

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

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

For the quarterly period ended **September 30, 2023**

or

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

For the transition period from _____ to _____.

Commission file number: **001-37497**



LIVE OAK BANCSHARES, INC.

(Exact name of registrant as specified in its charter)

North Carolina

26-4596286

(State or other jurisdiction of incorporation or organization)

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

1741 Tiburon Drive

Wilmington , North Carolina

28403

(Address of principal executive offices)

(Zip Code)

(910) 790-5867

(Registrant's telephone number, including area code)

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

APPLICABLE ONLY TO CORPORATE ISSUERS:

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

As of November 2, 2023, there were 44,481,685 shares of the registrant's voting common stock outstanding.

Live Oak Bancshares, Inc.
Form 10-Q
For the Quarterly Period Ended September 30, 2023

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Live Oak Bancshares, Inc.

Condensed Consolidated Balance Sheets

*As of September 30, 2023 (unaudited) and December 31, 2022**

(Dollars in thousands)

	September 30, 2023	December 31, 2022
Assets		
Cash and due from banks	\$ 534,774	\$ 280,239
Federal funds sold	—	136,397
Certificates of deposit with other banks	3,750	4,000
Investment securities available-for-sale	1,099,878	1,014,719
Loans held for sale	572,604	554,610
Loans and leases held for investment (includes \$ 410,128 and \$ 494,458 measured at fair value, respectively)	8,202,631	7,344,178
Allowance for credit losses on loans and leases	(121,273)	(96,566)
Net loans and leases	8,081,358	7,247,612
Premises and equipment, net	258,041	263,290
Foreclosed assets	6,701	—
Servicing assets	47,127	26,323
Other assets	346,227	328,308
Total assets	<u>\$ 10,950,460</u>	<u>\$ 9,855,498</u>
Liabilities and shareholders' equity		
Liabilities		
Deposits:		
Noninterest-bearing	\$ 239,536	\$ 194,100
Interest-bearing	9,764,106	8,690,828
Total deposits	10,003,642	8,884,928
Borrowings	25,847	83,203
Other liabilities	70,603	76,334
Total liabilities	<u>10,100,092</u>	<u>9,044,465</u>
Shareholders' equity		
Preferred stock, no par value, 1,000,000 shares authorized, none issued or outstanding at September 30, 2023 and December 31, 2022	—	—
Class A common stock, no par value, 100,000,000 shares authorized, 44,480,215 and 44,061,244 shares issued and outstanding at September 30, 2023 and December 31, 2022, respectively	340,929	330,854
Class B common stock, no par value, 10,000,000 shares authorized, none issued or outstanding at September 30, 2023 and December 31, 2022	—	—
Retained earnings	627,759	572,497
Accumulated other comprehensive loss	(118,320)	(92,318)
Total shareholders' equity	850,368	811,033
Total liabilities and shareholders' equity	<u>\$ 10,950,460</u>	<u>\$ 9,855,498</u>

* Derived from audited consolidated financial statements.

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Income
For the three and nine months ended September 30, 2023 and 2022 (unaudited)

(Dollars in thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Interest income				
Loans and fees on loans	\$ 162,722	\$ 107,880	\$ 454,136	\$ 291,235
Investment securities, taxable	8,701	5,506	24,751	12,951
Other interest earning assets	9,188	2,448	22,852	3,677
Total interest income	180,611	115,834	501,739	307,863
Interest expense				
Deposits	90,914	31,553	243,512	64,678
Borrowings	287	395	2,498	1,586
Total interest expense	91,201	31,948	246,010	66,264
Net interest income	89,410	83,886	255,729	241,599
Provision for loan and lease credit losses	10,279	14,169	42,328	21,272
Net interest income after provision for loan and lease credit losses	79,131	69,717	213,401	220,327
Noninterest income				
Loan servicing revenue	6,990	6,230	20,057	19,063
Loan servicing asset revaluation	11,335	(1,324)	8,860	(11,561)
Net gains on sales of loans	12,675	9,275	33,654	35,882
Net (loss) gain on loans accounted for under the fair value option	(568)	4,420	(3,369)	475
Equity method investments (loss) income	(1,034)	29,136	(6,041)	146,068
Equity security investments (losses) gains, net	(783)	876	(585)	2,487
Lease income	2,498	2,516	7,568	7,529
Management fee income	3,277	2,844	10,015	6,890
Other noninterest income	3,501	3,751	11,467	12,088
Total noninterest income	37,891	57,724	81,626	218,921
Noninterest expense				
Salaries and employee benefits	42,947	43,479	130,778	128,262
Travel expense	2,197	2,372	7,378	6,627
Professional services expense	1,762	2,505	4,685	9,284
Advertising and marketing expense	3,446	2,621	10,058	6,651
Occupancy expense	2,129	2,519	6,259	7,619
Technology expense	7,722	7,770	23,456	19,585
Equipment expense	3,676	3,761	11,517	11,361
Other loan origination and maintenance expense	3,498	3,376	10,867	9,511
Renewable energy tax credit investment impairment	—	7,721	69	7,771
FDIC insurance	4,115	2,697	12,579	6,833
Contributions and donations	—	191	—	6,429
Other expense	2,770	4,036	12,035	9,708
Total noninterest expense	74,262	83,048	229,681	229,641
Income before taxes	42,760	44,393	65,346	209,607
Income tax expense	2,967	1,525	7,611	35,191
Net income	\$ 39,793	\$ 42,868	\$ 57,735	\$ 174,416
Basic earnings per share	\$ 0.89	\$ 0.97	\$ 1.30	\$ 3.98
Diluted earnings per share	\$ 0.88	\$ 0.96	\$ 1.28	\$ 3.88

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Comprehensive Income
For the three and nine months ended September 30, 2023 and 2022 (unaudited)

(Dollars in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net income	\$ 39,793	\$ 42,868	\$ 57,735	\$ 174,416
Other comprehensive loss before tax:				
Net unrealized loss on investment securities available-for-sale during the period	(27,297)	(47,318)	(34,213)	(127,879)
Reclassification adjustment for gain on sale of securities available-for-sale included in net income	—	—	—	—
Other comprehensive loss before tax	(27,297)	(47,318)	(34,213)	(127,879)
Income tax benefit	6,557	11,359	8,211	30,691
Other comprehensive loss, net of tax	(20,740)	(35,959)	(26,002)	(97,188)
Total comprehensive income	\$ 19,053	\$ 6,909	\$ 31,733	\$ 77,228

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Changes in Shareholders' Equity
For the three and nine months ended September 30, 2023 and 2022 (unaudited)
(Dollars in thousands)

	Three Months Ended					
	Common stock				Accumulated	
	Shares			Retained	other	Total
	Class A	Class B	Amount	earnings	comprehensive	equity
					income (loss)	
Balance at June 30, 2023	44,351,715	—	\$ 341,032	\$ 589,036	\$ (97,580)	\$ 832,488
Net income	—	—	—	39,793	—	39,793
Other comprehensive loss	—	—	—	—	(20,740)	(20,740)
Issuance of restricted stock	63,694	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(1,348)	—	—	(1,348)
Employee stock purchase program	28,015	—	765	—	—	765
Stock option exercises	36,791	—	263	—	—	263
Stock option compensation expense	—	—	135	—	—	135
Restricted stock compensation expense	—	—	82	—	—	82
Transfer from retained earnings to other assets for pro rata portion of equity method investee stock compensation expense	—	—	—	263	—	263
Cash dividends (\$ 0.03 per share)	—	—	—	(1,333)	—	(1,333)
Balance at September 30, 2023	44,480,215	—	\$ 340,929	\$ 627,759	\$ (118,320)	\$ 850,368
Balance at June 30, 2022	43,854,011	—	\$ 320,924	\$ 530,021	\$ (59,283)	\$ 791,662
Net income	—	—	—	42,868	—	42,868
Other comprehensive loss	—	—	—	—	(35,959)	(35,959)
Issuance of restricted stock	59,603	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(1,362)	—	—	(1,362)
Employee stock purchase program	18,264	—	532	—	—	532
Stock option exercises	49,472	—	497	—	—	497
Stock option compensation expense	—	—	261	—	—	261
Restricted stock compensation expense	—	—	4,780	—	—	4,780
Transfer from retained earnings to other assets for pro rata portion of equity method investee stock compensation expense	—	—	—	208	—	208
Cash dividends (\$ 0.03 per share)	—	—	—	(1,319)	—	(1,319)
Balance at September 30, 2022	43,981,350	—	\$ 325,632	\$ 571,778	\$ (95,242)	\$ 802,168

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Changes in Shareholders' Equity (Continued)
For the three and nine months ended September 30, 2023 and 2022 (unaudited)

(Dollars in thousands)

	Nine Months Ended					
	Common stock			Retained earnings	Accumulated other comprehensive income (loss)	Total equity
	Shares		Amount			
	Class A	Class B				
Balance at December 31, 2022	44,061,244	—	\$ 330,854	\$ 572,497	\$ (92,318)	\$ 811,033
Net income	—	—	—	57,735	—	57,735
Other comprehensive loss	—	—	—	—	(26,002)	(26,002)
Issuance of restricted stock	264,713	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(4,950)	—	—	(4,950)
Employee stock purchase program	59,074	—	1,396	—	—	1,396
Stock option exercises	95,184	—	926	—	—	926
Stock option based compensation expense	—	—	272	—	—	272
Restricted stock compensation expense	—	—	12,431	—	—	12,431
Adoption of ASU 2022-02	—	—	—	676	—	676
Transfer from retained earnings to other assets for pro rata portion of equity method investee stock compensation expense	—	—	—	841	—	841
Cash dividends (\$ 0.09 per share)	—	—	—	(3,990)	—	(3,990)
Balance at September 30, 2023	44,480,215	—	\$ 340,929	\$ 627,759	\$ (118,320)	\$ 850,368
Balance at December 31, 2021	43,494,046	125,024	\$ 312,294	\$ 400,893	\$ 1,946	\$ 715,133
Net income	—	—	—	174,416	—	174,416
Other comprehensive loss	—	—	—	—	(97,188)	(97,188)
Issuance of restricted stock	172,296	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(4,453)	—	—	(4,453)
Employee stock purchase program	29,383	—	1,066	—	—	1,066
Stock option exercises	160,601	—	1,650	—	—	1,650
Stock option based compensation expense	—	—	886	—	—	886
Restricted stock compensation expense	—	—	14,189	—	—	14,189
Non-voting common stock converted to voting common stock in private sale	125,024	(125,024)	—	—	—	—
Transfer from retained earnings to other assets for pro rata portion of equity method investee stock compensation expense	—	—	—	415	—	415
Cash dividends (\$ 0.09 per share)	—	—	—	(3,946)	—	(3,946)
Balance at September 30, 2022	43,981,350	—	\$ 325,632	\$ 571,778	\$ (95,242)	\$ 802,168

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Cash Flows
For the nine months ended September 30, 2023 and 2022 (unaudited)

(Dollars in thousands)

	Nine Months Ended September 30,	
	2023	2022
Cash flows from operating activities		
Net income	\$ 57,735	\$ 174,416
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	15,941	15,626
Provision for loan and lease credit losses	42,328	21,272
Amortization of premium on securities, net of accretion	63	3,019
Deferred tax (benefit) expense	(13,164)	17,258
Originations of loans held for sale	(642,722)	(787,633)
Proceeds from sales of loans held for sale	985,287	796,286
Net gains on sale of loans held for sale	(33,654)	(35,882)
Net loss on sale of foreclosed assets	—	49
Net loss (gain) on loans accounted for under fair value option	3,369	(475)
Net (increase) decrease in servicing assets	(20,804)	4,493
Net loss on disposal of property and equipment	377	31
Equity method investments loss (income)	6,041	(146,068)
Equity security investments losses (gains), net	585	(2,487)
Renewable energy tax credit investment impairment	69	7,771
Stock option compensation expense	272	886
Restricted stock compensation expense	12,431	14,189
Stock based compensation excess tax (shortfall) benefit	(915)	876
Lease right-of-use assets and liabilities, net	(52)	252
Changes in assets and liabilities:		
Other assets	37,571	12,377
Other liabilities	(933)	2,072
Net cash provided by operating activities	449,825	98,328
Cash flows from investing activities		
Purchases of investment securities available-for-sale	(198,676)	(360,058)
Proceeds from maturities, calls, and principal paydown of investment securities available-for-sale	79,241	129,840
Proceeds from SBA reimbursement/sale of foreclosed assets, net	—	432
Maturities of certificates of deposits with other banks	250	500
Loan and lease originations and principal collections, net	(1,240,536)	(746,991)
Purchases of equity security investments	(3,359)	(9,213)
Purchases of equity method investments	(5,094)	(30,178)
Proceeds from sale of equity security investment	—	369
Proceeds from sale of equity method investments	6,878	147,713
Proceeds from sale of premises and equipment	100	—
Purchases of premises and equipment, net	(25,231)	(35,631)
Net cash used by investing activities	(1,386,427)	(903,217)

See Notes to Unaudited Condensed Consolidated Financial Statements

Live Oak Bancshares, Inc.
Condensed Consolidated Statements of Cash Flows (Continued)
For the nine months ended September 30, 2023 and 2022 (unaudited)

(Dollars in thousands)

	Nine Months Ended September 30,	
	2023	2022
<i>Cash flows from financing activities</i>		
Net increase in deposits	\$ 1,118,714	\$ 1,292,865
Proceeds from borrowings	2,906,056	12,074
Repayment of borrowings	(2,963,412)	(294,747)
Stock option exercises	926	1,650
Employee stock purchase program	1,396	1,066
Withholding cash issued in lieu of restricted stock and other	(4,950)	(4,453)
Shareholder dividend distributions	(3,990)	(3,946)
Net cash provided by financing activities	1,054,740	1,004,509
Net increase in cash and cash equivalents	118,138	199,620
<i>Cash and cash equivalents, beginning</i>	416,636	203,750
<i>Cash and cash equivalents, ending</i>	\$ 534,774	\$ 403,370
<i>Supplemental disclosures of cash flow information</i>		
Interest paid	\$ 245,091	\$ 66,975
Income tax paid, net	1,689	17,128
<i>Supplemental disclosures of noncash investing and financing activities</i>		
Unrealized holding losses on investment securities available-for-sale, net of taxes	\$ (26,002)	\$ (97,188)
Transfers from loans and leases to foreclosed assets or SBA receivable	34,864	14,880
Net transfers between foreclosed assets and SBA receivable	—	139
Transfer aircraft from premises and equipment, net to other assets	14,177	—
Transfer of loans held for sale to loans and leases held for investment	65,734	843,639
Transfer of loans and leases held for investment to loans held for sale	458,868	356,429
Transfer from retained earnings to other assets for pro rata portion of equity method investee stock compensation expense	841	415
Equity method investment commitments	7,721	14,732
Equity security investment commitments	—	394

See Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Basis of Presentation

Nature of Operations

Live Oak Bancshares, Inc. (collectively with its subsidiaries including Live Oak Banking Company, the "Company") is a bank holding company headquartered in Wilmington, North Carolina incorporated under the laws of the State of North Carolina in December 2008. The Company conducts business operations primarily through its commercial bank subsidiary, Live Oak Banking Company (the "Bank"). The Bank was organized and incorporated under the laws of the State of North Carolina on February 25, 2008 and commenced operations on May 12, 2008. The Bank specializes in providing lending and deposit related services to small businesses nationwide. A significant portion of the loans originated by the Bank are guaranteed by the Small Business Administration ("SBA") under the 7(a) Loan Program and the U.S. Department of Agriculture's ("USDA") Rural Energy for America Program ("REAP"), Water and Environmental Program ("WEP"), Business & Industry ("B&I") and Community Facilities loan programs. These loans are to small businesses and professionals with what the Bank believes are lower risk characteristics. Industries, or "verticals," on which the Bank focuses its lending efforts are carefully selected. The Bank also lends more broadly to select borrowers outside of those verticals.

The Company's wholly owned subsidiaries are the Bank, Government Loan Solutions, Inc. ("GLS"), Live Oak Grove, LLC ("Grove"), Live Oak Ventures, Inc. ("Live Oak Ventures"), and Canapi Advisors, LLC ("Canapi Advisors"). GLS is a management and technology consulting firm that advises and offers solutions and services to participants in the government guaranteed lending sector. GLS 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. The Grove provides Company employees and business visitors an on-site restaurant location. Live Oak Ventures' purpose is investing in businesses that align with the Company's strategic initiative to be a leader in financial technology. Canapi Advisors provides investment advisory services to a series of funds focused on providing venture capital to new and emerging financial technology companies.

The Bank's wholly owned subsidiaries are Live Oak Number One, Inc., Live Oak Clean Energy Financing LLC ("LOCEF"), Live Oak Private Wealth, LLC ("Live Oak Private Wealth") and Tiburon Land Holdings, LLC ("TLH"). Live Oak Number One, Inc. holds properties foreclosed on by the Bank. LOCEF provides financing to entities for renewable energy applications. Live Oak Private Wealth provides high-net-worth individuals and families with strategic wealth and investment management services. During the first quarter of 2022, Jolley Asset Management, LLC ("JAM") was merged into Live Oak Private Wealth. JAM was previously a wholly owned subsidiary of Live Oak Private Wealth. TLH was formed in the third quarter of 2022 to hold land adjacent to the Bank's headquarters consisting of wetlands and other protected property for the use and enjoyment of the Bank's employees and customers.

The Company generates revenue primarily from net interest income and secondarily through the origination and sale of government guaranteed loans. Income from the retention of loans is comprised principally of interest income. Income from the sale of loans is comprised of loan servicing revenue and revaluation of related servicing rights along with net gains on sales of loans. Offsetting these revenues are the cost of funding sources, provision for loan and lease credit losses, any costs related to foreclosed assets and other operating costs such as salaries and employee benefits, travel, professional services, advertising and marketing and tax expense. The Company also has less routinely generated gains and losses arising from its financial technology investments predominantly in its fintech segment.

General

In the opinion of management, all adjustments necessary for a fair presentation of the financial position and results of operations for the periods presented have been included, and all intercompany transactions have been eliminated in consolidation. Results of operations for the three and nine months ended September 30, 2023 are not necessarily indicative of the results of operations that may be expected for the year ending December 31, 2023. The Condensed Consolidated Balance Sheet as of December 31, 2022 has been derived from the audited consolidated financial statements contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the Securities Exchange Commission ("SEC") on February 23, 2023 (SEC File No. 001-37497) (the "2022 Form 10-K"). A summary description of the significant accounting policies followed by the Company is set forth in Note 1 of the Notes to Consolidated Financial Statements in the Company's 2022 Form 10-K. These Unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited consolidated financial statements and footnotes in the Company's 2022 Form 10-K.

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

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

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 two reportable operating segments: Banking and Fintech, as discussed more fully in Note 11. Segments.

Changes in Accounting Estimates

During the first quarter of 2023, the Company refined its allowance for credit losses ("ACL") methodology for estimating probability of default ("PD") and loss given default ("LGD"). Additionally, the Company began using internally calculated prepayment rates based on its historical information. These changes, based on the continued maturity of internal data, resulted in a \$ 1.5 million increase in the ACL in the first quarter of 2023.

The Company also refined its methodology for estimating its reserve on unfunded loan commitments by incorporating historical utilization rates on unused lines of credit and updating probability assumptions related to construction loan commitments. These changes resulted in a \$ 2.4 million increase in the reserve on unfunded commitments in the first quarter of 2023.

During the third quarter of 2023, the Company changed the valuation techniques used to estimate the fair value of servicing rights and loans measured at fair value as a result of rising interest rates and their impacts on market conditions. The changes include aligning our net servicing income and loan fair value estimates with changes in forward interest rate curves. Loan fair value estimates were also revised to utilize market participant credit loss information. These revisions provide estimates that the Company believes are more representative of fair value while transitioning from unobservable inputs to those that are more observable. These estimate changes were implemented as of July 1, 2023 and resulted in one-time adjustments to increase the estimated value of the servicing asset by \$ 13.7 million and loans measured at fair value by \$ 1.3 million. This adjustment also increased noninterest income by a corresponding \$ 15.0 million.

