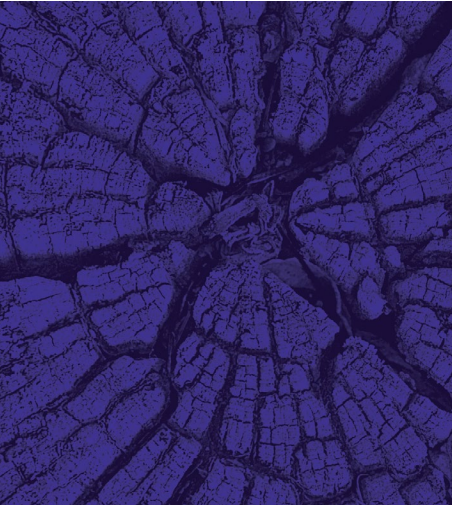




ANNUAL REPORT

LIVE OAK BANCSHARES



LETTER FROM THE CHAIRMAN

To Our Shareholders,

The grip of 2020 was difficult to avoid, especially for those on the frontlines, in marginalized communities and along Main Street where businesses were, and in some cases still are, shuttered. It was a year like none of us have seen, and to say it was a time of tragedy and triumph would be dismissive. It was a year of unforgettable pain, stress, and toughness. We saw firsthand how tight the hold was on small business and the incredible strength American entrepreneurs fought to survive. If there was a theme for 2020, survival would be on the short list. We tip our hat to the healthcare professionals, essential workers, and everyday heroes who worked tirelessly to move us to the next phase of recovery.

We have learned many lessons from 2020, and the one that stands out the most is the sheer resiliency of small business owners. Their drive shows that our work is, and will continue to be, purposeful and resolute. Getting capital into the hands of small business owners is crucial to the success of our economy and we are grateful to serve our customers who inspire us every day.

As we share the details of the year in the coming pages, we want to draw on not only 2020, but our history to paint a picture of our future. Instead of focusing on our financials or the recent increase of our stock price, I thought I would focus on our past and what may be around the corner.

Our Past

In our early days we were all about selling SBA loans for a profit. We focused on making high quality SBA 7(a) small business loans nationwide in industries we understood. In order to be in compliance with the FDIC de novo bank rules, target asset growth could not exceed more than 25% year over year. Given the opportunity in front of us of to scale an organization in multiple verticals in all 50 states, we had to consider selling all that we could, including both the government guaranteed piece as well as the unguaranteed portion of those loans.

SBA rules required us to hold 10% of all that we originated. We were successful in convincing other banks we could achieve this goal because of our industry expertise and the quality of the loans we generated. We didn't focus too much on our deposit strategy because we were only holding about 10% of whatever we were originating.

Our overall return metrics worked out quite nicely as you can see below:

	ROAA	ROAE
2011-2013	3.55%	36.11%
2014-2016	1.70%	12.04%
2017-2019	2.16%	16.09%
2020	0.85%	10.49%

Because we were an S-Corp during the years 2011 through 2014, returns for those years above are tax adjusted to be more comparable to later years.

As we emerged from seven long years of being considered a de novo bank by the FDIC on May 12, 2015, we immediately raised additional capital and took the company public that summer. Years of loan sales created a substantial servicing asset on our balance sheet that had to be revalued every quarter.

The effects of fair value accounting on these growing balances, including higher levels of loans measured at fair value, increased earnings volatility, making it a challenge for our shareholders to understand our earnings potential.

In late 2018 we ripped the band aid off and began to wean ourselves from the "gain on sale dependency" by reducing loan sales. As we held more and more high-quality government guaranteed paper, recurring revenue increased, driving more predictable earnings.

These past 10 years we have accomplished a great deal as it relates to asset generation.

1. We established an impeccable record as it relates to asset quality. See below which includes approximately \$10 million in hotel losses in 2020.

	Net Charge Offs (in thousands)	Originations (in thousands)
2011	\$1,461	\$306,637
2012	\$1,860	\$413,763
2013	\$1,888	\$498,752
2014	\$1,109	\$848,090
2015	\$798	\$1,158,640
2016	\$1,742	\$1,537,010
2017	\$3,555	\$1,934,238
2018	\$4,814	\$1,765,680
2019	\$3,760	\$2,001,886
2020	\$19,411	\$2,687,542
Total	\$40,398	\$13,152,238

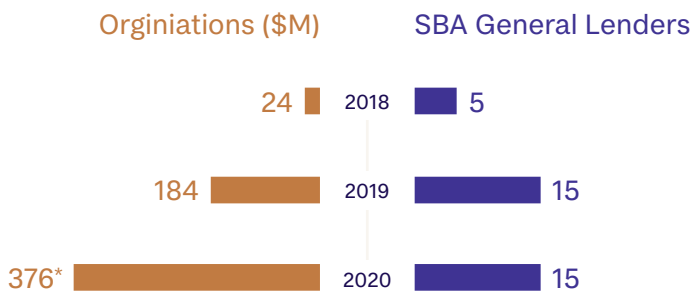
Net charge offs are reflective for all loans and leases carried at historical cost and measured at fair value. Originations exclude PPP.

The key takeaway here is that in 10 years we originated almost \$13.2 billion in loans and leases exclusive of Paycheck Protection Program (PPP). We took unguaranteed credit risk of approximately 25% of that, or approximately \$3.0 billion, and charged off \$40.4 million, or 135 bps of that unguaranteed exposure.

2. Our original theory of analyzing the SBA database of approximately 1,100 eligible industries and focusing on those with low default ratios has proven successful. The theory of verticality worked. The credit team delighted in advice from industry experts, and the sales team knew that staying within the credit box guidelines would allow better customer satisfaction and speed to closing the loan. Our ability to scale in more than our current 30+ industries is in front of us as we have proven the business model over the past 10 years.

3. In the latter months of 2017, we launched a research and development project – could we attract other experienced SBA lenders given our profoundly unique culture? Most SBA lenders are paid on commission from dollars generated from loan sales. Their compensation plans are complicated with complex clawbacks and legalese. We have replaced commissions with trust. We say to a new lender we **trust** you to continue your track record of success, and we will match your annual compensation with a base salary and add 100% coverage of family health care costs, 6% 401(k) match plus a cash bonus and stock rewards for high performers.

As a result of adding new SBA general lenders, we saw the following increase in our numbers:



*Exclusive of PPP

Today our general lenders, if viewed together as a stand-alone lender, would rank in the Top 10 SBA lenders in the country.

In addition, we have honed our craft internally. The heart and soul of our lending division is the team of underwriters, closers, and behind-the-scenes all stars who are constantly working to perfect handoffs, improve processes, and leverage technology to benefit the customer. They are driving us to the next stage of efficiency and expertise.

Relative to our current deposit strategy, our branchless model is certainly in the right place at the right time. Our cost to gather deposits is currently about 7 bps while the rate we pay on savings and CDs is around 60 bps, yielding an overall cost of funds just under 70bps. I understand that traditional retail banking's total all-in cost of funds can be 100 to 150 bps, which obviously includes the cost of branches, tellers and customer service reps. We believe we have a substantial advantage for branchless banks in this low interest rate environment.

