewed by the Asset/Liability Committee on a quarterly basis. Changes to these assumptions can significantly affect the results of the simulation. The simulation incorporates assumptions regarding the potential timing in the repricing of certain assets and liabilities when market rates change and the changes in spreads between different market rates. The simulation analysis incorporates management's current assessment of the risk that pricing margins will change adversely over time due to competition or other factors.

Simulation analysis is only an estimate of interest rate risk exposure at a particular point in time. The Company continually reviews the potential effect changes in interest rates could have on the repayment of rate sensitive assets and funding requirements of rate sensitive liabilities.

The table below sets forth an approximation of the Company's NII sensitivity exposure for the 12-month periods ending December 31, 2018 and 2019 and the Company's EVE sensitivity at December 31, 2017. The simulation uses projected repricing of assets and liabilities at December 31, 2017 on the basis of contractual maturities, anticipated repayments and scheduled rate adjustments. Prepayment rates can have a significant impact on interest income simulation. Because of the large percentage of variable rate loans and mortgage-backed securities the Company holds, rising or falling interest rates have a significant impact on the prepayment speeds of earning assets that in turn affect the rate sensitivity position. The Company's loan and lease portfolio consists primarily of SBA 7(a) loans, 93.5% variable rate loans adjustable with the prime rate or 3-month LIBOR. The Company's prepayment speeds react differently in a rising rate environment. Generally, when interest rates rise, the Company's prepayments tend to increase; the opposite reaction from typical bank loan and lease portfolios. In a rising rate environment, the Company's quarterly adjustable borrowers seek to fix their payments so the loans prepay faster as borrowers refinance into fixed rate products with another lender. When interest rates fall, prepayments tend to slow down. The Company's sensitivity would be reduced if prepayments slow and vice versa. While management believes such assumptions to be reasonable, approximate actual future activity may differ from the assumed prepayment rates presented below.

Table of Contents

Basis Point ("bp") Change in Interest Rates	Estimated Increase/Decrease in Net Interest Income 12 Months Ending December 31, 2018	12 Months Ending December 31, 2019	Estimated Percentage Change in EVE As of December 31, 2017
+400	22.0%	18.3%	(7.3)%
+300	16.5	13.7	(5.9)
+200	11.0	9.1	(4.4)
+100	5.5	4.6	(2.8)
-100	(6.1)	(4.9)	2.0

Rates are increased instantaneously at the beginning of the projection. The Company is overall slightly asset sensitive, therefore, the large percentage of variable rate loans produce positive net interest income results as rates rise. Generally banks will experience a decrease in net interest income as rates rise and an increase as rates decline. Sensitivity will decrease in the second year of the projection due to interest rates increasing or decreasing for the full year and also due to the other assumptions used in the analysis as noted previously but still have a positive impact in a rising rate environment. Interest rates do not normally move all at once or evenly over time, but management believes that the analysis is useful to understanding the potential direction and magnitude of net interest income changes due to changing interest rates.

The EVE analysis shows that the Company would theoretically lose market value in a rising rate environment. The increased fixed rate longer-term wholesale deposits has contributed a higher percentage than the assets to the portfolio mix, resulting in a negative change in market value in a rising rate environment. The favorable EVE change resulting from the loan portfolio in a rising rate analysis is more than offset by the devaluation of the interest-bearing liabilities.

Table of Contents

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
QUARTERLY FINANCIAL INFORMATION
The following table sets forth, for the periods indicated, certain consolidated quarterly financial information. This information is derived from the Company’s unaudited financial statements, which include, in the opinion of management, all normal recurring adjustments which management considers necessary for a fair presentation of the results for such periods. This information should be read in conjunction with the consolidated financial statements included elsewhere in this report. The results for any quarter are not necessarily indicative of results for any future period.
Quarterly Financials

(dollars in thousands, except per share data)	2017			
	4th Qtr	3rd Qtr	2nd Qtr	1st Qtr
Interest income	$30,536	$28,172	$24,345	$20,419
Interest expense	7,560	7,147	5,953	4,778
Net interest income	22,976	21,025	18,392	15,641
Provision for loan and lease losses	4,055	2,426	1,556	1,499
Net interest income after provision for loan and lease losses	18,921	18,599	16,836	14,142
Noninterest income	95,441	25,060	26,667	25,753
Noninterest expense	41,024	35,856	33,300	32,985
Income before income taxes	73,338	7,803	10,203	6,910
Income tax expense (benefit)	1,608	(5,059)	408	798
Net income to common shareholders	$71,730	$12,862	$9,795	$6,112
Net income per share:				
Basic	$1.80	$0.34	$0.28	$0.18
Diluted	$1.74	$0.33	$0.27	$0.17

Table of Contents

	2016			
	4th Qtr	3rd Qtr	2nd Qtr	1st Qtr
Interest income	$16,914	$15,562	$13,402	$11,394
Interest expense	4,522	3,931	3,485	2,685
Net interest income	12,392	11,631	9,917	8,709
Provision for loan and lease losses	3,844	3,806	3,453	1,433
Net interest income after provision for loan and lease losses	8,548	7,825	6,464	7,276
Noninterest income	26,327	25,432	19,348	22,432
Noninterest expense	32,384	27,218	25,132	21,711
Income before income taxes	2,491	6,039	680	7,997
Income tax (benefit) expense	(2,989)	2,561	557	3,314
Net income	5,480	3,478	123	4,683
Net loss attributable to noncontrolling interest	—	1	—	8
Net income to common shareholders	$5,480	$3,479	$123	$4,691
Net income per share:				
Basic	$0.16	$0.10	$0.00	$0.14
Diluted	$0.16	$0.10	$0.00	$0.13

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and the Board of Directors
Live Oak Bancshares, Inc.
Wilmington, North Carolina

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Live Oak Bancshares, Inc. and Subsidiaries (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the years in the three year period ended December 31, 2017, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal laws and applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks; examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements; evaluating the accounting principles used and significant estimates made by management; and evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Dixon Hughes Goodman LLP

We have served as the Company's auditor since 2010.

Raleigh, North Carolina
March 8, 2018

Table of Contents

Live Oak Bancshares, Inc.
Consolidated Balance Sheets
(Dollars in thousands)

	December 31, 2017	December 31, 2016
Assets		
Cash and due from banks	$295,271	$238,008
Certificates of deposit with other banks	3,000	7,250
Investment securities available-for-sale	93,355	71,056
Loans held for sale	680,454	394,278
Loans and leases held for investment	1,343,973	907,566
Allowance for loan and lease losses	(24,190)	(18,209)
Net loans and leases	1,319,783	889,357
Premises and equipment, net	178,790	64,661
Foreclosed assets	1,281	1,648
Servicing assets	52,298	51,994
Other assets	134,242	37,009
Total assets	$2,758,474	$1,755,261
Liabilities and Shareholders’ Equity		
Liabilities		
Deposits:		
Noninterest-bearing	$57,868	$27,990
Interest-bearing	2,202,395	1,457,086
Total deposits	2,260,263	1,485,076
Long term borrowings	26,564	27,843
Other liabilities	34,714	19,495
Total liabilities	2,321,541	1,532,414
Shareholders’ equity		
Preferred stock, no par value, 1,000,000 authorized, none issued or outstanding at December 31, 2017 and December 31, 2016	—	—
Class A common stock, no par value, 100,000,000 shares authorized, 35,252,053 and 29,530,072, shares issued and outstanding at December 31, 2017 and December 31, 2016, respectively	268,557	149,966
Class B common stock, no par value, 10,000,000 shares authorized, 4,723,530 shares issued, 4,643,530 and 4,723,530 shares outstanding at December 31, 2017 and December 31, 2016, respectively	49,168	50,015
Retained earnings	120,241	23,518
Accumulated other comprehensive loss	(1,033)	(652)
Total equity	436,933	222,847
Total liabilities and shareholders’ equity	$2,758,474	$1,755,261

See Notes to Consolidated Financial Statements

Table of Contents

Live Oak Bancshares, Inc.
Consolidated Statements of Income
(Dollars in thousands, except per share data)

	Years Ended December 31,		
	2017	2016	2015
Interest income			
Loans and fees on loans	$99,633	$55,107	$33,340
Investment securities, taxable	1,432	1,132	811
Other interest earning assets	2,407	1,033	300
Total interest income	103,472	57,272	34,451
Interest expense			
Deposits	24,223	13,659	7,379
Borrowings	1,215	964	1,483
Total interest expense	25,438	14,623	8,862
Net interest income	78,034	42,649	25,589
Provision for loan and lease losses	9,536	12,536	3,806
Net interest income after provision for loan and lease losses	68,498	30,113	21,783
Noninterest income			
Loan servicing revenue	24,588	21,393	16,081
Loan servicing asset revaluation	(13,171)	(8,391)	(6,229)
Net gains on sales of loans	78,590	75,326	67,385
Equity in loss of non-consolidated affiliates	—	—	(26)
Gain on sale of investment in non-consolidated affiliate	—	—	3,782
Gain on contribution to equity method investment	68,000	—	—
Gain (loss) on sale of investment securities available-for-sale	—	1	13
Construction supervision fee income	1,776	2,667	1,623
Title insurance income	7,565	—	—
Other noninterest income	5,573	2,543	1,699
Total noninterest income	172,921	93,539	84,328
Noninterest expense			
Salaries and employee benefits	74,669	62,996	40,323
Travel expense	8,124	8,205	7,379
Professional services expense	4,937	3,482	2,643
Advertising and marketing expense	6,363	4,534	4,333
Occupancy expense	6,195	4,573	3,475
Data processing expense	8,449	5,299	3,583
Equipment expense	7,479	2,246	2,119
Other loan origination and maintenance expense	4,970	2,825	2,069
Renewable energy tax credit investment impairment	690	3,197	—
FDIC insurance	3,206	1,417	514
Title insurance closing services expense	2,418	—	—
Impairment expense on goodwill and other intangibles	3,648	—	—
Other expense	12,017	7,671	5,277
Total noninterest expense	143,165	106,445	71,715
Income before taxes	98,254	17,207	34,396
Income tax (benefit) expense	(2,245)	3,443	13,795
Net income	100,499	13,764	20,601
Net loss attributable to noncontrolling interest	—	9	24

Net income attributable to Live Oak Bancshares, Inc.	$100,499	$13,773	$20,625
Basic earnings per share	$2.75	$0.40	$0.66
Diluted earnings per share	$2.65	$0.39	$0.65

See Notes to Consolidated Financial Statements

85

Table of Contents

Live Oak Bancshares, Inc.
Consolidated Statements of Comprehensive Income
(Dollars in thousands)

	Years Ended December 31,		
	2017	2016	2015
Net income	$100,499	$13,764	$20,601
Other comprehensive loss before tax:			
Net unrealized loss on investment securities arising during the period	(619)	(746)	(437)
Reclassification adjustment for gain on sale of securities available-for-sale included in net income	—	(1)	(13)
Other comprehensive loss before tax	(619)	(747)	(450)
Income tax benefit	238	287	173
Other comprehensive loss, net of tax	(381)	(460)	(277)
Total comprehensive income	$100,118	$13,304	$20,324

See Notes to Consolidated Financial Statements

86

Table of Contents

Live Oak Bancshares, Inc.
Consolidated Statements of Changes in Shareholders' Equity
(Dollars in thousands, except per share data)

	Common stock Shares Class A	Class B	Amount	Retained earnings (accumulated deficit)	Accumulated other comprehensive income (loss)	Non-controlling interest	Total equity
Balance at December 31, 2014	23,896,400	4,723,530	$98,672	$(6,943)	$85	$—	$91,814
Net income (loss)	—	—	—	20,625	—	(24)	20,601
Other comprehensive loss	—	—	—	—	(277)	—	(277)
Consolidation of investment with non-controlling interest	—	—	—	—	—	35	35
Stock option exercises	52,969	—	239	—	—	—	239
Stock option based compensation expense	—	—	1,277	—	—	—	1,277
Restricted stock expense	—	—	148	—	—	—	148
Capital contribution from non-controlling interest	—	—	—	—	—	22	22
Issuance of common stock in connection with initial public offering, net of issue costs	5,500,000	—	87,171	—	—	—	87,171
Dividends (distributions to shareholders)	—	—	—	(1,542)	—	—	(1,542)
Balance at December 31, 2015	29,449,369	4,723,530	$187,507	$12,140	$(192)	$33	$199,488
Net income (loss)	—	—	—	13,773	—	(9)	13,764
Other comprehensive loss	—	—	—	—	(460)	—	(460)
Issuance of restricted stock	16,745	—	—	—	—	—	—
Stock option exercises	63,958	—	401	—	—	—	401
Stock option based compensation expense	—	—	2,349	—	—	—	2,349
Restricted stock expense	—	—	9,724	—	—	—	9,724
Acquisition of non-controlling interest	—	—	—	—	—	(24)	(24)
Dividends (distributions to shareholders)	—	—	—	(2,395)	—	—	(2,395)
Balance at December 31, 2016	29,530,072	4,723,530	$199,981	$23,518	$(652)	$—	$222,847
Net income	—	—	—	100,499	—	—	100,499
Other comprehensive loss	—	—	—	—	(381)	—	(381)
Issuance of restricted stock	307,613	—	—	—	—	—	—
Withholding cash issued in lieu of restricted stock issuance	—	—	(4,891)	—	—	—	(4,891)
Employee stock purchase program	22,634	—	445	—	—	—	445
Stock option exercises	109,010	—	1,026	—	—	—	1,026
Stock option based compensation expense	—	—	1,786	—	—	—	1,786
Restricted stock expense	—	—	5,717	—	—	—	5,717

Stock issued in acquisition of Reltco, Inc.	27,724	—	565	—	—	—	565
Non-voting common stock converted to voting common stock in private sale	80,000	(80,000)	—	—	—	—	—
Issuance of common stock in connection with secondary offering, net of issue costs	5,175,000	—	113,096	—	—	—	113,096
Dividends (distributions to shareholders)	—	—	—	(3,776)	—	—	(3,776)
Balance at December 31, 2017	35,252,053	4,643,530	$317,725	$ 120,241	$ (1,033)	$ —	$436,933

See Notes to Consolidated Financial Statements

87

Table of Contents

Live Oak Bancshares, Inc.
Consolidated Statements of Cash Flows
(Dollars in thousands)

	Years Ended December 31,		
	2017	2016	2015
Cash flows from operating activities			
Net income	$ 100,499	$ 13,764	$ 20,601
Adjustments to reconcile net income to net cash used by operating activities:			
Depreciation and amortization	10,279	4,260	3,435
Provision for loan and lease losses	9,536	12,536	3,806
Amortization of premium on securities, net of accretion	460	242	66
Amortization of discount on unguaranteed loans, net	2,848	2,854	3,146
Impairment expense on goodwill and other intangibles	3,648	—	—
Deferred tax expense (benefit)	12,017	(4,288)	936
Originations of loans held for sale	(1,149,617)	(1,013,643)	(1,034,769)
Proceeds from sales of loans held for sale	883,366	837,830	745,072
Net gains on sale of loans held for sale	(78,590)	(75,326)	(67,385)
Net loss on sale of foreclosed assets	59	18	14
Gain on contribution to equity method investment	(68,000)	—	—
Net increase in servicing assets	(304)	(7,764)	(9,231)
Gain on sale of securities available-for-sale	—	(1)	(13)
Gain on sale of investment in non-consolidated affiliate	—	—	(3,782)
Net loss on disposal of premises and equipment	215	—	17
Renewable energy tax credit investment impairment	690	3,197	—
Stock option based compensation expense	1,786	2,349	1,277
Restricted stock expense	5,717	9,724	148
Equity in loss of non-consolidated affiliates	—	—	26
Stock based compensation expense excess tax benefits	1,002	—	—
Business combination contingent consideration fair value adjustment	1,950	—	—
Changes in assets and liabilities:			
Other assets	(25,247)	(8,929)	(4,201)
Other liabilities	157	1,227	6,154
Net cash used by operating activities	(287,529)	(221,950)	(334,683)
Cash flows from investing activities			
Purchases of securities available-for-sale	(43,071)	(37,421)	(24,927)
Proceeds from sales, maturities, calls, and principal paydown of securities available-for-sale	19,693	19,139	19,980
Proceeds from sale/collection of foreclosed assets	1,498	1,221	513
Business combination, net of cash acquired	(7,696)	—	—
Investment in certificates of deposit with other banks	—	(250)	(250)
Maturities of certificates of deposit with other banks	4,250	3,250	—
Proceeds from sale of investment in non-consolidated affiliate	—	—	9,896
Net cash acquired in consolidation of equity method investment	—	—	319
Capital contribution from non-controlling interest	—	—	22
Loan and lease originations and principal collections, net	(385,551)	(295,119)	84,475
Purchases of premises and equipment, net	(124,139)	(10,889)	(30,452)
Net cash (used) provided by investing activities	(535,016)	(320,069)	59,576

See Notes to Consolidated Financial Statements

88

Table of Contents

Live Oak Bancshares, Inc.
Consolidated Statements of Cash Flows (Continued)
(Dollars in thousands)

	Years Ended December 31,		
	2017	2016	2015
Cash flows from financing activities			
Net increase in deposits	$775,187	$680,288	$282,708
Proceeds from long term borrowings	16,900	—	12,960
Repayment of long term borrowings	(26,279)	(532)	(26,434)
Proceeds from short term borrowings	23,100	—	—
Repayment of short term borrowings	(15,000)	—	(6,100)
Stock option exercises	1,026	401	239
Employee stock purchase program	445	—	—
Withholding cash issued in lieu of restricted stock	(4,891)	—	—
Sale of common stock, net of issuance costs	113,096	—	87,171
Shareholder dividend distributions	(3,776)	(2,737)	(2,732)
Net cash provided by financing activities	879,808	677,420	347,812
Net increase in cash and cash equivalents	57,263	135,401	72,705
Cash and cash equivalents, beginning	238,008	102,607	29,902
Cash and cash equivalents, ending	$295,271	$238,008	$102,607
Supplemental disclosure of cash flow information			
Interest paid	$25,390	$14,516	$8,840
Income tax	7,084	8,238	12,326
Supplemental disclosures of noncash operating, investing, and financing activities			
Unrealized holding losses on available-for-sale securities, net of taxes	$(381)	$(460)	$(277)
Transfers from loans to foreclosed real estate and other repossessions	1,406	406	2,616
Transfers from foreclosed real estate to SBA receivable	216	185	507
Transfers of loans accounted for as secured borrowing collateral to other assets	—	—	4,575
Transfer from fixed assets to other assets held for sale	—	4,621	—
Dividends declared but not paid	—	—	342
Transfer of loans held for sale to loans held for investment	63,643	339,567	9,033
Transfer of loans held for investment to loans held for sale	19,534	2,296	3,243
Contingent consideration in acquisition of controlling interest in equity method investment	—	24	170
Transfers from short term borrowings to long term borrowings	8,100	—	—
Business combination:			
Assets acquired (excluding goodwill)	5,766	—	—
Liabilities assumed	4,681	—	—
Purchase price	8,363	—	—
Goodwill recorded	7,278	—	—

See Notes to Consolidated Financial Statements

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 1. Organization and Summary of Significant Accounting Policies

Organization

Live Oak Banking Company (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. In December 2008, Live Oak Bancshares, Inc. (the “Company”) was formed and in the first quarter of 2009 acquired all the outstanding shares of Live Oak Banking Company. The Bank is headquartered in the city of Wilmington, North Carolina and has five satellite sales offices across the United States. The Bank specializes in providing lending and deposit related services to small businesses nationwide in targeted industries, which are referred to as verticals. The Bank identifies and grows within credit-worthy industries through expertise within 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 to a lesser extent by the U.S. Department of Agriculture ("USDA") Rural Energy for America Program ("REAP") and Business & Industry ("B&I") loan programs. The guaranteed portion of the loan is generally available for sale in the secondary market. From time to time the Bank also engages in the sale of participating interests of the unguaranteed portion. As a state chartered bank, the Bank is subject to regulation by the North Carolina Commissioner of Banks and the Federal Deposit Insurance Corporation. On July 23, 2015 the Company closed on its initial public offering with a secondary offering completed in August of 2017.