These refinements have been accounted for as changes in accounting estimates under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 250, *Accounting Changes and Error Corrections*, with prospective application beginning in the period of change.

Long-Lived Asset Reclassified to Held for Sale

During the third quarter of 2023, the Company determined 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 marketed the aircraft for sale. In September 2023, the Company entered into a sale and purchase agreement with a third party with expected total proceeds, net of estimated expenses, of \$ 18.6 million. The carrying amount of the aircraft of \$ 14.2 million is reflected in the September 30, 2023 Unaudited Condensed Consolidated Balance Sheet in the "Other assets" line item. Subsequent to September 30, 2023, the aircraft was sold for a gain of \$ 4.4 million.

Reclassifications

During the third quarter of 2023, management reclassified all Search Fund Lending loans from the Specialty Lending division to the Small Business Banking division to better align with the underlying risk characteristics and management's methods for managing the Sponsor Finance business. This resulted in a reclassification of \$ 297.2 million between loan classes as of December 31, 2022.

Note 2. Recent Accounting Pronouncements

In March 2020, the FASB issued Accounting Standards Update ("ASU") No. 2020-04 "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting" ("ASU 2020-04"). ASU 2020-04 provides optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. In December 2022, ASU 2022-06 "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848" was issued deferring the sunset date of Topic 848. With the amendments, the ASU can be adopted by the Company as of March 12, 2020, through December 31, 2024. The Company does not believe these standards will have a material impact on its consolidated financial statements. To address the discontinuance of LIBOR, the Company stopped originating variable LIBOR-based loans effective December 31, 2021 and started to negotiate loans using the preferred replacement index, the Secured Overnight Financing Rate ("SOFR") or a relevant duration U.S. Treasury rate. For currently outstanding LIBOR-based loans, the timing and manner in which each customer's contract transitions from LIBOR to another rate will vary on a case-by-case basis. As of September 30, 2023, the Company has transitioned nearly all its LIBOR-based loan exposure to an alternative index. The remaining LIBOR-based loans will transition to an alternative index at their next repricing date.

In March 2022, the FASB issued ASU No. 2022-02 "Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings ("TDRs") and Vintage Disclosures" ("ASU 2022-02"). ASU 2022-02 eliminates the accounting guidance for TDRs by creditors in ASC 310-40, *Receivables – Troubled Debt Restructurings by Creditors*, while enhancing disclosure requirements for certain loan refinancings and restructurings when a borrower is experiencing financial difficulty. Additionally, for public business entities, ASU 2022-02 requires that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investments in leases within the scope of ASC 326-20, *Financial Instruments – Credit Losses – Measured at Amortized Cost*. The Company adopted the standard on January 1, 2023 using the modified retrospective method resulting in a net increase to retained earnings of \$ 676 thousand.

In June 2022, the FASB issued ASU No. 2022-03 "Fair Value Measurement (Topic 820) Fair Value Measurement of Equity Securities Subject to Contractual Restrictions" ("ASU 2022-03"). ASU 2022-03 indicates a contractual sale restriction on equity securities should not be considered in measuring fair value, however, disclosure should be made about such restrictions. The amendments in this standard will be effective for the Company on January 1, 2024. The Company does not believe this standard will have a material impact on its consolidated financial statements.

In March 2023, the FASB issued ASU No. 2023-02 "Investments-Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method" ("ASU 2023-02"). ASU 2023-02 permits companies to account for tax equity investments, regardless of the tax credit program from which the income tax credits are received, using the proportional amortization method if certain conditions are met. The amendments in this standard will be effective for the Company on January 1, 2024. The Company does not believe this standard will have a material impact on its consolidated financial statements.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Note 3. Earnings Per Share

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Basic earnings per share:				
Net income	\$ 39,793	\$ 42,868	\$ 57,735	\$ 174,416
Weighted-average basic shares outstanding	44,408,997	43,914,920	44,298,798	43,814,648
Basic earnings per share	\$ 0.89	\$ 0.97	\$ 1.30	\$ 3.98
Diluted earnings per share:				
Net income, for diluted earnings per share	\$ 39,793	\$ 42,868	\$ 57,735	\$ 174,416
Total weighted-average basic shares outstanding	44,408,997	43,914,920	44,298,798	43,814,648
Add effect of dilutive stock options and restricted stock grants	859,748	882,189	724,941	1,128,784
Total weighted-average diluted shares outstanding	45,268,745	44,797,109	45,023,739	44,943,432
Diluted earnings per share	\$ 0.88	\$ 0.96	\$ 1.28	\$ 3.88
Anti-dilutive stock options and restricted shares	700,768	1,335,254	700,768	1,335,254

Note 4. Securities
Available-for-Sale

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

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
September 30, 2023				
US government agencies	\$ 30,799	\$ —	\$ 615	\$ 30,184
Mortgage-backed securities	1,221,556	66	154,811	1,066,811
Municipal bonds	3,207	—	324	2,883
Total	\$ 1,255,562	\$ 66	\$ 155,750	\$ 1,099,878
December 31, 2022				
US government agencies	\$ 16,080	\$ —	\$ 412	\$ 15,668
Mortgage-backed securities	1,116,387	270	121,083	995,574
Municipal bonds	3,223	—	246	2,977
Other debt securities	500	—	—	500
Total	\$ 1,136,190	\$ 270	\$ 121,741	\$ 1,014,719

During the three months ended September 30, 2023, two mortgage-backed securities totaling \$ 4.3 million were settled. During the nine months ended September 30, 2023, four mortgage-backed securities totaling \$ 7.0 million were settled.

During the three months ended September 30, 2022, two mortgage-backed securities totaling \$ 3.8 million were settled. During the nine months ended September 30, 2022, twenty mortgage-backed securities totaling \$ 36.5 million were settled.

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

Accrued interest receivable on available-for-sale securities totaled \$ 3.4 million and \$ 2.9 million at September 30, 2023 and December 31, 2022, respectively, and is included in other assets in the accompanying Unaudited Condensed Consolidated Balance Sheets.

The following tables show debt securities available-for-sale in an unrealized loss position for which an allowance for credit losses has not been recorded, aggregated by investment category and length of time that the individual securities have been in a continuous unrealized loss position.

	Less Than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
September 30, 2023						
US government agencies	\$ 17,666	\$ 176	\$ 12,518	\$ 439	\$ 30,184	\$ 615
Mortgage-backed securities	218,425	10,744	842,233	144,067	1,060,658	154,811
Municipal bonds	—	—	2,883	324	2,883	324
Total	<u>\$ 236,091</u>	<u>\$ 10,920</u>	<u>\$ 857,634</u>	<u>\$ 144,830</u>	<u>\$ 1,093,725</u>	<u>\$ 155,750</u>
	Less Than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2022						
US government agencies	\$ 15,668	\$ 412	\$ —	\$ —	\$ 15,668	\$ 412
Mortgage-backed securities	513,639	29,060	456,972	92,023	970,611	121,083
Municipal bonds	2,884	241	93	5	2,977	246
Total	<u>\$ 532,191</u>	<u>\$ 29,713</u>	<u>\$ 457,065</u>	<u>\$ 92,028</u>	<u>\$ 989,256</u>	<u>\$ 121,741</u>

Management evaluates available-for-sale debt securities to determine whether the unrealized loss is due to credit-related factors or non-credit-related factors. The evaluation considers the extent to which the security's fair value is less than cost, the financial condition and near-term prospects of the issuer, and intent and ability of the Company to retain its investment in the security for a period of time sufficient to allow for any anticipated recovery in fair value.

At September 30, 2023, there were 405 mortgage-backed securities, four US government agency securities and two municipal bonds in unrealized loss positions for greater than 12 months. There were 49 mortgage-backed securities and five US government agency securities in unrealized loss positions for less than 12 months. Unrealized losses at December 31, 2022 were comprised of 185 mortgage-backed securities and one municipal bond in unrealized loss positions for greater than 12 months and 236 mortgage-backed securities, five US government agency securities and one municipal bond in unrealized loss positions for less than 12 months.

These unrealized losses are primarily the result of non-credit-related volatility in the market and market interest rates. Since none of the unrealized losses relate to marketability of the securities or the issuers' ability to honor redemption obligations and the Company has the intent and ability to hold the securities for a sufficient period of time to recover unrealized losses, none of the losses have been recognized in the Company's Unaudited Condensed Consolidated Statements of Income.

All mortgage-backed securities in the Company's portfolio at September 30, 2023 and December 31, 2022 were backed by U.S. government sponsored enterprises ("GSEs").

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

The following is a summary of investment securities by maturity:

	September 30, 2023	
	Available-for-Sale	
	Amortized Cost	Fair Value
US government agencies		
Within one year	\$ 8,000	\$ 7,954
One to five years	20,424	19,969
Five to ten years	2,375	2,261
Total	30,799	30,184
Mortgage-backed securities		
Within one year	12,519	12,452
One to five years	169,796	158,003
Five to ten years	249,343	212,178
After 10 years	789,898	684,178
Total	1,221,556	1,066,811
Municipal bonds		
Five to ten years	3,109	2,799
After 10 years	98	84
Total	3,207	2,883
Total	\$ 1,255,562	\$ 1,099,878

Mortgage-backed securities are included in maturity categories based on their contractual maturity date. Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations.

There were no securities pledged at September 30, 2023 or December 31, 2022.

Other

Other investments, largely comprised of non-marketable equity investments, are generally accounted for under the equity method or equity security accounting and are included in other assets in the accompanying Unaudited Condensed Consolidated Balance Sheets. The below tables provide additional information related to investments accounted for under these two methods.

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

The carrying amount and ownership percentage of each equity investment over which the Company has significant influence at September 30, 2023 and December 31, 2022 is reflected in the following table:

	September 30, 2023		December 31, 2022	
	Amount	Ownership %	Amount	Ownership %
Apiture, Inc.	\$ 56,559	40.3 %	\$ 60,320	40.3 %
Canapi Ventures SBIC Fund, LP ^{(1) (5)}	18,214	2.9	19,246	2.9
Canapi Ventures Fund, LP ^{(2) (5)}	2,272	1.5	2,382	1.5
Canapi Ventures Fund II, LP ^{(3) (5)}	7,297	1.6	7,412	1.6
Canapi Ventures SBIC Fund II, LP ^{(4) (5)}	7,816	2.9	7,981	3.7
Other Fintech investments in private companies ⁽⁶⁾	—	—	241	4.3
Other ⁽⁷⁾	20,217	Various	12,476	Various
Total	<u>\$ 112,375</u>		<u>\$ 110,058</u>	

(1) Includes unfunded commitments of \$ 5.1 million and \$ 5.5 million as of September 30, 2023 and December 31, 2022, respectively.

(2) Includes unfunded commitments of \$ 613 thousand and \$ 617 thousand as of September 30, 2023 and December 31, 2022, respectively.

(3) Includes unfunded commitments of \$ 6.7 million as of September 30, 2023 and December 31, 2022.

(4) Includes unfunded commitments of \$ 7.4 million and \$ 7.5 million as of September 30, 2023 and December 31, 2022, respectively.

(5) Investee is accounted for under equity method due to the Company's participation as an investment advisor.

(6) As of December 31, 2022, Other Fintech investments include Kwipped, Inc. As of September 30, 2023, the investment has been moved to equity security as the preferred shares do not qualify as in-substance common stock.

(7) As of September 30, 2023, Other investments include low income housing tax credit ("LIHTC") in Estrella Landing Apartments LLC ("Estrella Landing"), in which the company holds a 99.9 % limited member interest. Also included in Other investments are solar income tax credit investments in Green Sun Tenant LLC ("Green Sun"), SVA 2021-2 TE Holdco LLC ("Sun Vest") and EG5 CSP1 Holding LLC ("HEP"), which the Company holds a 99.0 % limited member interest in all investments. Also included are Cape Fear Collective Impact Opportunity 1 LLC ("Cape Fear Collective"), Cape Fear Collective Impact Opportunity 2 LLC ("Cape Fear Collective 2") and OTR Fund I, LLC ("OTR") which the Company holds 99.0 %, 32.3 %, and 11.5 % of limited member interests, respectively. As of September 30, 2023, there was an unfunded commitment of \$ 7.7 million for Estrella Landing. The Company also has an unrecorded commitment related to a solar income tax credit investment for \$ 18.2 million. As of December 31, 2022, Other investments include Green Sun, Sun Vest, and HEP, which the Company holds a 99.0 % limited member interest in all investments. Also included within Other investments are Cape Fear Collective and Cape Fear Collective 2, which the Company holds 99.0 % and 32.3 % of limited member interests, respectively. As of December 31, 2022 an unfunded commitment of \$ 2.6 million was recorded as a liability for HEP, and as of September 30, 2023, this commitment has been funded. Managing control of the above investments resides with the managing members.

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

The carrying amount of the Company's investments in non-marketable equity securities with no readily determinable fair value and amounts recognized in earnings on a cumulative basis as of September 30, 2023 and as of and for the nine months ended September 30, 2023 and 2022 is reflected in the following table:

	Cumulative Adjustments	As of and for the nine month period ended	
		September 30, 2023	September 30, 2022
Carrying value ⁽¹⁾		\$ 78,508	\$ 76,438
Carrying value adjustments:			
Impairment	\$ —	—	—
Upward changes for observable prices ⁽²⁾	50,492	—	2,022
Downward changes for observable prices	(1,085)	(999)	—
Net upward change	\$ 49,407	\$ (999)	\$ 2,022

(1) Includes \$ 2.6 million and \$ 3.1 million in unfunded commitments as of September 30, 2023, and September 30, 2022, respectively.

(2) Cumulative adjustments excludes \$ 13.9 million in realized gains for sale of an investment in the second quarter of 2021.

For the three and nine months ended September 30, 2023, the Company recognized unrealized losses on all equity securities held at the reporting date of \$ 1.0 million. For the three and nine months ended September 30, 2022, the Company recognized unrealized gains on all equity securities held at the reporting date of \$ 493 thousand and \$ 1.9 million, respectively.

Variable Interest Entities

Variable interests are defined as contractual ownership or other interests in an entity that change with fluctuations in the fair value of an entity's net asset value (a "VIE"). The primary beneficiary consolidates the 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.

Solar Renewable Energy Tax Credit Investments

The Company has equity interests in several limited liability companies that own and operate solar renewable energy projects which are accounted for as equity method investments. Over the course of the investments, 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.

Affordable Housing

The Company has an equity investment in a limited liability company ("LIHTC") that qualifies as an affordable housing project, managed by an unrelated general partner. The Company accounts for the investment under the proportional amortization method. Under this method an entity amortizes the initial cost of the investment in proportion to the tax credits and other tax benefits received and recognizes the net investment performance as a component of income tax expense. The Company also has equity interests in two limited liability companies that invest in the acquisition, rehabilitation, or new construction of local qualified housing projects which are accounted for as equity method investments.

Live Oak Bancshares, Inc.

Notes to Unaudited Condensed Consolidated Financial Statements

Canapi Funds

The Company's limited partnership investments in the Canapi Funds focus on providing venture capital to new and emerging financial technology companies. After initial commitment and over the course of the investment period, the Company will make capital contributions and receive profit and return of capital distributions as a result of fund performance until the funds wind down.

Non-marketable and Other Equity Investments

The Company also has limited interests in several non-marketable funds, including Small Business Investment Company ("SBIC") and venture capital funds, which are accounted for as equity security investments. After the initial commitment and over the course of the investment period, the Company will make capital contributions and receive profit and return of capital distributions as a result of fund performance until the funds wind down. While the partnership agreements allow 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. All investments are generally non-redeemable and distributions are expected to be received through the liquidation of the underlying investments throughout the life of the investment fund. Investments may only be sold or transferred subject to the notice and approval provisions of the underlying investment agreement.

All above investments meet the criteria of a VIE, however, the Company is not the primary beneficiary of the entities, as it does not have the power to direct the activities that most significantly impact the economic performance of the entities.

The Company's investment in the unconsolidated VIEs are carried in other assets and the Company's unfunded capital and other commitments related to the unconsolidated VIEs are carried in other liabilities on the Unaudited Condensed Consolidated Balance Sheets.

The Company's maximum exposure to loss from unconsolidated VIEs includes the investment recorded on the Company's Unaudited Condensed Consolidated Balance Sheets. For solar ITC investments, the balance sheet figures are net of any impairment recognized, and includes 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 loss from these investments is remote, the maximum exposure for solar tax credit investments was determined by assuming a scenario where related tax credits were recaptured.

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

The following table provides a summary of the VIEs that the Company has not consolidated as of September 30, 2023 and December 31, 2022:

September 30, 2023	Investment Carrying Amount	Maximum Exposure to Loss	Liability Recognized	Classification
Solar tax credit investments	\$ 3,713	\$ 18,837	\$ —	Other assets ⁽¹⁾
Affordable housing	15,888	15,888	7,721	Other assets & other liabilities ⁽²⁾
Canapi Funds	35,599	35,599	19,755	Other assets & other liabilities
Non-marketable and other equity investments	9,007	9,007	2,616	Other assets & other liabilities

December 31, 2022	Investment Carrying Amount	Maximum Exposure to Loss	Liability Recognized	Classification
Solar tax credit investments	\$ 5,221	\$ 24,295	\$ 2,641	Other assets & other liabilities ⁽³⁾
Affordable housing	7,255	7,255	—	Other assets
Canapi Funds	37,021	37,021	20,474	Other assets & other liabilities
Non-marketable and other equity investments	8,509	8,509	3,033	Other assets & other liabilities

- (1) Maximum exposure to loss represents \$ 3.7 million of current investments and a scenario in which related tax credits are recaptured, collectively totaling \$ 15.1 million.
- (2) Maximum exposure to loss represents \$ 15.9 million of investments. As there are no tax credits allocated in the current year, there is no increase to the maximum exposure to loss related to recaptured tax credits on the \$ 8.8 million LIHTC investment.
- (3) Maximum exposure to loss represents \$ 5.2 million of current investments and a scenario in which related tax credits are recaptured, collectively totaling \$ 19.1 million.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Note 5. Loans and Leases Held for Investment and Credit Quality

The following tables present total loans and leases held for investment and an aging analysis for the Company's portfolio segments. 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.