Notwithstanding that, we have not yet offered a non-interest bearing checking account for 13 years. Help is on the way!

After three long years of testing and development, we have released to our employees Live Oak checking accounts on a technology stack built on a Finxact core solution plus an additional 15 separate vendors. In our initial release, this product should not appear different from our competition. As you peek under the hood though, you will see a Tesla.

This cloud native, API-first engine is as different as an electric vehicle vs. a gas-powered vehicle. We are in the early days of creating a purpose-built core processing product engine to allow customized embedded banking in the 30+ industries we serve. We now have the capability through hand crafted APIs at Finxact, Apiture, and Savana to partner with businesses necessary to make our customers successful.

Part of the testing started in spring of 2020 with the launch of the PPP. We were swift to market when the downturn started and helped more than 11,000 borrowers get access to PPP capital by booking loans to the Finxact core. Because our foundation was built on an open system, we were able to shift our focus to borrowers who needed help to ride out the Covid-19 storm, and the plan was a massive success. The vision was realized and now we look to other possibilities.

For instance, imagine a world where a veterinarian has access to all her financial statement information (accounting software), practice management software (appointment calendaring, ordering drugs, etc.), payroll, and Live Oak Bank (deposits, line of credit, acquisition capital, refurbishment loans, wires, etc.), all presented with a beautiful user interface through elegant APIs delivered through our ecosystem.

We believe that embedding our bank inside the software programs necessary to operate a small business is the key to our non-interest-bearing deposit future. These accounts can appear on any mobile device or any browser and will have the ability to compete with the Chime, Affirm and Robinhoods of the fintech world. Those companies have created their own Tesla or purpose-built engine in a largely unregulated environment. It is our belief that over the next 10-15 years the 280,000,000 lines of code in the banking business will all change. Those fleet of foot have a chance of protecting their franchise. Those gas guzzlers who don't pivot? Well, as folklore attributes to Henry Ford, "if I asked people what they wanted, they would have said a faster horse." It's time to change the model, and for most banks in our industry, sadly, I am not so sure they are ready.

Now the Fun Part — Our Future

As we think about our future it is almost like we had to take every minute, every second of the last 13 years to get to this point. All the work, all the travel in all 50 states to develop relationships with customers and referral sources, the technology we built that allows us to say to our customers that “speed is our weapon,” while on the deposit side Finxact, Apiture and Savana are helping us to accomplish the same.

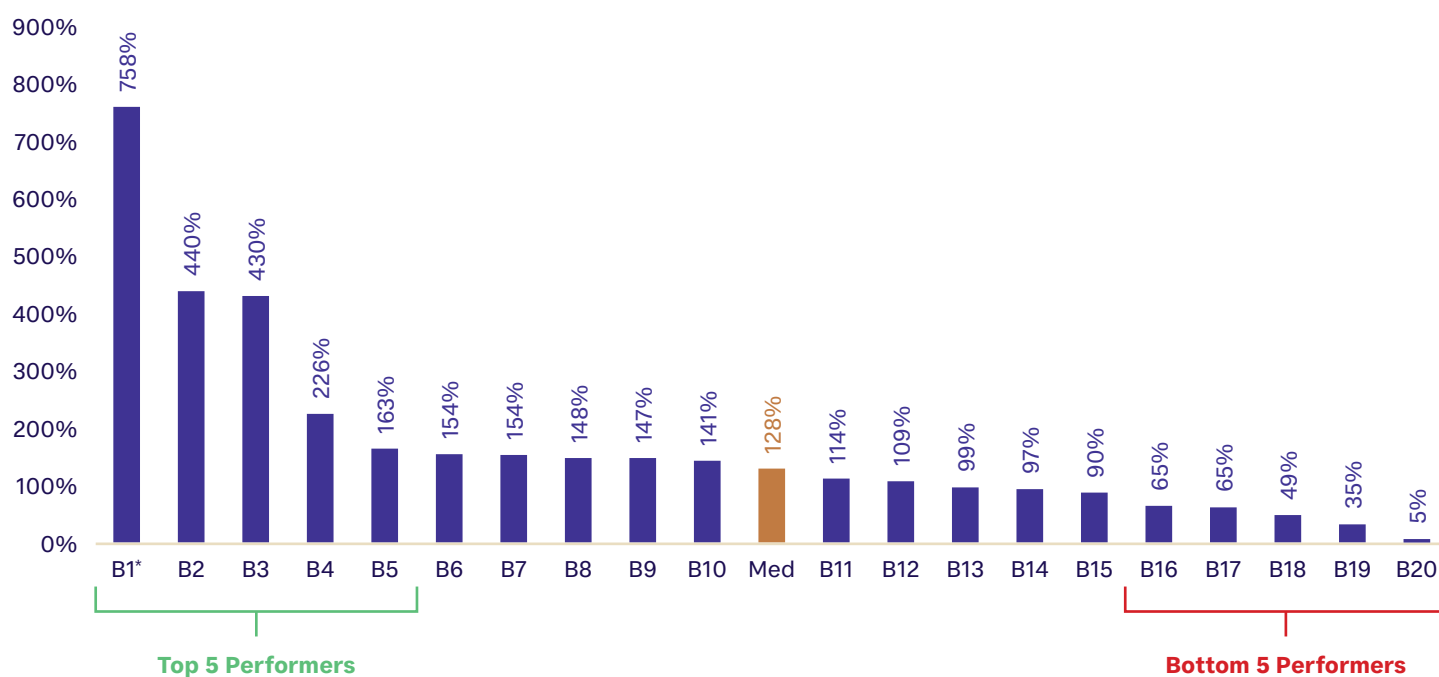
And to what end you should ask.

My answer is **growth** and **consistency**.

Recently I had a chance to study information an analyst provided on shareholder returns.

In this graph of major banks, it appears that traditional tangible book value comparisons, efficiency ratio comparisons, etc., do not appear to be as important to the value of these banks as year-over-year revenue growth.