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

In January 2012, the Company formed nCino, LLC (“nCino”) to further develop and sell cloud-based banking software that was built off of the Force.com platform and transformed into a bank operating system used to streamline the lending process of financial institutions. In 2012 nCino was a majority-owned subsidiary of the Company. In 2013 the Company’s ownership changed such that nCino became a minority-owned subsidiary of the Company. In December 2013 the legal structure of nCino converted from an LLC to a corporation. At year-end 2013, the Company owned 45.94% of nCino. In June of 2014 the Company divested its ownership in nCino to shareholders in the form of a dividend with a subsequent investment of $6.1 million later in 2014. At December 31, 2014, the Company owned 9.02% of nCino. During 2015, the Company sold its remaining investment in nCino resulting in no ownership as of December 31, 2015.

In September 2013, the Company acquired Government Loan Solutions (“GLS”) as a wholly-owned subsidiary. GLS is a management and technology consulting firm that advises and offers solutions and services to participants in the government guaranteed lending sector. GLS, which was founded in 2006, primarily provides services in connection with the settlement, accounting, and securitization processes for government guaranteed loans, including loans originated under the SBA 7(a) loan programs and USDA guaranteed loans.

In December 2013, the Company jointly formed 504 Fund Advisors, LLC (“504FA”) with Pennant Management, Inc. (“Pennant Management”). As of December 31, 2014, 504FA was a 50% owned investment established for the purpose of underwriting and managing SBA 504 loans held by The 504 Fund (“the Fund”), formerly known as the Pennant 504 Fund. Two of the three portfolio managers of the Fund were employees of GLS. The third employee was an outside owner/manager of 504FA until April 30, 2015. The Company’s wholly owned subsidiaries, the Bank and GLS, provided various advisory and human resource services to 504FA, for which both were reimbursed. The services provided to 504FA did not result in either the Bank or GLS having the ability to directly influence management operations or decisions that directly impact the financial standing of the Company or its subsidiaries. Accordingly, the Company’s investment in 504FA was accounted for under the equity method at December 31, 2014, with a carrying amount of $231 thousand. The Company acquired control over 504FA on February 2, 2015 by increasing its ownership from 50.0% to 91.3%. The acquisition of an additional 41.3% of ownership occurred in exchange for contingent consideration estimated to total $170 thousand. Transactions in the third quarter of 2015 increased the

Company’s ownership to 92.4% at December 31, 2015. With 7.6% of ownership remaining with a third party investor, amounts of earnings and equity in 504FA attributable to the third party investor were disclosed in the Company’s consolidated financial statements as related to a noncontrolling interest. During the first quarter of 2016, the Company increased ownership to 92.9%. On September 1, 2016, the Company acquired the remaining 7.1% ownership from a third party investor in exchange for contingent consideration estimated to total $24 thousand. The Company’s cumulative investment in 504FA was $1.4 million at December 31, 2017 and 2016.

In September 2015, the Company formed Live Oak Grove, LLC (“Grove”), a wholly-owned subsidiary, for the purpose of providing Company employees and business visitors an on-site restaurant location.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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

In November 2016, the Company formed Live Oak Clean Energy Financing LLC for the purpose of providing financing to entities for renewable energy applications.

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. See Note 2. Title Insurance Business for a further discussion of this transaction.

Basis of Presentation

Dollar amounts in all tables in the Notes to Consolidated Financial Statements have been presented in thousands, except percentage, time period, stock option, share and per share data. The accounting and reporting policies of the Company and the Bank follow United States generally accepted accounting principles and general practices within the financial services industry. The following is a description of the significant accounting and reporting policies the Company follows in preparing and presenting its consolidated financial statements.

Consolidation Policy

The consolidated financial statements include the financial statements of the Company and wholly-owned subsidiaries of Live Oak Banking Company, Live Oak Number One, GLS, 504FA, Grove, Canapi, Live Oak Clean Energy Financing and Reltco. All significant intercompany balances and transactions have been eliminated in consolidation.

In addition, the Company evaluates its relationships with other entities to identify whether they are variable interest entities and to assess whether it is the primary beneficiary of such entities. If the determination is made that the Company is the primary beneficiary, then that entity is included in the consolidated financial statements. If an entity is not a variable interest entity, the Company also evaluates arrangements in which there is a general partner or managing member to determine whether consolidation is appropriate.

Unconsolidated investments where we have the ability to exercise significant influence over the operating and financial policies of the respective investee are accounted for using the equity method of accounting; those that are not consolidated or accounted for using the equity method of accounting are accounted for under cost or fair value accounting. For these investments accounted for under the equity method, the Company records its investment in non-consolidated affiliates and the portion of income or loss in equity in income of non-consolidated affiliates. The Company periodically evaluates these investments for impairment.

On January 28, 2013, the Company’s ownership in nCino declined by 21.54%, from 64.36% to 42.82%. This decrease in ownership and related influence occurred as a result of nCino selling additional equity to outside investors for $7.5 million. As a result, the Company deconsolidated nCino, accounting for its remaining 42.82% investment using the equity method. As previously indicated, the Company divested its remaining ownership in nCino via a dividend to shareholders in June 2014. In August 2014 the Company again invested $6.1 million in nCino for 9.02% ownership. Due to the decreased level of influence, the Company’s investment in nCino at December 31, 2014 was accounted for as a cost method investment. During 2015, the Company sold its remaining investment in nCino resulting in no ownership as of December 31, 2015, 2016 and 2017.

The Company expects to continue to be one of nCino’s customers; however, the power to direct nCino's activities is now controlled by outside investors.

Variable Interest Entities

Variable interests are defined as contractual ownership or other interests in an entity that change with fluctuations in an entity's net asset value. The primary beneficiary consolidates the variable interest entity ("VIE"). The primary beneficiary is defined as the enterprise that has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could be significant to the VIE.

The Company has a limited interest in a partnership that owns and operates a solar renewable energy project which is accounted for as an equity method investment. Over the course of the investment, the Company will receive federal and state tax credits, tax-related benefits, and excess cash available for distribution, if any. The Company may be called to sell its interest in the limited partnerships through a call option once all investment tax credits have been recognized.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

This entity meets the criteria of a VIE; however, the Company is not the primary beneficiary of the entities, as the general partner has both the power to direct the activities that most significantly impact the economic performance of the entities and the obligation to absorb losses or the right to receive benefits that could be significant to the entity. While the partnership agreement allows the Company to remove the general partner, this right is not deemed to be substantive as the general partner can only be removed for cause.

The Company's investments in the unconsolidated VIE is carried in other assets on the consolidated balance sheet and the Company's unfunded capital and other commitments related to the unconsolidated VIE is carried in other liabilities on the consolidated balance sheet.

The Company's maximum exposure to loss from this unconsolidated VIE includes the investment recorded on the Company's consolidated balance sheet, net of unfunded capital commitments and any impairment recognized, and previously recorded tax credits which remain subject to recapture by taxing authorities based on compliance features required to be met at the project level. While the Company believes the potential for losses from this investment is remote, the maximum exposure was determined by assuming a scenario where related tax credits were recaptured.

The following table provides a summary of the tax advantaged VIE that the Company has not consolidated as of December 31, 2017 and 2016:

	2017	2016
Investment carrying amount	$ 705	$ 1,394
Unfunded capital	—	690
Maximum exposure to loss	4,221	5,100

Business Combinations

Business combinations are accounted for by applying the acquisition method in accordance with Accounting Standards Codification (ASC) 805, Business Combinations. Under the acquisition method, identifiable assets acquired and liabilities assumed, and any non-controlling interest in the acquiree at the acquisition date are measured at their fair values as of that date, and are recognized separately from goodwill. Results of operations of the acquired entities are included in the consolidated statements of comprehensive income from the date of acquisition. Any measurement-period adjustments are recorded in the period the adjustment is identified.

Business Segments

Operating segments are components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. 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.

Initial and Secondary Public Offerings

The Company qualifies as an "emerging growth company" as defined by the Jumpstart Our Business Startups Act (JOBS Act). In April of 2015 the Company filed a Registration Statement on Form S-1 with the U.S. Securities and Exchange Commission (SEC). This Registration Statement was declared effective by the SEC on July 22, 2015. In reliance on that Registration Statement, the Company issued 5,500,000 shares of voting common stock, no par value, at $17.00 per share, in exchange for total proceeds of $87.2 million, net of issue costs.

In August of 2017, the Company completed a secondary offering by issuing 5,175,000 shares of voting common stock, no par value, at $23.00 per share, in exchange for total proceeds of $113.1 million, net of issuance costs. The secondary offering was made pursuant to a prospectus supplement dated August 8, 2017 and an accompanying prospectus dated July 28, 2017, pursuant to the Company's shelf registration statement on Form S-3 that was filed with the Securities and Exchange Commission and became effective on July 28, 2017.

92

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Use of Estimates
In preparing financial statements in conformity with accounting principles generally accepted in the United States of America (“GAAP”), management is required to make estimates and assumptions that affect reported amounts of assets and liabilities as of the date of the balance sheet and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Material estimates that are particularly susceptible to significant change in the near term relate to the determination of the allowance for loan and lease losses, valuations of servicing assets and income taxes. In addition, the gain on contribution to equity method investment of $68.0 million was based on management's estimates, including projected cash flows of the entity, and is inherently subjective by its nature.
Cash and Cash Equivalents
For the purpose of presentation in the statement of cash flows, cash and cash equivalents are defined as those amounts included in the balance sheet caption “cash and due from banks.” Cash and cash equivalents have initial maturity of three months or less.
To comply with banking regulations, the Company is required to maintain certain average cash reserve balances. The daily average cash reserve requirement was approximately $6.6 million and $1.3 million for the years ended December 31, 2017 and 2016, respectively.
Certificates of Deposit with other Banks
Certificates of deposit with other banks have maturities ranging from March 2018 through December 2018 and bear interest at rates ranging from 0.15% to 1.90%. None of the certificates of deposit had maturities of 12 months or less at the time of origination. All investments in certificates of deposit are with FDIC insured financial institutions and none exceed the maximum insurable amount of $250 thousand.
Investments
Securities
Certain debt securities that management has the positive intent and ability to hold to maturity are classified as “held-to-maturity” and recorded at amortized cost. Trading securities are recorded at fair value with changes in fair value included in earnings. Securities not classified as held-to-maturity or trading, are classified as “available-for-sale” and recorded at fair value. Unrealized gains and losses for available-for-sale investment securities are excluded from earnings and reported in other comprehensive income. The Company’s entire portfolio for the periods presented is available-for-sale.
Purchase premiums and discounts are recognized in interest income using the interest method over the terms of the securities.
Other
The Company accounts for other investments either under the equity or cost method. Investments through which there is significant influence but not control over the investee are accounted for under the equity method. Investments through which the Company is not able to exercise significant influence over the investee are accounted for under the cost method. Other investments are generally non-marketable equity investments and are included in the other assets line on the consolidated balance sheet.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Impairment
At each reporting date, the Company evaluates each investment in a loss position for other than temporary impairment ("OTTI"). The Company evaluates declines in market value below cost for debt securities by assessing the likelihood of selling the security prior to recovering its cost basis. If the Company intends to sell the debt security or it is more-likely-than-not that the Company will be required to sell the debt security prior to recovering its cost basis, the Company will write down the security to fair value with the full charge recorded in earnings. If the Company does not intend to sell the debt security and it is not more-likely-than-not that the Company will be required to sell the debt security prior to recovery, the security will not be considered other-than-temporarily impaired unless there are credit losses associated with the security. In that case: (1) where credit losses exist, the portion of the impairment related to those credit losses should be recognized in earnings; (2) any remaining difference between the fair value and the cost basis should be recognized as part of other comprehensive income. For equity securities, any OTTI is recognized with the full charge recorded in earnings. To determine whether an impairment of equity securities is OTTI, the Company considers whether it has the ability and intent to hold the investment until there is a market price recovery and considers whether evidence indicating the cost of the investment is recoverable outweighs evidence to the contrary.
In determining whether OTTI exists, management considers many factors, including (1) the length of time and the extent to which the fair value has been less than cost, (2) the financial condition and near-term prospects of the issuer, and (3) the intent and ability of the Company to retain its investment in the issuer for a period of time sufficient to allow for any anticipated recovery in fair value. Gains and losses on the sales of securities are recorded on the trade date and are determined using the specific identification method.
Loans Held For Sale
Management designates loans as held for sale ("HFS") based on its intent to sell guaranteed portions in the SBA and USDA Secondary Market and unguaranteed portions to participant banks and credit unions. Salability requirements of the guaranteed portion include, but are not limited to, full disbursement of the loan commitment amount. Loans originated and intended for sale are carried at the lower of cost or estimated fair value on a loan-by-loan basis. The cost basis of loans held for sale includes the deferral of loan origination fees and costs. Deferred fees and costs are accreted and amortized for loans classified held for sale until the sale occurs. At loan settlement, the pro-rata portion, based on the percent of the total loan sold, of the remaining deferred fees and costs are recognized as an adjustment to the gain on sale.
As part of our management of the loans held in our portfolio, we will occasionally transfer loans from held for investment to held for sale. Upon transfer, any associated allowance for loan and lease loss is released and the carrying value of the loans is adjusted to the estimated fair value. The loans are subsequently accounted for at the lower of cost or fair value, with valuation changes recorded in other noninterest income. Gains or losses on the sale of these loans are also recorded in noninterest income. In certain circumstances, loans designated as held for sale may later be transferred back to the loan and lease portfolio based upon our intent and ability to hold the loans for the foreseeable future. The Company transfers these loans to loans and leases held for investment at the lower of cost or fair value and establishes a related allowance for loan and lease loss.
In accordance with SBA regulation, the Bank is required to retain 10% of the principal balance of any SBA 7(a) loan comprised of unguaranteed dollars. With written consent from the SBA, the Bank may sell down to a 5% exposure comprised of unguaranteed dollars. During 2012, the SBA approved the Bank to sell to the 5% retention level participating interests of the unguaranteed portion of loans originated on or before June 30, 2012 that had been fully funded for a period of eighteen months. This approval expired on June 30, 2014.
Historically, loans held for sale consisted only of guaranteed loan balances and the unguaranteed portion up to the SBA retention minimums discussed above. A negative change in the credit quality of a loan resulted in the loan classification changing from held for sale to held for investment. Beginning in June 2016, loans held for sale consist of guaranteed loan balances. The gain on sale recognized in income is the sum of the premium on the guaranteed loan

and the fair value of the servicing assets recognized, less the discount recorded on the unguaranteed portion of the loan retained.

94

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following summarizes the activity pertaining to loans held for sale for the years ended December 31, 2017 and 2016:

	2017	2016
Balance at beginning of year	$394,278	$480,619
Originations	1,149,617	1,013,643
Proceeds from sale	(883,366)	(837,830)
Gain on sale of loans	78,590	75,326
Principal collections, net of deferred fees and costs	(14,556)	(209)
Non-cash transfers, net	(44,109)	(337,271)
Balance at end of period	$680,454	$394,278

Loans and Leases Held for Investment

Loans and leases receivable that management has the intent and ability to hold for the foreseeable future or until maturity or pay-off are classified as held for investment ("HFI") and reported at their outstanding principal amount adjusted for any charge-offs, the allowance for loan and lease losses, and any deferred fees or costs on originated loans and leases and unamortized premium or discount on purchased loans. Loan origination fees, net of certain direct origination costs, are deferred and recognized as an adjustment of the related loan yield using the interest method. Discounts and premiums on any purchased loans are amortized to income using the interest method over the remaining period to contractual maturity, adjusted for anticipated prepayments. Historically, loans and leases designated as held for investment, included loans and leases identified as more beneficial to hold for the long term as well as the required retention amount defined by the SBA comprised of unguaranteed dollars and loans and leases designated as troubled debt restructurings, nonaccrual, and risk grade at a 5 or worse as defined by internal risk rating metrics. Beginning June 2016, loans and leases held for investment consist of unguaranteed loan and lease balances and guaranteed and unguaranteed loans and leases designated as troubled debt restructurings, nonaccrual, non-marketable, and risk grade 5 or worse.

During the second quarter of 2016, the Bank transferred $318.8 million in unguaranteed loans from the HFS category to the HFI category to better reflect intentions of the Company.

Interest income on loans and leases is recognized as earned on a daily accrual basis. The accrual of interest on loans and leases is discontinued when principal or interest is past due 90 days or the loan or lease is determined to be impaired. Impaired loans and leases, or portions thereof, are charged off when deemed uncollectible.