	Current or Less than 30 Days Past Due	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Total Carried at Amortized Cost	Loans Accounted for Under the Fair Value Option ⁽¹⁾	Total Loans and Leases
September 30, 2023							
Commercial & Industrial							
Small Business Banking	\$ 2,103,484	\$ 10,603	\$ 29,857	\$ 40,460	\$ 2,143,944	\$ 164,631	\$ 2,308,575
Specialty Lending	1,024,183	—	—	—	1,024,183	8,307	1,032,490
Energy & Infrastructure	644,163	3,746	3,082	6,828	650,991	47,300	698,291
Paycheck Protection Program	6,750	—	—	—	6,750	—	6,750
Total	3,778,580	14,349	32,939	47,288	3,825,868	220,238	4,046,106
Construction & Development							
Small Business Banking	491,744	—	—	—	491,744	—	491,744
Specialty Lending	97,095	—	—	—	97,095	—	97,095
Energy & Infrastructure	6,882	—	—	—	6,882	—	6,882
Total	595,721	—	—	—	595,721	—	595,721
Commercial Real Estate							
Small Business Banking	2,258,327	28,349	20,132	48,481	2,306,808	133,911	2,440,719
Specialty Lending	404,734	—	12,232	12,232	416,966	139	417,105
Energy & Infrastructure	149,805	—	3,072	3,072	152,877	17,880	170,757
Total	2,812,866	28,349	35,436	63,785	2,876,651	151,930	3,028,581
Commercial Land							
Small Business Banking	508,804	—	1,917	1,917	510,721	37,960	548,681
Total	508,804	—	1,917	1,917	510,721	37,960	548,681
Total	\$ 7,695,971	\$ 42,698	\$ 70,292	\$ 112,990	\$ 7,808,961	\$ 410,128	\$ 8,219,089
Retained Loan Discount							(33,783)
Net Deferred Cost							17,325
Loans and Leases, Net							\$ 8,202,631
Guaranteed Balance	\$ 2,705,805	\$ 30,694	\$ 47,673	\$ 78,367	\$ 2,784,172	\$ 66,707	\$ 2,850,879
% Guaranteed	35.2 %	71.9 %	67.8 %	69.4 %	35.7 %	16.3 %	34.7 %

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

	Current or Less than 30 Days Past Due	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Total Carried at Amortized Cost	Loans Accounted for Under the Fair Value Option ⁽¹⁾	Total Loans and Leases
December 31, 2022							
Commercial & Industrial							
Small Business Banking	\$ 1,987,508	\$ 21,987	\$ 16,487	\$ 38,474	\$ 2,025,982	\$ 195,856	\$ 2,221,838
Specialty Lending	754,272	—	—	—	754,272	15,576	769,848
Energy & Infrastructure	420,447	—	3,082	3,082	423,529	50,094	473,623
Paycheck Protection Program	13,134	—	—	—	13,134	—	13,134
Total	3,175,361	21,987	19,569	41,556	3,216,917	261,526	3,478,443
Construction & Development							
Small Business Banking	471,243	1,500	—	1,500	472,743	—	472,743
Specialty Lending	104,069	—	—	—	104,069	—	104,069
Energy & Infrastructure	13,753	—	—	—	13,753	—	13,753
Total	589,065	1,500	—	1,500	590,565	—	590,565
Commercial Real Estate							
Small Business Banking	2,149,662	12,082	5,771	17,853	2,167,515	168,409	2,335,924
Specialty Lending	306,785	—	—	—	306,785	236	307,021
Energy & Infrastructure	136,706	—	3,072	3,072	139,778	22,123	161,901
Total	2,593,153	12,082	8,843	20,925	2,614,078	190,768	2,804,846
Commercial Land							
Small Business Banking	429,014	1,663	1,917	3,580	432,594	42,164	474,758
Total	429,014	1,663	1,917	3,580	432,594	42,164	474,758
Total	\$ 6,786,593	\$ 37,232	\$ 30,329	\$ 67,561	\$ 6,854,154	\$ 494,458	\$ 7,348,612
Retained Loan Discount							(23,893)
Net Deferred Cost							19,459
Loans and Leases, Net							\$ 7,344,178
Guaranteed Balance	\$ 2,657,770	\$ 20,199	\$ 26,026	\$ 46,225	\$ 2,703,995	\$ 67,268	\$ 2,771,263
% Guaranteed	39.2 %	54.3 %	85.8 %	68.4 %	39.5 %	13.6 %	37.7 %

(1) Retained portions of government guaranteed loans sold prior to January 1, 2021 are carried at fair value under FASB ASC Subtopic 825-10, *Financial Instruments: Overall*. See Note 9. Fair Value of Financial Instruments for additional information.

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

The following tables present asset quality indicators by portfolio class and origination year. See Note 3. Loans and Leases Held for Investment and Credit Quality in the Company's 2022 Form 10-K for additional discussion around the asset quality indicators that the Company uses to manage and monitor credit risk.

	Term Loans and Leases Amortized Cost Basis by Origination Year						Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term	Total ⁽¹⁾
	2023	2022	2021	2020	2019	Prior			
September 30, 2023									
Small Business Banking									
Risk Grades 1 - 4	\$ 746,767	\$ 1,499,758	\$ 1,324,936	\$ 728,706	\$ 376,392	\$ 314,869	\$ 78,699	\$ 10,914	\$ 5,081,041
Risk Grade 5	2,600	47,299	33,895	46,180	29,658	51,047	21,687	1,082	233,448
Risk Grades 6 - 8	—	26,028	28,514	26,827	25,152	29,946	2,261	—	138,728
Total	749,367	1,573,085	1,387,345	801,713	431,202	395,862	102,647	11,996	5,453,217
Specialty Lending									
Risk Grades 1 - 4	480,389	408,420	257,867	60,173	9,216	119	165,929	16,593	1,398,706
Risk Grade 5	1,250	40,018	32,703	6,730	10,465	—	19,763	7,111	118,040
Risk Grades 6 - 8	—	—	16,396	—	—	—	5,102	—	21,498
Total	481,639	448,438	306,966	66,903	19,681	119	190,794	23,704	1,538,244
Energy & Infrastructure									
Risk Grades 1-4	318,582	152,921	152,400	38,975	50,442	28,683	12,822	—	754,825
Risk Grade 5	—	—	2,625	13,485	7,188	10,315	—	—	33,613
Risk Grades 6 - 8	—	4,024	6,336	3,564	—	8,388	—	—	22,312
Total	318,582	156,945	161,361	56,024	57,630	47,386	12,822	—	810,750
Paycheck Protection Program									
Risk Grades 1 - 4	—	—	3,532	3,218	—	—	—	—	6,750
Total	—	—	3,532	3,218	—	—	—	—	6,750
Total	\$ 1,549,588	\$ 2,178,468	\$ 1,859,204	\$ 927,858	\$ 508,513	\$ 443,367	\$ 306,263	\$ 35,700	\$ 7,808,961
Year-To-Date Gross Charge-offs									
Small Business Banking	\$ —	\$ 2,018	\$ 5,226	\$ 1,009	\$ 788	\$ 523	\$ 1,013	\$ —	\$ 10,577
Specialty Lending	—	—	—	—	—	—	7,966	—	7,966
Total	\$ —	\$ 2,018	\$ 5,226	\$ 1,009	\$ 788	\$ 523	\$ 8,979	\$ —	\$ 18,543

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

	Term Loans and Leases Amortized Cost Basis by Origination Year						Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term	Total ⁽¹⁾
	2022	2021	2020	2019	2018	Prior			
December 31, 2022									
Small Business Banking									
Risk Grades 1 - 4	\$ 1,499,309	\$ 1,490,346	\$ 857,380	\$ 438,907	\$ 224,199	\$ 204,933	\$ 75,005	\$ 1,773	\$ 4,791,852
Risk Grade 5	15,942	22,295	45,541	46,655	30,523	27,212	15,549	452	204,169
Risk Grades 6 - 8	1,806	8,777	18,261	29,047	14,260	27,215	2,688	759	102,813
Total	1,517,057	1,521,418	921,182	514,609	268,982	259,360	93,242	2,984	5,098,834
Specialty Lending									
Risk Grades 1 - 4	562,952	266,165	82,812	13,343	268	788	143,512	31,469	1,101,309
Risk Grade 5	7,341	28,722	6,990	9,258	—	—	4,280	—	56,591
Risk Grades 6 - 8	—	6,933	—	—	—	—	293	—	7,226
Total	570,293	301,820	89,802	22,601	268	788	148,085	31,469	1,165,126
Energy & Infrastructure									
Risk Grades 1 - 4	199,338	176,855	39,600	51,190	23,374	19,694	12,751	351	523,153
Risk Grade 5	4,024	4,409	500	6,976	4,706	5,142	—	—	25,757
Risk Grades 6 - 8	—	3,082	16,589	—	8,479	—	—	—	28,150
Total	203,362	184,346	56,689	58,166	36,559	24,836	12,751	351	577,060
Paycheck Protection Program									
Risk Grades 1 - 4	—	7,421	5,713	—	—	—	—	—	13,134
Total	—	7,421	5,713	—	—	—	—	—	13,134
Total	\$ 2,290,712	\$ 2,015,005	\$ 1,073,386	\$ 595,376	\$ 305,809	\$ 284,984	\$ 254,078	\$ 34,804	\$ 6,854,154

(1) Excludes \$ 410.1 million and \$ 494.5 million of loans accounted for under the fair value option as of September 30, 2023 and December 31, 2022, respectively.

The following tables present guaranteed and unguaranteed loan and lease balances by asset quality indicator:

	Loan and Lease		Unguaranteed	
	Balance ⁽¹⁾	Guaranteed Balance	Balance	% Guaranteed
September 30, 2023				
Risk Grades 1 - 4	\$ 7,241,322	\$ 2,557,146	\$ 4,684,176	35.3 %
Risk Grade 5	385,101	123,431	261,670	32.1
Risk Grades 6 - 8	182,538	103,595	78,943	56.8
Total	\$ 7,808,961	\$ 2,784,172	\$ 5,024,789	35.7 %
December 31, 2022				
Risk Grades 1 - 4	\$ 6,429,448	\$ 2,508,229	\$ 3,921,219	39.0 %
Risk Grade 5	286,517	115,573	170,944	40.3
Risk Grades 6 - 8	138,189	80,193	57,996	58.0
Total	\$ 6,854,154	\$ 2,703,995	\$ 4,150,159	39.5 %

(1) Excludes \$ 410.1 million and \$ 494.5 million of loans accounted for under the fair value option as of September 30, 2023 and December 31, 2022, respectively.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Nonaccrual Loans and Leases

As of September 30, 2023 and December 31, 2022 there were no loans greater than 90 days past due and still accruing. There was no interest income recognized on nonaccrual loans and leases during the three and nine months ended September 30, 2023 and 2022. Accrued interest receivable on loans totaled \$59.0 million and \$46.5 million at September 30, 2023 and December 31, 2022, respectively, and is included in other assets in the accompanying Unaudited Condensed Consolidated Balance Sheets.

Nonaccrual loans and leases held for investment as of September 30, 2023 and December 31, 2022 are as follows:

	Loan and Lease Balance ⁽¹⁾	Guaranteed Balance	Unguaranteed Balance	Unguaranteed Exposure with No ACL
September 30, 2023				
Commercial & Industrial				
Small Business Banking	\$ 34,535	\$ 29,113	\$ 5,422	\$ 407
Energy & Infrastructure	6,828	2,794	4,034	2,560
Total	41,363	31,907	9,456	2,967
Commercial Real Estate				
Small Business Banking	35,816	25,766	10,050	3,680
Specialty Lending	12,232	—	12,232	—
Energy & Infrastructure	3,072	2,799	273	—
Total	51,120	28,565	22,555	3,680
Commercial Land				
Small Business Banking	6,609	5,365	1,244	196
Total	6,609	5,365	1,244	196
Total	\$ 99,092	\$ 65,837	\$ 33,255	\$ 6,843
December 31, 2022				
Commercial & Industrial				
Small Business Banking	\$ 25,968	\$ 19,686	\$ 6,282	\$ 407
Specialty Lending	—	—	—	—
Energy & Infrastructure	3,082	2,794	288	288
Total	29,050	22,480	6,570	695
Commercial Real Estate				
Small Business Banking	34,520	23,830	10,690	3,611
Energy & Infrastructure	3,072	2,799	273	—
Total	37,592	26,629	10,963	3,611
Commercial Land				
Small Business Banking	6,750	5,499	1,251	196
Total	6,750	5,499	1,251	196
Total	\$ 73,392	\$ 54,608	\$ 18,784	\$ 4,502

(1) Excludes nonaccrual loans accounted for under the fair value option. See Note 9. Fair Value of Financial Instruments for additional information.

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

When a loan or lease is placed on nonaccrual status, any accrued interest is reversed from loan interest income. The following table summarizes the amount of accrued interest reversed during the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Commercial & Industrial	\$ 263	\$ 88	\$ 1,605	\$ 397
Commercial Real Estate	32	288	499	470
Commercial Land	—	—	—	105
Total	\$ 295	\$ 376	\$ 2,104	\$ 972

The following table presents the amortized cost basis of collateral-dependent loans and leases, which are individually evaluated to determine expected credit losses, as of September 30, 2023 and December 31, 2022:

	Total Collateral-Dependent Loans			Unguaranteed Portion			
	Real Estate	Business Assets	Other	Real Estate	Business Assets	Other	Allowance for Credit Losses
September 30, 2023							
Commercial & Industrial							
Small Business Banking	\$ 2,737	\$ —	\$ —	\$ 421	\$ —	\$ —	\$ —
Specialty Lending	—	4,711	—	—	4,711	—	—
Energy & Infrastructure	3,022	—	—	227	—	—	—
Total	5,759	4,711	—	648	4,711	—	—
Commercial Real Estate							
Small Business Banking	18,348	—	—	5,908	—	—	420
Total	18,348	—	—	5,908	—	—	420
Commercial Land							
Small Business Banking	1,743	—	—	202	—	—	—
Total	1,743	—	—	202	—	—	—
Total	\$ 25,850	\$ 4,711	\$ —	\$ 6,758	\$ 4,711	\$ —	\$ 420

	Total Collateral-Dependent Loans			Unguaranteed Portion			
	Real Estate	Business Assets	Other	Real Estate	Business Assets	Other	Allowance for Credit Losses
December 31, 2022							
Commercial & Industrial							
Small Business Banking	\$ 2,730	\$ 371	\$ —	\$ 414	\$ 371	\$ —	\$ 291
Energy & Infrastructure	16,378	—	—	13,583	—	—	—
Total	19,108	371	—	13,997	371	—	291
Commercial Real Estate							
Small Business Banking	15,286	—	—	6,440	—	—	152
Total	15,286	—	—	6,440	—	—	152
Commercial Land							
Small Business Banking	1,743	—	—	202	—	—	—
Total	1,743	—	—	202	—	—	—
Total	\$ 36,137	\$ 371	\$ —	\$ 20,639	\$ 371	\$ —	\$ 443

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Allowance for Credit Losses - Loans and Leases

See Note 1. Organization and Summary of Significant Accounting Policies of the Notes to the Consolidated Financial Statements in the Company's 2022 Form 10-K for a description of the methodologies used to estimate the ACL.

The following table details activity in the ACL by portfolio segment allowance for the periods presented:

Three Months Ended	Commercial & Industrial	Construction & Development	Commercial Real Estate	Commercial Land	Total
September 30, 2023					
Beginning Balance	\$ 79,407	\$ 6,428	\$ 29,908	\$ 4,373	\$ 120,116
Charge offs	(9,088)	—	(287)	—	(9,375)
Recoveries	104	—	149	—	253
Provision (Recovery)	10,395	(448)	134	198	10,279
Ending Balance	\$ 80,818	\$ 5,980	\$ 29,904	\$ 4,571	\$ 121,273
September 30, 2022					
Beginning Balance	\$ 41,178	\$ 3,504	\$ 17,840	\$ 3,341	\$ 65,863
Charge offs	(1,528)	—	(945)	—	(2,473)
Recoveries	240	—	481	11	732
Provision	9,023	1,982	3,155	9	14,169
Ending Balance	\$ 48,913	\$ 5,486	\$ 20,531	\$ 3,361	\$ 78,291

Nine Months Ended	Commercial & Industrial	Construction & Development	Commercial Real Estate	Commercial Land	Total
September 30, 2023					
Beginning Balance	\$ 64,995	\$ 5,101	\$ 22,901	\$ 3,569	\$ 96,566
Adoption of ASU 2022-02	(25)	(166)	(83)	(402)	(676)
Charge offs	(17,564)	—	(979)	—	(18,543)
Recoveries	685	—	913	—	1,598
Provision	32,727	1,045	7,152	1,404	42,328
Ending Balance	\$ 80,818	\$ 5,980	\$ 29,904	\$ 4,571	\$ 121,273
September 30, 2022					
Beginning Balance	\$ 37,770	\$ 3,435	\$ 19,068	\$ 3,311	\$ 63,584
Charge offs	(6,163)	—	(1,378)	(652)	(8,193)
Recoveries	420	—	1,197	11	1,628
Provision	16,886	2,051	1,644	691	21,272
Ending Balance	\$ 48,913	\$ 5,486	\$ 20,531	\$ 3,361	\$ 78,291

During the three and nine months ended September 30, 2023, the ACL increased as a result of loan growth, combined with specific reserve changes on individually evaluated loans and charge-off related impacts. Additionally, during the first quarter of 2023, certain assumptions were refined, drawing more heavily on internal data, in the calculations of PD, LGD, and prepayment rates. These refinements increased the ACL by \$ 1.5 million during the nine months ended September 30, 2023. Loss rates are adjusted for twelve month forecasted unemployment followed by a twelve-month straight-line reversion period.

During the three and nine month periods ended September 30, 2022, the ACL increased primarily as a result of loan growth, charge-off experience impacts, a transfer of \$ 729.5 million in loans carried at amortized cost, including \$ 694.0 million in guaranteed loans, from held for sale to held for investment and changes in the macroeconomic outlook. Loss rates are adjusted for twelve month forecasted unemployment followed by a twelve-month straight-line reversion period.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Loan Modifications for Borrowers Experiencing Financial Difficulty

The Company may agree to modify the contractual terms of a loan to a borrower experiencing financial difficulty as a part of ongoing loss mitigation strategies. These modifications may result in an interest rate reduction, term extension, an other-than-insignificant payment delay, or a combination thereof. The Company typically does not offer principal forgiveness.

The following tables summarize the amortized cost basis of loans that were modified during the periods presented.

Three Months Ended September 30, 2023	Other-Than- Insignificant	Term Extension	Interest Rate Reduction	Combination - Term	% of Total Class of Financing Receivable
	Payment Delay			Extension & Payment Delay	
Small Business Banking	\$ 10,117	\$ 5,184	\$ —	\$ —	0.3 %
Total	\$ 10,117	\$ 5,184	\$ —	\$ —	0.3 %

Nine Months Ended September 30, 2023	Other-Than- Insignificant	Term Extension	Interest Rate Reduction	Combination - Term	% of Total Class of Financing Receivable
	Payment Delay			Extension & Payment Delay	
Small Business Banking	\$ 10,117	\$ 5,184	\$ 3,356	\$ 361	0.4 %
Specialty Lending	—	399	—	4,164	0.3
Energy & Infrastructure	—	13,485	—	—	1.7
Total	\$ 10,117	\$ 19,068	\$ 3,356	\$ 4,525	2.3 %

As of September 30, 2023, the Company had commitments to lend additional funds to these borrowers totaling \$ 1.7 million.

The following table presents an aging analysis of loans that were modified on or after January 1, 2023, the date the Company adopted ASU 2022-02, through September 30, 2023.

	Current	30-89 Days	90 Days or More Past Due	Total Past Due
		Past Due		
Small Business Banking	\$ 19,018	\$ —	\$ —	\$ —
Specialty Lending	4,563	—	—	—
Energy & Infrastructure	13,485	—	—	—
Total	\$ 37,066	\$ —	\$ —	\$ —

The following tables summarize the financial impacts of loan modifications made to borrowers experiencing financial difficulty during the periods presented.

	Three Months Ended September 30, 2023	
	Weighted Average Interest Rate Reduction	Weighted Average Term Extension (in Months)
Small Business Banking	— %	60

	Nine Months Ended September 30, 2023	
	Weighted Average Interest Rate Reduction	Weighted Average Term Extension (in Months)
Small Business Banking	1.41 %	67
Specialty Lending	—	70
Energy & Infrastructure	—	12

There were no loans that were modified on or after January 1, 2023, the date the Company adopted ASU 2022-02, through September 30, 2023 that subsequently defaulted during the periods presented.

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

The Company's ACL is estimated using lifetime historical loan performance adjusted to reflect current conditions and reasonable and supportable forecasts. Upon determination that a modified loan, or portion of a modified loan, has subsequently been deemed uncollectible, the uncollectible portion is written off. The amortized cost basis is reduced by the uncollectible amount and the ACL is adjusted by the same amount. As a result, the impact of loss mitigation strategies is captured in the estimates of PD and LGD.

Troubled Debt Restructurings

The following tables present the types of loans modified as troubled debt restructurings ("TDRs"):

Three Months Ended September 30, 2022										
Interest Only		Payment Deferral		Extend Amortization		Other ⁽¹⁾		Total TDRs ⁽²⁾		
Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded	
Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at	
	period end		period end		period end		period end		period end	
Commercial & Industrial										
Small Business Banking	— \$ —	3 \$ 7,074	1 \$ 146	— \$ —	4 \$ 7,220					
Total	— —	3 7,074	1 146	— —	4 7,220					
Construction & Development										
Small Business Banking	— —	— —	— —	2 2,518	2 2,518					
Total	— —	— —	— —	2 2,518	2 2,518					
Total	— \$ —	3 \$ 7,074	1 \$ 146	2 \$ 2,518	6 \$ 9,738					

(1) Includes two small business banking loans with extended amortization and interest only.