10-Year Total Return for Coverage and Key Performance Metrics for 20 Major US Banks (2010 - 2020)



ROTE¹	12.7%	Fee Income %²	21.6%
Efficiency Ratio¹	55.1%	Expense Growth²	14.3%
Loan Growth²	21.4%	PTPP Growth²	16.7%
Deposit Growth²	21.0%	Forward P/E¹	15.2X
NIB Deposit %¹	31.5%	P/TBV¹	2.1X
TBV CAGR²	14.2%	Revenue Growth²	15.5%
		NPS³	60

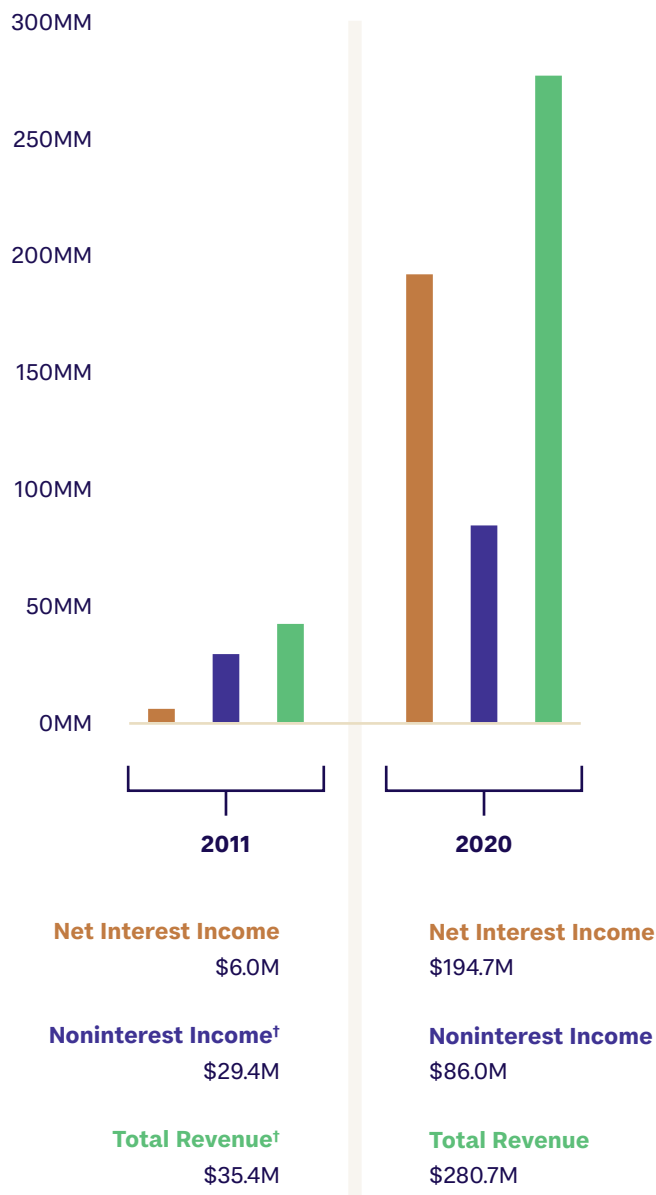
ROTE¹	11.8%	Fee Income %²	1.7%
Efficiency Ratio¹	59.1%	Expense Growth²	3.4%
Loan Growth²	13.1%	PTPP Growth²	11.3%
Deposit Growth²	13.1%	Forward P/E¹	13.8X
NIB Deposit %¹	22.5%	P/TBV¹	1.7X
TBV CAGR²	6.6%	Revenue Growth²	4.7%
		NPS³	37

*B = Bank

Source: SNL Financial, Company reports, Bloomberg Finance L.P., and J.D. Power | 1. Median from 2010-2020 | 2. 10-Year CAGR from 2010-2020 | 3. FRC 2019 NPS is from company reports. Data excludes BKU due to fewer than 100 survey respondents. Data excludes SBNY and SIVB due to fewer than 50 nationwide branches or other reason not in J.D. Power survey. Net promoter score ranges from -100 to 100.

In that regard, maybe the past is a proxy for the future. Our Compound Annual Growth rate of Net Interest Income plus Noninterest Income from 2011-2020 is approximately 25.9%.

**Live Oak Bank Compound Annual Growth Rate
(2011 compared to 2020)**



Certainly, the law of small numbers is at work in the early days. Throughout our history we have always focused on 15% growth for two reasons. First, the math is simple ... 15% doubles every 5 years. Second, given our focus on a granular, geographic disbursed loan book ... it just feels right.

It has taken more than a decade to perfect two loan origination engines. It is our belief that our culture, benefits, and technology can continue to attract and retain talent acquired from the pool of thousands of SBA lenders in this country. This geographic granular dispersion is essential to our business model.

Secondly, it has taken us 10 years to scale the theory of verticality to have a meaningful presence in 30+ industries out of a reasonable base of several hundred.

This type of organic growth while maintaining pristine credit quality is hard to find.

Given our focus on American small businesses that have been underserved by the large banks and technology starved by the smaller banks, it feels like we are in the second pitch, first inning.

We are glad to have you along for the ride!

All my very best,

James S. "Chip" Mahan III
Chairman and Chief Executive Officer

†Includes estimated changes in fair value for loans measured under the fair value option.

**MAKERS
DREAMERS
CREATORS
HEROES
ACHIEVERS
BELIEVERS
RISK-TAKERS**

DEDICATED TO THE DOERS™

We're on a mission to be America's small business bank. To do that, we are building a platform that allows our teams to deliver financial expertise, unmatched service, and efficiency to small business owners across the country. In 2020, we relaunched our brand to better capture and reflect who Live Oak is to our employees, customers, and shareholders.

At Live Oak, we work with determined doers.

The ones that...

**...get up early and stay up late;
...aren't satisfied with the status quo;
...aren't deterred by the tough times along the way.**

We saw the incredible determination and resiliency of small business owners over and over again in 2020. The impacts of the Covid-19 pandemic, shutdowns, hurricanes, fires, and economic hardships were like nothing we have seen in modern times and challenges continue. Through it all, we saw customers dig deep, make sacrifices, and remain nimble. We saw our own employees do the same, shifting roles, staying up late, and working weekends. 2020 will be remembered as a year of banding together, getting tough work done, and standing beside one another to get to the other side.

We remain dedicated to the doers no matter what the world throws our way.



+

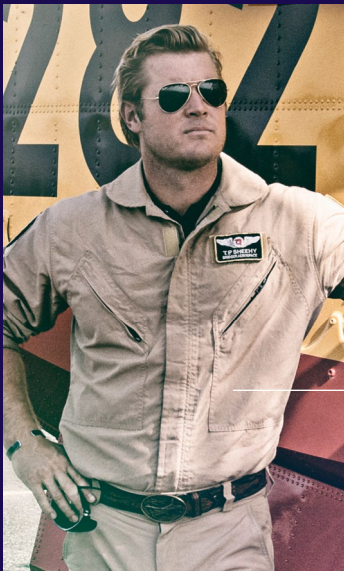
Fahaam Ahmad & Abdul Hanan

Company **MARBLEHEAD COMMUNITY STORE**

Location **MARBLEHEAD, MA**

Mission **FEEDING THEIR NEIGHBORS**

"We are very glad for Live Oak's support this past year during the troubling times we have faced. With the stress-free service and reliable information they provided, we remain successfully in business to serve our community."



+

Tim Sheehy

Company **BRIDGER AEROSPACE**

Location **BELGRADE, MT**

Mission **FIRST RESPONDERS IN FLIGHT**

"Live Oak enabled us to acquire our flagship aerial firefighting assets, the Viking Air Limited: CL-415EAFs, to protect lives, property, and habitat. Their support has been instrumental in our transformation to optimize and modernize our operations to provide the safest and most reliable purpose-built aerial assets. They are part of the team supporting emergency responders battling wildfires. Live Oak's innovation and dedication provided the means to secure ownership of our first two aircraft through two instrumental loans with the USDA."