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 leased 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 4-6 years which is consistent with the useful life of the equipment with no residual value. As of December 31, 2017, the Company had net investments in direct financing lease receivables of $2.0 million.

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.

95

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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 40%, 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.

As of December 31, 2017, the Company had a net investment of $88.4 million in assets included in premises and equipment that are subject to operating leases.

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

As of December 31, 2017	Amount
2018	$5,162
2019	5,408
2020	5,428
2021	5,455
2022	5,458
Thereafter	34,046
Total	$60,957

Allowance for Loan and Lease Losses

The allowance for loan and lease losses is established as losses are estimated to have occurred through a provision for loan and lease losses charged to earnings. Loan or lease losses are charged against the allowance when management believes the un-collectibility of a loan or lease balance is confirmed. Subsequent recoveries, if any, are credited to the allowance.

The allowance for loan and lease losses is evaluated on a regular basis by management and is based upon management’s periodic review of the collectibility of the loans or leases in light of historical experience, the nature and volume of the loan and lease portfolio, adverse situations that may affect the borrower’s ability to repay, estimated value of any underlying collateral and prevailing economic conditions. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available.

A loan or lease is considered impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan or lease agreement. Factors considered by management in determining impairment include payment status and other circumstances impacting the probability of collecting scheduled principal and interest payments when due. Management determines the significance of payment delays and payment shortfalls on a case-by-case basis, taking into consideration all of the circumstances surrounding the loan or lease and the borrower, including the length of the delay, the reasons for the delay, the borrower’s prior payment record, and the amount of the shortfall in relation to the principal and interest owed. Impairment is measured on a credit-by-credit basis by either the present value of expected future cash flows discounted at the loan or lease's effective interest rate, the loan or lease’s obtainable market price, or the fair value of the collateral if the loan or lease is collateral dependent, except for large groups of smaller balance homogeneous loans or leases which are collectively evaluated for impairment. Smaller balance loan or lease relationships collectively evaluated for impairment are generally comprised of credits with unguaranteed exposure of less than $100,000 using a methodology based on historical specific reserves on similar sized loans or leases. Loans or leases classified as troubled debt restructured (“TDR”) are considered impaired. Loans or leases that experience insignificant payment delays and payment shortfalls generally are not classified as impaired.

96

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

A loan or lease is accounted for as a TDR if the Company, for reasons related to the borrower's financial difficulties, restructures a loan or lease, and grants a concession to the borrower that it would not otherwise grant. A TDR typically involves a modification of terms such as a reduction of the interest rate below the current market rate for a loan or lease with similar risk characteristics or the waiving of certain financial covenants without corresponding offsetting compensation or additional support. The Company measures the impairment loss of a TDR using the methodology for individually impaired loans or leases.

Interest is accrued and credited to income based on the principal amount outstanding. The accrual of interest on impaired loans or leases is discontinued when, in management's opinion, the borrower may be unable to meet payments as they become due or when the loan or lease becomes ninety days past due. Past due status of loans and leases is determined based on contractual terms. When interest accrual is discontinued, all unpaid accrued interest for the current year is reversed. Interest income is subsequently recognized on the cash-basis or cost-recovery method, as appropriate. Cash payments of interest on nonaccrual loans or leases will be applied to the principal balance of the loan or lease. When facts and circumstances indicate the borrower has regained the ability to meet the required payments, the loan or lease is returned to accrual status. Interest accruals are resumed on nonaccrual loans or leases only when it is brought current with respect to interest and principal and when, in the judgment of management, the loans or leases are estimated to be fully collectible as to all principal and interest. Management's judgment is based on an assessment of the borrower's financial condition and a recent history of payment performance.

The Company identifies all impaired loans and leases, including those individually and collectively evaluated for impairment, for impairment disclosures.

Upon transfer from held for sale classification, loans and leases held for investment become subject to the allowance for loan and lease loss review process. As a result of this process, the above mentioned $318.8 million loan reclassification resulted in a $4.0 million increase in the provision for loan and lease losses during the second quarter of 2016.

During the second quarter of 2016, the Company also implemented enhancements to the methodology for estimating the allowance for loan and lease losses, including refinements to the measurement of qualitative factors in the estimation process. Management believes these enhancements will improve the precision of the process for estimating the allowance, but did not fundamentally change the Company's approach. These revisions resulted in a $390 thousand reduction in the provision for loan and lease losses during the second quarter of 2016.

Foreclosed Assets

Real estate properties acquired through, or in lieu of, loan foreclosure are to be sold and are initially recorded at the lower of carrying amount or fair value less anticipated cost to sell at the date of foreclosure, establishing a new cost basis. Any write down at the time of transfer to foreclosed assets is charged to the allowance for loan and lease losses. After foreclosure, valuations are periodically performed by management, and the real estate is carried at the lower of carrying amount or fair value, less cost to sell. Subsequent write downs are charged to other loan origination and maintenance expense. Costs relating to improvement of the property are capitalized while holding costs of the property are charged to other loan origination and maintenance expense in the period incurred.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Premises and Equipment
All premises and equipment, excluding land, are carried at cost, less accumulated depreciation. Land is carried at cost. Additions and major replacements or improvements which extend useful lives of property or equipment are capitalized. Maintenance, repairs, and minor improvements are expensed as incurred. Upon retirement or other disposition of the assets, the cost and related depreciation are removed and any resulting gain or loss is reflected in income. Leasehold improvements are amortized over the terms of the respective leases or the estimated useful lives of the improvements, whichever is shorter. Depreciation is computed by the straight-line method over the following estimated useful lives:

	Years
Buildings	39
Transportation	5-10
Land Improvements	7-15
Furniture and equipment	5-10
Computers and software	3-5

Servicing Assets
All sales of loans are executed on a servicing retained basis. The standard SBA loan sale agreement is structured to provide the Company with a “servicing spread” paid from a portion of the interest cash flow of the loan. SBA regulations require the Bank to retain a portion of the cash flow from the interest payments received for a sold loan. The SBA retention requirement is at least 100 basis points in servicing spread while the Company's standard USDA loan sale agreement specifies a servicing spread of 40 basis points. The portion of the servicing spread that exceeds adequate compensation for the servicing function is recognized as a servicing asset. Industry practice recognizes adequate compensation for servicing SBA and USDA loans as 40 basis points. The fair value of the servicing asset is measured at the discounted present value of the excess servicing spread over the expected life of the related loan using appropriate discount rates and assumptions based on industry statistics for prepayment speeds.
Servicing assets are recognized as separate assets when rights are acquired through purchase or through sale of financial assets and are carried at fair value. Generally, purchased servicing rights are capitalized at the cost to acquire the rights. For sales of loans, a portion of the cost of originating the loan is allocated to the servicing right based on fair value. Fair value is based on market prices for comparable servicing contracts, when available, or alternatively, is based on a valuation model that calculates the present value of estimated future net servicing income. The valuation model incorporates assumptions that market participants would use in estimating future net servicing income, such as adequate compensation for servicing, the discount rate, the custodial earnings rate, an inflation rate, ancillary income, prepayment speeds and default rates and losses. Capitalized servicing rights are carried at fair value as of the reporting date. Changes to fair value are reported in loan servicing asset revaluation.
Servicing fee income is recorded for fees earned for servicing loans. The fees are based on a contractual percentage of the outstanding principal or a fixed amount per loan and are recorded as income when earned.
The Company’s investment in a loan is allocated between the retained portion of the loan, the servicing asset, and the sold portion of the loan on the date the loan is sold.
When only a portion of a loan is sold, GAAP requires the Company to reallocate the carrying basis between the portion of the loan sold and the portion of the loan retained based on the relative fair value of the respective portions as of the date of sale. The maximum gain on sale that can be recognized is the difference between the fair value of the guaranteed portion sold and the reallocated basis of the portion of the loan sold. The Company measures the fair value of the guaranteed portion of the loan by the cash premium at which the sale was consummated. The limitation on the maximum gain allowed to be recognized results in a discount recorded on the unguaranteed dollars retained. The carrying value of the retained portion of the loan is discounted based in part on the estimates derived from the Company’s comparable nonguaranteed loan sales.

98

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Derivative Financial Instruments
During the fourth quarter of 2016, the Company began using exchange-traded interest rate futures contracts to manage interest rate risk that may impact expected gains arising from future secondary market loan sales. Upon entering into a futures contract, the Company is required to pledge to the counterparty an amount of cash equal to a certain percentage of the contract amount, also known as an initial margin deposit. Subsequent payments, known as variation margin, are made or received by the Company each day to settle the daily fluctuations in the fair value of the underlying contract. Investments in these derivative contracts are subject to risks that can result in a loss of all or part of an investment. Credit risk is considered low because the counterparties are futures exchanges. The Company has not designated any derivative as a hedging instrument under applicable accounting guidance. Changes in fair value of the derivative contracts is recorded as a component of "net gains on sales of loans" on the consolidated statement of income. The Company recognized a loss of $117 thousand and a gain of $31 thousand on the derivative contracts for the years ended December 31, 2017 and 2016, respectively. The total notional amount of derivative contracts outstanding was $29.9 million and $8.0 million as of December 31, 2017 and 2016, respectively. The fair value of the derivative contracts on the balance sheet date is zero due to the daily cash settlement of contracts.
Goodwill and Intangible Assets
Goodwill is the purchase premium after adjusting for the fair value of net assets acquired. Goodwill is not amortized but is reviewed for potential impairment on an annual basis, or when events or circumstances indicate a potential impairment, at the related reporting unit level. The goodwill impairment test involves comparing the fair value of the reporting unit with its carrying value, including goodwill. If the fair value of the reporting unit exceeds its carrying value, goodwill of the reporting unit is considered not impaired; however, if the carrying value of the reporting unit exceeds its fair value, an impairment charge must be recorded. An impairment loss recognized cannot exceed the amount of goodwill assigned to a reporting unit. An impairment loss establishes a new basis in the goodwill and subsequent reversals of goodwill impairment losses are not permitted under applicable accounting guidance.
For intangible assets subject to amortization, the recoverability test is performed when a triggering event occurs and an impairment loss is recognized if the carrying value of the intangible asset is not recoverable and exceeds fair value. The carrying value of the intangible asset is considered not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use of the asset. Intangible assets deemed to have indefinite useful lives are not subject to amortization. An impairment loss is recognized if the carrying value of the intangible asset with an indefinite life exceeds its fair value.
Intangibles subject to amortization related to the Reltco acquisition include non-compete agreements with former employees amortized over five years and customer relationships amortized over eight years. The Reltco trade name had a carrying amount of $480 thousand as of December 31, 2017, and is the only indefinite-lived intangible asset.
The following table shows carrying amounts and accumulated amortization of all intangible assets as of December 31, 2017. There were no intangible assets related to Reltco as of December 31, 2016.
Amortizable intangible assets as of December 31, 2017:

	Carrying Amount	Accumulated Amortization
Non-compete agreements	$ 405	$ (74)
Customer relationships	3,900	(447)
Total	$ 4,305	$ (521)

The Company’s projected amortization expense for the years ending December 31, 2018, 2019, 2020 and 2021 is $569 thousand per year. Projected amortization expense for the year ended December 31, 2022 is $494 thousand.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

As of October 31, 2017, it was determined that impairment existed at the Reltco reporting unit and impairment charges of $3.6 million were recorded. These impairment charges for the year ended December 31, 2017 are reflected in a separate line in the income statement and are comprised of the following components:

Intangible assets	$720
Goodwill	7,278
Contingent consideration liability	(4,350)
Total impairment expense on goodwill and other intangibles	$3,648

See Note 2. Title Insurance Business for further discussion related to impairment of Reltco.

Long-Lived Assets

The Company evaluates the carrying value of rental equipment and identifiable definite lived intangible assets for impairment whenever events or circumstances have occurred that would indicate the carrying amount may not be fully recoverable. A key element in determining the recoverability of long-lived assets is the Company's outlook as to the future market conditions for its rental equipment. If the carrying amount is not fully recoverable, an impairment loss is recognized to reduce the carrying amount to fair value. The Company determines fair value based upon the condition of the rental equipment and the projected net cash flows from its rental and sale considering current market conditions. During the year ended December 31, 2017, there were no impairments of long-lived assets.

Impairment of Long -Lived Asset Reclassified to Held for Sale

During the fourth quarter of 2016, the Company determined that retention of one of its aircraft was ineffective in serving the needs of an expanding nationwide customer base. As a result of this determination, the Company began marketing the aircraft for sale. Subsequently in December 2016, the Company entered into a sale agreement with a third party with expected total proceeds, net of expenses, of $3.2 million. An impairment expense of $1.4 million was recorded and included in the "Other expense" line item in the 2016 consolidated statements of income upon adjusting the carrying amount to the expected fair value. The expected fair value of the aircraft of $3.2 million is reflected in the consolidated 2016 balance sheet in the "Other assets" line item. The sale of this aircraft took place in January 2017 with no additional loss.

Change in Accounting Estimate

During 2017, the Company assessed its estimate of the useful lives of the Company's aircraft transportation. The Company revised its original useful life estimate of 20 years and currently estimates that its aircraft transportation will have a useful life of 10 years. The effects of reflecting this change in accounting estimate on the 2017 consolidated financial statements are as follows:

	Year Ended December 31, 2017
Decrease in:	
Net income	$ 894
Basic EPS	$ 0.02
Diluted EPS	$ 0.02

100

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Common Stock
On June 11, 2014, the Company amended its Articles of Incorporation to create two classes of common stock. These two classes are identified as Class A and Class B for Voting Common Stock and Non-Voting Common Stock, respectively, in the accompanying consolidated balance sheet and statement of changes in shareholders' equity. Voting and Non-Voting Common Stock holders have identical rights and privileges, with the exception that Non-Voting Common shares have no voting power unless circumstances arise where instances creating the Non-Voting Common Shares are modified in any way that negatively impact rights of holder. Stock splits or dividends of Voting and Non-Voting Common Shares shall be in like stock (voting for voting and non-voting for non-voting). Any number of Non-Voting Common Stock may be converted to an equal number of Voting Common Stock at the option of the holder; provided that holder is not the initial transferee or an affiliate of initial transferee.
Advertising Expense
Marketing costs are recognized in the month the event or advertisement takes place. These costs are included in advertising and marketing expense as presented in the consolidated statements of income.
Income Taxes
Income tax expense is the total of the current year income tax due or refundable and the change in deferred tax assets and liabilities (excluding deferred tax assets and liabilities related to business combinations or components of other comprehensive income). Deferred tax assets and liabilities are the expected future tax amounts for the temporary differences between carrying amounts and tax bases of assets and liabilities, computed using enacted tax rates. The effect of a change in tax rates on deferred assets and liabilities is recognized in income taxes during the period that includes the enactment date. A valuation allowance, if needed, reduces deferred tax assets to the expected amount more likely than not to be realized. Realization of deferred tax assets is dependent upon the level of historical income, prudent and feasible tax planning strategies, reversals of deferred tax liabilities and estimates of future taxable income.
The Company uses the flow-through method of accounting on investments that generate investment tax credits. Under this method, investment tax credits are recognized as a reduction to income tax expense immediately in the period that the credit is generated, to the extent permitted by tax law. In accounting for any temporary difference that arise, the Company has elected the income statement method whereby deferred taxes are adjusted through income tax expense.
The Company evaluates uncertain tax positions at the end of each reporting period. The Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefit recognized in the financial statements from any such position is measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. For tax positions not meeting the "more likely than not" test, no tax benefit is recorded. Any interest and/or penalties related to income taxes are reported as a component of income tax expense.
The Company has determined that it does not have any material unrecognized tax benefits or obligations as of December 31, 2017. Fiscal years ending on or after December 31, 2014 remain subject to examination by federal and state tax authorities.
Comprehensive Income
Annual comprehensive income reflects the change in the Company's equity during the year arising from transactions and events other than investment by and distributions to shareholders. The only components of other comprehensive income consist of realized and unrealized gains and losses related to investment securities.
Stock Compensation Plans
The Company recognizes compensation cost relating to share-based payment transactions in the consolidated financial statements in accordance with GAAP. The cost is measured based on the fair value of the equity or liability instruments issued. The expense measures the cost of employee services received in exchange for stock options and restricted stock based on the grant-date fair value of the award, and recognizes the cost over the vesting period as

indicated in the option agreement.

101

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Fair Value of Financial Instruments

GAAP defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company determines the fair values of its financial instruments based on the fair value hierarchy established per GAAP which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Investment securities available-for-sale and servicing assets are recorded at fair value on a recurring basis. Loans held for sale, certain impaired loans and foreclosed assets are carried at fair value on a non-recurring basis.

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.

	December 31,		
	2017	2016	2015
Basic earnings per share:			
Net income available to common shareholders	$100,499	$ 13,773	$ 20,625
Weighted-average basic shares outstanding	36,592,893	34,202,168	31,079,032
Basic earnings per share	$2.75	$ 0.40	$ 0.66
Diluted earnings per share:			
Net income available to common shareholders, for diluted earnings per share	$100,499	$ 13,773	$ 20,625
Total weighted-average basic shares outstanding	36,592,893	34,202,168	31,079,032
Add effect of dilutive stock options and restricted stock grants	1,266,642	884,791	894,114
Total weighted-average diluted shares outstanding	37,859,535	35,086,959	31,973,146
Diluted earnings per share	$2.65	$ 0.39	$ 0.65
Anti-dilutive shares	253,338	1,777,035	1,811,776

Reclassifications and Corrections

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.

Recent Accounting Pronouncements

The following is a summary of recent authoritative pronouncements that could impact the accounting, reporting, and/or disclosure of financial information by the Company.