(2) Excludes loans accounted for under the fair value option. See Note 9. Fair Value of Financial Instruments for additional information.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Nine Months Ended September 30, 2022

	Interest Only		Payment Deferral		Extend Amortization		Other ⁽¹⁾		Total TDRs ⁽²⁾	
	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded
	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at
		period end		period end		period end		period end		period end
Commercial & Industrial										
Small Business Banking	—	\$ —	6	\$ 10,192	3	\$ 1,674	1	\$ 527	10	\$ 12,393
Specialty Lending	—	—	1	734	—	—	—	—	1	734
Total	—	—	7	10,926	3	1,674	1	527	11	13,127
Commercial Real Estate										
Small Business Banking	—	—	—	—	1	4,847	—	—	1	4,847
Total	—	—	—	—	1	4,847	—	—	1	4,847
Construction & Development										
Small Business Banking	—	—	—	—	—	—	2	2,518	2	2,518
Total	—	—	—	—	—	—	2	2,518	2	2,518
Total	—	\$ —	7	\$ 10,926	4	\$ 6,521	3	\$ 3,045	14	\$ 20,492

(1) Includes one small business banking loan with extend amortization and a rate concession, two small business banking loans with extended amortization and interest only.

(2) Excludes loans accounted for under the fair value option. See Note 9. Fair Value of Financial Instruments for additional information.

Restructurings made to improve a loan's performance have varying degrees of success. The following tables present TDRs that were modified within the twelve months ended September 30, 2022 subsequently defaulted during the period:

Three Months Ended September 30, 2022

	Interest Only		Payment Deferral		Extend Amortization		Other		Total TDRs ⁽¹⁾	
	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded
	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at
		period end		period end		period end		period end		period end
Commercial & Industrial										
Small Business Banking	—	\$ —	—	\$ —	1	\$ 146	—	\$ —	1	\$ 146
Total	—	\$ —	—	\$ —	1	\$ 146	—	\$ —	1	\$ 146

(1) Excludes loans accounted for under the fair value option. See Note 9. Fair Value of Financial Instruments for additional information.

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

Nine Months Ended September 30, 2022

	Interest Only		Payment Deferral		Extend Amortization		Other		Total TDRs ⁽¹⁾	
	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded	Number of	Recorded
	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at	Loans	investment at
		period end		period end		period end		period end		period end
Commercial & Industrial										
Small Business										
Banking	—	\$ —	2	\$ 2,737	2	\$ 496	—	\$ —	4	\$ 3,233
Total	—	\$ —	2	\$ 2,737	2	\$ 496	—	\$ —	4	\$ 3,233

(1) Excludes loans accounted for under the fair value option. See Note 9. Fair Value of Financial Instruments for additional information.

Note 6. Leases
Lessor Equipment Leasing

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

Direct Financing Leases

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

	September 30, 2023	December 31, 2022
Gross direct finance lease payments receivable	\$ 2,716	\$ 4,284
Less – unearned interest	(265)	(479)
Net investment in direct financing leases	\$ 2,451	\$ 3,805

Future minimum lease payments under finance leases are as follows:

<u>As of September 30, 2023</u>	Amount
2023	\$ 388
2024	1,243
2025	968
2026	117
Total	\$ 2,716

Interest income of \$ 72 thousand and \$ 101 thousand was recognized in the three months ended September 30, 2023 and 2022, respectively. Interest income of \$ 211 thousand and \$ 309 thousand was recognized in the nine months ended September 30, 2023 and 2022, respectively.

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

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

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

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

As of September 30, 2023 and December 31, 2022, the Company had a net investment of \$ 106.9 million and \$ 114.2 million, respectively, in assets included in premises and equipment that are subject to operating leases. Of the net investment, the gross balance of the assets was \$ 162.8 million and \$ 163.4 million as of September 30, 2023 and December 31, 2022, respectively. Accumulated depreciation was \$ 55.9 million and \$ 49.2 million as of September 30, 2023 and December 31, 2022, respectively. Depreciation expense recognized on these assets was \$ 2.4 million for the three months ended September 30, 2023 and 2022. Depreciation expense recognized on these assets was \$ 7.2 million and \$ 7.3 million for the nine months ended September 30, 2023 and 2022.

Lease income of \$ 2.4 million was recognized in the three months ended September 30, 2023 and 2022. Lease income of \$ 7.1 million was recognized in the nine months ended September 30, 2023 and 2022.

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

<u>As of September 30, 2023</u>	<u>Amount</u>
2023	\$ 1,937
2024	8,808
2025	8,935
2026	8,923
2027	8,690
Thereafter	13,562
Total	<u>\$ 50,855</u>

Note 7. Servicing Assets

Loans serviced for others are not included in the accompanying Unaudited Condensed Consolidated Balance Sheets. The unpaid principal balance of loans serviced for others requiring recognition of a servicing asset was \$ 3.00 billion and \$ 2.67 billion at September 30, 2023 and December 31, 2022, respectively. The unpaid principal balance for all loans serviced for others was \$ 4.03 billion and \$ 3.48 billion at September 30, 2023 and December 31, 2022, respectively.

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

The following table summarizes the activity pertaining to servicing rights:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Balance at beginning of period	\$ 31,042	\$ 28,661	\$ 26,323	\$ 33,574
Additions, net	4,750	1,744	11,944	7,068
Fair value changes:				
Due to changes in valuation inputs or assumptions ⁽¹⁾	13,334	992	15,457	(3,056)
Decay due to increases in principal paydowns or runoff	(1,999)	(2,316)	(6,597)	(8,505)
Balance at end of period	<u>\$ 47,127</u>	<u>\$ 29,081</u>	<u>\$ 47,127</u>	<u>\$ 29,081</u>

- (1) Three and nine month periods ended September 30, 2023 include a \$ 13.7 million increase related to change in estimate implemented on July 1, 2023. See Note 1. Basis of Presentation for additional information.

The fair value of servicing rights was determined using a weighted average discount rate of 15.0 % on September 30, 2023 and 15.1 % on September 30, 2022. The fair value of servicing rights was determined using a weighted average prepayment speed of 15.3 % on September 30, 2023 and 16.1 % on September 30, 2022, with the actual rate depending on the stratification of the specific right. Changes to fair value are reported in loan servicing asset revaluation within the Unaudited Condensed Consolidated Statements of Income.

The fair value of servicing rights is highly sensitive to changes in underlying assumptions. Changes in prepayment speed assumptions typically 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, however, weakening economic conditions or significant declines in interest rates can also increase loan prepayment activity. 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.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Note 8. Borrowings

Total outstanding borrowings consisted of the following:

	September 30, 2023	December 31, 2022
Borrowings		
In March 2021, the Company entered into a 60 -month term loan agreement of \$ 50.0 million with a third party correspondent bank. The loan accrues interest at a fixed rate of 2.95 % with a monthly payment sufficient to fully amortize the loan, with all remaining unpaid principal and interest due at maturity on March 30, 2026 . The Company paid the Lender a non-refundable \$ 325 thousand loan origination fee upon signing of the Note that is presented as a direct deduction from the carrying amount of the loan and will be amortized into interest expense over the life of the loan.	\$ 25,847	\$ 33,203
On December 30, 2022, the Company made an advance of \$ 50.0 million on an overnight Fed Funds line of credit that is unsecured with a variable interest rate of 4.65 %. The Company paid down the balance in full on January 3, 2023 and there is \$ 100.0 million of available credit remaining at September 30, 2023.	—	50,000
Total borrowings	\$ 25,847	\$ 83,203

As of September 30, 2023 the Company's unused borrowing capacity was \$ 3.80 billion. Unused borrowing capacity consists of access through the Federal Reserve Bank's discount window, available lines of credit with the Federal Home Loan Bank and other correspondent banks as well as access to a repurchase agreement. As of December 31, 2022 the Company's unused borrowing capacity was \$ 3.55 billion based upon securities and loans identified as available for collateral and \$ 4.88 billion based principally upon the stated available limits from sources mentioned above.

New borrowing capacity added in the first quarter of 2023 was from the Bank Term Funding Program ("BTFP"). Under the BTFP, advances must be secured by pledging eligible securities owned by the Company on March 12, 2023. BTFP advances can be requested for a term of up to one year at a fixed market rate until the program ends March 11, 2024.

In September 2023, the Company modified a \$ 100.0 million revolving line of credit with a third party correspondent bank. The line of credit was extended 12 months to a maturity date of October 10, 2026 and the interest rate cap was increased from 4.25 % to 6.75 %. The Company paid the Lender a non-refundable \$ 250 thousand renewal fee upon signing the Note that will be amortized into interest expense over the life of the loan.

Note 9. 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.

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

The table below provides a rollforward of the Level 3 equity warrant asset fair values:

Equity Warrant Assets	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Balance at beginning of period	\$ 2,251	\$ 2,422	\$ 2,210	\$ 1,672
New equity warrant assets	708	14	952	718
Changes in fair value, net	19	121	37	167
Settlements	—	—	(221)	—
Balance at end of period	\$ 2,978	\$ 2,557	\$ 2,978	\$ 2,557

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

September 30, 2023	Total	Level 1	Level 2	Level 3
Investment securities available-for-sale				
US government agencies	\$ 30,184	\$ —	\$ 30,184	\$ —
Mortgage-backed securities	1,066,811	—	1,066,811	—
Municipal bonds ⁽¹⁾	2,883	—	2,799	84
Loans held for investment	410,128	—	—	410,128
Servicing assets ⁽²⁾	47,127	—	—	47,127
Mutual fund	1,647	—	1,647	—
Equity warrant assets	2,978	—	—	2,978
Total assets at fair value	\$ 1,561,758	\$ —	\$ 1,101,441	\$ 460,317

December 31, 2022	Total	Level 1	Level 2	Level 3
Investment securities available-for-sale				
US government agencies	\$ 15,668	\$ —	\$ 15,668	\$ —
Mortgage-backed securities	995,574	—	995,574	—
Municipal bonds ⁽¹⁾	2,977	—	2,884	93
Other debt securities	500	—	500	—
Loans held for investment	494,458	—	—	494,458
Servicing assets ⁽²⁾	26,323	—	—	26,323
Mutual fund	1,656	—	1,656	—
Equity warrant assets	2,210	—	—	2,210
Total assets at fair value	\$ 1,539,366	\$ —	\$ 1,016,282	\$ 523,084

- (1) During the three months ended September 30, 2023 there was no level 3 fair value adjustment gain or loss. During the nine months ended September 30, 2023, the Company recorded a level 3 fair value adjustment loss of \$ 9 thousand. During the three and nine months ended September 30, 2022, the Company recorded a level 3 fair value adjustment gain of \$ 1 thousand and a loss of \$ 2 thousand, respectively.

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

For additional information on the valuation techniques and significant inputs for Level 2 and Level 3 assets and liabilities that are measured at fair value on a recurring basis, see Note 10. Fair Value of Financial Instruments in the Company's 2022 Form 10-K. Additionally, see Note 1. Basis of Presentation of the accompanying Notes to the Unaudited Condensed Consolidated Financial Statements for information related to changes in valuation techniques for the Company's loan servicing assets and loans accounted for under the fair value option.

Fair Value Option

Until the first quarter of 2021, the Company had historically elected to account for retained participating interests of all government guaranteed loans under the fair value option in order to align the accounting presentation with the Company's viewpoint of the economics of the loans. Interest income is recognized in the same manner on loans reported at fair value as on non-fair value loans, except in regard to origination fees and costs which are recognized immediately upon fair value election. Not electing fair value generally results in a larger discount being recorded on the date of the sale. This discount is subsequently accreted into interest income over the underlying loan's remaining term using the effective interest method. Management made this change of election in alignment with its ongoing effort to reduce volatility and drive more predictable revenue. In accordance with GAAP, any loans for which fair value was previously elected continue to be measured as such.

There were no loans accounted for under the fair value option that were 90 days or more past due and still accruing interest at September 30, 2023 or December 31, 2022. The unpaid principal balance of unguaranteed exposure for nonaccruals was \$ 8.4 million and \$ 7.2 million at September 30, 2023 and December 31, 2022, respectively.

The following tables provide more information about the fair value carrying amount and the unpaid principal outstanding of loans accounted for under the fair value option at September 30, 2023 and December 31, 2022.

September 30, 2023									
Total Loans			Nonaccruals			90 Days or More Past Due			
Fair Value Carrying Amount	Unpaid Principal Balance	Difference	Fair Value Carrying Amount	Unpaid Principal Balance	Difference	Fair Value Carrying Amount	Unpaid Principal Balance	Difference	
Fair Value Option Elections									
Loans held for investment	\$ 410,128	\$ 429,643	\$ (19,515)	\$ 45,896	\$ 48,202	\$ (2,306)	\$ 30,388	\$ 31,581	\$ (1,193)
	<u>\$ 410,128</u>	<u>\$ 429,643</u>	<u>\$ (19,515)</u>	<u>\$ 45,896</u>	<u>\$ 48,202</u>	<u>\$ (2,306)</u>	<u>\$ 30,388</u>	<u>\$ 31,581</u>	<u>\$ (1,193)</u>
December 31, 2022									
Total Loans			Nonaccruals			90 Days or More Past Due			
Fair Value Carrying Amount	Unpaid Principal Balance	Difference	Fair Value Carrying Amount	Unpaid Principal Balance	Difference	Fair Value Carrying Amount	Unpaid Principal Balance	Difference	
Fair Value Option Elections									
Loans held for investment	\$ 494,458	\$ 513,219	\$ (18,761)	\$ 44,890	\$ 46,993	\$ (2,103)	\$ 24,663	\$ 26,321	\$ (1,658)
	<u>\$ 494,458</u>	<u>\$ 513,219</u>	<u>\$ (18,761)</u>	<u>\$ 44,890</u>	<u>\$ 46,993</u>	<u>\$ (2,103)</u>	<u>\$ 24,663</u>	<u>\$ 26,321</u>	<u>\$ (1,658)</u>

The following table presents the net gains (losses) from changes in fair value.

Gains (Losses) on Loans Accounted for under the Fair Value Option	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Loans held for sale	\$ —	\$ 1,748	\$ —	\$ 1,521
Loans held for investment	(568)	2,672	(3,369)	(1,046)
	<u>\$ (568)</u>	<u>\$ 4,420</u>	<u>\$ (3,369)</u>	<u>\$ 475</u>

Gains and (losses) related to borrower-specific credit risk were \$ 0 and \$ 3.5 million for the three and nine months ended September 30, 2023, respectively, and \$ 451 thousand and \$(2.4) million for the three and nine months ended September 30, 2022, respectively.

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

The following tables summarize the activity pertaining to loans accounted for under the fair value option:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Loans held for sale				
Balance at beginning of period	\$ —	\$ 23,452	\$ —	\$ 25,310
Repurchases	—	—	—	65
Fair value changes	—	1,748	—	1,521
Transfers to held for investment, net	—	(24,768)	—	(26,219)
Settlements	—	(432)	—	(677)
Balance at end of period	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Loans held for investment				
Balance at beginning of period	\$ 441,781	\$ 530,644	\$ 494,458	\$ 645,201
Repurchases	3,390	1,946	19,287	4,851
Fair value changes ⁽¹⁾	(568)	2,672	(3,369)	(1,046)
Transfers from held for sale, net	—	24,768	—	26,219
Settlements	(34,475)	(47,847)	(100,248)	(163,042)
Balance at end of period	<u>\$ 410,128</u>	<u>\$ 512,183</u>	<u>\$ 410,128</u>	<u>\$ 512,183</u>

(1) Three and nine month periods ended September 30, 2023 include a \$ 1.3 million increase related to change in estimate implemented on July 1, 2023. See Note 1. Basis of Presentation for additional information.

Non-Recurring Fair Value

The tables below present the recorded amount of assets measured at fair value on a non-recurring basis. The Company has no liabilities recorded at fair value on a non-recurring basis.

September 30, 2023	Total	Level 1	Level 2	Level 3
Collateral-dependent loans	\$ 4,220	\$ —	\$ —	\$ 4,220
Foreclosed assets	6,701	—	—	6,701
Total assets at fair value	<u>\$ 10,921</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 10,921</u>

December 31, 2022	Total	Level 1	Level 2	Level 3
Collateral-dependent loans	\$ 4,840	\$ —	\$ —	\$ 4,840
Total assets at fair value	<u>\$ 4,840</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 4,840</u>

For additional information on the valuation techniques and significant inputs for Level 2 and Level 3 assets that are measured at fair value on a non-recurring basis, see Note 10. Fair Value of Financial Instruments in the Company's 2022 Form 10-K.

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Level 3 Analysis

For Level 3 assets measured at fair value on a recurring or non-recurring basis as of September 30, 2023 and December 31, 2022, the significant unobservable inputs used in the fair value measurements were as follows:

September 30, 2023

Level 3 Assets with Significant					
Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range	Weighted Average ⁽¹⁾
Recurring fair value					
Municipal bond	\$ 84	Discounted expected cash flows	Discount rate	7.2 %	N/A
			Prepayment speed	5.0 %	N/A
Loans held for investment			Loss rate	0.0 % - 7.5 %	1.8 %
	\$ 410,128	Discounted expected cash flows	Discount rate	6.7 % - 18.0 %	9.6 %
			Prepayment speed	14.0 % - 30.4 %	16.1 %
Equity warrant assets			Volatility	26.7 % - 90.0 %	35.1 %
	\$ 2,978	Black-Scholes option pricing model	Risk-free interest rate	4.5 % - 4.6 %	4.5 %
			Marketability discount	20.0 % - 25.0 %	22.8 %
			Remaining life	4 - 10 years	7.8 years
Non-recurring fair value					
Collateral-dependent loans	\$ 4,220	Discounted appraisals	Appraisal adjustments ⁽²⁾	10.0 % - 37.5 %	11.1 %
Foreclosed assets	\$ 6,701	Discounted appraisals	Appraisal adjustments ⁽²⁾	10.0 %	10.0 %

December 31, 2022

Level 3 Assets with Significant					
Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range	Weighted Average ⁽¹⁾
Recurring fair value					
Municipal bond	\$ 93	Discounted expected cash flows	Discount rate	6.0 %	N/A
			Prepayment speed	5.0 %	N/A
Loans held for investment			Loss rate	0.0 % - 79.3 %	1.9 %
	\$ 494,458	Discounted expected cash flows	Discount rate	7.5 % - 11.2 %	10.0 %
			Prepayment speed	16.5 %	16.5 %
		Discounted appraisals	Appraisal adjustments	0.0 % - 77.3 %	28.6 %
Equity warrant assets			Volatility	26.5 % - 90.0 %	34.2 %
	\$ 2,210	Black-Scholes option pricing model	Risk-free interest rate	3.9 % - 4.0 %	3.9 %
			Marketability discount	20.0 %	20.0 %
			Remaining life	3 - 10 years	7.7 years
Non-recurring fair value					
Collateral-dependent loans	\$ 4,840	Discounted appraisals	Appraisal adjustments ⁽²⁾	10.0 % - 66.5 %	34.2 %

(1) Weighted averages are determined by the relative fair value of the instruments or the relative contribution to the instruments fair value.

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

Live Oak Bancshares, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements
Estimated Fair Value of Other Financial Instruments

GAAP also requires disclosure of the fair value of financial instruments carried at book value on the Unaudited Condensed Consolidated Balance Sheets.

The carrying amounts and estimated fair values of the Company's financial instruments not measured at fair value on a recurring or non-recurring basis are as follows:

	Carrying Amount	Quoted Price In Active Markets for Identical Assets/Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
September 30, 2023					
Financial assets					
Cash and due from banks	\$ 534,774	\$ 534,774	\$ —	\$ —	\$ 534,774
Certificates of deposit with other banks	3,750	3,750	—	—	3,750
Loans held for sale	572,604	—	—	586,231	586,231
Loans and leases held for investment, net of allowance for credit losses on loans and leases	7,671,230	—	—	7,960,602	7,960,602
Financial liabilities					
Deposits	10,003,642	—	9,659,636	—	9,659,636
Borrowings	25,847	—	—	25,140	25,140

	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
December 31, 2022					
Financial assets					
Cash and due from banks	\$ 280,239	\$ 280,239	\$ —	\$ —	\$ 280,239
Federal funds sold	136,397	136,397	—	—	136,397
Certificates of deposit with other banks	4,000	4,000	—	—	4,000
Loans held for sale	554,610	—	—	577,254	577,254
Loans and leases held for investment, net of allowance for credit losses on loans and leases	6,753,154	—	—	6,652,936	6,652,936
Financial liabilities					
Deposits	8,884,928	—	8,532,615	—	8,532,615
Borrowings	83,203	—	—	82,258	82,258

Note 10. Commitments and Contingencies
Litigation

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

Financial Instruments with Off-Balance-Sheet Risk

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

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

	September 30, 2023	December 31, 2022
Commitments to extend credit ⁽¹⁾	\$ 2,831,592	\$ 2,731,866
Standby letters of credit	21,983	26,454
Airplane purchase agreement commitments	18,000	24,000
Total unfunded off-balance-sheet credit risk	<u>\$ 2,871,575</u>	<u>\$ 2,782,320</u>

(1) Includes unfunded overdraft protection.