+

Kristy Waldon

Company **WALDON PROFESSIONAL FUNERAL & CREMATION SERVICES**

Location **SANFORD, FL**

Mission **COMPASSION & EMPATHY**

"Even in this time of uncertainty, Live Oak Bank came through for our funeral home. We are eternally grateful!"



ENVIRONMENTAL, SOCIAL & GOVERNANCE REPORT

A Note from Huntley Garriott, President of Live Oak Bank

We learned in 2020 that the world can drastically change in a matter of months and that being prepared, nimble, and forward thinking is a successful roadmap for the future. We believe sound environmental, social, and governance (ESG) practices are vital to that roadmap, and the following pages detail our first ESG report. The key objectives in our ESG report focus on five areas: employees, customers, sustainability, community, and governance.

We plan to report annually on these ESG benchmarks to give you updates on our progress.

Across these key objectives you will find metrics, stories and information that capture the heart of what we do – putting our employees first, so they can take care of our customers and ultimately benefit you, our shareholders.

At the center, always, is our customer, and we intend to use these benchmarks to help deliver capital to small business owners across the country. Their drive drives us, and we remain steadfast in our dedication to them as America's small business bank.



M. Huntley Garriott, Jr.

Employees

At Live Oak Bank, our employees are our most valuable resource. Attracting and retaining the best employees is key to our success. We continuously seek opportunities to invest in our employees and in the strong corporate culture that makes our employees thrive.

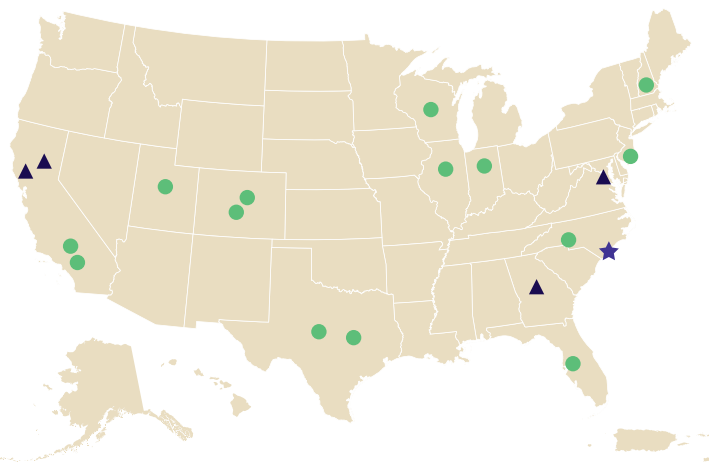
Live Oakers

621

full-time employees

5

lending offices



- ★ LOB Headquarters
- ▲ LOB Lending Office
- LOB General Lender

11 SCHOOLS

with recruitment efforts

including

3 HBCUs

NC A&T, NC Central and Fayetteville State

Our Commitment

North Carolina is home to the most Historically Black Colleges and University (HBCU) students in the country,⁴ which is why Live Oak is proud to be part of the HBCU Partnership Challenge in order to put a brighter spotlight on inclusion, diversity, equity and awareness. It is proven that diverse companies have powerful advantages, and we applaud a landscape where American businesses are encouraged to expand mindsets and foster change. We've broadened and focused our recruiting efforts by cultivating relationships with larger public institutions as well as HBCUs. These alumni, along with other black Live Oakers, launched our first African American affinity group in 2020 named RISE to support our employees and ensure they flourish both at Live Oak and in our community.



4. [UNCE](#): By the Numbers: How HBCUs Stack Up

Customers

Throughout 2020 and beyond, Live Oak Bank's dedication to small businesses has never wavered. As one of the nation's top originators of small business loans, we remained focused on providing capital to industries, and segments of industries, who are typically underserved. We continued to serve as a trusted business partner to our borrowers even after their loan closed, providing financial guidance and industry benchmarks to every single customer throughout the life of their loan. Live Oak Bank was the highest volume SBA 7(a) lender for 2020.⁵ Additionally, Live Oak was named the 2020 USDA Commercial Lender of the Year,⁶ an award given to the highest volume lender for the USDA's loan guarantee programs.

\$1.22 BILLION

to rural borrowers

\$187 MILLION

to minority borrowers

\$2.56 BILLION

to women borrowers

\$417 MILLION

to veteran borrowers

21%

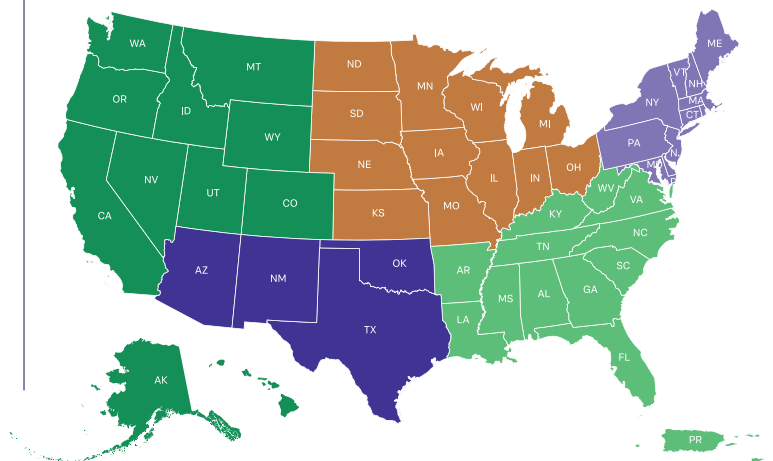
of Live Oak Bank's loan portfolio is to **low to moderate income areas**

39%

of Live Oak Bank's loan portfolio is to **middle income areas**

Serving the Underserved

Live Oak continues to be named the top SBA and USDA lender in the country.^{5,6} The loans we provide to rural communities, minorities, women and veterans have been noted for providing financing in areas where SBA lending has previously been low.⁷ According to a report to the Federal Reserve Bank of Dallas, Live Oak Bank's verticalized approach "can increase the supply of credit and may ultimately reshape the availability of credit across industries."⁷ Putting capital into the hands of small business owners across the country is embedded in our mission, and we will continue to mobilize our lenders to find American entrepreneurs who keep our economy going across all markets and in underserved communities.



West 24%

Southwest 13%

Midwest 13%

Southeast 36%

Northeast 14%

All figures based on publicly available data from the SBA, USDA, U.S. Census Bureau, and internal reports since inception, excluding leases and PPP loans. Borrowers gave permission to participate and were not compensated for their involvement in this report. | 5. The data supplied by the SBA reflects 7(a) highest dollar volume during US Government FY 2020 | 6. Live Oak Bank was awarded the 2020 Commercial Lender of the Year by the U.S. Department of Agriculture (USDA) for the highest dollar volume | 7. Di., W. and Pattinson, N. (2018) Remote Competition and Small Business Loans: Evidence from SBA Lending

Sustainability

Live Oak Bank is proud to be a partner to renewable energy and other sustainability-focused businesses across the country. We commit to lead by example, recognizing that good stewardship of resources strengthens our business while helping our communities. Our Energy & Infrastructure team understands the nuances associated with the advancement of renewable energy solutions and project development. There are many exciting projects that closed in 2020 across solar and bioenergy, and we are proud to support these efforts. As we look to the future, we expect to invest in a variety of cutting-edge, entrepreneurial businesses ranging from upstream renewable energy generation to downstream distribution, grid resiliency and energy efficiency, as well as advanced recycling technologies and companies that help global supply chains shift to sustainability.