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, “Revenue from Contracts with Customers (Topic 606)” (“ASU 2014-09”). This standard is intended to clarify the principles for recognizing revenue and to develop a common revenue standard for GAAP. The Company's revenue is comprised of loan servicing revenue, net gains on sales of loans and net interest income on financial assets and financial liabilities, all of which are explicitly excluded from the scope of ASU 2014-09, and non-interest income. The Company's revenue streams included in non-interest income that are within the scope of the guidance are primarily related to sales of foreclosed assets, construction supervision fees, title insurance income and trust fiduciary fees. The Company adopted the standard in the first quarter of 2018 with no effect on the consolidated financial statements.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842)” (“ASU 2016-02”). The FASB issued this ASU to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet by lessees for those leases classified as operating leases under current GAAP and disclosing key information about leasing arrangements. The amendments in this ASU are effective for the Company on January 1, 2019. The impact of this standard will depend on the Company's lease portfolio at the time of the adoption and the Company is currently assessing the effect that the adoption of this standard will have on the consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, “Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting (“ASU 2016-09”). ASU 2016-09 simplifies the accounting for share-based payment transactions for items including income tax consequences, classification of awards as equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 was effective and adopted by the Company on January 1, 2017. Starting in the first quarter of 2017, stock-based compensation excess tax benefits or deficiencies are reflected in the Consolidated Statements of Income as a component of the income tax expense, where as they previously were recognized in equity. Additionally, the Consolidated Statements of Cash Flows now present excess tax benefits as an operating activity while any cash paid in lieu of shares for tax-withholding being classified as a financing activity. There were no excess tax benefits in the prior period presented for reclassification. Finally, the Company will continue to incorporate actual forfeitures as they occur in the accrual of compensation expense. As a result of the adoption of ASU 2016-09, the Consolidated Statement of Cash Flows for the year ended December 31, 2017 was impacted as follows: a $1.0 million increase to net cash provided by operating activities and a $4.9 million increase to net cash used in financing activities. The adoption of ASU 2016-09 further resulted in a $0.03 increase in basic and diluted EPS for the year ended December 31, 2017. See Note 10 for information regarding the additional impact on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, “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. The Company is currently evaluating the potential impact of ASU 2016-13 on the consolidated financial statements. In that regard, a cross-functional working group has been formed, under the direction of the Company's Chief Financial Officer and Chief Credit Officer. The working group is comprised of individuals from various functional areas including credit, risk management, finance and information technology, among others. The Company is currently developing an implementation plan to include assessment of processes, portfolio segmentation, model development, system requirements and the identification of data and resource needs, among other things. The Company has also selected a third-party vendor solution to assist in the application of the ASU 2016-13. While the Company is currently unable to reasonably estimate the impact of adopting ASU 2016-13, the impact of adoption is expected to be significantly influenced by the composition, characteristics and quality of loan and securities portfolios as well as the prevailing economic conditions and forecasts as of the adoption date.

In January 2017, the FASB issued ASU No. 2017-01, “Business Combinations (Topic 805) - Clarifying the Definition of a Business” (“ASU 2017-01”). ASU 2017-01 clarifies the definition and provides a more robust framework to use in determining when a set of assets and activities constitutes a business. ASU 2017-01 is intended to provide guidance when evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses.

ASU 2017-01 will be effective for the Company on January 1, 2018. The Company does not expect this amendment to have a material effect on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, “Intangibles - Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment” (“ASU 2017-04”). This ASU eliminates Step 2 from the goodwill impairment test. Under the new guidance, entities should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value. Additionally, this ASU eliminates the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. The amendments in this ASU are effective for the Company on January 1, 2020, with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company elected to early adopt ASU 2017-04 in the fourth quarter of 2017. Refer to Note 2. Title Insurance Business for information on this adoption.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

In February 2017, the FASB issued ASU No. 2017-05, “Other Income - Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20) - Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets” (“ASU 2017-05”). ASU 2017-05 clarifies the scope of Subtopic 610-20 and adds guidance on nonfinancial asset derecognition as well as the accounting for partial sales of nonfinancial assets. The amendments conform the derecognition guidance on nonfinancial assets with the model for transactions in the new revenue standard. ASU 2017-05 will be effective for the Company on January 1, 2018 and is not expected to have a significant impact on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, “Compensation - Stock Compensation (Topic 718) - Scope of Modification Accounting” (“ASU 2017-09”). ASU 2017-09 clarifies when changes to the terms or conditions of a share-based payment award should be accounted for as a modification. This guidance indicates modification accounting is required when the fair value, vesting conditions, or classification of the award changes. ASU 2017-09 will be effective for the Company on January 1, 2018 and is not expected to have a significant impact on its consolidated financial statements.

In August 2017, the FASB issued ASU No. 2017-12, “Derivatives and Hedging (Topic 815) - Targeted Improvements to Accounting for Hedging Activities” (“ASU 2017-12”). ASU 2017-12 amends the hedge accounting recognition and presentation requirements in ASC 815 to improve the transparency and understandability of information conveyed to financial statement users about an entity’s risk management activities to better align the entity’s financial reporting for hedging relationships with those risk management activities and to reduce the complexity of and simplify the application of hedge accounting. ASU 2017-12 will be effective for the Company on January 1, 2019 and is not expected to have a significant impact on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, “Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income” (“ASU 2018-02”). ASU 2018-02 addresses the income tax accounting treatment of the stranded tax effects within other comprehensive income. The ASU allows for an entity to reclassify the stranded tax effects resulting from the Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings. ASU 2018-02 will be effective for the Company on January 1, 2019, with early adoption permitted. The Company will early adopt ASU 2018-02 in the first quarter of 2018 and will reclassify its stranded tax debit of $244 thousand within accumulated other comprehensive income to retained earnings at March 31, 2018.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies are not expected to have a material impact on the Company’s balance sheets, statements of income and cash flows.

Note 2. Title Insurance Business

Business Combination

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. The acquisition continues the Company's growth strategy, including vertically integrating with complementary services to deliver a high-quality customer experience with speed.

On the acquisition date, the fair value of Reltco included $5.8 million in assets and $4.7 million in liabilities. The total acquisition gross consideration at the time of the transaction, including earn-out contingent consideration was approximately $15.8 million. The acquisition was valued at $12.7 million after consideration of the applicable fair value adjustments to the earn-out, resulting in the Company paying $7.8 million in cash and issuing 27,724 shares of its common stock at closing in addition to an earn-out of up to 184,012 shares of its stock and $3.8 million in cash, in exchange for all of the outstanding shares of Reltco. The earn-out was recorded as a $4.3 million contingent liability on the acquisition date and is earned proportionally based on the ratio of the new subsidiary's actual future aggregate net income after tax divided by a target net income after tax of approximately $6.0 million over the four year earn-out period. Fair value measurement of the earn-out was calculated using the Monte Carlo Simulation. The Monte Carlo

Simulation simulates 100,000 trials to assess the expected market price as of the earn-out measurement date at the end of each of the next four years based on the Cox, Ross & Rubinstein option pricing methodology. The Monte Carlo Simulation utilized various assumptions that include a risk free rate of return through the end of each measurement period equivalent to that of a U.S. Treasury, expected volatility of 30.00% over four years and a dividend yield of 0.40%.

104

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The merger was accounted for in accordance with the acquisition method of accounting, and the identifiable assets acquired and liabilities assumed were recorded at their estimated fair values as of the acquisition date separately from goodwill. The estimated fair values of assets acquired and liabilities assumed are based on the information available at the date of the acquisition. Management continues to evaluate these fair values, which are subject to revision as additional information becomes available. Contingent consideration is recorded at fair value based on the terms of the purchase agreement with subsequent quarterly changes in fair value recorded through earnings. The fair value of contingent consideration upon acquisition was $4.3 million and increased by $350 thousand during the period leading up to the October 31, 2017 impairment assessment date discussed below. During this pre-impairment assessment period fair value was estimated using the Monte Carlo Simulation. The assumptions utilized include a risk-free rate of return through the end of each measurement period equivalent to that of a U.S. Treasury, expected volatility of 30.00% over the remaining 3.25 years and a dividend yield of 0.51%.
The following table summarizes the allocation of the purchase price on the date of acquisition to assets acquired and the liabilities assumed based on their estimated fair values:

Fair value of assets acquired	
Cash	$102
Accounts receivable	159
Intangible assets	5,505
Total assets acquired	5,766
Fair value of liabilities assumed	
Contingent consideration	4,300
Accounts payable and other liabilities	381
Total liabilities assumed	4,681
Net assets acquired	$1,085
Purchase price	
Common shares issued	27,724
Purchase price per share of the Company’s common stock	$20.38
Company common stock issued	565
Cash	$7,798
Total purchase price	8,363
Goodwill	$7,278

Goodwill recorded represents future revenues and efficiencies gained through the Reltco acquisition. Goodwill in this transaction is expected to be deductible for income tax purposes. At the date of acquisition, intangible assets consisted of trade names of $1.2 million, customer relationships of $3.9 million, and non-compete agreements of $405 thousand.
The Company recorded merger expenses of $766 thousand and $115 thousand during the years ended December 31, 2017 and 2016, respectively, related to the Reltco acquisition.
Goodwill and Intangible Asset Impairment
Goodwill and intangible assets are evaluated for potential impairment annually or when circumstances indicate potential impairment may have occurred. Impairment losses, if any, are determined based upon the excess of carrying value over the estimated fair value of the asset.
As of October 31, 2017 the Company determined that its goodwill and certain intangible assets related to the Reltco business combination had indications of impairment. Reltco’s financial performance was significantly lower during the first nine-months of operations and expectations of future profitability for the reporting unit were also lower than originally expected due to a slowing of refinance activity in the mortgage industry. The slowing of refinance activity in the mortgage industry was largely driven by increased levels of market rates during 2017.

105

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

In performing the goodwill impairment testing and measurement process to identify possible impairment, the estimated fair value of the Reltco reporting unit was developed using the income and market approaches to value Reltco. The income approach consisted of discounting projected long-term future cash flows, which are derived from internal forecasts and economic expectations for Reltco. The market valuation approach utilized revenue and EBITDA multiples from comparable market transactions.
The results of the impairment test indicated that the estimated fair value of Reltco was less than book value which resulted in a goodwill impairment charge of $7.3 million in accordance with accounting for Intangibles, Goodwill and other under ASC 360. This non-cash goodwill impairment charge to earnings was recorded as a component of impairment expense on goodwill and other intangibles in the consolidated statement of income.
While the intangibles subject to amortization were determined to be recoverable based on an undiscounted cash flow analysis, impairment of $720 thousand was realized for indefinite life tradenames. This non-cash intangible impairment charge to earnings was recorded as a component of impairment expense on goodwill and other intangibles in the consolidated statement of income.
The following is a summary of activity in goodwill for the Reltco reporting unit:

Balance, December 31, 2016	$ —
Goodwill acquired during 2017	7,278
Accumulated impairment losses	(7,278)
Balance, December 31, 2017	$ —

As a result of Reltco's results of operations and the direct contractual inclusion of impairment losses in the determination of earn out consideration, the fair value of the contingent consideration decreased by $4.4 million, which is recorded as a component of impairment expense on goodwill and other intangibles in the consolidated statement of income. The Company subsequently modified the acquisition contract to change the definition of net income related to the earn-out contingent consideration which resulted in $1.6 million in salaries and employee benefit expense.
Following is a summary of activity in contingent consideration for the Reltco reporting unit:

Balance, December 31, 2016	$—
Contingent consideration recorded upon acquisition	4,300
Fair value adjustments prior to October 31, 2017 impairment assessment	350
Impact of impairment assessment	(4,350)
Effect of purchase contract modification	1,600
Balance, December 31, 2017	$1,900

Fair value of contingent consideration was estimated using the Monte Carlo Simulation. The assumptions utilized in the determining the impact of the impairment assessment and subsequent purchase contract modification include a risk-free rate of return through the end of each measurement period equivalent to that of a U.S. Treasury, expected volatility of 25.00% over the remaining 3.00 years and a dividend yield of 0.51%.
Pro Formas
The following pro forma financial information reflects the Company's estimated consolidated pro forma results of operations as if the Reltco acquisition occurred on January 1, of each of the below years:

	2017	2016	2015
Revenue (net interest income and noninterest income)	$251,723	$148,322	$116,582
Net income available to common shareholders	100,537	15,363	21,451
Basic earnings per share	2.75	0.45	0.69
Diluted earnings per share	2.66	0.44	0.67

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 3. Unconsolidated Joint Venture

On October 1, 2017, the Company closed the digital banking joint venture between Live Oak Banking Company and First Data Corporation ("First Data"). The new company, named Apiture, combines First Data's and the Bank's digital banking platforms, products, services, and certain human resources used in the creation and delivery of technology solutions for financial institutions. The contributed assets of both the Company and First Data are considered businesses in accordance with relevant accounting standards. At closing both the Bank and First Data received equal voting interests in Apiture in exchange for their respective contributions. As a term of the closing agreements, First Data is entitled to a preference in Apiture's cash earnings from the date of closing through December 31, 2017 and all of 2018, not to exceed $18.0 million and $18.9 million, respectively.

As a result of this transaction, the Company and First Data each have, directly or indirectly, equal voting interests in Apiture. In addition, the Company has analyzed the Contribution Agreement and determined that Apiture is not a variable interest entity. The Company also considered the partners' participating rights under the Contribution Agreement and determined that the joint venture partners have the ability to participate in major decisions, which equates to shared decision making. Accordingly, the Bank has significant influence but does not control the joint venture. Therefore, the joint venture will be accounted for as an equity method investment effective on October 1, 2017 (the date of the transaction). Under the equity method of accounting, the net equity investment of the Bank and the Bank's share of net income or loss from the unconsolidated entity will be reflected in the Company's consolidated balance sheets and the consolidated statements of income.

The estimated fair value of Apiture at the date of closing was approximately $150 million. Based on the aforementioned cash earnings preference to First Data during 2017 and 2018, the valuation of equity interests received in exchange for contributions by the two initial investors was unequal. As a consequence of this preference the initial economic interest in Apiture for First Data was equal to 54.7% or $82.0 million, while the Company's initial economic interest in Apiture was equal to 45.3%, or $68.0 million. As the Company had no carrying amount for its contribution in the formation of Apiture, the transaction resulted in the recognition of a $68.0 million equity method investment included in other assets on the consolidated balance sheet and a one-time pre-tax gain of the same amount reflected in gain on contribution to equity method investment on the consolidated income statement at the date of closing. The estimated fair value of Apiture and the related initial economic interests of investors were based on a discounted cash flows which are inherently subjective by nature.

As a result of unequal economic interests arising from the cash earnings preference, distribution rights and priorities set forth in the Contribution Agreement differ from what is reflected by the underlying percentage voting interests of First Data and Live Oak. Accordingly, GAAP income (loss) is allocated utilizing the hypothetical liquidation at book value ("HLBV") method. Under the HLBV method, in which we allocate income or loss based on the change in each unitholders' claim on the net assets of Apiture at period end, after adjusting for any distributions or contributions made during such period. The HLBV method is commonly applied to equity investments where cash distribution percentages vary at different points in time and are not directly linked to an equity holder's ownership percentage. The HLBV method is a balance sheet-focused approach. A calculation is prepared at each balance sheet date to determine the amount that unitholders would receive if Apiture were to liquidate all of its assets (at GAAP net book value) and distribute the resulting proceeds to its creditors and unitholders based on the contractually defined liquidation priorities. The difference between the calculated liquidation distribution amounts at the beginning and the end of the reporting period, after adjusting for capital contributions and distributions, is used to derive each unitholder's share of the income (loss) for the period. Due to the stated cash earnings preference to First Data and because the HLBV method incorporates non-cash items such as amortization expense, in any given period, income or loss may be allocated disproportionately to unitholders as compared to their respective ownership percentage in our operating partnership, and net income (loss) attributable to the Bank could be more or less net income than actual cash distributions received and more or less income or loss than what may be received in the event of an actual liquidation.

Additionally, the HLBV method could result in no net income attributable to the Company during a period when Apiture reports net income.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 4. Securities
The carrying amount of securities and their approximate fair values are reflected in the following table:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
December 31, 2017				
US government agencies	$ 22,778	$ 3	$ 157	$22,624
Residential mortgage-backed securities	70,167	1	1,472	68,696
Mutual fund	2,090	—	55	2,035
Total	$ 95,035	$ 4	$ 1,684	$93,355
December 31, 2016				
US government agencies	$ 17,803	$ 52	$ 32	$17,823
Residential mortgage-backed securities	52,301	3	1,031	51,273
Mutual fund	2,012	—	52	1,960
Total	$ 72,116	$ 55	$ 1,115	$71,056

During the year ended December 31, 2017, there were no sales of securities.

During the year ended December 31, 2016, one security was sold for $1.9 million resulting in a net gain of $1 thousand.

Twelve securities were sold for $17.7 million resulting in a net gain on sale of securities of $13 thousand during the year ended December 31, 2015.
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	
December 31, 2017	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
US government agencies	$14,842	$ 100	$6,465	$ 57	$21,307	$ 157
Residential mortgage-backed securities	23,481	439	40,648	1,033	64,129	1,472
Mutual fund	—	—	2,035	55	2,035	55
Total	$38,323	$ 539	$49,148	$ 1,145	$87,471	$ 1,684

	Less Than 12 Months		12 Months or More		Total	
December 31, 2016	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
US government agencies	$6,508	$ 32	$—	$ —	$6,508	$ 32
Residential mortgage-backed securities	49,109	1,017	1,635	14	50,744	1,031
Mutual fund	1,960	52	—	—	1,960	52
Total	$57,577	$ 1,101	$1,635	$ 14	$59,212	$ 1,115

At December 31, 2017, there were twenty-three residential mortgage-backed securities, three US government agencies and the 504 mutual fund in unrealized loss positions for greater than 12 months and eight residential mortgage-backed securities and five US government agency securities in unrealized loss position for less than 12 months. Unrealized losses at December 31, 2016 consisted of two residential mortgage-backed securities in unrealized loss positions for greater than 12 months and three US government agency securities, twenty-two residential mortgage-backed securities and the 504 Fund mutual fund investment in unrealized loss positions for less than 12 months.

108

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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 these securities until they recover their value, none of the securities are deemed to be other than temporarily impaired.

All residential mortgage-backed securities in the Company's portfolio at December 31, 2017 and December 31, 2016 were backed by US government sponsored enterprises ("GSEs").

The following is a summary of investment securities by maturity:

	Available-for-sale	
	Amortized cost	Fair value
US government agencies		
Within one year	$6,323	$6,295
One to five years	16,455	16,329
Total	22,778	22,624
Residential mortgage-backed securities		
Five to ten years	6,815	6,701
After 10 years	63,352	61,995
Total	70,167	68,696
Total	$92,945	$91,320

The table above reflects contractual maturities. Actual results will differ as the loans underlying the mortgage-backed securities may repay sooner than scheduled. This table excludes the 504 Fund mutual fund investment.