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. Commitment letters are issued after approval of the loan by the Credit Department and generally expire ninety days after issuance.

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

The allowance for off-balance-sheet credit exposures was \$ 4.6 million and \$ 1.5 million at September 30, 2023 and December 31, 2022, respectively.

Other Commitments

The Company is in the early phase of constructing a new facility to accommodate expansion of its main campus. The total estimated cost to complete the construction program is approximately \$ 36.7 million. At September 30, 2023, the Company has paid and was committed to approximately \$ 12.0 million of the total estimated amount.

As of September 30, 2023 and December 31, 2022, the Company recorded unfunded commitments to provide capital contributions for on-balance-sheet investments in the amount of \$ 30.1 million and \$ 26.1 million, respectively.

Concentrations of Credit Risk

The distribution of commitments to extend credit approximates the distribution of loans outstanding. The Company does not have a significant number of credits to any single borrower or group of related borrowers whereby their retained unguaranteed exposure exceeds \$ 20.0 million, except for twenty-nine relationships that have a retained unguaranteed exposure of \$ 1.05 billion of which \$ 673.1 million of the unguaranteed exposure has been disbursed.

Additionally, the Company has future minimum lease payments receivable under non-cancelable operating leases totaling \$ 50.9 million, of which no relationships exceed \$ 20.0 million.

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

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

Geographic Concentrations

The following table presents the geographic concentration of our loan and lease portfolio at September 30, 2023:

	% of Total
Geographic Regions ⁽¹⁾	
Midwest	12.6 %
Northeast	18.7
Southeast	31.0
Southwest	11.2
West	26.5
Total	100.0 %

- (1) Concentrations are stated as a percentage of total unguaranteed loans held for investment. Midwest consists of ND, SD, NE, KS, MN, IA, WI, MO, IL, IN, MI and OH. Northeast consists of MD, DE, PA, NJ, NY, CT, RI, MA, VT, ME and NH. Southeast consists of AR, LA, MS, TN, AL, GA, FL, SC, KY, NC, VA, WV, DC, PR and VI. Southwest consists of AZ, NM, TX and OK. West consists of WA, OR, CA, NV, ID, MT, WY, CO, UT, AK and HI.

Note 11. Segments

The Company's management reporting process measures the performance of its operating segments based on internal operating structure, which is subject to change from time-to-time. Accordingly, the Company operates two reportable segments for management reporting purposes as discussed below:

Banking - This segment specializes in providing financing services to small businesses nationwide in targeted industries and deposit-related services to small businesses, consumers and other customers nationwide. The primary source of revenue for this segment is net interest income and secondarily the origination and sale of government guaranteed loans.

Fintech - This segment is involved in making strategic investments into emerging financial technology companies. The primary sources of revenue for this segment are principally gains and losses on equity method and equity security investments and management fees. The Fintech segment is comprised of the Company's direct wholly owned subsidiaries Live Oak Ventures and Canapi Advisors, and the investments held by those entities, as well as the Bank's investment in Apiture.

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

The following tables provide financial information for the Company's segments. The information provided under the caption "Other" represents operations not considered to be reportable segments and/or general operating expenses of the Company, and includes the parent company, other non-bank subsidiaries and elimination adjustments to reconcile the results of the operating segments to the Unaudited Condensed Consolidated Financial Statements prepared in conformity with GAAP.

	Banking	Fintech	Other	Consolidated
As of and for the three months ended September 30, 2023				
Interest income	\$ 180,416	\$ (6)	\$ 201	\$ 180,611
Interest expense	90,914	—	287	91,201
Net interest income (loss)	89,502	(6)	(86)	89,410
Provision for loan and lease credit losses	10,279	—	—	10,279
Noninterest income	35,730	1,652	509	37,891
Noninterest expense	69,480	3,069	1,713	74,262
Income tax expense (benefit)	3,084	(5)	(112)	2,967
Net income (loss)	\$ 42,389	\$ (1,418)	\$ (1,178)	\$ 39,793
Total assets	\$ 10,800,881	\$ 110,914	\$ 38,665	\$ 10,950,460
As of and for the three months ended September 30, 2022				
Interest income	\$ 115,819	\$ 8	\$ 7	\$ 115,834
Interest expense	31,581	—	367	31,948
Net interest income (loss)	84,238	8	(360)	83,886
Provision for loan and lease credit losses	14,169	—	—	14,169
Noninterest income	27,268	29,980	476	57,724
Noninterest expense	78,474	2,495	2,079	83,048
Income tax expense (benefit)	1,344	416	(235)	1,525
Net income (loss)	\$ 17,519	\$ 27,077	\$ (1,728)	\$ 42,868
Total assets	\$ 9,140,943	\$ 163,304	\$ 10,403	\$ 9,314,650

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

	Banking	Fintech	Other	Consolidated
As of and for the nine months ended September 30, 2023				
Interest income	\$ 501,271	\$ 14	\$ 454	\$ 501,739
Interest expense	245,094	—	916	246,010
Net interest income (loss)	256,177	14	(462)	255,729
Provision for loan and lease credit losses	42,328	—	—	42,328
Noninterest income	74,215	5,689	1,722	81,626
Noninterest expense	215,879	8,032	5,770	229,681
Income tax expense (benefit)	7,785	177	(351)	7,611
Net income (loss)	\$ 64,400	\$ (2,506)	\$ (4,159)	\$ 57,735
Total assets	\$ 10,800,881	\$ 110,914	\$ 38,665	\$ 10,950,460
As of and for the nine months ended September 30, 2022				
Interest income	\$ 307,780	\$ 80	\$ 3	\$ 307,863
Interest expense	64,961	—	1,303	66,264
Net interest income (loss)	242,819	80	(1,300)	241,599
Provision for loan and lease credit losses	21,272	—	—	21,272
Noninterest income	64,371	152,878	1,672	218,921
Noninterest expense	216,652	6,809	6,180	229,641
Income tax expense (benefit)	10,152	26,138	(1,099)	35,191
Net income (loss)	\$ 59,114	\$ 120,011	\$ (4,709)	\$ 174,416
Total assets	\$ 9,140,943	\$ 163,304	\$ 10,403	\$ 9,314,650

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

The following presents management's discussion and analysis of the financial condition and results of operations of Live Oak Bancshares, Inc. (individually, "Bancshares" and collectively with its subsidiaries including Live Oak Banking Company, the "Company"). This discussion should be read in conjunction with the unaudited condensed consolidated financial statements and related notes included elsewhere in this quarterly report on Form 10-Q and with the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "2022 Form 10-K"). Results of operations for the periods included in this quarterly report on Form 10-Q are not necessarily indicative of results to be obtained during any future period.

Important Note Regarding Forward-Looking Statements

This quarterly report on Form 10-Q contains statements that management believes are forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995.

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

- deterioration in the financial condition of borrowers resulting in significant increases in the Company's loan and lease losses and provisions for those losses and other adverse impacts to results of operations and financial condition;
- changes in Small Business Administration ("SBA") rules, regulations and loan products, including specifically the Section 7(a) program, changes in SBA standard operating procedures or changes to the status of Live Oak Banking Company (the "Bank") as an SBA Preferred Lender;
- changes in rules, regulations or procedures for other government loan programs, including those of the United States Department of Agriculture ("USDA");
- changes in interest rates that affect the level and composition of deposits, loan demand and the values of loan collateral, securities, and interest sensitive assets and liabilities;
- the failure of assumptions underlying the establishment of reserves for possible loan and lease losses;
- changes in loan underwriting, credit review or loss reserve policies associated with economic conditions, examination conclusions, or regulatory developments;
- recent adverse developments in the banking industry highlighted by high-profile bank failures and the potential impact of such developments on customer confidence, liquidity, and regulatory responses to these developments;
- the impacts of global health crises and pandemics, such as the Coronavirus Disease 2019 ("COVID-19") pandemic, on trade (including supply chains and export levels), travel, employee productivity and other economic activities that may have a destabilizing and negative effect on financial markets, economic activity and customer behavior;

- a reduction in or the termination of the Company's ability to use the technology-based platform that is critical to the success of the Company's business model or to develop a next-generation banking platform, including a failure in or a breach of the Company's operational or security systems or those of its third party service providers;
- changes in financial market conditions, either internationally, nationally or locally in areas in which the Company conducts operations, including reductions in rates of business formation and growth, demand for the Company's products and services, commercial and residential real estate development and prices, premiums paid in the secondary market for the sale of loans, and valuation of servicing rights;
- changes in accounting principles, policies, and guidelines applicable to bank holding companies and banking;
- fluctuations in markets for equity, fixed-income, commercial paper and other securities, which could affect availability, market liquidity levels, and pricing;
- the effects of competition from other commercial banks, non-bank lenders, consumer finance companies, credit unions, securities brokerage firms, insurance companies, money market and mutual funds, and other financial institutions operating in the Company's market area and elsewhere, including institutions operating regionally, nationally and internationally, together with such competitors offering banking products and services by mail, telephone and the Internet;
- the Company's ability to attract and retain key personnel;
- changes in governmental monetary and fiscal policies as well as other legislative and regulatory changes, including with respect to SBA or USDA lending programs and investment tax credits;
- a deterioration of the credit rating for U.S. long-term sovereign debt, actions that the U.S. government may take to avoid exceeding the debt ceiling, and uncertainties surrounding the debt ceiling and the federal budget;
- changes in political and economic conditions, including any prolonged U.S. government shutdown;
- the impact of heightened regulatory scrutiny of financial products and services, primarily led by the Consumer Financial Protection Bureau and various state agencies;
- the Company's ability to comply with any requirements imposed on it by regulators, and the potential negative consequences that may result;
- operational, compliance and other factors, including conditions in local areas in which the Company conducts business such as inclement weather or a reduction in the availability of services or products for which loan proceeds will be used, that could prevent or delay closing and funding loans before they can be sold in the secondary market;
- the effect of any mergers, acquisitions or other transactions, to which the Company or the Bank may from time to time be a party, including management's ability to successfully integrate any businesses acquired;
- adverse results, including related fees and expenses, from pending or future lawsuits, government investigations or private actions;
- other risk factors listed from time to time in reports that the Company files with the SEC, including those described under "Risk Factors" in this Report; and
- the Company's success at managing the risks involved in the foregoing.

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

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

Nature of Operations

Bancshares is a financial holding company and a bank holding company headquartered in Wilmington, North Carolina incorporated under the laws of the state of North Carolina in December 2008. The Company conducts business operations primarily through its commercial bank subsidiary, Live Oak Banking Company (the "Bank"). The Bank was incorporated in February 2008 as a North Carolina-chartered commercial bank. The Bank specializes in providing lending and deposit related services to small businesses nationwide. A significant portion of the loans originated by the Bank are guaranteed by the SBA under the 7(a) Loan Program and the U.S. Department of Agriculture's ("USDA") Rural Energy for America Program ("REAP"), Water and Environmental Program ("WEP"), Business & Industry ("B&I") and Community Facilities loan programs. These loans are to small businesses and professionals with what the Bank believes are lower risk characteristics. Industries, or "verticals," on which the Bank focuses its lending efforts are carefully selected. The Bank also lends more broadly to select borrowers outside of those verticals.

The Company's wholly owned material subsidiaries are the Bank, Government Loan Solutions ("GLS"), Live Oak Grove, LLC ("Grove"), Live Oak Ventures, Inc. ("Live Oak Ventures") and Canapi Advisors, LLC ("Canapi Advisors"). GLS is a management and technology consulting firm that advises and offers solutions and services to participants in the government guaranteed lending sector. GLS 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. The Grove provides Company employees and business visitors an on-site restaurant location. Live Oak Ventures' purpose is investing in businesses that align with the Company's strategic initiative to be a leader in financial technology. Canapi Advisors provides investment advisory services to a series of funds (the "Canapi Funds") focused on providing venture capital to new and emerging financial technology companies.

The Bank's wholly owned subsidiaries are Live Oak Number One, Inc., Live Oak Clean Energy Financing LLC ("LOCEF"), Live Oak Private Wealth, LLC ("Live Oak Private Wealth") and Tiburon Land Holdings, LLC ("TLH"). Live Oak Number One, Inc. holds properties foreclosed on by the Bank. LOCEF provides financing to entities for renewable energy applications. Live Oak Private Wealth provides high-net-worth individuals and families with strategic wealth and investment management services. During the first quarter of 2022, Jolley Asset Management, LLC ("JAM") was merged into Live Oak Private Wealth. JAM was previously a wholly owned subsidiary of Live Oak Private Wealth. TLH was formed in the third quarter of 2022 to hold land adjacent to the Bank's headquarters consisting of wetlands and other protected property for the use and enjoyment of the Bank's employees and customers.

The Company generates revenue primarily from net interest income and secondarily through origination and sale of government guaranteed loans. Income from the retention of loans is comprised principally of interest income. Income from the sale of loans is comprised of loan servicing revenue and revaluation of related servicing assets along with net gains on sales of loans. Offsetting these revenues are the cost of funding sources, provision for loan and lease credit losses, any costs related to foreclosed assets and other operating costs such as salaries and employee benefits, travel, professional services, advertising and marketing and tax expense. The Company also has less routinely generated gains and losses arising from its financial technology investments predominantly in its fintech segment, as discussed more fully later in this section under the caption "Results of Segment Operations."

Results of Operations

Performance Summary

Three months ended September 30, 2023 compared with three months ended September 30, 2022

For the three months ended September 30, 2023, the Company reported net income of \$39.8 million, or \$0.88 per diluted share, compared to net income of \$42.9 million, or \$0.96 per diluted share, for the third quarter of 2022.

The decrease in net income was principally due to the lower equity method investment income of \$30.2 million, largely driven by the third quarter of 2022 gain of \$28.4 million related to the Company's sale of its investment in Payrailz, LLC ("Payrailz"). To a lesser extent, the decrease was also influenced by a \$5.0 million negative change in net loss on loans accounted for under the fair value option.

Key factors partially offsetting the decrease in net income for the third quarter of 2023 were:

- Increase in net interest income of \$5.5 million, or 6.6%, driven by increases in loan volumes, partially mitigated by a decrease in net interest margin arising from an increase in interest-bearing liabilities combined with average cost of funds outpacing the average yield on interest-earning assets;
- Decreased provision for loan and lease credit losses of \$3.9 million to \$10.3 million, compared to \$14.2 million for the third quarter of 2022. The provision expense in the third quarter of 2023 was primarily the result of continued growth of the loan and lease portfolio combined with specific reserve changes on individually evaluated loans and charge-off related impacts;
- On July 1, 2023, the Company changed the valuation techniques used to estimate the fair value of its servicing rights and loans measured at fair value as a result of rising interest rates and their impacts on market conditions. These revisions were made to provide estimates which the Company believes are more representative of fair value. These estimate changes were implemented as of July 1, 2023 and resulted in one-time adjustments on that date to increase the estimated value of the servicing asset by \$13.7 million and loans measured at fair value by \$1.3 million, or a total impact to noninterest income of \$15.0 million. All comparative balances and changes between periods discussed herein related to the servicing asset and loans measured at fair value are inclusive of these one-time adjustments.

During the third quarter of 2023, the net gain on loan servicing asset revaluation increased by \$12.7 million (inclusive of the one-time adjustment discussed above), to \$11.3 million for the quarter, compared to a net loss of \$1.3 million in the third quarter of 2022.

- Increased net gains on sales of loans of \$3.4 million, or 36.7%, principally the result of a higher volume of loan sales in the third quarter of 2023; and
- Decreased impairment charges of \$7.7 million, arising from a third quarter of 2022 renewable energy tax credit investment.

Nine months ended September 30, 2023 compared with nine months ended September 30, 2022

For the nine months ended September 30, 2023, the Company reported net income of \$57.7 million, or \$1.28 per diluted share, compared to net income of \$174.4 million, or \$3.88 per diluted share, for the nine months ended September 30, 2022.

The decrease in net income was largely due to the following items:

- Decrease in equity method investment income of \$152.1 million, principally a product of the above discussed Payrailz gain combined with the second quarter of 2022 gain of \$120.5 million related to the Company's sale of its investment in Finxact, Inc. ("Finxact");

- Provision for loan and lease credit losses increased by \$21.1 million, to \$42.3 million, compared to \$21.3 million for the first nine months of 2022. The level of provision expense in the first nine months of 2023 was primarily the result of continued growth of the loan and lease portfolio combined with specific reserve changes on individually evaluated loans and charge-off related impacts;
- The net loss on loans accounted for under the fair value option of \$3.4 million, increased by \$3.8 million (inclusive of the one-time adjustment discussed above) from a net gain of \$475 thousand in the first nine months of 2022, principally the result of negative market trends; and
- Increased levels of noninterest expense related to advertising and marketing up \$3.4 million, or 51.2%, technology expense up \$3.9 million, or 19.8%, and FDIC insurance expense up \$5.7 million, or 84.1%.

Key factors partially offsetting the decrease in net income for the first nine months of 2023 were:

- Increase in net interest income of \$14.1 million, or 5.8%, principally the result of the above discussed drivers of the quarter over quarter increase;
- A net gain on loan servicing asset revaluation of \$8.9 million (inclusive of the one-time adjustment discussed above) compared to a net loss of \$11.6 million in the first nine months of 2022, resulting in a positive change of \$20.4 million. This increase was principally driven by the above discussed third quarter of 2023 change in estimate;
- Decreased levels of noninterest expense related to professional services expense down \$4.6 million, or 49.5%, combined with declines in renewable energy tax credit investment impairment of \$7.7 million and contributions and donations expense of \$6.4 million; and
- Decreased income tax expense of \$27.6 million, or 78.4%, principally related to above discussed decrease in net income.

Net Interest Income and Margin

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

Three months ended September 30, 2023 compared with three months ended September 30, 2022

For the three months ended September 30, 2023, net interest income increased \$5.5 million, or 6.6%, to \$89.4 million compared to \$83.9 million for the three months ended September 30, 2022. This increase was principally due to the growth in the held for investment loan and lease portfolio outpacing growth in interest-bearing liabilities offset by an increase in average cost of funds which exceeded the increase in average yield on interest-earning assets. Excluding PPP loan impacts, comprised of amortization of net deferred fees combined with a 1% annualized interest rate less the related interest expense from funding activity, net interest income increased by \$6.6 million. Average interest-earning assets increased by \$1.85 billion, or 21.4%, to \$10.52 billion for the third quarter of 2023, compared to \$8.66 billion for the third quarter of 2022, while the yield on average interest-earning assets increased 150 basis points to 6.81%. The cost of funds on interest-bearing liabilities for the third quarter of 2023 increased 217 basis points to 3.72%, and the average balance of interest-bearing liabilities increased by \$1.58 billion, or 19.3%, over the third quarter of 2022.

As indicated in the rate/volume table below, the overall increase discussed above is reflected in increased interest income of \$64.8 million outpacing growth in interest expense of \$59.3 million for the third quarter of 2023 compared to the third quarter of 2022. The net interest margin decreased from 3.84% for the third quarter of 2022 to 3.37% for the third quarter of 2023.