Powering the Grid in 2020

\$291 MILLION

solar lending volume

290

megawatts funded

55,000

households powered

\$97 MILLION

bioenergy lending volume

1.7 MILLION

MMBTU funded

23,000

households powered

Building Solar Gardens

About two hours west of Minneapolis, a crop of solar panels developed and managed by Live Oak borrower United States Solar Corporation sits above a plot of wildflowers. The Brockway Solar project pictured below is one of more than a dozen solar projects that Live Oak has financed with US Solar in Minnesota. The 1.37 MWdc system is located in Clara City and utilizes industry best practices on this and other sites in its portfolio by planting the area under the panels with pollinator-friendly wildflowers – a cost-friendly landscaping solution that also supports the environment. Live Oak funded both the construction and permanent debt on the site.

The electricity generated by the project and others like it in the portfolio will be used by a range of residential, faith-based, school and commercial customers as part of Minnesota's community solar garden program.



Community

While Live Oak Bank serves customers across all 50 states, our home is Wilmington, NC. We are committed to giving back to the Cape Fear region and supporting local community-based organizations that are meaningful to our employees.

Live Oak was built upon the core principle that good people and innovation can change the world. However, changing the world begins with improving our local communities and the lives of the people in them. Our employees are passionate and driven individuals that are connected to many charitable organizations in the Cape Fear region. We encourage their involvement in these relationships whenever possible. Our efforts also double down on serving the underserved by putting our dollars to work for small business owners in marginalized communities. We are making social impact investments to scale solutions in affordable housing, workforce development, small business growth, and transportation challenges. These are exciting efforts that we hope will change the trajectory of our community and can be a model for others across the country.

GIVE - Giving, Investing, Volunteering & Engaging

\$1.5 MILLION

donated in 2020

606 HOURS

volunteered in 2020

\$2.5 MILLION

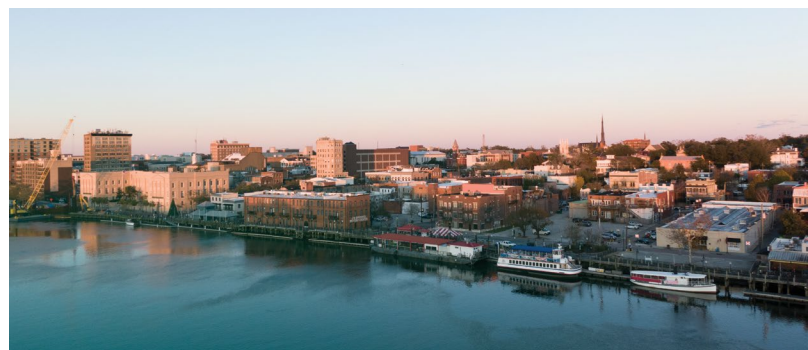
2020 social impact investment

Impact Through Cape Fear Collective

Live Oak seeded the launch of Cape Fear Collective (CFC) in 2019 to drive equitable systemic change in Southeastern North Carolina. Wilmington's history is uniquely filled with entrepreneurship, and like other southern cities, racial divides. We believe Live Oak has a bold opportunity to impact our area in ways that extend beyond our philanthropic efforts. CFC is a nonprofit organization that uses data science to gain insights, mobilizes private sector capital through impact investing programs, and supports cross-sector collaboration.

In 2020 we made a \$2.5 million investment with CFC to support affordable housing solutions in the Wilmington region. Live Oak's investment has been used to acquire 20 residences to address affordable housing in downtown Wilmington and Pender County. The investment is part of a broader initiative through CFC Ventures, a social impact investment initiative aimed at raising capital to scale solutions in affordable housing, workforce development, small business growth, and transportation challenges.

Live Oak is proud to invest in the city we call home, and we believe that supporting Cape Fear Collective is an innovative way to positively impact our vital local workforce and advance the socio-economic status of all the residents of our region.



Governance

A diversity of backgrounds and perspectives in company leadership is essential to delivering on our commitment to making sound investment decisions. Our leadership is guided by a strong code of ethics and rigorous processes around risk review and mitigation.

Our Board of Directors



James S. "Chip" Mahan III
Chairman



William L. Williams III
Vice-Chairman



Tonya W. Bradford
Audit & Risk Committee
Compensation Committee



William H. Cameron
Audit & Risk Committee
Compensation Committee Chair
Nominating & Corporate
Governance Committee



Diane B. Glossman
Audit & Risk Committee
Compensation Committee
Nominating & Corporate
Governance Committee Chair



Glen F. Hoffsis
Compensation Committee
Nominating & Corporate
Governance Committee



David G. Lucht



Milton E. Petty
Audit & Risk Committee Chair



Neil L. Underwood

A Note from Dr. Tonya Bradford

At Live Oak, corporate governance means having a distinct and trained lens on the long-term success of the company. Live Oak is doing that in new ways these days with a more diverse set of eyes examining the company's strategic direction. I joined Live Oak's board in 2020 as the second woman and first person of color. It is a thrilling distinction knowing how Live Oak leads in the industry. The power of a diverse set of voices at the board level we believe will help drive Live Oak's momentum, firmly setting a trajectory that will be both exhilarating and bold. I am glad to be a part of this great company along with Chip, the board, and the rest of the Live Oak family in creating a landscape where being dedicated to the doers never wanes.

CAPITAL IS JUST ONE WAY WE INVEST IN OUR CUSTOMERS



Keeping Our Customers Close

Consistent outreach
Deferrals and 6 months of SBA 7(a) payments
Ongoing credit assessments



Paycheck Protection Program

~11,000 loans disbursed
\$1.76 billion originated
~217,000 jobs impacted
738 loans disbursed in Wilmington, NC area
8,591 jobs impacted locally



Origination Opportunities

Continued to provide capital and support through CARES Act and Economic Aid Act programs to small business owners across the country



Amy Wright

Company

BITTY & BEAU'S COFFEE

Locations

WILMINGTON, NC; CHARLESTON, SC;
SAVANNAH, GA; ANNAPOLIS, MD

Mission

CHANGING THE WAY PEOPLE VALUE OTHERS

Helping Hometown Heroes

The reality of not being able to pay employees was a devastating blow to so many American business owners when the pandemic brought our country to a halt. The blow felt even sharper to Amy Wright and her employees at Bitty & Beau's Coffee, which was founded in our hometown of Wilmington. The company's six locations are run by people with intellectual and developmental disabilities. Their jobs are vitally important because 80% of disabled people are unemployed. So, when Live Oak completed its PPP loan for Bitty & Beau's it was not just a celebration of getting a paycheck, it was a validation of their importance to our community where their work is more than just a cup of coffee.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2020

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____.
Commission file number: 001-37497



LIVE OAK BANCSHARES, INC.