At December 31, 2017 and 2016, investment securities with a fair market value of $2.5 million and $1.2 million, respectively, were pledged to the Company's trust department for uninsured trust assets held by the trust department and $100 thousand was pledged to the Ohio State Treasurer to allow the Company's trust department to conduct business in the State of Ohio. In addition, $1.5 million, was pledged to secure a line of credit with the Company's correspondent bank at December 31, 2016.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 5. Loans 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 owner occupied 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 loan 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.

110

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Loans and leases consist of the following:

	December 31, 2017	December 31, 2016
Commercial & Industrial		
Agriculture	$3,274	$1,714
Death Care Management	13,495	9,684
Healthcare	43,301	37,270
Independent Pharmacies	99,920	83,677
Registered Investment Advisors	93,770	68,335
Veterinary Industry	46,387	38,930
Other Industries	184,903	94,836
Total	485,050	334,446
Construction & Development		
Agriculture	34,188	32,372
Death Care Management	6,119	3,956
Healthcare	49,770	30,467
Independent Pharmacies	1,496	2,013
Registered Investment Advisors	376	294
Veterinary Industry	13,184	11,514
Other Industries	58,120	31,715
Total	163,253	112,331
Commercial Real Estate		
Agriculture	46,717	5,591
Death Care Management	67,381	52,510
Healthcare	126,631	114,281
Independent Pharmacies	19,028	15,151
Registered Investment Advisors	11,789	11,462
Veterinary Industry	113,932	102,906
Other Industries	134,172	46,245
Total	519,650	348,146
Commercial Land		
Agriculture	178,897	113,569
Total	178,897	113,569
Total Loans and Leases [1]	1,346,850	908,492
Net Deferred Costs	8,545	7,648
Discount on SBA 7(a) and USDA Unguaranteed [2]	(11,422)	(8,574)
Loans and Leases, Net of Unearned	$1,343,973	$907,566

1 Total loans and leases include $99.7 million and $37.7 million of U.S. government guaranteed loans as of December 31, 2017 and December 31, 2016, 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.

111

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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 each borrower’s 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. Debt service coverage (“DSC”) is over 1.75X based on historical results. Secondary source of repayment is strong, with a loan to value (“LTV”) of 65% or less if secured solely by commercial real estate (“CRE”). Discounted collateral coverage from all sources should exceed 125%. Guarantors have credit scores above 740.

Quality (2 Rated): These loans and leases are of good quality, with good, well-documented sources of repayment. DSC is over 1.25X based on historical or pro-forma results. Secondary source of repayment is good, with a LTV of 75% or less if secured solely by CRE. Discounted collateral coverage should exceed 100%. Guarantors have credit scores above 700.

Acceptable (3 rated): These loans and leases are of acceptable quality, with acceptable sources of repayment. DSC of over 1.00X based on historical or pro-forma results. Companies that do not meet these credit metrics must be evaluated to determine if they should be graded below this level.

Acceptable (4 rated): These loans and leases are considered very weak pass. These loans and leases are riskier than a 3-rated credit, but due to various mitigating factors are not considered a Special Mention or worse. The mitigating factors must clearly be identified to offset further downgrade. Examples of loans and leases that may be put in this category include start-up loans and leases and loans and leases with less than 1:1 cash flow coverage with other sources of repayment.

Special mention (5 rated): These loans and leases are considered as emerging problems, with potentially unsatisfactory characteristics. These loans and leases require greater management attention. A loan or lease may be put into this category if the Bank is unable to obtain financial reporting from a company to fully evaluate its position.

Substandard (6 rated): Loans and leases graded Substandard are inadequately protected by current sound net worth, paying capacity of the borrower, or pledged collateral. They typically have unsatisfactory characteristics causing more than acceptable levels of risk, and have one or more well-defined weaknesses that could jeopardize the repayment of the debt.

Doubtful (7 rated): Loans and leases graded Doubtful have inherent weaknesses that make collection or liquidation in full questionable. Loans and leases graded Doubtful must be placed on non-accrual status.

Loss (8 rated): Loss rated loans and leases are considered uncollectible and of such little value that their continuance as an active Bank asset is not warranted. The asset should be charged off, even though partial recovery may be possible in the future.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following tables summarize the risk grades of each category:

	Risk Grades 1 - 4	Risk Grade 5	Risk Grades 6 - 8	Total
December 31, 2017				
Commercial & Industrial				
Agriculture	$ 3,052	$ 222	$ —	$ 3,274
Death Care Management	13,371	117	7	13,495
Healthcare	36,530	2,246	4,525	43,301
Independent Pharmacies	86,152	5,541	8,227	99,920
Registered Investment Advisors	90,911	2,134	725	93,770
Veterinary Industry	42,313	1,704	2,370	46,387
Other Industries	184,540	363	—	184,903
Total	456,869	12,327	15,854	485,050
Construction & Development				
Agriculture	31,738	2,450	—	34,188
Death Care Management	6,119	—	—	6,119
Healthcare	47,813	699	1,258	49,770
Independent Pharmacies	1,496	—	—	1,496
Registered Investment Advisors	376	—	—	376
Veterinary Industry	13,184	—	—	13,184
Other Industries	58,120	—	—	58,120
Total	158,846	3,149	1,258	163,253
Commercial Real Estate				
Agriculture	46,717	—	—	46,717
Death Care Management	60,671	3,881	2,829	67,381
Healthcare	112,321	9,992	4,318	126,631
Independent Pharmacies	15,641	1,825	1,562	19,028
Registered Investment Advisors	11,649	140	—	11,789
Veterinary Industry	97,065	2,948	13,919	113,932
Other Industries	133,493	679	—	134,172
Total	477,557	19,465	22,628	519,650
Commercial Land				
Agriculture	176,811	2,086	—	178,897
Total	176,811	2,086	—	178,897
Total[1]	$ 1,270,083	$ 37,027	$ 39,740	$ 1,346,850

113

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

	Risk Grades 1 - 4	Risk Grade 5	Risk Grades 6 - 8	Total
December 31, 2016				
Commercial & Industrial				
Agriculture	$ 1,656	$ 58	$ —	$ 1,714
Death Care Management	9,452	121	111	9,684
Healthcare	28,723	681	7,866	37,270
Independent Pharmacies	73,948	6,542	3,187	83,677
Registered Investment Advisors	65,297	2,246	792	68,335
Veterinary Industry	34,407	1,967	2,556	38,930
Other Industries	94,736	100	—	94,836
Total	308,219	11,715	14,512	334,446
Construction & Development				
Agriculture	32,061	—	311	32,372
Death Care Management	3,956	—	—	3,956
Healthcare	30,467	—	—	30,467
Independent Pharmacies	2,013	—	—	2,013
Registered Investment Advisors	294	—	—	294
Veterinary Industry	9,725	1,789	—	11,514
Other Industries	31,715	—	—	31,715
Total	110,231	1,789	311	112,331
Commercial Real Estate				
Agriculture	5,591	—	—	5,591
Death Care Management	46,427	4,314	1,769	52,510
Healthcare	103,097	7,142	4,042	114,281
Independent Pharmacies	12,654	1,968	529	15,151
Registered Investment Advisors	11,462	—	—	11,462
Veterinary Industry	88,168	3,995	10,743	102,906
Other Industries	46,245	—	—	46,245
Total	313,644	17,419	17,083	348,146
Commercial Land				
Agriculture	112,333	1,138	98	113,569
Total	112,333	1,138	98	113,569
Total[1]	$ 844,427	$ 32,061	$ 32,004	$ 908,492

1 Total loans and leases include $99.7 million of U.S. government guaranteed loans as of December 31, 2017, segregated by risk grade as follows: Risk Grades 1 – 4 = $65.0 million, Risk Grade 5 = $6.7 million, Risk Grades 6 – 8 = $28.0 million. As of December 31, 2016 total loans and leases include $37.7 million of U.S. government guaranteed loans, segregated by risk grade as follows: Risk Grades 1 – 4 = $8.7 million, Risk Grade 5 = $7.7 million, Risk Grades 6 – 8 = $21.3 million.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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	Current	Total Loans and Leases	90 Days or More Past Due & Still Accruing
December 31, 2017								
Commercial & Industrial								
Agriculture	$ —	$ —	$ —	$ —	$ —	$ 3,274	$ 3,274	$ —
Death Care Management	—	—	—	—	—	13,495	13,495	—
Healthcare	788	131	14	3,004	3,937	39,364	43,301	—
Independent Pharmacies	236	2,930	1,349	3,376	7,891	92,029	99,920	—
Registered Investment Advisors	—	321	—	—	321	93,449	93,770	—
Veterinary Industry	212	594	508	797	2,111	44,276	46,387	—
Other Industries	—	—	—	—	—	184,903	184,903	—
Total	1,236	3,976	1,871	7,177	14,260	470,790	485,050	—
Construction & Development								
Agriculture	—	—	—	—	—	34,188	34,188	—
Death Care Management	—	—	—	—	—	6,119	6,119	—
Healthcare	—	—	—	—	—	49,770	49,770	—
Independent Pharmacies	—	—	—	—	—	1,496	1,496	—
Registered Investment Advisors	—	—	—	—	—	376	376	—
Veterinary Industry	—	—	—	—	—	13,184	13,184	—
Other Industries	—	—	—	—	—	58,120	58,120	—
Total	—	—	—	—	—	163,253	163,253	—
Commercial Real Estate								
Agriculture	—	—	—	—	—	46,717	46,717	—
Death Care Management	—	—	168	1,391	1,559	65,822	67,381	—
Healthcare	40	54	1,916	1,550	3,560	123,071	126,631	—
Independent Pharmacies	—	—	—	1,562	1,562	17,466	19,028	—
Registered Investment Advisors	—	—	—	—	—	11,789	11,789	—
Veterinary Industry	1,804	3,226	—	4,765	9,795	104,137	113,932	—
Other Industries	—	—	—	—	—	134,172	134,172	—
Total	1,844	3,280	2,084	9,268	16,476	503,174	519,650	—
Commercial Land								
Agriculture	—	—	—	—	—	178,897	178,897	—
Total	—	—	—	—	—	178,897	178,897	—

Total[1]	$ 3,080	$ 7,256	$ 3,955	$ 16,445	$ 30,736	$1,316,114	$1,346,850	$ —

115

Table of Contents

Live Oak Bancshares, Inc.
Notes to 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	Current	Total Loans and Leases	90 Days or More Past Due & Still Accruing
December 31, 2016								
Commercial & Industrial								
Agriculture	$ —	$ —	$ —	$—	$ —	$ 1,714	$ 1,714	$ —
Death Care Management	—	—	—	—	—	9,684	9,684	—
Healthcare	—	272	496	5,920	6,688	30,582	37,270	—
Independent Pharmacies	42	293	408	2,349	3,092	80,585	83,677	—
Registered Investment Advisors	—	—	—	—	—	68,335	68,335	—
Veterinary Industry	32	151	646	1,441	2,270	36,660	38,930	—
Other Industries	—	—	—	—	—	94,836	94,836	—
Total	74	716	1,550	9,710	12,050	322,396	334,446	—
Construction & Development								
Agriculture	231	80	—	—	311	32,061	32,372	—
Death Care Management	—	—	—	—	—	3,956	3,956	—
Healthcare	—	—	—	—	—	30,467	30,467	—
Independent Pharmacies	—	—	—	—	—	2,013	2,013	—
Registered Investment Advisors	—	—	—	—	—	294	294	—
Veterinary Industry	—	—	—	—	—	11,514	11,514	—
Other Industries	—	—	—	—	—	31,715	31,715	—
Total	231	80	—	—	311	112,020	112,331	—
Commercial Real Estate								
Agriculture	—	—	—	—	—	5,591	5,591	—
Death Care Management	—	—	188	1,423	1,611	50,899	52,510	—
Healthcare	—	—	3,180	45	3,225	111,056	114,281	—
Independent Pharmacies	—	—	—	529	529	14,622	15,151	—
Registered Investment Advisors	—	—	—	—	—	11,462	11,462	—
Veterinary Industry	898	3,981	737	5,158	10,774	92,132	102,906	—
Other Industries	—	—	—	—	—	46,245	46,245	—
Total	898	3,981	4,105	7,155	16,139	332,007	348,146	—
Commercial Land								
Agriculture	58	40	—	—	98	113,471	113,569	—
Total	58	40	—	—	98	113,471	113,569	—
Total[1]	$ 1,261	$ 4,817	$ 5,655	$ 16,865	$ 28,598	$ 879,894	$ 908,492	$ —

1 Total loans and leases include $99.7 million of U.S. government guaranteed loans as of December 31, 2017, of which $15.0 million is greater than 90 days past due, $7.4 million is 30-89 days past due and $77.3 million is included in current loans and leases as presented above. As of December 31, 2016, total loans and leases include $37.7 million of U.S. government guaranteed loans, of which $13.7 million is greater than 90 days past due, $6.8

million is 30-89 days past due and $17.2 million is included in current loans and leases as presented above.

116

Table of Contents

Live Oak Bancshares, Inc.
Notes to 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, $622 thousand and $794 thousand for the years ended December 31, 2017, 2016, and 2015, respectively. All nonaccrual loans and leases are included in the held for investment portfolio. Nonaccrual loans and leases as of December 31, 2017 and December 31, 2016 are as follows:

December 31, 2017	Loan and Lease Balance	Guaranteed Balance	Unguaranteed Exposure
Commercial & Industrial			
Healthcare	$3,806	$ 3,235	$ 571
Independent Pharmacies	4,961	3,906	1,055
Veterinary Industry	1,517	1,478	39
Total	10,284	8,619	1,665
Commercial Real Estate			
Death Care Management	1,559	1,237	322
Healthcare	3,506	2,719	787
Independent Pharmacies	1,562	1,562	—
Veterinary Industry	6,569	5,733	836
Total	13,196	11,251	1,945
Total	$23,480	$ 19,870	$ 3,610

December 31, 2016	Loan and Lease Balance	Guaranteed Balance	Unguaranteed Exposure
Commercial & Industrial			
Healthcare	$6,416	$ 5,152	$ 1,264
Independent Pharmacies	2,799	2,204	595
Veterinary Industry	2,119	2,079	40
Total	11,334	9,435	1,899
Construction & Development			
Agriculture	231	173	58
Total	231	173	58
Commercial Real Estate			
Death Care Management	1,611	1,263	348
Healthcare	3,225	2,731	494
Independent Pharmacies	529	—	529
Veterinary Industry	6,793	5,395	1,398
Total	12,158	9,389	2,769
Commercial Land			
Agriculture	58	—	58
Total	58	—	58
Total	$23,781	$ 18,997	$ 4,784

117

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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 more than 89 days and still accruing interest.
- Any loan or lease which has been modified such that it meets the definition of a TDR.

The Company’s policy for impaired loan 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 or 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 “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 and 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.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following tables detail 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
December 31, 2017					
Beginning Balance	$ 1,693	$ 5,897	$ 8,413	$ 2,206	$18,209
Charge offs	—	(1,177)	(2,617)	(58)	(3,852)
Recoveries	—	191	101	5	297
Provision	337	4,269	4,854	76	9,536
Ending Balance	$ 2,030	$ 9,180	$ 10,751	$ 2,229	$24,190
December 31, 2016					
Beginning Balance	$ 1,064	$ 2,486	$ 2,766	$ 1,099	$7,415
Charge offs	—	(707)	(1,464)	(63)	(2,234)
Recoveries	—	6	486	—	492
Provision	629	4,112	6,625	1,170	12,536
Ending Balance	$ 1,693	$ 5,897	$ 8,413	$ 2,206	$18,209
December 31, 2015					
Beginning Balance	$ 586	$ 2,291	$ 1,369	$ 161	$4,407
Charge offs	—	(164)	(978)	—	(1,142)
Recoveries	—	131	213	—	344
Provision	478	228	2,162	938	3,806
Ending Balance	$ 1,064	$ 2,486	$ 2,766	$ 1,099	$7,415

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

December 31, 2017	Construction & Development	Commercial Real Estate	Commercial & Industrial	Commercial Land	Total
Allowance for Loan and Lease Losses:					
Loans and leases individually evaluated for impairment	$ 157	$ 1,502	$ 1,126	$ —	$2,785
Loans and leases collectively evaluated for impairment[2]	1,873	7,678	9,625	2,229	21,405
Total allowance for loan and lease losses	$ 2,030	$ 9,180	$ 10,751	$ 2,229	$24,190
Loans and leases receivable [1]:					
Loans and leases individually evaluated for impairment	$ 1,237	$ 17,105	$ 8,672	$ —	$27,014
Loans and leases collectively evaluated for impairment[2]	162,016	502,545	476,378	178,897	1,319,836
Total loans and leases receivable	$ 163,253	$ 519,650	$ 485,050	$ 178,897	$1,346,850

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

December 31, 2016	Construction & Development	Commercial Real Estate	Commercial & Industrial	Commercial Land	Total
Allowance for Loan and Lease Losses:					
Loans and leases individually evaluated for impairment	$ —	$ 1,496	$ 1,458	$ —	$2,954
Loans and leases collectively evaluated for impairment[2]	1,693	4,401	6,955	2,206	15,255
Total allowance for loan and lease losses	$ 1,693	$ 5,897	$ 8,413	$ 2,206	$18,209
Loans and Leases Receivable [1]:					
Loans and leases individually evaluated for impairment	$ —	$ 16,359	$ 6,884	$ —	$23,243
Loans and leases collectively evaluated for impairment[2]	112,331	331,787	327,562	113,569	885,249
Total loans and leases receivable	$ 112,331	$ 348,146	$ 334,446	$ 113,569	$908,492

1 Loans and leases receivable includes $99.7 million of U.S. government guaranteed loans as of December 31, 2017, of which $28.1 million are impaired. As of December 31, 2016, loans and leases receivable includes $37.7 million of U.S. government guaranteed loans, of which $22.1 million are considered impaired.