Nine months ended September 30, 2023 compared with nine months ended September 30, 2022

For the nine months ended September 30, 2023, net interest income increased \$14.1 million, or 5.8%, to \$255.7 million compared to \$241.6 million for the nine months ended September 30, 2022. This increase was principally due to the growth in the held for investment loan and lease portfolio outpacing growth in interest-bearing liabilities offset by an increase in average cost of funds which exceeded the increase in average yield on interest-earning assets. Excluding PPP loan impacts, comprised of amortization of net deferred fees combined with a 1% annualized interest rate less the related interest expense from funding activity, net interest income increased by \$20.4 million. Average interest-earning assets increased by \$1.91 billion, or 23.2%, to \$10.17 billion for the nine months ended September 30, 2023, compared to \$8.26 billion for the nine months ended September 30, 2022, while the yield on average interest-earning assets increased 161 basis points to 6.60%. The cost of funds on interest-bearing liabilities for the nine months ended September 30, 2023 increased 236 basis points to 3.49%, and the average balance of interest-bearing liabilities increased by \$1.60 billion, or 20.4%, over the nine months ended September 30, 2022.

The increase in average interest-bearing liabilities was largely driven by funding for significant loan originations and growth as well as maintenance of the Company's target liquidity profile. This increase was muted by a \$78.0 million reduction in average borrowings largely related to Paycheck Protection Program Liquidity Facility, or PPPLF, repayments in 2022. As indicated in the rate/volume table below, the overall increase discussed above is reflected in increased interest income of \$193.9 million outpacing growth in interest expense of \$179.7 million for the first nine months of 2023 compared to the first nine months of 2022. The net interest margin decreased from 3.91% for the nine months ended September 30, 2022 to 3.36% for the nine months ended September 30, 2023.

During the nine months ended September 30, 2023, the Federal Reserve increased the federal funds upper target rate by 100 basis points. In September 2023, the Federal Reserve released its most current federal funds target rate midpoint projections which implied an increase of the median Federal Funds rate to 5.6% by the end of 2023 and a decrease of approximately 50 basis points to 5.1% by the end of 2024. There can be no assurance that any further increases in the Federal Funds rate will occur, and if they do, the amount and timing of actual increases are subject to change. See Item 3. Quantitative and Qualitative Disclosures About Market Risk for information about the Company's sensitivity to interest rates.

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

	Three Months Ended September 30,					
	2023			2022		
	Average Balance	Interest	Average Yield/Rate	Average Balance	Interest	Average Yield/Rate
Interest-earning assets:						
Interest-earning balances in other banks	\$ 677,857	\$ 9,188	5.38 %	\$ 225,959	\$ 1,375	2.41 %
Federal funds sold	—	—	—	187,014	1,073	2.28
Investment securities	1,257,740	8,701	2.74	1,040,076	5,506	2.10
Loans held for sale	602,109	13,271	8.74	1,000,912	16,156	6.40
Loans and leases held for investment ⁽¹⁾	7,978,870	149,451	7.43	6,208,447	91,724	5.86
Total interest-earning assets	10,516,576	180,611	6.81	8,662,408	115,834	5.31
Less: Allowance for credit losses on loans and leases	(119,941)			(65,511)		
Noninterest-earning assets	499,508			598,220		
Total assets	\$ 10,896,143			\$ 9,195,117		
Interest-bearing liabilities:						
Interest-bearing checking	\$ 300,059	\$ 4,217	5.58 %	\$ —	\$ —	— %
Savings	4,588,085	45,778	3.96	4,009,928	16,775	1.66
Money market accounts	136,879	202	0.59	100,074	72	0.29
Certificates of deposit	4,675,075	40,717	3.46	3,978,793	14,706	1.47
Total deposits	9,700,098	90,914	3.72	8,088,795	31,553	1.55
Borrowings	27,425	287	4.15	63,207	395	2.48
Total interest-bearing liabilities	9,727,523	91,201	3.72	8,152,002	31,948	1.55
Noninterest-bearing deposits	237,545			133,676		
Noninterest-bearing liabilities	78,930			84,597		
Shareholders' equity	852,145			824,842		
Total liabilities and shareholders' equity	\$ 10,896,143			\$ 9,195,117		
Net interest income and interest rate spread		\$ 89,410	3.09 %		\$ 83,886	3.76 %
Net interest margin			3.37 %			3.84 %
Ratio of average interest-earning assets to average interest-bearing liabilities			108.11 %			106.26 %

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

	Nine Months Ended September 30,					
	2023			2022		
	Average Balance	Interest	Average Yield/Rate	Average Balance	Interest	Average Yield/Rate
Interest-earning assets:						
Interest-earning balances in other banks	\$ 579,962	\$ 21,228	4.89 %	\$ 259,212	\$ 2,402	1.24 %
Federal funds sold	46,165	1,624	4.70	92,127	1,275	1.85
Investment securities	1,232,737	24,751	2.68	950,787	12,951	1.82
Loans held for sale	559,770	37,410	8.94	1,078,743	47,308	5.86
Loans and leases held for investment ⁽¹⁾	7,751,863	416,726	7.19	5,876,078	243,927	5.55
Total interest-earning assets	10,170,497	501,739	6.60	8,256,947	307,863	4.99
Less: Allowance for credit losses on loans and leases	(107,686)			(63,613)		
Noninterest-earning assets	497,795			610,330		
Total assets	\$ 10,560,606			\$ 8,803,664		
Interest-bearing liabilities:						
Interest-bearing checking	\$ 208,278	\$ 8,456	5.43 %	\$ —	\$ —	— %
Savings	4,359,136	123,959	3.80	3,838,150	29,153	1.02
Money market accounts	124,198	523	0.56	94,901	182	0.26
Certificates of deposit	4,668,087	110,574	3.17	3,749,894	35,343	1.26
Total deposits	9,359,699	243,512	3.48	7,682,945	64,678	1.13
Borrowings	74,163	2,498	4.50	152,157	1,586	1.39
Total interest-bearing liabilities	9,433,862	246,010	3.49	7,835,102	66,264	1.13
Noninterest-bearing deposits	207,009			105,629		
Noninterest-bearing liabilities	74,645			64,205		
Shareholders' equity	845,090			798,728		
Total liabilities and shareholders' equity	\$ 10,560,606			\$ 8,803,664		
Net interest income and interest rate spread		\$ 255,729	3.11 %		\$ 241,599	3.86 %
Net interest margin			3.36 %			3.91 %
Ratio of average interest-earning assets to average interest-bearing liabilities			107.81 %			105.38 %

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

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

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2023 vs. 2022			2023 vs. 2022		
	Increase (Decrease) Due to			Increase (Decrease) Due to		
	Rate	Volume	Total	Rate	Volume	Total
Interest income:						
Interest-earning balances in other banks	\$ 3,375	\$ 4,438	\$ 7,813	\$ 11,470	\$ 7,356	\$ 18,826
Federal funds sold	—	(1,073)	(1,073)	1,475	(1,126)	349
Investment securities	1,866	1,329	3,195	7,049	4,751	11,800
Loans held for sale	4,729	(7,614)	(2,885)	18,823	(28,721)	(9,898)
Loans and leases held for investment	28,068	29,659	57,727	83,446	89,353	172,799
Total interest income	38,038	26,739	64,777	122,263	71,613	193,876
Interest expense:						
Interest-bearing checking	—	4,217	4,217	—	8,456	8,456
Savings	24,909	4,094	29,003	85,420	9,386	94,806
Money market accounts	90	40	130	251	90	341
Certificates of deposit	21,692	4,319	26,011	60,029	15,202	75,231
Borrowings	191	(299)	(108)	2,632	(1,720)	912
Total interest expense	46,882	12,371	59,253	148,332	31,414	179,746
Net interest income	\$ (8,844)	\$ 14,368	\$ 5,524	\$ (26,069)	\$ 40,199	\$ 14,130

Provision for Loan and Lease Credit Losses

The provision for loan and lease credit losses represents the amount necessary to be charged against the current period's earnings to maintain the allowance for credit losses ("ACL") on loans and leases at a level that the Company believes is appropriate in relation to the estimated losses inherent in the loan and lease portfolio.

Losses inherent in loan relationships are mitigated if a portion of the loan is guaranteed by the SBA or USDA. Typical SBA 7(a) and USDA guarantees range from 50% to 90% depending on loan size and type, which serve to reduce the risk profile of these loans. The Company believes that its focus on compliance with regulations and guidance from the SBA and USDA are key factors to managing this risk.

For the third quarter of 2023, there was a provision for loan and lease credit losses of \$10.3 million compared to \$14.2 million for the same period in 2022, a decrease of \$3.9 million. For the nine months ended September 30, 2023, there was a provision for loan and lease credit losses of \$42.3 million compared to \$21.3 million for the same period in 2022, an increase of \$21.1 million. The increase in provision expense as compared to the third quarter of 2022 and the nine months ended September 30, 2022 was primarily the result of loan growth, combined with specific reserve changes on individually evaluated loans and charge-off related impacts.

Loans and leases held for investment at historical cost were \$7.79 billion as of September 30, 2023, increasing by \$1.45 billion, or 22.9%, compared to September 30, 2022.

Net charge-offs for loans and leases carried at historical cost were \$9.1 million, or 0.48% of average quarterly loans and leases held for investment, carried at historical cost, on an annualized basis, for the three months ended September 30, 2023, compared to net charge-offs of \$1.7 million, or 0.12%, for the three months ended September 30, 2022. The increase in net charge-offs was primarily related to a single borrower relationship of which a significant portion was reserved for in the second quarter of 2023. For the nine months ended September 30, 2023, net charge-offs totaled \$16.9 million compared to \$6.6 million for the nine months ended September 30, 2022, an increase of \$10.4 million, or 158.1%. The increase in net charge-offs for the first nine-months of 2023 was primarily isolated to two relationships. Net charge-offs are a key element of historical experience in the Company's estimation of the allowance for credit losses on loans and leases.

In addition, nonperforming loans and leases not guaranteed by the SBA or USDA, excluding \$6.5 million and \$2.7 million accounted for under the fair value option at September 30, 2023 and 2022, respectively, totaled \$33.3 million, which was 0.43% of the held for investment loan and lease portfolio carried at historical cost at September 30, 2023, compared to \$14.3 million, or 0.23% of loans and leases held for investment carried at historical cost at September 30, 2022. The increase in total nonperforming loans and leases not guaranteed and carried at historical cost was largely comprised of one large relationship.

Noninterest Income

Noninterest income is principally comprised of net gains from the sale of SBA and USDA-guaranteed loans along with loan servicing revenue and related revaluation of the servicing asset. Revenue from the sale of loans depends upon the volume, maturity structure and rates of underlying loans as well as the pricing and availability of funds in the secondary markets prevailing in the period between completed loan funding and closing of sale. In addition, the loan servicing revaluation is significantly impacted by changes in market rates and other underlying assumptions such as prepayment speeds and default rates. Net (loss) gain on loans accounted for under the fair value option is also significantly impacted by changes in market rates, prepayment speeds and inherent credit risk. Other less consistent elements of noninterest income include gains and losses on investments.

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

	Three Months Ended September 30,		2023/2022 Increase (Decrease)	
	2023	2022	Amount	Percent
Noninterest income				
Loan servicing revenue	\$ 6,990	\$ 6,230	\$ 760	12.2 %
Loan servicing asset revaluation	11,335	(1,324)	12,659	956.1
Net gains on sales of loans	12,675	9,275	3,400	36.7
Net (loss) gain on loans accounted for under the fair value option	(568)	4,420	(4,988)	(112.9)
Equity method investments (loss) income	(1,034)	29,136	(30,170)	(103.5)
Equity security investments (losses) gains, net	(783)	876	(1,659)	(189.4)
Lease income	2,498	2,516	(18)	(0.7)
Management fee income	3,277	2,844	433	15.2
Other noninterest income	3,501	3,751	(250)	(6.7)
Total noninterest income	\$ 37,891	\$ 57,724	\$ (19,833)	(34.4)%

	Nine Months Ended September 30,		2023/2022 Increase (Decrease)	
	2023	2022	Amount	Percent
Noninterest income				
Loan servicing revenue	\$ 20,057	\$ 19,063	\$ 994	5.2 %
Loan servicing asset revaluation	8,860	(11,561)	20,421	176.6
Net gains on sales of loans	33,654	35,882	(2,228)	(6.2)
Net (loss) gain on loans accounted for under the fair value option	(3,369)	475	(3,844)	(809.3)
Equity method investments (loss) income	(6,041)	146,068	(152,109)	(104.1)
Equity security investments (losses) gains, net	(585)	2,487	(3,072)	(123.5)
Lease income	7,568	7,529	39	0.5
Management fee income	10,015	6,890	3,125	45.4
Other noninterest income	11,467	12,088	(621)	(5.1)
Total noninterest income	\$ 81,626	\$ 218,921	\$ (137,295)	(62.7)%

As mentioned earlier, balances herein for the three and nine-month periods ended September 30, 2023 are inclusive of positive one-time change in estimate adjustments of \$13.7 million for the loan servicing asset revaluation and \$1.3 million for the net loss on loans accounted for under the fair value option

For the three months ended September 30, 2023, noninterest income decreased by \$19.8 million, or 34.4%, compared to the three months ended September 30, 2022. The decrease over the prior year is primarily a result of the \$28.4 million Payrailz gain included in equity method investment income in the third quarter of 2022. To a lesser extent, the decrease was also influenced by a \$5.0 million negative change in net losses on loans accounted for under the fair value option. Partially offsetting the decrease over the third quarter of 2022 was a \$12.7 million incremental net gain related to the servicing asset revaluation and an increase in net gains on sales of loans of \$3.4 million.

For the nine months ended September 30, 2023, noninterest income decreased by \$137.3 million, or 62.7%, compared to the nine months ended September 30, 2022. The decrease over the prior year is primarily a result of the aggregate \$148.9 million in Finxact and Payrailz gains included in equity method investments income in the first nine months of 2022. To a lesser extent, the decrease was also influenced by a \$3.8 million negative change in net losses on loans accounted for under the fair value option, decreased net gains on loan sales of \$2.2 million and decreased equity security investments gains of \$3.1 million. Partially offsetting the decrease over the prior year to date period was an increased net gain of \$20.4 million related to the servicing asset revaluation combined with a \$3.1 million increase in management fee income generated by Canapi Advisors. Canapi Advisors is included in the Company's Fintech segment.

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

	Three months ended September 30,		Three months ended June 30,		Three months ended March 31,	
	2023	2022	2023	2022	2023	2022
Amount of loans and leases originated	\$ 1,073,255	\$ 1,005,235	\$ 861,033	\$ 959,635	\$ 1,030,882	\$ 865,063
Guaranteed portions of loans sold	225,585	148,110	245,074	68,818	167,826	219,703
Outstanding balance of guaranteed loans sold ⁽¹⁾	2,909,343	2,671,705	2,808,200	2,681,079	2,695,757	2,786,403

	Nine Months Ended September 30,		For years ended December 31,			
	2023	2022	2022	2021	2020	2019
Amount of loans and leases originated	\$ 2,965,170	\$ 2,829,933	\$ 4,007,621	\$ 4,480,725	\$ 4,450,198	\$ 2,001,886
Guaranteed portions of loans sold	638,485	436,631	580,889	668,462	542,596	340,374
Outstanding balance of guaranteed loans sold ⁽¹⁾	2,909,343	2,671,705	2,668,110	2,756,915	2,819,625	2,746,480

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

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

Loan Servicing Asset Revaluation: The Company revalues its serviced loan portfolio at least quarterly. 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, with the prepayment speed being one of the most sensitive assumptions. For the three months ended September 30, 2023, there was a net gain on loan servicing asset revaluation of \$11.3 million, compared to a net loss of \$1.3 million for the three months ended September 30, 2022, resulting in a positive comparative quarter change of \$12.7 million. For the nine months ended September 30, 2023, there was a net gain on loan servicing asset revaluation of \$8.9 million compared to a net loss of \$11.6 million for the nine months ended September 30, 2022, resulting in a positive change of \$20.4 million, or 176.6%. The increase in the valuation of the servicing asset compared to the three and nine months ended September 30, 2022 was principally the result of the previously discussed change in valuation techniques used to estimate the fair value of servicing rights with a one-time positive adjustment of \$13.7 million as a result of rising interest rates and their impacts on market conditions.

Net Gains on Sales of Loans: For the three months ended September 30, 2023, net gains on sales of loans increased \$3.4 million, or 36.7%, compared to the three months ended September 30, 2022. The volume of guaranteed loans sold increased \$77.5 million, or 52.3%, for the three months ended September 30, 2023 to \$225.6 million from \$148.1 million in the three months ended September 30, 2022. For the nine months ended September 30, 2023, net gains on sales of loans decreased \$2.2 million, or 6.2%, compared to the nine months ended September 30, 2022. For the nine months ended September 30, 2023, the volume of guaranteed loans sold increased \$201.9 million, or 46.2%, to \$638.5 million from \$436.6 million for the nine months ended September 30, 2022. The average net gain on loan sale premium decreased from 108% to 105% in the third quarters of 2022 and 2023, respectively, and decreased from 109% to 106% in the first nine months of 2022 and 2023, respectively. The increase in net gains on sales of loans over the third quarter of 2022 was principally the result of higher loan sale volume while the decrease over the first nine months of 2022 was principally related to the effect of weaker premiums outpacing heightened levels of sales volume.

Net (Loss) Gain on Loans Accounted for Under the Fair Value Option: For the three months ended September 30, 2023, the Company had a net loss on loans accounted for under the fair value option of \$568 thousand compared to a net gain of \$4.4 million for the third quarter of 2022, a negative change of \$5.0 million, or 112.9%. For the nine months ended September 30, 2023, the Company had a net loss on loans accounted for under the fair value option of \$3.4 million compared to a net gain of \$475 thousand for the same period of 2022, a negative change of \$3.8 million, or 809.3%. The carrying amount of loans accounted for under the fair value option at September 30, 2023 and 2022 was \$410.1 million (all classified as held for investment) and \$512.2 million (all classified as held for investment), respectively, a decrease of \$102.1 million, or 19.9%. The incremental net loss on loans accounted for under the fair value option compared to both prior periods was largely the result of negative market trends between the comparative periods.

Noninterest Expense

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

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

	Three Months Ended September 30,		2023/2022 Increase (Decrease)	
	2023	2022	Amount	Percent
Noninterest expense				
Salaries and employee benefits	\$ 42,947	\$ 43,479	\$ (532)	(1.2)%
Non-employee expenses:				
Travel expense	2,197	2,372	(175)	(7.4)
Professional services expense	1,762	2,505	(743)	(29.7)
Advertising and marketing expense	3,446	2,621	825	31.5
Occupancy expense	2,129	2,519	(390)	(15.5)
Technology expense	7,722	7,770	(48)	(0.6)
Equipment expense	3,676	3,761	(85)	(2.3)
Other loan origination and maintenance expense	3,498	3,376	122	3.6
Renewable energy tax credit investment impairment	—	7,721	(7,721)	(100.0)
FDIC insurance	4,115	2,697	1,418	52.6
Contributions and donations	—	191	(191)	(100.0)
Other expense	2,770	4,036	(1,266)	(31.4)
Total non-employee expenses	31,315	39,569	(8,254)	(20.9)
Total noninterest expense	\$ 74,262	\$ 83,048	\$ (8,786)	(10.6)%

	Nine Months Ended September 30,		2023/2022 Increase (Decrease)	
	2023	2022	Amount	Percent
Noninterest expense				
Salaries and employee benefits	\$ 130,778	\$ 128,262	\$ 2,516	2.0 %
Non-employee expenses:				
Travel expense	7,378	6,627	751	11.3
Professional services expense	4,685	9,284	(4,599)	(49.5)
Advertising and marketing expense	10,058	6,651	3,407	51.2
Occupancy expense	6,259	7,619	(1,360)	(17.9)
Technology expense	23,456	19,585	3,871	19.8
Equipment expense	11,517	11,361	156	1.4
Other loan origination and maintenance expense	10,867	9,511	1,356	14.3
Renewable energy tax credit investment impairment	69	7,771	(7,702)	(99.1)
FDIC insurance	12,579	6,833	5,746	84.1
Contributions and donations	—	6,429	(6,429)	(100.0)
Other expense	12,035	9,708	2,327	24.0
Total non-employee expenses	98,903	101,379	(2,476)	(2.4)
Total noninterest expense	\$ 229,681	\$ 229,641	\$ 40	— %

Total noninterest expense for the three and nine months ended September 30, 2023, decreased \$8.8 million, or 10.6%, and increased \$40 thousand, respectively, compared to the same periods in 2022. The changes in noninterest expense for the comparable three and nine month periods were largely driven by various components, as discussed below.