(Exact name of registrant as specified in its charter)

North Carolina

(State or other jurisdiction of incorporation or organization)

26-4596286

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

1741 Tiburon Drive, Wilmington, NC

(Address of principal executive offices)

28403

(Zip Code)

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

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

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

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES NO

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

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

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

Large Accelerated Filer

Accelerated Filer

Non-accelerated Filer

Smaller Reporting Company

Emerging growth company

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 30, 2020, was approximately \$442,026,821. Shares of common stock held by each officer and director have been excluded in that such persons may be deemed to be affiliates. There is no public market for the registrant's non-voting common stock. For purposes of this calculation, the registrant has assumed that the market value of each share of non-voting common stock is equal to a share of voting common stock.

APPLICABLE ONLY TO CORPORATE REGISTRANTS:

As of February 24, 2021, there were 41,845,430 shares of the registrant's voting common stock outstanding and 881,875 shares of the registrant's non-voting common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for the 2021 Annual Meeting of Shareholders, which the registrant plans to file subsequent to the date hereof, are incorporated by reference into Part III. Portions of the registrant's annual report to shareholders for the year ended December 31, 2020, which will be posted on the registrant's website subsequent to the date hereof, are incorporated by reference into Part II.

Live Oak Bancshares, Inc.
Annual Report on Form 10-K
December 31, 2020
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Important Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K (this "Report") 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;
- the potential impacts of 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;
- changes in political and economic conditions, including as a result of the 2020 federal elections;
- 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;
- 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.

PART I

Item 1. BUSINESS

General

Live Oak Bancshares, Inc. (collectively with its subsidiaries including Live Oak Banking Company, the "Company," also referred to as "our" and "we"), headquartered in Wilmington, North Carolina, is the bank holding company for Live Oak Banking Company (the "Bank" or "Live Oak Bank"). The Bank was incorporated in February 2008 as a North Carolina-chartered commercial bank and operates an established national online platform for small business lending and deposit gathering. Live Oak Bancshares, Inc. was incorporated under the laws of the state of North Carolina on December 18, 2008, for the purpose of serving as the bank holding company of Live Oak Bank. Live Oak Bancshares, Inc. completed its initial public offering ("IPO") in July 2015.

The Company

The Company predominantly originates loans partially guaranteed by the U.S. Small Business Administration (the "SBA") and to a lesser extent by the 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 Company believes are lower risk characteristics. Industries, or "verticals," on which the Company focuses its lending efforts are carefully selected. Within these verticals the Company typically retains individuals who possess extensive industry-specific experience. The Company also lends more broadly to select borrowers outside of those verticals.

In addition to focusing on industry verticals, the Company emphasizes developing detailed knowledge of its customers' businesses. This knowledge is developed, in part, through virtual and/or regular visits with customers, wherever they are located. These regular visits are designed to foster, both for the Company and for the customer, a deep and personalized experience throughout the lending relationship. The Company has developed and continues to refine a technology-based platform to facilitate providing financial services to the small business community on a national scale, and has leveraged this technology to optimize the Company's loan origination process, customer experience, reporting metrics, and servicing activity. The Company services customers efficiently throughout the loan process and monitors their performance by means of the technology-based platform without maintaining traditional branch locations.

For additional information on the Company's business, financial performance and results of operations, see "Overview" and "Executive Summary" in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of this Report. For information on the Company's financial information about geographic areas, see Part II, Item 8 of this Report.

The Company's voting common stock trades on the NASDAQ Global Select Market ("NASDAQ") under the symbol "LOB." As of January 31, 2021, there were 276 holders of record of the Company's voting common stock. The Company's principal executive office is located at 1741 Tiburon Drive, Wilmington, North Carolina 28403, telephone number (910) 790-5867. The Company maintains a website at www.liveoakbank.com. Documents available on the website include: (i) the Company's Code of Ethics and Conflict of Interest Policy; and (ii) charters for the Audit and Risk, Compensation, and Nominating and Corporate Governance Committees of the Board of Directors. These documents also are available in print to any shareholder who requests a copy.

In addition, available free of charge through the Company's website is the Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports as soon as reasonably practicable after electronically filing or furnishing such material to the U.S. Securities and Exchange Commission ("SEC"). These filings are also accessible on the SEC's website at www.sec.gov.

The Company also will provide without charge a copy of this Report, as well as any documents available on the Company's website, to any shareholder by mail. Requests should be sent to Live Oak Bancshares, Inc., Attention: Corporate Secretary, 1741 Tiburon Drive, Wilmington, NC 28403.

Employees and Human Capital Resource Management

The Company operates on the fundamental philosophy that people are our most valuable asset, because every person who works for us has the potential to impact our success as well as the success of our customers. The Company's employees are the source of our deep industry and product expertise and the embodiment of our culture. It is this industry vertical expertise, product knowledge and our culture that differentiate the Company and allow us to provide an unprecedented customer experience and live our mission to fuel the growth of small business across the country and be America's Small Business Bank.

As a financial institution, our ability to attract, develop and retain highly qualified employees is critical to our success. The Company's core values of innovation, dedication, ownership, respect and teamwork are pillars of our culture and represent the expectations we have of each and every one of our employees. We believe our people provide significant value to our Company and its shareholders.

Demographics

As of December 31, 2020, the Company had 621 full-time employees, 18 part-time employees and 8 independent contractors. None of the Company's employees are covered by a collective bargaining agreement, and management considers relations with employees to be good.

Diversity and Inclusion

The Company strives to foster a welcoming, supportive, and equitable environment for diverse employees. To accomplish this, the Company focuses on engagement, awareness, training, accountability, education, and communication. During 2020, the Company offered implicit bias training, conducted a Juneteenth town hall event, facilitated and participated in quarterly roundtable discussions on topics of diversity, equity and inclusion, and saw the formation of an internal affinity group called R.I.S.E. (Responsibility to Identify Solutions & Empower). The Company's diversity, equity and inclusion initiatives are both internally and externally focused. Its commitment to providing and enhancing a support infrastructure for people with underrepresented backgrounds remains a strategic initiative in 2021 and beyond. The Company intends to continue to identify, monitor and measure meaningful diversity and inclusion goals, to continue to foster a welcoming environment through education, communication and recruiting efforts, and to provide support so that diverse employees have the resources and relationships they need to be successful and thrive.

Compensation

We believe that creating an unprecedented banking experience for small business owners nationwide through service and technology will build long-term shareholder value. To accomplish this, we endeavor to identify, recruit, retain and incentivize exceptional employees. Our compensation policy is based on the premise that employees should receive fair and equitable treatment based on their individual contributions to the Company's profitability and success. We use a combination of fixed and incentive pay, including base salary, cash bonus and equity compensation. We also offer a 401(k) savings plan to qualifying employees.