2 Included in loans and leases collectively evaluated for impairment are impaired loans and leases with individual unguaranteed exposure of less than $100 thousand. As of December 31, 2017, these balances totaled $14.8 million, of which $13.2 million are guaranteed by the U.S. government and $1.6 million are unguaranteed. As of December 31, 2016, these balances totaled $12.3 million, of which $10.0 million are guaranteed by the U.S. government and $2.3 million are unguaranteed. The allowance for loan and lease losses associated with these loans and leases totaled $279 thousand and $438 thousand as of December 31, 2017 and December 31, 2016, respectively.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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

December 31, 2017	Recorded Investment	Guaranteed Balance	Unguaranteed Exposure
Commercial & Industrial			
Death Care Management	$ 7	$ —	$ 7
Healthcare	4,551	3,235	1,316
Independent Pharmacies	8,571	6,356	2,215
Registered Investment Advisors	733	—	733
Veterinary Industry	2,762	2,001	761
Total	16,624	11,592	5,032
Construction & Development			
Healthcare	1,237	944	293
Total	1,237	944	293
Commercial Real Estate			
Death Care Management	2,831	1,237	1,594
Healthcare	4,315	2,967	1,348
Independent Pharmacies	1,562	1,562	—
Veterinary Industry	15,266	9,768	5,498
Total	23,974	15,534	8,440
Commercial Land			
Agriculture	—	—	—
Total	—	—	—
Total	$ 41,835	$ 28,070	$ 13,765

December 31, 2016	Recorded Investment	Guaranteed Balance	Unguaranteed Exposure
Commercial & Industrial			
Death Care Management	$ 111	$ —	$ 111
Healthcare	7,923	5,453	2,470
Independent Pharmacies	3,514	2,495	1,019
Registered Investment Advisors	796	—	796
Veterinary Industry	2,882	2,199	683
Total	15,226	10,147	5,079
Construction & Development			
Agriculture	300	233	67
Total	300	233	67
Commercial Real Estate			
Death Care Management	1,768	1,264	504
Healthcare	4,044	2,985	1,059
Independent Pharmacies	528	—	528
Veterinary Industry	13,561	7,518	6,043
Total	19,901	11,767	8,134
Commercial Land			
Agriculture	91	—	91
Total	91	—	91
Total	$ 35,518	$ 22,147	$ 13,371

Table of Contents

Live Oak Bancshares, Inc.
Notes to 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.

	December 31, 2017				
	Recorded Investment				
	With a Recorded Allowance	With No Recorded Allowance	Total	Unpaid Principal Balance	Related Allowance Recorded
Commercial & Industrial					
Death Care Management	$—	$ 7	$7	$7	$ —
Healthcare	3,521	1,030	4,551	5,643	165
Independent Pharmacies	8,154	417	8,571	9,078	521
Registered Investment Advisors	662	71	733	725	504
Veterinary Industry	2,505	257	2,762	3,113	182
Total	14,842	1,782	16,624	18,566	1,372
Construction & Development					
Healthcare	1,237	—	1,237	1,258	157
Total	1,237	—	1,237	1,258	157
Commercial Real Estate					
Death Care Management	2,221	610	2,831	2,964	260
Healthcare	3,717	598	4,315	4,332	192
Independent Pharmacies	1,562	—	1,562	1,933	8
Veterinary Industry	13,711	1,555	15,266	16,584	1,075
Total	21,211	2,763	23,974	25,813	1,535
Commercial Land					
Agriculture	—	—	—	58	—
Total	—	—	—	58	—
Total Impaired Loans and Leases	$37,290	$ 4,545	$41,835	$45,695	$ 3,064

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

	December 31, 2016				
	Recorded Investment				
	With a Recorded Allowance	With No Recorded Allowance	Total	Unpaid Principal Balance	Related Allowance Recorded
Commercial & Industrial					
Death Care Management	$ 8	$ 103	$ 111	$ 111	$ 1
Healthcare	7,259	664	7,923	8,120	778
Independent Pharmacies	3,184	330	3,514	3,610	327
Registered Investment Advisors	796	—	796	792	514
Veterinary Industry	2,754	128	2,882	3,369	106
Total	14,001	1,225	15,226	16,002	1,726
Construction & Development					
Agriculture	300	—	300	311	13
Total	300	—	300	311	13
Commercial Real Estate					
Death Care Management	1,580	188	1,768	1,904	34
Healthcare	3,514	530	4,044	4,042	47
Independent Pharmacies	528	—	528	529	284
Veterinary Industry	11,193	2,368	13,561	14,283	1,273
Total	16,815	3,086	19,901	20,758	1,638
Commercial Land					
Agriculture	91	—	91	161	15
Total	91	—	91	161	15
Total Impaired Loans and Leases	$ 31,207	$ 4,311	$ 35,518	$ 37,232	$ 3,392

Table of Contents

Live Oak Bancshares, Inc.
Notes to 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.

	December 31, 2017		December 31, 2016		December 31, 2015	
	Average Balance	Interest Income Recognized	Average Balance	Interest Income Recognized	Average Balance	Interest Income Recognized
Commercial & Industrial						
Death Care Management	$8	$ —	$112	$ 1	$—	$ —
Healthcare	6,101	53	7,513	81	3,375	276
Independent Pharmacies	6,018	100	2,570	76	1,701	148
Registered Investment Advisors	759	50	817	22	—	—
Veterinary Industry	2,523	45	2,537	35	2,029	109
Total	15,409	248	13,549	215	7,105	533
Construction & Development						
Agriculture	—	—	317	—	—	—
Healthcare	1,240	11	—	—	—	—
Total	1,240	11	317	—	—	—
Commercial Real Estate						
Death Care Management	2,882	50	1,789	7	1,420	—
Healthcare	4,381	49	4,093	41	1,403	—
Independent Pharmacies	1,708	—	538	3	—	—
Veterinary Industry	14,605	536	13,554	336	10,870	556
Other Industries	—	—	—	—	—	—
Total	23,576	635	19,974	387	13,693	556
Commercial Land						
Agriculture	113	—	294	—	—	—
Total	113	—	294	—	—	—
Total	$40,338	$ 894	$34,134	$ 602	$20,798	$ 1,089

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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

	December 31, 2017			December 31, 2016			December 31, 2015		
	All Restructurings			All Restructurings			All Restructurings		
	Number of Loans and Leases	Pre-modification Recorded Investment	Post-modification Recorded Investment	Number of Loans and Leases	Pre-modification Recorded Investment	Post-modification Recorded Investment	Number of Loans and Leases	Pre-modification Recorded Investment	Post-modification Recorded Investment
Interest Only									
Commercial & Industrial									
Healthcare	—	$ —	$ —	—	$ —	$ —	3	$ 1,087	$ 1,087
Commercial Real Estate									
Healthcare	—	—	—	—	—	—	1	94	94
Total Interest Only	—	—	—	—	—	—	4	1,181	1,181
Extended Amortization									
Commercial & Industrial									
Independent Pharmacies	—	—	—	—	—	—	2	322	308
Total Extended Amortization	—	—	—	—	—	—	2	322	308
Payment Deferral and Extended Amortization									
Commercial & Industrial									
Independent Pharmacies	1	262	262	—	—	—	—	—	—
Total Payment Deferral and Extended Amortization	1	262	262	—	—	—	—	—	—
Payment Deferral									
Commercial & Industrial									
Veterinary Industry	2	559	559	1	420	420	—	—	—
Healthcare	—	—	—	1	440	440	—	—	—
Total Payment Deferral	2	559	559	2	860	860	—	—	—
Total	3	$ 821	$ 821	2	$ 860	$ 860	6	$ 1,503	$ 1,489

Concessions made to improve a loan and lease’s performance have varying degrees of success. During the twelve months ended December 31, 2017, one TDR that was modified within the twelve months ended December 31, 2017 subsequently defaulted. This TDR was a commercial and industrial independent pharmacy loan that was previously modified for payment deferral and extended amortization. The recorded investment for this TDR at December 31, 2017 was $1.1 million. During the twelve months ended December 31, 2016, one TDR that was modified within the twelve months ended December 31, 2016 subsequently defaulted. This TDR was a commercial and industrial healthcare loan that was previously modified for payment deferral. There was no recorded investment for this TDR at December 31, 2016. No TDRs that were modified within the previous twelve months ending December 31, 2015 subsequently defaulted.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 6. 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 $2.44 billion, $2.22 billion and $1.78 billion at December 31, 2017,2016 and 2015, respectively. The unpaid principal balance for all loans serviced for others was $2.54 billion, $2.35 billion and $1.94 billion at December 31, 2017, 2016 and 2015, respectively.

The following summarizes the activity pertaining to servicing rights:

	2017	2016
Balance at beginning of period	$51,994	$44,230
Additions, net	14,028	16,584
Fair value changes:		
Due to changes in valuation inputs or assumptions	(2,722)	(955)
Decay due to increases in principal paydowns or runoff	(11,002)	(7,865)
Balance at end of period	$52,298	$51,994

The fair value of servicing rights was determined using discount rates ranging from 0.00% to 15.40% on December 31, 2017, and 8.70% to 13.90% on December 31, 2016. The fair value of servicing rights was determined using prepayment speeds ranging from 0.00% to 11.50% on December 31, 2017 and 2.40% to 9.80% on December 31, 2016, depending on the stratification of the specific right. Changes to fair value are reported in loan servicing revenue and 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.

Note 7. Premises, Equipment and Leases

Components of Premises and Equipment

Components of premises and equipment and total accumulated depreciation at December 31, 2017 and 2016 are as follows:

	2017	2016
Buildings	$21,875	$21,713
Land improvements	3,566	3,524
Furniture and equipment	10,391	9,735
Computers and software	561	444
Leasehold improvements	7,539	612
Land	8,650	3,749
Transportation	44,863	23,470
Solar panels	90,640	—
Deposits on fixed assets	6,534	10,320
Premises and equipment, total	194,619	73,567
Less accumulated depreciation	(15,829)	(8,906)
Premises and equipment, net of depreciation	$178,790	$64,661

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Deposits on fixed assets consist primarily of preliminary costs related the Company's planned third building and parking deck at its headquarters campus and initial deposit on a new airplane. Outstanding contract commitments for the new airplane purchase is $25.5 million with the final purchase payments expected in the second quarter of 2019. Depreciation expense for the years ended December 31, 2017, 2016 and 2015 amounted to $9.6 million, $4.2 million and $2.9 million, respectively.

Lease Obligations

Pursuant to the terms of non-cancelable lease agreements in effect at December 31, 2017 pertaining to Company premises and equipment, future minimum rent commitments under various operating leases are as follows:

Year	Amount
2018	$ 964
2019	793
2020	380
2021	232
2022	237
Thereafter	230
Total	$ 2,836

Certain leases contain renewal options for various additional terms after the expiration of the current lease term. Lease payments for the renewal period are not included in the future minimum lease table above.

The Company’s total rent expense related to the aforementioned leases for 2017, 2016, and 2015 was $848 thousand, $632 thousand and $385 thousand, respectively.

Note 8. Deposits

The types of deposits at December 31, 2017 and 2016 are:

	2017	2016
Noninterest-bearing deposits	$ 57,868	$ 27,990
Interest-bearing deposits:		
Interest-bearing checking	36,978	27,402
Money market	188,146	489,978
Savings	696,989	—
Time deposits	1,280,282	939,706
Total	2,202,395	1,457,086
Total deposits	$ 2,260,263	$ 1,485,076

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The aggregate amount of time deposits in denominations of $250 thousand or more at December 31, 2017 and 2016 was approximately $234.4 million and $253.7 million, respectively. At December 31, 2017 the scheduled maturities of total time deposits are as follows:

Year	Amount
2018	$ 892,164
2019	116,615
2020	105,746
2021	66,420
2022	23,263
Thereafter	76,074
Total	$ 1,280,282

There were no pledged certificates of deposit as of December 31, 2017 and December 31, 2016.

Note 9. Borrowings

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

	December 31, 2017	December 31, 2016
Short term borrowings		
On October 20, 2017, the Company entered into a revolving line of credit of $20 million with an unaffiliated commercial bank. The note is unsecured and accrues interest at LIBOR plus 1.750% for a term of 12 months. Payments are interest only with all principal and accrued interest due on October 19, 2018. The terms of this loan require the Company to maintain minimum capital and debt service coverage ratios. No advances have been made to this line of credit and there is $20 million of available credit remaining at December 31, 2017.	$ —	$ —
Total short term borrowings	$ —	$ —

	December 31, 2017	December 31, 2016
Long term borrowings		
On September 11, 2014, the Company financed the construction of an additional building located on the Company's Tiburon Drive main campus for a $24 million construction line of credit with an unaffiliated commercial bank, secured by both properties at its Tiburon Drive main facility location. Payments were interest only through September 11, 2016 at a fixed rate of 3.95% for a term of 84 months. Monthly principal and interest payments of $146 thousand began in October 2016 with all principal and accrued interest due on September 11, 2021. The construction line is fully disbursed and there was no remaining available credit on this construction line at December 31, 2017.	$ 22,990	$ 23,864
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. Interest accrues at prime plus 1% with monthly principal and interest payments over a term of 60 months. The interest rate at December 31, 2017 is 5.25%. The maturity date is October 5, 2019. The pledged collateral is classified in other assets with a fair value of $3.6 million at December 31, 2017. Underlying loans carry a risk grade of 3 and are	3,574	3,979

current with no delinquencies.		
On September 18, 2014, the Company entered into a note payable revolving line of credit of $8.1 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 is unsecured and accrues interest at Prime minus 0.50% for a term of 24 months. Payments are interest only with all principal and accrued interest due on April 30, 2019. The terms of this loan require the Company to maintain minimum capital, liquidity and Texas ratios. This line of credit was paid in full on August 25, 2017, and there is $25 million of available credit remaining at December 31, 2017.	—	—
Total long term borrowings	$ 26,564	$ 27,843

128

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The Company may purchase federal funds through unsecured federal funds lines of credit with various correspondent banks, which totaled $47.5 million and $26.5 million as of December 31, 2017 and 2016. 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 December 31, 2017 or 2016.

The Company has entered into a repurchase agreement with a third party for up to $5 million as of December 31, 2017 and 2016. 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 December 31, 2017 and 2016.

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 $348.5 million and $281.3 million as of December 31, 2017 and 2016, respectively. At December 31, 2017 and 2016, the Company had approximately $189.1 million and $142.7 million, respectively, in borrowing capacity available under these arrangements with no outstanding balance as of December 31, 2017 or 2016.

Note 10. Income Taxes

The components of income tax expense for the years ended December 31 are as follows:

	2017	2016	2015
Current income tax (benefit) expense:			
Federal	$(15,424)	$6,487	$11,387
State	1,162	1,244	1,472
Total current tax (benefit) expense	(14,262)	7,731	12,859
Deferred income tax (benefit) expense:			
Federal	8,389	(3,848)	992
State	3,628	(440)	(56)
Total deferred tax (benefit) expense	12,017	(4,288)	936
Income tax (benefit) expense, as reported	$(2,245)	$3,443	$13,795

Reported income tax expense differed from the amounts computed by applying the U.S. federal statutory income tax rate of 35% to income before income taxes for the years ended December 31, 2017, 2016 and 2015 as follows:

	2017	2016	2015
Income tax expense computed at the statutory rate	$34,389	$6,023	$12,039
State income tax, net of federal benefit	3,114	523	920
Stock-based compensation expense	(380)	768	423
Change in U.S. tax rate	(18,921)	—	—
Other	62	525	413
Decrease in taxes due to investment tax credit	(20,509)	(4,396)	—
Total income tax expense	$(2,245)	$3,443	$13,795

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cut and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code that affects 2017, including, but not limited to, accelerated depreciation that will allow for full expensing of qualified property. The Tax Act also establishes new tax laws that will affect 2018 and after, including a reduction in the U.S. federal corporate income tax rate from 35% to 21%. The 21% tax rate positively impacted 2017 due to the revaluation of the Company's deferred tax assets and liabilities. As such, the Company recorded a provisional net tax benefit of $18.9 million.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, Income Taxes. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. The Company has recorded a provisional amount in the consolidated financial statements and expects the accounting to be completed during the fourth quarter of 2018. The final amount may differ from the provisional amount due to additional analysis, regulatory guidance that may be issued or changes in interpretation.

Components of deferred tax assets and liabilities are as follows:

	2017	2016	2015
Deferred tax assets:			
Tax credit carryforwards	$20,272	$ —	$—
Allowance for loan and lease losses	5,806	6,828	2,780
Mark to market on loans held for sale	5,751	—	—
Stock-based compensation expense	1,872	3,877	—
Goodwill and intangibles	1,259	—	—
Accrued expenses	375	725	505
Other	1,062	1,395	734
Total deferred tax assets	36,397	12,825	4,019
Deferred tax liabilities:			
Investment in joint venture	16,320	—	—
Unguaranteed loan discount	6,615	4,644	4,083
Premises and equipment	24,112	7,193	3,952
Deferred loan fees and costs, net	1,139	1,321	892
Other	323	—	—
Total deferred tax liabilities	48,509	13,158	8,927
Net deferred tax liability	$12,112	$ 333	$4,908

The Company has recorded a deferred tax asset of $20.3 million related to tax credit carryforwards which will expire in 2037.

The Company does not have any material uncertain tax positions and does not have any interest and penalties recorded in the income statement for the years ended December 31, 2017, 2016 and 2015. The Company files a consolidated income tax return in the U.S. federal tax jurisdiction.

Note 11. 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.

130

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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 US government agency securities, mortgage-backed securities, obligations of states and political subdivisions and certain corporate, asset backed 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. When the fair value of the collateral is based on an observable market price or a current appraised value, the Company records the foreclosed asset as nonrecurring Level 2. When an appraised value is not available or management determines the fair value of the collateral is further impaired below the appraised value and there is no observable market price, the Company records foreclosed real estate as nonrecurring Level 3. Foreclosed assets classified as Level 3 are based on management's judgment and estimation.
Contingent consideration liability: Contingent consideration associated with the acquisition of Reltco will be adjusted to fair value quarterly until settled. The assumptions used to measure fair value are based on internal metrics that are unobservable and therefore the contingent consideration liability is classified within Level 3 of 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.

December 31, 2017	Total	Level 1	Level 2	Level 3
Investment securities available-for-sale				
US government agencies	$22,624	$ —	$22,624	$—
Residential mortgage-backed securities	68,696	—	68,696	—
Mutual fund	2,035	—	2,035	—
Servicing assets[1]	52,298	—	—	52,298
Total assets at fair value	$145,653	$ —	$93,355	$52,298
Contingent consideration liability[2]	$1,900	$ —	$—	$1,900

Total liabilities at fair value	$1,900	$ —	$—	$1,900

131

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

December 31, 2016	Total	Level 1	Level 2	Level 3
Investment securities available-for-sale				
US government agencies	$17,823	$ —	$17,823	$—
Residential mortgage-backed securities	51,273	—	51,273	—
Mutual fund	1,960	—	1,960	—
Servicing assets[1]	51,994	—	—	51,994
Total assets at fair value	$123,050	$ —	$71,056	$51,994

1 See Note 6 for a rollforward of recurring Level 3 fair values for servicing assets.

2 See Note 2 for activity related to the recurring Level 3 fair value for the contingent consideration liability and various assumptions used in the fair value measurement.