Salaries and employee benefits: Total personnel expense for the nine months ended September 30, 2023 increased \$2.5 million, or 2.0%, respectively, compared to the same period in 2022. The increase over the first nine months of 2022 is principally related to continued investment in human resources to support strategic and growth initiatives. Total full-time equivalent employees increased from 940 at September 30, 2022, to 956 at September 30, 2023. Salaries and employee benefits expense included \$12.7 million of stock-based compensation for the nine months ended September 30, 2023, compared to \$15.1 million for the nine months ended September 30, 2022. Expenses related to the employee stock purchase program, stock grants, stock option compensation and restricted stock expense are all considered stock-based compensation.

Professional services expense: For the nine months ended September 30, 2023, professional services expense decreased \$4.6 million, or 49.5%, compared to the same period in 2022. This decrease was due to lower levels of legal fees combined with an insurance recovery of \$1.3 million in the first quarter of 2023 related to previously expensed legal fees.

Advertising and marketing expense: For the nine months ended September 30, 2023, advertising and marketing expense increased \$3.4 million, or 51.2%, compared to the same period in 2022. The increase over the first nine months of 2022 was largely driven by continued investment in the Company's lending and deposit market growth.

Technology expense: For the nine months ended September 30, 2023, technology expense increased \$3.9 million, or 19.8%, compared to the same period in 2022. This increase was primarily related to enhanced investments in the Company's technology resources.

Renewable energy tax credit investment impairment: For the three and nine months ended September 30, 2023, impairment charges decreased by \$7.7 million, compared to the same periods in 2022. This decrease was the result of a new renewable energy tax credit investment in the third quarter of 2022.

FDIC insurance: For the nine months ended September 30, 2023, FDIC insurance increased \$5.7 million, or 84.1%, compared to the same period in 2022. This increase is largely the result of rate increases effective in 2023 combined with the ongoing growth of Live Oak Banking Company.

Contributions and donations: For the nine months ended September 30, 2023, contributions and donations decreased \$6.4 million, compared to the same period in 2022. The decrease is principally related to a \$5.0 million special charitable donation during the second quarter of 2022 made in connection with the earlier discussed Finxact gain.

Income Tax Expense

For the three months ended September 30, 2023, income tax expense was \$3.0 million compared to \$1.5 million for the three months ended September 30, 2022, and the Company's effective tax rates were 6.9% and 3.4%, respectively. For the nine months ended September 30, 2023, income tax expense was \$7.6 million compared to \$35.2 million for the nine months ended September 30, 2022, and the Company's effective tax rates were 11.6% and 16.8%, respectively. The higher level of income tax expense for the third quarter of 2023 as compared to the third quarter of 2022 was primarily the result of higher than anticipated investment tax credits in the third quarter of 2022 related to renewable energy investments, arising from the impacts of the passage of the Inflation Reduction Act of 2022 combined with higher than expected costs at that time, as a result of the inflationary environment. The decrease in income tax expense for first nine months of 2023 compared to the same period in 2022 was primarily due to decreased pretax income during the current period.

Results of Segment Operations

The Company's operations are managed along two primary operating segments Banking and Fintech. A description of each segment and the methodologies used to measure financial performance is described in Note 11. Segments in the accompanying Notes to the Unaudited Condensed Consolidated Financial Statements. Net income (loss) by operating segment is presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Banking	\$ 42,389	\$ 17,519	\$ 64,400	\$ 59,114
Fintech	(1,418)	27,077	(2,506)	120,011
Other	(1,178)	(1,728)	(4,159)	(4,709)
Consolidated net income	\$ 39,793	\$ 42,868	\$ 57,735	\$ 174,416

Banking

For the three and nine months ended September 30, 2023, net income increased \$24.9 million and \$5.3 million, respectively, compared to the same periods of 2022. Key factors influencing these changes are discussed below.

For the three and nine months ended September 30, 2023, net interest income increased \$5.3 million, or 6.2%, and \$13.4 million, or 5.5%, respectively, compared to the same periods of 2022. See above section captioned "Net Interest Income and Margin" as it is principally related to the Banking segment.

The provision for loan and lease credit losses for the three and nine months ended September 30, 2023, decreased \$3.9 million, and increased \$21.1 million, respectively, compared to the same periods of 2022. See the analysis of provision for loan and lease credit losses included in the above section captioned "Provision for Loan and Lease Credit Losses" as it is entirely related to the Banking segment.

For the three and nine months ended September 30, 2023, noninterest income increased \$8.5 million, or 31.0%, and \$9.8 million, or 15.3%, respectively, compared to the same periods of 2022. The increase for the three and nine month comparative periods was principally driven by an incremental net gain on the loan servicing asset revaluation. Also contributing to the increase over the third quarter of 2022 was higher net gains on sale of loans. Partially offsetting these three and nine month contributors to increased noninterest income was incremental net losses on loans accounted for under the fair value option. See the analysis of these categories of noninterest income included in the above section captioned "Noninterest Income" for additional discussion.

For the three months ended September 30, 2023, noninterest expense decreased \$9.0 million, or 11.5%, compared to same period of 2022. See the analysis of these categories of noninterest expense included in the above section captioned "Noninterest Expense" for additional discussion.

For the three and nine months ended September 30, 2023, income tax expense increased \$1.7 million and decreased \$2.4 million, respectively, compared to the same periods of 2022. The increase compared to the third quarter of 2022 was primarily related to higher levels of pre-tax income in third quarter of 2023 while the decrease compared to the nine months ended September 30, 2022 is principally due to higher levels of expected tax credits in the prior year.

Fintech

For the three and nine months ended September 30, 2023, net income decreased by \$28.5 million and \$122.5 million, respectively, compared to same periods of 2022. The primary factor influencing this decrease compared to both prior periods is the \$120.5 million Finxact gain from the second quarter of 2022 and the \$28.4 million Payrailz gain from the third quarter of 2022, both included in equity method investment income. Partially offsetting the decrease over the first nine months of 2022 was a \$3.1 million increase in management fee income earned by Canapi Advisors combined with lower levels of income tax expense as a result decreased pretax income in 2023.

Discussion and Analysis of Financial Condition

September 30, 2023 vs. December 31, 2022

Total assets at September 30, 2023 were \$10.95 billion, an increase of \$1.09 billion, or 11.1%, compared to total assets of \$9.86 billion at December 31, 2022. The growth in total assets was principally driven by the following:

- Cash and cash equivalents, comprised of cash and due from banks and federal funds sold, combined with investment securities available-for-sale was \$1.63 billion at September 30, 2023, an increase of \$203.3 million, or 14.2%, compared to \$1.43 billion at December 31, 2022. This increase reflects growing deposit levels combined with maintenance of the Company's targeted liquidity profile.
- Growth in total loans and leases held for investment of \$858.5 million, or 11.7%, during the first nine months of 2023, from \$7.34 billion at December 31, 2022, to \$8.20 billion at September 30, 2023, resulting from strong origination activity during the first nine months of 2023 of \$2.97 billion.

Total deposits were \$10.00 billion at September 30, 2023, an increase of \$1.12 billion, or 12.6%, from \$8.88 billion at December 31, 2022. The increase in total deposits from the prior period was to support growth in the loan and lease portfolio combined with strong deposit inflows. At September 30, 2023, the Bank's total uninsured deposits were approximately \$1.48 billion, or 14.6%, of total deposits.

Borrowings decreased to \$25.8 million at September 30, 2023, from \$83.2 million at December 31, 2022. This decrease was principally due to paying off the Company's Fed Funds line of credit in the first quarter of 2023. See Note 8. Borrowings in the accompanying Notes to Unaudited Condensed Consolidated Financial Statements for a discussion of current sources of available debt capacity.

Regulatory Impact of Asset Growth

General. In the first quarter of 2023, the Company and the Bank each first exceeded \$10 billion in total assets. As of September 30, 2023, the Company and the Bank each had total assets of \$10.95 billion and \$10.87 billion, respectively. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") and its implementing regulations impose various additional requirements on bank holding companies and banks with \$10 billion or more in total consolidated assets. As a general matter, the Company and the Bank are not immediately subject to these additional requirements when they exceed \$10 billion in assets; instead, the Company and the Bank will be subject to these various requirements over various dates, as described below.

Consumer Financial Laws. Under the Dodd-Frank Act, the Consumer Financial Protection Bureau (CFPB) has near-exclusive supervision authority, including examination authority, to assess compliance with federal consumer financial laws for a bank and its affiliates if the bank has total assets of more than \$10 billion. This provision becomes applicable to a bank following the fourth consecutive quarter where the total assets of the bank, as reported in its quarterly Call Report, exceed \$10 billion and afterwards remains applicable to the bank unless the bank has reported total assets of \$10 billion or less in its quarterly Call Report for four consecutive quarters.

Deposit Insurance Assessments. Also under the Dodd-Frank Act, the minimum ratio of net worth to insured deposits of the Deposit Insurance Fund administered by the FDIC was increased from 1.15 percent to 1.35 percent and the FDIC is required, in setting deposit insurance assessments, to offset the effect of the increase on institutions with assets of less than \$10 billion, which results in institutions with assets greater than \$10 billion paying higher assessments. In addition, following the fourth consecutive quarter where the total assets of a bank exceeds \$10 billion, as reported in its quarterly Call Report, the FDIC utilizes a different method for determining deposit insurance assessments. This large bank method is based on a bank's ability to withstand asset- and funding-related stress, its regulatory ratings, and potential losses to the FDIC in the event of the bank's failure, subject to discretionary adjustments by the FDIC.

Volcker Rule. Under provisions of the Dodd-Frank Act referred to as the "Volcker Rule," certain limitations are placed on the ability of insured depository institutions and their affiliates to engage in sponsoring, investing in and transacting with certain investment funds, known as "covered funds" under the rule. There are a number of exclusions from the definition of "covered funds," including for investments in Small Business Investment Companies, or SBICs, and certain qualifying venture capital funds. The Volcker Rule also places restrictions on proprietary trading, which could impact certain hedging activities.

Limits on Interchange Fees. The Bank also may be affected by the Durbin Amendment to the Dodd-Frank Act regarding limits on debit card interchange fees. The Durbin Amendment gave the Federal Reserve Board the authority to establish rules regarding interchange fees charged for electronic debit transactions by a payment card issuer that, together with its affiliates, has assets of \$10 billion or more, as of December 31 of the preceding calendar year, and to enforce a new statutory requirement that such fees be reasonable and proportional to the actual cost of a transaction to the issuer. The Federal Reserve Board has adopted rules under this provision that limit the swipe fees that a debit card issuer can charge a merchant for a transaction to the sum of 21 cents and five basis points times the value of the transaction, plus up to one cent for fraud prevention costs.

Asset Quality

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

Nonperforming Assets

The Bank places loans and leases on nonaccrual status when they become 90 days past due as to principal or interest payments, or prior to that if management has determined based upon current information available to them that the timely collection of principal or interest is not probable. When a loan or lease is placed on nonaccrual status, any interest previously accrued as income but not actually collected is reversed and recorded as a reduction of loan or lease interest and fee income. Typically, collections of interest and principal received on a nonaccrual loan or lease are applied to the outstanding principal as determined at the time of collection of the loan or lease. In respect to the Company's adoption of ASU No. 2022-02 on January 1, 2023, as described more fully in Note 2 in the accompanying Unaudited Condensed Consolidated Financial Statements, the prior period discussed below has been adjusted to exclude previously disclosed troubled debt restructurings for comparative purposes.

Nonperforming assets, excluding loans measured at fair value, at September 30, 2023 were \$105.8 million, which represented a \$32.4 million, or 44.1%, increase from December 31, 2022. These nonperforming assets at September 30, 2023 were comprised of \$99.1 million in nonaccrual loans and leases and \$6.7 million in foreclosed assets. Of the \$105.8 million of nonperforming assets, \$69.0 million carried a government guarantee, leaving an unguaranteed exposure of \$36.8 million in total nonperforming assets at September 30, 2023. This represents an increase of \$18.0 million, or 95.7%, from an unguaranteed exposure of \$18.8 million at December 31, 2022.

The following table provides information with respect to nonperforming assets, excluding loans measured at fair value, at the dates indicated.

	September 30, 2023 ⁽¹⁾	December 31, 2022 ⁽¹⁾
Nonaccrual loans and leases:		
Total nonperforming loans and leases (all on nonaccrual)	\$ 99,092	\$ 73,392
Foreclosed assets	6,701	—
Total nonperforming assets	\$ 105,793	\$ 73,392
Allowance for credit losses on loans and leases	\$ 121,273	\$ 96,566
Total nonperforming loans and leases to total loans and leases held for investment	1.27 %	1.07 %
Total nonperforming loans and leases to total assets	0.94 %	0.78 %
Allowance for credit losses on loans and leases to loans and leases held for investment	1.56 %	1.41 %
Allowance for credit losses on loans and leases to total nonperforming loans and leases	122.38 %	131.58 %

(1) Excludes loans measured at fair value.

	September 30, 2023 ⁽¹⁾	December 31, 2022 ⁽¹⁾
Nonaccrual loans and leases guaranteed by U.S. government:		
Total nonperforming loans and leases guaranteed by the U.S. government (all on nonaccrual)	\$ 65,837	\$ 54,608
Foreclosed assets guaranteed by the U.S. government	3,196	—
Total nonperforming assets guaranteed by the U.S. government	\$ 69,033	\$ 54,608
Allowance for credit losses on loans and leases	\$ 121,273	\$ 96,566
Total nonperforming loans and leases not guaranteed by the U.S. government to total held for investment loans and leases	0.43 %	0.27 %
Total nonperforming loans and leases not guaranteed by the U.S. government to total assets	0.32 %	0.20 %
Allowance for credit losses on loans and leases to total nonperforming loans and leases not guaranteed by the U.S. government	364.68 %	514.09 %

(1) Excludes loans measured at fair value.

Total nonperforming assets, including loans measured at fair value, at September 30, 2023 were \$154.0 million, which represented a \$33.6 million, or 27.9%, increase from December 31, 2022. These nonperforming assets at September 30, 2023 were comprised of \$147.3 million in nonaccrual loans and leases and \$6.7 million in foreclosed assets. Of the \$154.0 million of nonperforming assets, \$108.8 million carried a government guarantee, leaving an unguaranteed exposure of \$45.2 million in total nonperforming assets at September 30, 2023. This represents an increase of \$19.1 million, or 73.6%, from an unguaranteed exposure of \$26.0 million at December 31, 2022.

See the below discussion related to the change in potential problem and impaired loans and leases for management's overall observations regarding growth in total nonperforming loans and leases.

As a percentage of the Bank's total capital, nonperforming loans and leases, excluding loans measured at fair value, represented 11.0% at September 30, 2023, compared to 9.0% at December 31, 2022. Adjusting the ratio to include only the unguaranteed portion of nonperforming loans and leases at historical cost to reflect management's belief that the greater magnitude of risk resides in this portion, the ratios at both September 30, 2023 and December 31, 2022 were 3.7% and 2.3%, respectively.

As of September 30, 2023, and December 31, 2022, potential problem (also referred to as criticized) and classified loans and leases, excluding loans measured at fair value, totaled \$567.6 million and \$424.7 million, respectively. The following is a discussion of these loans and leases. Risk Grades 5 through 8 represent the spectrum of criticized and classified loans and leases. For a complete description of the risk grading system, see Note 3. Loans and Leases Held for Investment and Credit Quality in the Company's 2022 Form 10-K. At September 30, 2023, the portion of criticized and classified loans and leases guaranteed by the SBA or USDA totaled \$227.0 million and total portfolio unguaranteed exposure risk was \$340.6 million, or 6.8% of total held for investment unguaranteed exposure carried at historical cost. This compares to the December 31, 2022 portion of criticized and classified loans and leases guaranteed by the SBA or USDA which totaled \$195.8 million and total portfolio unguaranteed exposure risk was \$228.9 million, or 5.5% of total held for investment unguaranteed exposure carried at historical cost. As of September 30, 2023, loans and leases carried at historical cost within the following verticals comprise the largest portion of the total potential problem and classified loans and leases: General Lending at 13.2%, Wine and Craft Beverage at 11.2%, Senior Housing at 11.4%, Sponsor Search Fund Lending at 10.5%, Sponsor Finance at 5.0%, Hotels at 4.5%, Venture Banking at 4.1%, Agriculture at 3.9%, Healthcare at 3.9%, and Senior Care at 3.9%. As of December 31, 2022, loans and leases carried at historical cost within the following verticals comprise the largest portion of the total potential problem and classified loans and leases: Wine and Craft Beverage at 11.5%, General Lending at 10.3%, Senior Housing at 10.2%, Sponsor Search Fund Lending at 7.0%, Healthcare at 6.4%, Hotels at 5.9%, Fitness Centers at 5.1%, Agriculture at 4.5% and Senior Care at 4.0%. Of the above listed verticals, Senior Housing and Venture Banking are within the Company's Specialty Lending division while Hotels are within the Energy & Infrastructure division, the remainder of the above listed verticals are within the Small Business Banking division. The majority of the \$142.9 million increase in potential problem and classified loans and leases in the first nine months of 2023 was comprised of several relationships that did not have a government guarantee. The Company believes that its underwriting and credit quality standards have remained high and continues to consider changing economic conditions in a rising interest rate environment.

Loans and leases that experience insignificant payment delays and payment shortfalls are generally not individually evaluated for the purpose of estimating the allowance for credit losses. The Bank generally considers an “insignificant period of time” from payment delays to be a period of 90 days or less. The Bank would consider a modification for a customer experiencing what is expected to be a short-term event that has temporarily impacted cash flow. This could be due, among other reasons, to illness, weather, impact from a one-time expense, slower than expected start-up, construction issues or other short-term issues. Credit personnel will review the request to determine if the customer is stressed and how the event has impacted the ability of the customer to repay the loan or lease long term. At September 30, 2023, the Company had a total of \$37.1 million in loans modified in the first nine months of 2023 to borrowers experiencing financial difficulty, all of which remained current with \$14.6 million on principal payment deferral.

Management endeavors to be proactive in its approach to identify and resolve problem loans and leases and is focused on working with the borrowers and guarantors of these loans and leases to provide loan and lease modifications when warranted. Management implements a proactive approach to identifying and classifying loans and leases as special mention (also referred to as criticized), Risk Grade 5. At September 30, 2023, and December 31, 2022, Risk Grade 5 loans and leases, excluding loans measured at fair value, totaled \$385.1 million and \$286.5 million, respectively, for a nine month increase of \$84.9 million. The increase in Risk Grade 5 loans and leases, exclusive of loans measured at fair value, during the first nine months of 2023 was principally confined to eight verticals: Sponsor Search Fund Lending (\$25.4 million or 30.0%), Sponsor Finance (\$23.7 million or 23.9%), General Lending (\$21.0 million or 24.7%), Venture Banking (\$15.9 million or 18.7%), Asset-Based Lending (\$13.7 million or 16.1%), Bioenergy (\$13.4 million or 15.8%), Senior Housing (\$9.0 million or 10.6%) and Wine and Craft Beverage (\$7.0 million or 8.3%). Partially offsetting the above increase were decreases in Risk Grade 5 loans principally concentrated in two verticals: Broadband (\$12.4 million or 14.5%) and Entertainment Centers (\$9.0 million or 10.6%). Of the above listed verticals, Asset-Based Lending, Sponsor Finance, Senior Housing and Venture Banking are within the Company's Specialty Lending division while Bioenergy is within the Energy & Infrastructure division, the remainder of the above listed verticals are within the Small Business Banking division.