Our compensation program is intended to motivate employees to successfully execute our mission. The Company believes that the most effective incentive compensation programs strive to achieve the following objectives:

- align compensation with responsibilities and performance;
- align employees' interests with those of our shareholders;
- motivate performance toward the achievement of business objectives;
- clearly communicate compensation policies and structures to employees;
- motivate behaviors to increase long-term profitability while maintaining the Company's primary commitment to safety and soundness;
- attract and retain talent and build leadership succession within business units.

Benefits and Wellness

As the success of our business is fundamentally connected to the well-being of our people, we offer benefits that support their physical, financial and emotional well-being. We provide our employees with access to flexible and convenient insurance programs intended to meet their needs and the needs of their families. In addition to robust medical, dental and vision coverage, we offer eligible employees dependent care flexible spending accounts, paid time off, employee assistance programs, short-term and long-term disability insurance and term life insurance.

Our focus on employee wellness extends beyond just insurance benefits. The Company provides access to an intranet site focused on physical, mental, emotional and financial wellness, and at its Wilmington headquarters facility, an on-site health clinic for employees, on-site physical therapy appointments, and an on-site wellness facility staffed with certified physical trainers and regularly scheduled live and virtual wellness classes. The Company's main campus in Wilmington also offers two on-site restaurants that provide heart-healthy options and which can cater to specific dietary needs.

In response to the COVID-19 pandemic, we implemented changes that we determined were in the best interest of our employees, as well as the communities in which we operate. These measures included capacity limits in our buildings, temperature check stations at building entryways, mask mandates, and one-way stairways. In addition, our 100% cloud-based operations allowed our employees to transition to a remote working environment with no material effect on our operations or customer experience. We continue to embrace a flexible working arrangement for a majority of our employees.

Commitment to Values and Ethics

Along with our core values, we have adopted a Code of Ethics and Conflict of Interest Policy, which set forth expectations and guidance for employees to make appropriate decisions. Our Code of Ethics and Conflict of Interest Policy cover topics such as conflicts of interest, compliance with laws, appropriate use of company assets, protecting confidential information, and reporting of violations. Our Code of Ethics and Conflict of Interest Policy reflect our commitment to operating in a fair, honest, responsible and ethical manner and also provide direction for reporting complaints in the event of alleged violations of our policies. Our executive officers and supervisors maintain "open door" policies, and any form of retaliation is strictly prohibited.

Professional Development and Training

We believe training and professional development for our employees has a positive impact on employee retention, customer experience and, ultimately, shareholder value. The Company has certain training programs and resources in place to meet the needs of various roles, skill sets and departments across the Company, including:

- Internally and externally led manager training and professional development;
- Internally led "lunch and learn" meetings for role-specific skills;
- Web-based learning modules and training for personal and professional development, skill-based learning, leadership development and management functions;
- Formal cross-department teams tasked with technology, initiative roll-outs and change management; and
- Tuition reimbursement for job-specific certifications and required continuing education.

Communication and Engagement

We believe that the Company's success and the ultimate creation of long-term value for shareholders begin with employees understanding how their work contributes to the Company's overall strategy. To this end, we communicate with our workforce through a variety of channels and encourage open and direct communication, including:

- An annual company-wide "all hands" meeting;
- Regularly scheduled town hall meetings that are led by our key executives and held quarterly or more often as needed;
- Periodic posts from the Bank's president via our internal enterprise social media network; and
- An open-door environment that encourages communication, collaboration and the free-flow of information.

Collaboration, both within and between business units, is a hallmark of our approach to service delivery and value creation for our customers and stakeholders.

Competition

Commercial banking in the United States is extremely competitive. The Company competes with national banking organizations, including the largest commercial banks headquartered in the country, all of which have small business lending divisions. The Company also competes with other federally and state-chartered financial institutions such as community banks and credit unions, finance and business development companies, peer-to-peer and marketplace lenders and other non-bank lenders. Many of the Company's competitors have higher legal lending limits and are also able to provide a wider array of services and make greater use of media advertising given their size and resources.

Despite the intense level of competition among small business lenders, the Company believes that it occupies a lending category distinct from its competitors. One of the Company's principal advantages is the technology-based platform it uses, which management believes has accelerated the Company's ability to issue proposals, complete credit due diligence, finalize commitments and improve the overall customer experience. The Company believes that its personnel also provide a competitive advantage because they include industry participants with relevant experience in the Company's identified verticals.

Subsidiaries

In addition to the Bank, the Company directly or indirectly held the following wholly owned subsidiaries as of December 31, 2020:

- Canapi Advisors, LLC, formed in September 2018 for the purpose of providing investment advisory services to a series of funds focused on providing venture capital to new and emerging financial technology companies.
- Live Oak Ventures, Inc., formed in August 2016 for the purpose of investing in businesses that align with the Company's strategic initiative to be a leader in financial technology;
- Live Oak Grove, LLC, formed in February 2015 for the purpose of providing Company employees and business visitors an on-site restaurant location at the Company's Wilmington, North Carolina headquarters; and
- Government Loan Solutions, Inc. ("GLS"), a management and technology consulting firm that specializes in the settlement, accounting, and securitization processes for government guaranteed loans, including loans originated under the SBA 7(a) loan program and USDA-guaranteed loans.

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

In 2018, the Bank formed Live Oak Private Wealth, LLC ("LOPW"), a registered investment advisor that provides high-net-worth individuals and families with strategic wealth and investment management services, and on April 1, 2020, it acquired Jolley Asset Management, LLC ("JAM") to broaden service offerings for existing high-net-worth individuals and families, attract new clients from an expanded footprint and benefit from economies of scale.

In 2019, Live Oak Clean Energy Financing LLC ("LOCEF") became a subsidiary of the Bank. LOCEF was formed in November 2016 as a subsidiary of the Company for the purpose of providing financing to entities for renewable energy applications.

504 Fund Advisors, LLC ("504FA"), was formed in June 2013 to serve as the investment advisor to The 504 Fund, a closed-end mutual fund organized to invest in SBA section 504 loans. During 2019, 504FA completed the transfer of its advisory agreement and was dissolved in December 2019.

Operating Segments

The Company's operations are managed along two reportable operating segments consisting of Banking and Fintech. See the sections captioned "Results of Segment Operations" in Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 16 - Segments in the notes to consolidated financial statements included in Item 8 - Financial Statements and Supplementary Data elsewhere in this report.

SUPERVISION AND REGULATION

General

The Company is subject to extensive regulation in connection with its respective activities and operations. The framework under which the Company is supervised and examined is complex. This framework includes federal and state laws, regulations, policy statements, guidance, and other interpretative materials that define the obligations and requirements for financial institutions.

Regulations of banks and their holding companies is subject to continual revision, through legislative changes, regulatory revisions, and the evolving supervisory objectives of federal and state banking agency examiners and supervisory staff. It is not possible to predict the content or timing of changes to the laws and regulations that may impact the business of the Company. Any changes to the regulatory framework applicable to the Company could have a material adverse impact on the conditions and operations of each entity.