Non-recurring Fair Value

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

December 31, 2017	Total	Level 1	Level 2	Level 3
Impaired loans	$34,493	$ —	$ —	$34,493
Foreclosed assets	1,281	—	—	1,281
Total assets at fair value	$35,774	$ —	$ —	$35,774
December 31, 2016	Total	Level 1	Level 2	Level 3
Impaired loans	$27,815	$ —	$ —	$27,815
Foreclosed assets	1,648	—	—	1,648
Total assets at fair value	$29,463	$ —	$ —	$29,463

Level 3 Analysis

For Level 3 assets and liabilities measured at fair value on a non-recurring basis as of December 31, 2017 and December 31, 2016 the significant unobservable inputs used in the fair value measurements were as follows:

December 31, 2017

Level 3 Assets with Significant Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Impaired Loans	$34,493	Discounted appraisals Discounted expected cash flows	Appraisal adjustments (1) Interest rate & repayment term	10% to 25% Weighted average discount rate 6.26%
Foreclosed Assets	$1,281	Discounted appraisals	Appraisal adjustments (1)	10% to 37%

December 31, 2016

Level 3 Assets with Significant Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Impaired Loans	$27,815	Discounted appraisals Discounted expected cash flows	Appraisal adjustments (1) Interest rate & repayment term	0% to 25% Weighted average discount rate 5.28%
Foreclosed Assets	$1,648	Discounted appraisals	Appraisal adjustments (1)	10% to 35%

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

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Estimated Fair Value of Other Financial Instruments
GAAP also requires disclosure of fair value information about financial instruments carried at book value on the consolidated balance sheet. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. In that regard, the derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, could not be realized in immediate settlement of the instruments. Accordingly, the aggregate fair value amounts presented do not represent the underlying value of the Company.
The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments not measured at fair value on the consolidated balance sheets:
Cash and due from banks: The carrying amounts reported in the balance sheet for cash and due from banks approximate their fair values.
Certificates of deposit with other banks: The fair value of certificates of deposit with other banks is estimated based on discounting cash flows using the rates currently offered for instruments of similar remaining maturities.
Loans held for sale: The fair values of loans held for sale are based on quoted market prices, where available, and determined by discounting estimated cash flows using interest rates approximating the Company’s current origination rates for similar loans adjusted to reflect the inherent credit risk.
Loans and leases held for investment: For variable-rate loans and leases that reprice frequently and with no significant change in credit risk, fair values are based on carrying amounts. The fair values for other loans and leases are estimated using discounted cash flow analysis, based on interest rates currently being offered for loans and leases with similar terms to borrowers of similar credit quality. Loan and lease fair value estimates include judgments regarding future expected loss experience and risk characteristics. Fair values for impaired loans are estimated using discounted cash flow analysis or underlying collateral values, where applicable.
Accrued interest: The carrying amounts of accrued interest approximate fair value.
Deposits: The fair values disclosed for demand deposits (e.g., interest and non-interest checking, passbook savings, and certain types of money market accounts) are, by definition, equal to the amount payable on demand at the reporting date (i.e., their carrying amounts). The carrying amounts of variable-rate, fixed-term money market accounts and certificates of deposit approximate their fair values at the reporting date. Fair values for fixed-rate certificates of deposit are estimated using a discounted cash flow calculation that applies interest rates currently being offered on certificates to a schedule of aggregated expected monthly maturities on time deposits.
Short and long term borrowings: The fair values of the Company’s short term borrowings approximate fair value while long term borrowings are estimated using discounted cash flow analyses based on the Company’s current incremental debt rates for similar types of debt arrangements.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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

December 31, 2017	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
Financial assets					
Cash and due from banks	$295,271	$ 295,271	$ —	$ —	$295,271
Certificates of deposit with other banks	3,000	2,993	—	—	2,993
Investment securities, available-for-sale	93,355	—	93,355	—	93,355
Loans held for sale	680,454	—	—	706,972	706,972
Loans and leases, net of allowance for loan and lease losses	1,319,783	—	—	1,319,615	1,319,615
Servicing assets	52,298	—	—	52,298	52,298
Accrued interest receivable	10,160	10,160	—	—	10,160
Financial liabilities					
Deposits	2,260,263	—	2,232,370	—	2,232,370
Accrued interest payable	367	367	—	—	367
Long term borrowings	26,564	—	—	27,390	27,390

December 31, 2016	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
Financial assets					
Cash and due from banks	$238,008	$ 238,008	$ —	$ —	$238,008
Certificates of deposit with other banks	7,250	7,236	—	—	7,236
Investment securities, available-for-sale	71,056	—	71,056	—	71,056
Loans held for sale	394,278	—	—	397,391	397,391
Loans and leases, net of allowance for loan and lease losses	889,357	—	—	873,158	873,158
Servicing assets	51,994	—	—	51,994	51,994
Accrued interest receivable	7,520	7,520	—	—	7,520
Financial liabilities					
Deposits	1,485,076	—	1,469,173	—	1,469,173
Accrued interest payable	319	319	—	—	319
Long term borrowings	27,843	—	—	29,559	29,559

Note 12. 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.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

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:

	December 31, 2017	December 31, 2016
Commitments to extend credit	$1,701,137	$1,342,271
Standby letters of credit	2,298	343
Solar purchase commitments	106,921	—
Airplane purchase agreement commitments	25,450	21,500
Total unfunded off-balance sheet credit risk	$1,835,806	$1,364,114

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.

Solar purchase commitments are to purchase solar assets to fulfill leasing obligations.

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 December 31, 2017 and 2016, the Company had commitments for on-balance sheet instruments in the amount of $3.5 million and $4.9 million, respectively.

Concentrations of Credit Risk

Although the Company is not subject to any geographic concentrations, a substantial amount of the Company’s loans 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 exposure exceeds $7.5 million, except for nine relationships that have a retained unguaranteed exposure of $101.7 million of which $70.0 million of the unguaranteed exposure has been disbursed.

Additionally, the Company has future minimum lease payments due under non-cancelable operating leases totaling $61.0 million, of which $43.4 million is due from three relationships.

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

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 13. Benefit Plans
Defined Contribution Plan
The Company maintains an employee benefit plan pursuant to Section 401(k) of the Internal Revenue Code. The plan covers substantially all employees who are at least 21 years of age and have completed one month of service. Participants may contribute a percentage of compensation, subject to a maximum allowed under the Code. In addition, the Company makes certain matching contributions and may make additional contributions at the discretion of the board of directors. Company expense relating to the plan for the years ended December 31, 2017, 2016, and 2015 amounted to $2.5 million, $2.0 million and $1.4 million, respectively.
Flexible Benefits Plan
The Company maintains a Flexible Benefits Plan which covers substantially all employees. Participants may set aside pre-tax dollars to provide for future expenses such as dependent care.
Employee Stock Purchase Plan
The Company adopted an Employee Stock Purchase Plan (2014 ESPP) on October 8, 2014. On May 24, 2016, the 2014 ESPP was amended and the Amended and Restated Employee Stock Purchase Plan became effective (ESPP), within the meaning of Section 423 of the Internal Revenue Code of 1986, as amended. Under this plan, 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 this plan 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. Expense recognized in relation to the ESPP was $79 thousand in fiscal year 2017. There were no ESPP purchases during 2015 or 2016.
Stock Option Plans
In 2008, the Company adopted both an Incentive Stock Option (ISO) Plan and a Non-Qualified Stock Option (NQSO) Plan. Options granted under both plans expire no more than ten years from date of grant. Exercise prices under both plans 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 three to seven year periods from the date of the grant for both 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 (the "Plan") was amended and restated to authorize awards covering a maximum of 7,000,000 common voting shares and has an expiration date of March 20, 2025. Options or restricted shares granted under the the Plan expire no more than 10 years from 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 or restricted shares vest over a minimum of three years from the date of the grant.
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 years ended December 31, 2017, 2016, and 2015 the Company recognized $1.7 million, $2.3 million, and $1.3 million in compensation expense for stock options, respectively.
Stock option activity under the Plan during the year ended December 31, 2017 is summarized below.

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2016	3,478,208	$ 11.51		

Exercised	109,010	9.41		
Forfeited	310,739	14.37		
Granted	—	—		
Outstanding at December 31, 2017	3,058,459	$ 11.30	7.04 years	$38,398,463
Exercisable at December 31, 2017	693,460	$ 10.43	6.83 years	$9,308,406

136

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following is a summary of non-vested stock option activity for the Company for the years ended December 31, 2017, 2016, and 2015.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2014	1,704,230	$ 1.18
Granted	2,088,316	6.81
Vested	173,180	0.88
Forfeited	225,925	2.66
Non-vested at December 31, 2015	3,393,441	4.56
Granted	169,987	6.58
Vested	372,515	4.41
Forfeited	174,813	3.06
Non-vested at December 31, 2016	3,016,100	4.78
Granted	—	—
Vested	340,362	4.36
Forfeited	310,739	6.25
Non-vested at December 31, 2017	2,364,999	$ 4.65

The total intrinsic value of options exercised during the years ended December 31, 2017, 2016, and 2015 was $1.5 million, $590 thousand, and $445 thousand, respectively.
At December 31, 2017, unrecognized compensation costs relating to stock options amounted to $8.8 million which will be recognized over a weighted average period of 2.70 years.
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 options granted in 2017.
Weighted average assumptions used for options granted during the the years ended December 31, 2016 and 2015 were as follows:

	2016	2015
Risk free rate	1.56 %	1.95 %
Dividend yield	0.05 %	1.00 %
Volatility	44.20%	43.53%
Average life (in years)	7	4-7

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Restricted Stock Plan
In 2010, the Company adopted a Restricted Stock Plan. Under this plan, a total of 1,350,000 shares of Common Stock were available for issuance to eligible employees. Restricted stock grants vest in equal installments over a two to four year period from the date of the grant. During 2015, 65,122 restricted shares at a weighted average grant date fair value of $16.10 per share were granted under the 2015 Omnibus Stock Incentive Plan which replaced the previously existing Restricted Stock Plan. During 2016, 2,962,486 restricted stock units were granted to eligible employees and outside directors at a weighted average grant date fair value of $9.76 per share, of which 2,872,000 restricted stock units had market price conditions or non-market-related performance criteria restrictions. During 2017, 340,318 restricted stock units were granted to eligible employees and outside directors at a weighted average grant date fair value of $17.00 per share, of which 233,791 restricted stock units had market price conditions or non-market-related performances criteria restrictions.
The fair value of each restricted stock unit is based on the market value of the Company’s stock on the date of the grant. Restricted stock awards are authorized in the form of restricted stock awards or units ("RSUs") and restricted stock awards or units with a market price condition ("Market RSUs").
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 $38.00 per share for at least twenty (20) consecutive trading days at any time prior to the expiration date of the grants. 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.
The following is a summary of non-vested RSU stock activity for the Company for the year ended December 31, 2017.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2016	134,969	$ 14.96
Granted	106,527	23.71
Vested	39,002	15.45
Forfeited	20,680	14.55
Non-vested at December 31, 2017	181,814	$ 20.03

During 2016 and 2015, the Company granted 597,986 and 65,122 RSUs, respectively. The weighted average grant date fair value for RSUs granted in 2016 and 2015 were $15.61 and $16.10, respectively.
For the years ended December 31, 2017, 2016, and 2015 the Company recognized $741 thousand, $8.5 million, and $148 thousand in compensation expense for RSUs, respectively.
At December 31, 2017, unrecognized compensation costs relating to RSUs amounted to $3.2 million which will be recognized over a weighted average period of 4.54 years.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following is a summary of non-vested Market RSU stock activity for the Company for the year ended December 31, 2017.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2016	2,364,500	$ 8.28
Granted	233,791	13.94
Vested	—	—
Forfeited	65,483	9.17
Non-vested at December 31, 2017	2,532,808	$ 8.78

During 2016, the Company granted 2,364,500 Market RSUs with a weighted average grant date fair value of $8.28. 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.
Related to the 100,733 Market RSUs granted on January 31, 2017 and the 3,058 Market RSUs granted on May 8, 2017, the share price simulation was based on the Cox, Ross & Rubinstein option pricing methodology for a period of 7.0 years. The implied term of the restricted stock was 4.1 years. The Monte Carlo Simulation used various assumptions that included a risk free rate of return of 2.28%, expected volatility of 30.00% and a dividend yield of 0.39%.
Related to the 130,000 Market RSUs granted on August 7, 2017, the share price simulation was based on the Cox, Ross & Rubinstein option pricing methodology for a period of 7.0 years. The implied term of the restricted stock was 3.9 years. The Monte Carlo Simulation used various assumptions that included a risk free rate of return of 2.07%, expected volatility of 30.00% and a dividend yield of 0.33%.
For the year ended December 31, 2017 and 2016, the Company recognized $5.0 million and $1.2 million, respectively, in compensation expense for Market RSUs.
At December 31, 2017, unrecognized compensation costs relating to Market RSUs amounted to $16.2 million which will be recognized over a weighted average period of 3.01 years.
Employee/Outside Director Bonus Plan
In 2014, the Company adopted a Bonus Plan whereby eligible employees and outside directors were qualified to receive quarterly and annual bonus payments based on each individual’s base pay/annual director fees and the profitability of the Company. In 2016, the Company approved a revised Incentive Compensation Plan and the payout criteria was adjusted for exceeding thresholds based on certain performance metrics and the profitability of the Company and applied to full-time employees only. Total expenses related to the bonus plan for employees were $3.2 million, $2.9 million, and $3.2 million for the years ended December 31, 2017, 2016, and 2015, respectively. Total expenses related to the bonus plan for outside directors was $14 thousand for the year ended December 31, 2015. For 2016 and 2017, this plan no longer applied to outside directors.

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 14. Regulatory Matters
Dividends
The Bank, as a North Carolina banking corporation, may pay dividends to shareholders provided the bank does not make distributions that reduce its capital below its applicable required capital, pursuant to North Carolina General Statutes Section 53C-4-7. However, regulatory authorities may limit payment of dividends by any bank when it is determined that such a limitation is in the public interest and is necessary to ensure financial soundness of the bank.
Capital Requirements
The Company (on a consolidated basis) and the Bank are subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company's and Bank's financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and the Bank must meet specific capital guidelines that involve quantitative measures of their assets, liabilities and certain off-balance-sheet items as calculated under regulatory accounting principles. The capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors. Prompt corrective action provisions are not applicable to bank holding companies.
The Basel III Capital Rules, a comprehensive capital framework for U.S. banking organizations, became effective for the Company and Bank on January 1, 2015 (subject to a phase-in period for certain provisions). Quantitative measures established by the Basel III Capital Rules to ensure capital adequacy require the maintenance of minimum amounts and ratios (set forth in the table below) of Common Equity Tier 1 capital, Tier 1 capital and Total capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier 1 capital to adjusted quarterly average assets (as defined). Management believes, as of December 31, 2017 and 2016 that the Company and the Bank meet all capital adequacy requirements to which they are subject.
When fully phased in on January 1, 2019, the Basel III Capital Rules will require the Company and Bank to maintain (i) a minimum ratio of Common Equity Tier 1 capital to risk-weighted assets of at least 4.5%, plus a 2.5% "capital conservation buffer" (which is added to the 4.5% Common Equity Tier 1 capital ratio as that buffer is phased in, effectively resulting in a minimum ratio of Common Equity Tier 1 capital to risk-weighted assets of at least 7.0% upon full implementation), (ii) a minimum ratio of Tier 1 capital to risk-weighted assets of at least 6.0%, plus the capital conservation buffer (which is added to the 6.0% Tier 1 capital ratio as that buffer is phased in, effectively resulting in a minimum Tier 1 capital ratio of 8.5% upon full implementation), (iii) a minimum ratio of Total capital (that is, Tier 1 plus Tier 2) to risk-weighted assets of at least 8.0%, plus the capital conservation buffer (which is added to the 8.0% total capital ratio as that buffer is phased in, effectively resulting in a minimum total capital ratio of 10.5% upon full implementation) and (iv) a minimum leverage ratio of 4.0%, calculated as the ratio of Tier 1 capital to average quarterly assets.
The implementation of the capital conservation buffer began on January 1, 2016 at the 0.625% level and will be phased in over a three-year period (increasing by that amount on each subsequent January 1, until it reaches 2.5% on January 1, 2019). Banking institutions with a ratio of Common Equity Tier 1 capital to risk-weighted assets below the effective minimum (4.5% plus the capital conservation buffer) will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall.
As of December 31, 2017, the most recent notification from the Federal Deposit Insurance Corporation categorized the Bank as well capitalized under the regulatory framework for prompt corrective action. To be categorized as well capitalized, an institution must maintain minimum common equity Tier 1 risk-based, total risk-based, Tier 1 risk-based and Tier 1 leverage ratios as set forth in the following tables. There are no conditions or events since the notification that management believes have changed the Bank's category.

140

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Capital amounts and ratios as of December 31, 2017 and 2016, are presented in the table below.