At September 30, 2023, approximately 95.4% of loans and leases classified as Risk Grade 5 are performing with no relationships having payments past due more than 30 days. While the level of nonperforming assets fluctuates in response to changing economic and market conditions, in light of the relative size and composition of the loan and lease portfolio and management's degree of success in resolving problem assets, management believes that a proactive approach to early identification and intervention is critical to successfully managing a small business loan portfolio. As government payment assistance began to expire toward the end of 2020, borrowers with continuing difficulties arising from the pandemic were provided additional relief through payment deferrals. At September 30, 2023, the Company had \$10.5 million in unguaranteed loans on SBA payment assistance.

Allowance for Credit Losses on Loans and Leases

The ACL of \$96.6 million at December 31, 2022, increased by \$24.7 million, or 25.6%, to \$121.3 million at September 30, 2023. The ACL as a percentage of loans and leases held for investment at historical cost amounted to 1.4% and 1.6% at December 31, 2022 and September 30, 2023, respectively. The increase in the ACL during the first nine months of 2023 was primarily the result of loan growth, combined with specific reserve changes on individually evaluated loans and charge-off related impacts. See also the above section captioned “Provision for Loan and Lease Credit Losses” in “Results of Operations” for related information.

Actual past due held for investment loans and leases, inclusive of loans measured at fair value, have increased by \$46.7 million since December 31, 2022. Total loans and leases 90 or more days past due increased \$45.2 million, or 80.0 %, compared to December 31, 2022. This increase was comprised of a \$19.7 million increase in unguaranteed exposure combined with a \$25.5 million increase in the guaranteed portion of past due loans compared to December 31, 2022. At September 30, 2023 and December 31, 2022, total held for investment unguaranteed loans and leases past due as a percentage of total held for investment unguaranteed loans and leases, inclusive of loans measured at fair value, was 0.8% and 0.7%, respectively. Total unguaranteed loans and leases past due were comprised of \$34.5 million carried at historical cost, an increase of \$13.3 million, and \$8.0 million measured at fair value, a decrease of \$1.6 million, as of September 30, 2023 compared to December 31, 2022. Management continues to actively monitor and work to improve asset quality. Management believes the ACL of \$121.3 million at September 30, 2023 is appropriate in light of the risk inherent in the loan and lease portfolio. Management's judgments are based on numerous assumptions about current and expected events that it believes to be reasonable, but which may or may not be valid. Accordingly, no assurance can be given that management's ongoing evaluation of the loan and lease portfolio in light of changing economic conditions and other relevant circumstances will not require significant future additions to the ACL, thus adversely affecting the Company's operating results. Additional information on the ACL is presented in Note 5. Loans and Leases Held for Investment and Credit Quality of the Unaudited Condensed Consolidated Financial Statements in this report.

Liquidity Management

Liquidity management refers to the ability to meet day-to-day cash flow requirements based primarily on activity in loan and deposit accounts of the Company's customers. Liquidity is immediately available from four major sources: (a) cash on hand and on deposit at other banks; (b) the outstanding balance of federal funds sold; (c) the market value of unpledged investment securities; and (d) availability under lines of credit. At September 30, 2023, the total amount of these four items was \$4.34 billion, or 39.6% of total assets compared to 40.7% of total assets, at December 31, 2022.

Loans and other assets are funded by loan sales, wholesale deposits, and customer deposits. To date, an increasing retail deposit base and a stable amount of brokered deposits have been adequate to meet loan obligations, while maintaining the desired level of immediate liquidity. The Company maintains an investment securities portfolio that is available for both immediate and secondary contingent liquidity purposes, whether via pledging to the Federal Home Loan Bank, Federal Reserve Bank Term Funding Program or through liquidation. Additionally, the Company maintains a guaranteed loan portfolio that is also a contingent liquidity source, whether via pledging to the Federal Reserve Discount Window or through liquidation.

At September 30, 2023, none of the investment securities portfolio was pledged to secure public deposits or pledged to retail repurchase agreements, leaving \$1.10 billion available to pledge as collateral.

Contractual Obligations

The Company has entered into significant fixed and determinable contractual obligations for future payments. Other than normal changes in the ordinary course of the Company's operations, there have been no significant changes in the types of contractual obligations or amounts due since December 31, 2022. See the section titled "Liquidity Management" in Part II, Item 7 of the Company's 2022 Form 10-K for additional discussion of contractual obligations.

Off-Balance Sheet Arrangements

In the normal course of operations, the Company engages in a variety of financial transactions that, in accordance with GAAP, 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 commitments to extend credit and standby letters of credit. For more information, see Note 10. Commitments and Contingencies in the accompanying notes to Unaudited Condensed Consolidated Financial Statements.

Asset/Liability Management and Interest Rate Sensitivity

One of the primary objectives of asset/liability management is to maximize the net interest margin while minimizing the earnings risk associated with changes in interest rates. One method used to manage interest rate sensitivity is to measure the repricing differences, or interest rate gaps, between interest-earning assets and interest-bearing liabilities, across various time periods. As of September 30, 2023, the balance sheet's total cumulative gap position was 4.7%, meaning that over the entire life of the Company's assets and liabilities, more assets will reprice than liabilities. For further information, see Item 3. Quantitative and Qualitative Disclosures About Market Risk.

The interest rate gap method, however, addresses only the magnitude of asset and liability repricing timing differences as of the report date and does not address earnings, market value, changes in account behaviors based on the interest rate environment, or growth. Therefore, management also uses an earnings simulation model to prepare, on a regular basis, earnings projections based on a range of instantaneous parallel interest rate shocks applied to a static balance sheet and non-parallel interest rate shocks applied to a dynamic balance sheet to measure interest rate risk. As of September 30, 2023, the Company's interest rate risk profile under the instantaneous parallel interest rate shock scenarios applied to a static balance sheet is slightly asset-sensitive. For more information, see Item 3. Quantitative and Qualitative Disclosures About Market Risk.

An asset-sensitive position means that net interest income will generally move in the same direction as interest rates. For instance, if interest rates increase, net interest income can be expected to increase, and if interest rates decrease, net interest income can be expected to decrease. The Company attempts to mitigate interest rate risk by match funding assets and liabilities with similar rate instruments. Asset/liability sensitivity is primarily derived from the prime-based loans that adjust as the prime interest rate changes, rates on cash accounts that adjust as the federal funds rate changes and the longer duration of indeterminate term deposits. Note that the Company regularly models various forecasted rate projections with non-parallel shifts that are reflective of potential current rate environment outcomes. Under these scenarios, the Company's interest rate risk profile may increase in asset sensitivity, decrease in asset sensitivity, or depending on the scenario and timing of anticipated rate changes, may transition to a liability-sensitive interest rate risk profile. The Company believes that regular modeling of various interest rate outcomes allows it to assess and manage potential risks from various rate shifts.

Capital

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

Capital amounts and ratios as of September 30, 2023, and December 31, 2022, are presented in the table below.

	Actual		Minimum Capital Requirement		Minimum To Be Well Capitalized Under Prompt Corrective Action Provisions ⁽¹⁾	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Consolidated - September 30, 2023						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 942,495	11.63 %	\$ 364,764	4.50 %	N/A	N/A
Total Capital (to Risk-Weighted Assets)	1,044,122	12.88	648,470	8.00	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	942,495	11.63	486,353	6.00	N/A	N/A
Tier 1 Capital (to Average Assets)	942,495	8.56	440,488	4.00	N/A	N/A
Bank - September 30, 2023						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 802,562	10.25 %	\$ 352,192	4.50 %	\$ 508,722	6.50 %
Total Capital (to Risk-Weighted Assets)	900,739	11.51	626,120	8.00	782,650	10.00
Tier 1 Capital (to Risk-Weighted Assets)	802,562	10.25	469,590	6.00	626,120	8.00
Tier 1 Capital (to Average Assets)	802,562	7.35	436,650	4.00	545,812	5.00
Consolidated - December 31, 2022						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 888,235	12.47 %	\$ 320,446	4.50 %	N/A	N/A
Total Capital (to Risk-Weighted Assets)	977,360	13.73	569,681	8.00	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	888,235	12.47	427,261	6.00	N/A	N/A
Tier 1 Capital (to Average Assets)	888,235	9.26	383,499	4.00	N/A	N/A
Bank - December 31, 2022						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 730,092	10.70 %	\$ 307,179	4.50 %	\$ 443,703	6.50 %
Total Capital (to Risk-Weighted Assets)	815,577	11.95	546,096	8.00	682,620	10.00
Tier 1 Capital (to Risk-Weighted Assets)	730,092	10.70	409,572	6.00	546,096	8.00
Tier 1 Capital (to Average Assets)	730,092	7.70	379,396	4.00	474,245	5.00

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

Critical Accounting Policies and Estimates

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

Accounting policies, as described in detail in the Notes to the Company's Unaudited Condensed Consolidated Financial Statements in this report and in the Company's Annual Report on Form 10-K for the year ended December 31, 2022, 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. The Company's most critical accounting policies and estimates are listed below. These estimates require the Company to make difficult, subjective or complex judgments about matters that are inherently uncertain.

- Allowance for credit losses;
- Valuation of loans accounted for under the fair value option;

- Valuation of servicing assets; and
- Income taxes

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

Item 3. Quantitative and Qualitative Disclosures About Market Risk

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 an Asset/Liability Committee to support prudent oversight of interest rate risk management. The Asset/Liability Committee 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 Company has a total cumulative gap in interest-earning assets and interest-bearing liabilities of 4.7% as of September 30, 2023, indicating that, overall, over the expected life of the instruments, assets will reprice before liabilities.

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 ("EVE") and net interest income ("NII") simulations. These simulations project both short-term and long-term interest rate risk under a variety of instantaneous parallel rate shocks applied to a static balance sheet. The EVE simulation provides a long-term view of interest rate risk because it analyzes all of the Company's future cash flows. EVE is defined as the present value of the Company'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. The NII simulation provides a short-term view of interest rate risk as it analyzes impact on net interest income over the next 12 and 24 months from instantaneous parallel rate shocks on a static balance sheet.

EVE and NII simulations are completed regularly 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 provided to the Asset/Liability Committee on at least an annual 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 regularly models various forecasted rate projections with non-parallel shifts that are reflective of potential current rate environment outcomes. Under these scenarios, the Company's interest rate risk profile may increase in asset sensitivity, decrease in asset sensitivity, or depending on the scenario and timing of anticipated rate changes, may transition to a liability sensitive interest rate risk profile. The Company believes that regular modeling of various interest rate outcomes allows it to assess and manage potential risks from various rate shifts.

The table below sets forth an approximation of the Company's NII sensitivity exposure for the 12-month periods ending September 30, 2024 and 2025, and the Company's EVE sensitivity at September 30, 2023. The simulation uses projected repricing of assets and liabilities at September 30, 2023, on the basis of contractual maturities, anticipated repayments and scheduled rate adjustments. Critical model assumptions such as loan and investment prepayment rates, deposit decay rates, changes in deposit pricing, both in amount and timing, relative to changes in market rates (commonly referred to as deposit betas and lags, respectively) and assumed replacement pricing can have a significant impact on interest income simulation. A static balance sheet is maintained to remove volume considerations and to place the focal point on the rate sensitivity of the Company's balance sheet. While management believes such assumptions to be reasonable, actual future activity may differ from the results shown below as it will include growth considerations, non-parallel rate movements, and management actions to mitigate the impacts of changing interest rates on the balance sheet's earnings profile.

Basis Point ("bp") Change in Interest Rates	Estimated Increase/Decrease in Net Interest Income		Estimated Percentage Change in EVE
	12 Months Ending September 30, 2024	12 Months Ending September 30, 2025	As of September 30, 2023
+400	(3.1 %)	(3.6 %)	(28.9 %)
+300	(2.2)	(2.5)	(22.1)
+200	(1.4)	(1.5)	(14.9)
+100	(0.6)	(0.6)	(7.5)
-100	0.4	0.3	7.3
-200	0.5	0.2	14.4
-300	0.6	(0.1)	21.6

Rates are increased instantaneously at the beginning of the projection. The Company's asset/liability profile is slightly liability sensitive in both years one and two from a net interest income perspective. The Company had recent interest rate increases where new and existing deposits are repricing more rapidly than the Company's total loan and lease portfolio. The Company's variable rate loan portfolio reprices the full amount of the assumed change in interest rates, while the retail savings and short-term retail certificates of deposits portfolio will reprice with an assumed beta. 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 favorable EVE change resulting from the loan and lease portfolio in a rising rate analysis is more than offset by the devaluation of the interest-bearing liabilities. This is largely driven by the Company's longer asset duration, primarily consisting of investments and loans, versus the shorter duration of its funding portfolio, primarily consisting of retail savings and short-term retail certificates of deposits. Increased fixed rate loan production since 2020, given the historical low market rate environment, has also been a significant driver in the model results.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

An evaluation of the Company's disclosure controls and procedures (as defined in Rules 13(a)-15(e) and 15(d)-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), was carried out under the supervision and with the participation of the Company's Chief Executive Officer and Chief Financial Officer as of September 30, 2023, the last day of the period covered by this Quarterly Report. The Company's Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of September 30, 2023, in ensuring that the information required to be disclosed in the reports the Company files or submits under the Exchange Act is (i) accumulated and communicated to management (including the Company's Chief Executive Officer and Chief Financial Officer) as appropriate to allow timely decisions regarding required disclosures, and (ii) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2023, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

In the ordinary course of operations, the Company is at times involved in legal proceedings. In the opinion of management, as of September 30, 2023, there are no material pending legal proceedings to which the Company or any of its subsidiaries is a party or of which any of their property is the subject.

Item 1A. Risk Factors

There have been no material changes in the Company's risk factors from those disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2022, with the exception of the additional risk factor disclosed in the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2023.

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

On May 17, 2022, the Board of Directors of the Company authorized the repurchase of up to \$50,000,000 in shares of the Company's voting common stock from time to time through December 31, 2023 (the "Repurchase Program"). The Repurchase Program enables the Company to acquire shares through open market purchases or privately negotiated transactions, including through a Rule 10b5-1 plan, at the discretion of management and on terms (including quantity, timing, and price) that management determines to be advisable. Actions in connection with the repurchase program will be subject to various factors, including the Company's capital and liquidity positions, regulatory and accounting considerations, the Company's financial and operational performance, alternative uses of capital, the trading price of the Company's common stock, and market conditions. The repurchase program does not obligate the Company to acquire a specific dollar amount or number of shares and may be extended, modified, or discontinued at any time. As of September 30, 2023, the Company had not made any purchases of shares under the Repurchase Program.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits.

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

INDEX TO EXHIBITS

Exhibit No.	Description of Exhibit
3.1	Amended and Restated Articles of Incorporation of Live Oak Bancshares, Inc. (incorporated by reference to Exhibit 3.1 of the registration statement on Form S-1, filed on June 19, 2015)
3.2	Amended Bylaws of Live Oak Bancshares, Inc. (incorporated by reference to Exhibit 3.2 of the amended registration statement on Form S-1, filed on July 13, 2015)
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the registration statement on Form S-1, filed on June 19, 2015)
10.1	Amendment to Software Service Agreement dated September 12, 2023, between Live Oak Banking Company and nCino, Inc.*
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
101	Interactive data files pursuant to Rule 405 of Regulation S-T, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of September 30, 2023 and December 31, 2022; (ii) Condensed Consolidated Statements of Income for the Three and Nine Months Ended September 30, 2023 and 2022; (iii) Condensed Consolidated Statements of Comprehensive Income for the Three and Nine Months Ended September 30, 2023 and 2022; (iv) Condensed Consolidated Statements of Changes in Shareholders' Equity for the Three and Nine Months Ended September 30, 2023 and 2022; (v) Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2023 and 2022; and (vi) Notes to Unaudited Condensed Consolidated Financial Statements*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

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

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

Denotes management contract or compensatory plan.

SIGNATURES

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

Live Oak Bancshares, Inc.

(Registrant)

Date: November 3, 2023

By: /s/ William C. Losch III

William C. Losch III

Chief Financial Officer

Exhibit 10.1

Amendment

This Amendment ("Amendment") is effective as of the date that both parties have executed this Amendment (the "Amendment Effective Date") and amends the nCino, LLC Software Service Agreement dated November 1, 2012, as amended (the "Agreement") by and between nCino OpCo, Inc. ("nCino") and Live Oak Bank ("Subscriber"). Capitalized terms used but not otherwise defined in this Amendment shall have the meanings assigned to them in the Agreement.

In exchange for the consideration detailed herein, and other good and valuable consideration the receipt of which is acknowledged by both parties, the parties do hereby agree as follows:

1. Subscriber wishes to transfer thirty (30) Premium Operators (the "Transferred Subscription Services") from Org ID 00DG000000h5Do to Org ID 00D3k000000uAXY. The transfer of the Transferred Subscription Services shall occur as soon as practicable following the Amendment Effective Date (the actual date of transfer, the "Transfer Date"). Accordingly, commencing on the Transfer Date: (i) Attachment A to the Agreement will be amended to reflect the transfer of the Transferred Subscription Services into Subscriber's Org ID 00D3k000000uAXY, and (ii) Subscriber will have access to the Transferred Subscription Services in Subscriber's Org ID 00D3k000000uAXY. Any Fees in Subscriber's Org ID 00D3k000000uAXY that are billed to Subscriber based on a percentage of the Total Annual Subscription Fees will be amended accordingly to cover the cost of the Transferred Subscription Services. Subscriber agrees and acknowledges that a single user subscription cannot access more than one org (i.e. if a Subscriber employee requires access to both the Org ID 00DG000000h5Do and the Org ID 00D3k000000uAXY, two (2) user subscriptions will be required).
2. Subscriber wishes to make changes to the Subscription Services as set forth in Exhibit A below, which are to reduce certain Subscription Services (the "Reduced Subscription Services") and purchase access and use rights for additional Subscription Services (the "Additional Subscription Services", and collectively with the Reduced Subscription Services, the "Amended Subscription Services"). Accordingly, commencing on or as soon as practicable following the Transfer Date: (i) Attachment A to the Agreement shall be amended to reflect the Amended Subscription Services as set forth in Exhibit A, and (ii) Subscriber will (a) no longer have access to the Reduced Subscription Services, and (b) have access to the Additional Subscription Services in Subscriber's Org ID 00D3k000000uAXY as soon as practicable following the Transfer Date. The initial invoice for the Additional Subscription Services will be issued as of the date the Additional Subscription Services are activated, pro-rated for the initial year of activation, as applicable. Thereafter, Subscriber will be invoiced the full annual amount of the Fees for the Additional Subscription Services on each annual invoice date for the remainder of the Term of the Agreement. The term for the Additional Subscription Services will run co-terminously with the Term of the Agreement. Any Fees in Subscriber's Org ID 00D3k000000uAXY that are billed to Subscriber based on a percentage of the Total Annual Subscription Fees will be amended to cover the cost of the Additional Subscription Services.

Exhibit A

The Subscription Services in Subscriber's Org ID 00D3k000000uAXY are hereby amended as follows:

Product	Quantity	Price	Annual Subscription Fees
nCino Premium Seat	-30 Operator(s)	\$130/Operator/Month	-\$46,800
nCino Premium Seat FSC	+30 Operator(s)	\$145/Operator/Month	\$52,200

3. Except as set forth in this Amendment, the Agreement is unaffected and shall continue in full force and effect in accordance with its terms. Any further modification or amendment to the Agreement must be set forth in writing in a document executed by both parties.
-

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the dates shown below their respective signatures.

nCino	Subscriber
Signature: /s/ Charles Ragland	Signature: /s/ Renato Derraik
Name: Charles Ragland	Name: Renato Derraik
Title: Global Revenue Operations	Title: Chief Inf. and Digital Officer
Date: 9/12/2023	Date: 9/12/2023

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

I, James S. Mahan III, certify that:

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

Date: November 3, 2023

/s/ James S. Mahan III

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

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

I, William C. Losch III, certify that:

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

Date: November 3, 2023

/s/ William C. Losch III

William C. Losch III
Chief Financial Officer
(principal financial officer)

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

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

The Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 (the "Form 10-Q") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 3, 2023

/s/ James S. Mahan III

James S. Mahan III

Chief Executive Officer

(principal executive officer)

Date: November 3, 2023

/s/ William C. Losch III

William C. Losch III

Chief Financial Officer

(principal financial officer)

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

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