	Actual		Minimum Capital Requirement		Minimum To Be Well Capitalized	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Consolidated - December 31, 2017						
Common Equity Tier 1						
(to Risk-Weighted Assets)	$390,816	17.81%	$98,764	4.50%	$142,659	6.50 %
Total Capital						
(to Risk-Weighted Assets)	$415,006	18.91%	$175,580	8.00%	$219,475	10.00%
Tier 1 Capital						
(to Risk-Weighted Assets)	$390,816	17.81%	$131,685	6.00%	$175,580	8.00 %
Tier 1 Capital						
(to Average Assets)	$390,816	15.50%	$100,828	4.00%	$126,036	5.00 %
Bank - December 31, 2017						
Common Equity Tier 1						
(to Risk-Weighted Assets)	$277,943	12.89%	$97,060	4.50%	$140,197	6.50 %
Total Capital						
(to Risk-Weighted Assets)	$302,385	14.02%	$172,551	8.00%	$215,688	10.00%
Tier 1 Capital						
(to Risk-Weighted Assets)	$277,943	12.89%	$129,413	6.00%	$172,551	8.00 %
Tier 1 Capital						
(to Average Assets)	$277,943	11.36%	$97,864	4.00%	$122,330	5.00 %
Consolidated - December 31, 2016						
Common Equity Tier 1						
(to Risk-Weighted Assets)	$206,670	15.31%	$60,732	4.50%	$87,724	6.50 %
Total Capital						
(to Risk-Weighted Assets)	$223,559	16.56%	$107,968	8.00%	$134,960	10.00%
Tier 1 Capital						
(to Risk-Weighted Assets)	$206,670	15.31%	$80,976	6.00%	$107,968	8.00 %
Tier 1 Capital						
(to Average Assets)	$206,670	12.00%	$68,919	4.00%	$86,149	5.00 %
Bank - December 31, 2016						
Common Equity Tier 1						
(to Risk-Weighted Assets)	$139,078	10.68%	$58,579	4.50%	$84,615	6.50 %
Total Capital						
(to Risk-Weighted Assets)	$155,423	11.94%	$104,141	8.00%	$130,177	10.00%
Tier 1 Capital						
(to Risk-Weighted Assets)	$139,078	10.68%	$78,106	6.00%	$104,141	8.00 %
Tier 1 Capital						
(to Average Assets)	$139,078	8.41 %	$66,142	4.00%	$82,678	5.00 %

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 15. Transactions with Related Parties
The Company has entered into transactions with its directors, officers, significant shareholders and their affiliates (related parties). Such transactions were made in the ordinary course of business on substantially the same terms and conditions, including interest rates, as those prevailing at the same time for comparable transactions with other customers, and did not, in the opinion of management, involve more than normal risk or present other unfavorable features.
There were no related party loans at December 31, 2017 and 2016, other than those disclosed as secured borrowings in Note 9.
Deposits from related parties held by the Company at December 31, 2017 and 2016 amounted to $42.8 million and $24.4 million, respectively.
During the year ended December 31, 2016, the Company invested $75 thousand in Plexus Funds II and III, L.P. which is included in other assets in the consolidated balance sheets at December 31, 2017 and 2016 with a balance of $1.0 million. There were no additional investments in Plexus Funds II and III, L.P. during the year ended December 31, 2017. In May 2016, the Company committed to invest $2.5 million in Plexus Fund IV-C, L.P. which is included in other assets in the consolidated balance sheet at December 31, 2017 and 2016, with $188 thousand of the commitment invested during 2016 and an additional $375 thousand invested during 2017. A member of the Company’s board of directors is also a member of Plexus Capital, the administrator of Plexus Funds II, III and IV, L.P.
During the year ended December 31, 2016, the Company invested $1.0 million in DefenseStorm, Inc. ("DefenseStorm"), which is included in other assets in the consolidated balance sheets with a balance of $1.5 million at both December 31, 2017 and 2016. The Company holds voting and non-voting equity in DefenseStorm which is accounted for as a cost method investment. DefenseStorm provides a broad range of IT and cyber security solutions principally designed for financial institutions. As of December 31, 2017, the Company held approximately 7.9% of DefenseStorm on a fully diluted basis in the form of both voting and non-voting common equity, including approximately 4.0% voting control. Directors and officers of the Company and their affiliates collectively own approximately 9.8% of DefenseStorm on a fully diluted basis as of December 31, 2017. During 2017 and 2016, the Company had business transactions with DefenseStorm amounting to $405 thousand and $47 thousand, respectively, for cyber security event monitoring services.
During the year ended December 31, 2016, the Company invested $2.8 million in Finxact LLC ("Finxact"), a developer of core processing software and services for the banking industry, which is included in other assets in the consolidated balance sheet. At December 31, 2017, the Company holds approximately 18.8% of Finxact on a fully diluted basis in the form of both voting and non-voting equity, including approximately 14.1% voting control. This investment is accounted for as an equity method investment due to the Company's ability to exercise significant influence over financial and operating policies of Finxact. Certain officers and directors of the Company collectively own approximately 7.5% of Finxact on a fully diluted basis in the form of non-voting equity at December 31, 2017.
During the year ended December 31, 2017, the Company invested $1.5 million in Payrailz, LLC ("Payrailz"), an entity that provides digital payment services to the financial services industry, which is included in other assets in the consolidated balance sheet. At December 31, 2017, the Company holds approximately 16.0% of Payrailz on a fully diluted basis in the form of voting equity. This investment is accounted for as an equity method investment due to the Company's ability to exercise significant influence over financial and operating policies of Payrailz. Certain officers and directors of the Company collectively own approximately 4.3% of Payrailz on a fully diluted basis in the form of voting equity at December 31, 2017.
During the year ended December 31, 2017, the Company closed the digital banking joint venture between Live Oak Banking Company and First Data Corporation creating a new company called Apiture. See Note 3. Unconsolidated Joint Venture for further discussion. During 2017, the Company had business transactions with Apiture amounting to $304 thousand for professional services.

142

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 16. Parent Company Only Financial Statements
The following balance sheets, statements of income and statements of cash flows for Live Oak Bancshares, Inc. should be read in conjunction with the consolidated financial statements and the notes thereto.
Balance Sheets

	2017	2016
Assets		
Cash and cash equivalents	$54,502	$14,029
Investment in subsidiaries	351,647	174,957
Premises & equipment, net	33,948	30,290
Other assets	25,457	32,391
Total assets	$465,554	$251,667
Liabilities and Shareholders' Equity		
Long term borrowings	$26,564	$27,843
Other liabilities	2,057	977
Total liabilities	28,621	28,820
Shareholders' equity:		
Common stock	317,725	199,981
Retained earnings	120,241	23,518
Accumulated other comprehensive loss	(1,033)	(652)
Total equity	436,933	222,847
Total liabilities & shareholders' equity	$465,554	$251,667

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Statements of Income

	2017	2016	2015
Interest income	$5	$50	$70
Interest expense	1,210	964	1,156
Net interest loss	(1,205)	(914)	(1,086)
Noninterest income:			
Dividends from banking subsidiary	—	—	4,205
Gain on sale of investment in non-consolidated affiliate	—	—	3,782
Other noninterest income	2,114	2,041	1,360
Total noninterest income	2,114	2,041	9,347
Noninterest expense:			
Salaries and employee benefits	10,531	12,785	2,592
Professional services expense	1,192	675	812
Renewable energy tax credit investment impairment	690	3,197	—
Contingent consideration fair value adjustment	(4,350)	—	—
Other expense	2,588	2,076	1,719
Total noninterest expense	10,651	18,733	5,123
Net (loss) income before equity in undistributed income of subsidiaries	(9,742)	(17,606)	3,138
Income tax benefit	(320)	(10,065)	(41)
Net (loss) income	(9,422)	(7,541)	3,179
Equity in undistributed income of subsidiaries in excess of dividends from subsidiaries	109,921	21,305	17,422
Net income	100,499	13,764	20,601
Net loss attributable to noncontrolling interest	—	9	24
Net income attributable to Live Oak Bancshares, Inc.	$100,499	$13,773	$20,625

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Statements of Cash Flows

	2017	2016	2015
Cash flows from operating activities			
Net income	$100,499	$13,764	$20,601
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Equity in undistributed net income of subsidiaries in excess of dividends of subsidiaries	(109,921)	(21,305)	(17,422)
Depreciation	1,188	1,173	739
Impairment on contingent consideration	(4,350)	—	—
Deferred income tax	(5,376)	(2,695)	582
Renewable energy tax credit investment impairment	690	3,197	—
Stock option based compensation expense	1,786	2,349	1,277
Restricted stock expense	5,717	9,724	148
Gain on sale of investment in non-consolidated affiliate	—	—	(3,782)
Business combination contingent consideration fair value adjustment	1,950	—	—
Net change in other assets	11,649	(17,930)	(8,785)
Net change in other liabilities	(820)	(358)	1,422
Net cash provided by (used in) operating activities	3,012	(12,081)	(5,220)
Cash flows from investing activities			
Capital investment in subsidiaries	(55,240)	(45,870)	(28,250)
Net change in advances to subsidiaries	640	—	—
Business combination, net of cash acquired	(7,696)	—	—
Proceeds from sale of investment in non-consolidated affiliate	—	—	9,896
Capital contribution from non-controlling interest	—	—	22
Purchases of premises and equipment	(4,864)	(143)	(11,397)
Net cash used in investing activities	(67,160)	(46,013)	(29,729)
Cash flows from financing activities			
Proceeds from long term borrowings	16,900	—	12,960
Repayments of long term borrowings	(26,279)	(532)	(26,609)
Proceeds from short term borrowings	8,100	—	—
Stock option exercises	1,026	401	239
Employee stock purchase program	445	—	—
Withholding cash issued in lieu of restricted stock	(4,891)	—	—
Sale of common stock, net	113,096	—	87,171
Shareholder dividend distributions	(3,776)	(2,737)	(2,732)
Net cash provided by (used in) financing activities	104,621	(2,868)	71,029
Net change in cash and cash equivalents	40,473	(60,962)	36,080
Cash and cash equivalents at beginning of year	14,029	74,991	38,911
Cash and cash equivalents at end of year	$54,502	$14,029	$74,991

Table of Contents

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 17. Subsequent Events
Management has evaluated subsequent events through the date the financial statements were available to be issued and determined that the following events required disclosure:
Debt Repayment
On January 31, 2018, the Company repaid in full the $24.0 million construction line of credit with an unaffiliated commercial bank. The balance of the long term borrowing was $23.0 million at December 31, 2017. The payoff amount on January 31, 2018 was $23.2 million, including a $229 thousand prepayment penalty.
Investment Securities Purchase
On February 22, 2018, the Company purchased eighteen residential mortgage-backed securities for a total of $170.3 million with a weighted average book yield of 3.02% and an average life of 4.9 years. These purchases are part of a strategic plan to enhance the Company’s contingent funding sources.

Table of Contents

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, the Company carried out an evaluation, under the supervision and with the participation of its management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and procedures. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management was required to apply judgment in evaluating its controls and procedures. Based on this evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), were effective as of the end of the period covered by this report.

Management's Report on Internal Control over Financial Reporting

As of December 31, 2017, management assessed the effectiveness of the Company's internal control over financial reporting based on the criteria for effective internal control over financial reporting established in "Internal Control-Integrated Framework (2013)," issued by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission. Based on the assessment, management determined that the Company maintained effective internal control over financial reporting as of December 31, 2017.

Dixon Hughes Goodman LLP, the independent registered public accounting firm, audited the consolidated financial statements of the Company included in this Annual Report on Form 10-K. Their report is included in Part II, Item 8. Financial Statements and Supplementary Data under the heading "Report of Independent Registered Public Accounting Firm." This Annual Report on Form 10-K does not include an attestation report of the Company's registered public accounting firm due to an exemption established by the JOBS Act for emerging growth companies.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2017, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

Table of Contents

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 10 will be included in LOB's definitive proxy statement for the 2018 Annual Meeting of Shareholders (the "Proxy Statement"), under the headings "Proposal 1: Election of Directors," "Qualification of Directors," "Executive Officers," "Report of the Audit and Risk Committee," and "Section 16(a) Beneficial Ownership Reporting Compliance" and is incorporated herein by reference. The Proxy Statement will be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days of the end of our 2017 fiscal year.

Item 11. EXECUTIVE COMPENSATION

The information required by Item 11 will be included in the Proxy Statement under the headings "Executive Compensation and Other Matters" and "Corporate Governance - Compensation Committee Interlocks and Insider Participation" and is incorporated herein by reference.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

The information required by Item 12 will be included in the Proxy Statement under the headings "Beneficial Ownership of Our Common Stock" and "Executive Compensation and Other Matters - Equity Compensation Plan Information" and is incorporated herein by reference.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 13 will be included in the Corporate Governance section of the Proxy Statement under the headings "Director Independence," "Director Relationships," "Indebtedness of and Transactions with Management," and "Certain Relationships and Related Person Transactions" and is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 14 will be included in the Proxy Statement under the heading "Proposal 3: Ratification of Independent Auditors" and is incorporated herein by reference.

Table of Contents

PART IV
Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES
(a)(1) Financial Statements. The following financial statements and supplementary data are included in Item 8 of this report.
Financial Statements
Quarterly Financial Information
Reports of Independent Registered Public Accounting Firm
Consolidated Balance Sheets as of December 31, 2017 and 2016
Consolidated Statements of Income for the Years Ended December 31, 2017, 2016 and 2015
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2017, 2016 and 2015
Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2017, 2016 and 2015
Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016 and 2015
(a)(2) Financial Statement Schedules. All applicable financial statement schedules required under Regulation S-X have been included in the Notes to the Consolidated Financial Statements
(a)(3) Exhibits. The exhibits listed in the accompanying Exhibit Index are filed as a part of this Annual Report on Form 10-K

Table of Contents

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) 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: March 8, 2018 By: /s/ James S. Mahan III
James S. Mahan III
Chairman and Chief Executive Officer
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

	Date
/s/ James S. Mahan III James S. Mahan III Chairman and Chief Executive Officer (Principal Executive Officer)	March 8, 2018
/s/ S. Brett Caines S. Brett Caines Chief Financial Officer (Principal Financial Officer)	March 8, 2018
/s/ J. Wesley Sutherland J. Wesley Sutherland Chief Accounting Officer (Principal Accounting Officer)	March 8, 2018
/s/ William L. Williams III William L. Williams III Vice Chairman of the Board of Directors	March 8, 2018
/s/ William H. Cameron William H. Cameron Director	March 8, 2018
/s/ Diane B. Glossman Diane B. Glossman Director	March 8, 2018

Table of Contents

/s/ Glen F. Hoffsis Glen F. Hoffsis Director	March 8, 2018
/s/ Howard K. Landis Howard K. Landis Director	March 8, 2018
/s/ Miltom E. Petty Miltom E. Petty Director	March 8, 2018
/s/ Jerald L. Pullins Jerald L. Pullins Director	March 8, 2018
/s/ Neil L. Underwood Neil L. Underwood Director	March 8, 2018

Table of Contents

INDEX TO EXHIBITS

The following exhibits are incorporated by reference or filed herewith. References to the "2015 10-K" are to the Company's Annual Report on Form 10-K for the year ended December 31, 2015. References to the "2016 10-K" are to the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Exhibit No.	Description of Exhibit
2.1	Contribution Agreement dated as of May 9, 2017 (incorporated by reference to Exhibit 2.1 of the current report on Form 8-K filed on May 5, 2017)
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 registration statement on Form S-1, filed on June 19, 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)
10.1	2008 Incentive Stock Option Plan, as amended (incorporated by reference to Exhibit 10.1 of the registration statement on Form S-1, filed on June 19, 2015)
10.2	2008 Nonstatutory Stock Option Plan, as amended (incorporated by reference to Exhibit 10.2 of the registration statement on Form S-1, filed on June 19, 2015)
10.3	Amended and Restated Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 of the quarterly report on Form 10-Q filed on August 8, 2016)
10.4.1	2015 Omnibus Stock Incentive Plan (incorporated by reference to Exhibit 10.4 of the registration statement on Form S-1 filed on June 19, 2015)
10.4.2	Amendment to 2015 Omnibus Stock Incentive Plan dated December 17, 2015 (incorporated by reference to Exhibit 10.4.2 of the 2015 10-K)
10.4.3	2015 Omnibus Stock Incentive Plan as Amended and Restated effective May 24, 2016 (incorporated by reference to Exhibit 10.1 of the current report on Form 8-K filed on May 27, 2016)
10.5.1	Securities Purchase Agreement, dated May 28, 2014 between Live Oak Bancshares, Inc. and Wellington purchasers (incorporated by reference to Exhibit 10.7 of the registration statement on Form S-1 filed on June 19, 2015)
10.5.2	First Amendment to Securities Purchase Agreement, dated July 31, 2014 between Live Oak Bancshares, Inc. and Wellington purchasers (incorporated by reference to Exhibit 10.8 of the registration statement on Form S-1 filed on June 19, 2015)
10.5.3	Second Amendment to Securities Purchase Agreement, dated August 1, 2014 between Live Oak Bancshares, Inc. and Wellington purchasers (incorporated by reference to Exhibit 10.9 of the registration statement on Form S-1 filed on June 19, 2015)
10.6.1	Software Service Agreement between Live Oak Banking Company and nCino, LLC, dated November 1, 2012 (incorporated by reference to Exhibit 10.10 of the registration statement on Form S-1 filed on June 19, 2015)
10.6.2	Amendment to Software Service Agreement dated October 9, 2015, between Live Oak Banking Company and nCino, Inc. (incorporated by reference to Exhibit 10.7.2 of the 2015 10-K)
10.7.1	Form of Stock Option Award Agreement for executive officers under the 2015 Omnibus Stock Incentive Plan (incorporated by reference to Exhibit 10.8 of the 2015 10-K)
10.7.2	Performance RSU Award Agreement for Neil L. Underwood (incorporated by reference to Exhibit 99.1 of the current report on Form 8-K filed on March 25, 2016)
10.7.3	Performance RSU Award Agreement with Stock Price Condition for Neil L. Underwood (incorporated by reference to Exhibit 99.2 of the current report on Form 8-K filed on March 25, 2016)

10.7.4	Form of Performance RSU Award Agreement with Stock Price Condition for certain executive officers (incorporated by reference to Exhibit 99.1 of the current report on Form 8-K filed on December 2, 2016)
10.7.5	Form of Performance RSU Award Agreement with Stock Price Condition for certain executive officers (incorporated by reference to Exhibit 99.1 of the current report on Form 8-K filed on February 2, 2017)
10.7.6	Form of Performance RSU Award Agreement with Stock Price Condition for certain executive officers*
10.7.7	Form of RSU Award Agreement with Separation Agreement for Gregory B. Thompson dated February 12, 2018*
10.7.8	Form of 2017 RSU Award Agreement for non-employee directors*

152

Table of Contents

Exhibit No.	Description of Exhibit
21.1	Subsidiaries of the Registrant*
23.1	Consent of the Independent Registered Public Accounting Firm - Dixon Hughes Goodman LLP*
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: (i) Consolidated Balance Sheets as of December 31, 2017 and 2016; (ii) Consolidated Statements of Income for the Years Ended December 31, 2017, 2016 and 2015; (iii) Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2017, 2016 and 2015; (iv) Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2017, 2016 and 2015; (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016 and 2015; and (vi) Notes to Consolidated Financial Statements.*

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

** 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.