In addition to the regulation and supervision summarized below, the Company is a reporting company under the Securities Exchange Act of 1934 (the "Exchange Act") and is required to file reports with the SEC and otherwise comply with federal securities laws.

The following discussion is not intended to be a complete description of all the activities regulated by U.S. banking laws and regulations or of the impact of such laws and regulations on the Company. Rather, it is intended to briefly summarize the legal and regulatory framework in which the Company operates and describes legal requirements that impact its businesses and operations. The information set forth below is subject to change.

Federal Bank Holding Company Regulation and Structure

As a registered bank holding company, the Company is subject to regulation under the Bank Holding Company Act, or BHCA, and to the supervision, examination and reporting requirements of the Board of Governors of the Federal Reserve System (the "Federal Reserve"). The Bank is a North Carolina-chartered commercial bank and is subject to regulation, supervision and examination by the Federal Deposit Insurance Corporation, or the FDIC, and the North Carolina Commissioner of Banks, or NCCOB.

The BHCA requires every bank holding company to obtain the prior approval of the Federal Reserve before:

- it may acquire direct or indirect ownership or control of any voting shares of any bank if, after the acquisition, the bank holding company will directly or indirectly own or control more than 5% of the voting shares of the bank;
- it or any of its subsidiaries, other than a bank, may acquire all or substantially all of the assets of any bank; or
- it may merge or consolidate with any other bank holding company.

The BHCA further provides that the Federal Reserve may not approve any transaction that would result in a monopoly or that would substantially lessen competition in the banking business, unless the public interest in meeting the needs of the communities to be served outweighs the anti-competitive effects. The Federal Reserve is also required to consider the financial and managerial resources and future prospects of the bank holding companies and banks involved and the convenience and needs of the communities to be served. Consideration of financial resources generally focuses on capital adequacy, and consideration of convenience and needs issues focuses, in part, on the performance under the Community Reinvestment Act of 1977, both of which are discussed elsewhere in more detail.

Subject to various exceptions, the BHCA and the Change in Bank Control Act, together with related regulations, require Federal Reserve approval prior to any person or company acquiring "control" of a bank holding company. Control is conclusively presumed to exist if a person or company acquires 25% or more of any class of voting securities of a bank holding company. Control is also presumed to exist, although rebuttable, if a person or company acquires 10% or more, but less than 25%, of any class of voting securities and either:

- the bank holding company has securities registered under Section 12 of the Exchange Act; or
- no other person owns a greater percentage of that class of voting securities immediately after the transaction.

Live Oak Bancshares, Inc.'s voting common stock is registered under Section 12 of the Exchange Act. The regulations provide a procedure for challenging rebuttable presumptions of control.

On April 1, 2020, the Federal Reserve's final rule revising the "controlling influence" prong of its "control" rules promulgated under the BHCA became effective. The final rule largely reaffirms the Federal Reserve's existing framework for analyzing "controlling influence" but with some new rules for presumptions of control for investments in and by banking organizations that represent more than 4.9% and less than 24.9% of control over any class of voting securities. By codifying the Federal Reserve's presumptions used in making control determinations, the final rule provides greater transparency on the types on relationships that the Federal Reserve generally views as supporting a facts-and-circumstances determination that one entity controls another. The final rule applies to questions of control under the BHCA, but does not extend to the Change in Bank Control Act.

The BHCA generally prohibits a bank holding company from retaining direct or indirect ownership or control of any voting shares of any company which is not a bank or bank holding company or engaging in activities other than banking, managing or controlling banks or other permissible subsidiaries and acquiring or retaining direct or indirect control of any company engaged in any activities other than activities closely related to banking or managing or controlling banks. In determining whether a particular activity is permissible, the Federal Reserve considers whether performing the activity can be expected to produce benefits to the public that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest or unsound banking practices. The Federal Reserve has the power to order a bank holding company or its subsidiaries to terminate any activity or control of any subsidiary when the continuation of the activity or control constitutes a serious risk to the financial safety, soundness or stability of any bank subsidiary of that bank holding company.

Under the BHCA, a bank holding company may file an election with the Federal Reserve to be treated as a financial holding company and engage in an expanded list of financial activities. The election must be accompanied by a certification that all of the company's insured depository institution subsidiaries are "well capitalized" and "well managed." Additionally, the Community Reinvestment Act of 1977 rating of each subsidiary bank must be satisfactory or better. If, after becoming a financial holding company and undertaking activities not permissible for a bank holding company, the company fails to continue to meet any of the prerequisites for financial holding company status, the company must enter into an agreement with the Federal Reserve to comply with all applicable capital and management requirements. If the company does not return to compliance within 180 days, the Federal Reserve may order the company to divest its subsidiary banks or the company may discontinue or divest investments in companies engaged in activities permissible only for a bank holding company that has elected to be treated as a financial holding company. Live Oak Bancshares, Inc. filed an election and became a financial holding company in 2016.

Under Federal Reserve policy and as codified by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the Company is expected to act as a source of financial strength for Live Oak Bank and to commit resources to support Live Oak Bank. This support may be required at times when the Company might not be inclined to provide it or it might not be in the Company's best interests or the best interests of its shareholders. In addition, any capital loans made by the Company to Live Oak Bank will be repaid only after Live Oak Bank's deposits and various other obligations are repaid in full.

Live Oak Bank is also subject to numerous state and federal statutes and regulations that affect its business, activities and operations and it is supervised and examined by state and federal bank regulatory agencies. The FDIC and the NCCOB regularly examine the operations of Live Oak Bank and are given the authority to approve or disapprove mergers, consolidations, the establishment of branches and similar corporate actions. These agencies also have the power to prevent the continuance or development of unsafe or unsound banking practices or other violations of law.

Bank Merger Act

Section 18(c) of the Federal Deposit Insurance Act, popularly known as the "Bank Merger Act," requires the prior written approval of appropriate federal bank regulatory agencies before any bank may (i) merge or consolidate with, (ii) purchase or otherwise acquire the assets of, or (iii) assume the deposit liabilities of, another bank if the resulting institution is to be a state nonmember bank.

The Bank Merger Act prohibits the applicable federal bank regulatory agency from approving any proposed merger transaction that would result in a monopoly, or would further a combination or conspiracy to monopolize or to attempt to monopolize the business of banking in any part of the United States. Similarly, the Bank Merger Act prohibits the applicable federal bank regulatory agency from approving a proposed merger transaction whose effect in any section of the country may be substantially to lessen competition, or to tend to create a monopoly, or which in any other manner would be in restraint of trade. An exception may be made in the case of a merger transaction whose effect would be to substantially lessen competition, tend to create a monopoly, or otherwise restrain trade, if the applicable federal bank regulatory agency finds that the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served.

In every proposed merger transaction, the applicable federal bank regulatory agency must also consider the financial and managerial resources and future prospects of the existing and proposed institutions, the convenience and needs of the community to be served, and the effectiveness of each insured depository institution involved in the proposed merger transaction in combating money-laundering activities, including in overseas branches.

State Law

Live Oak Bank is subject to extensive supervision and regulation by the NCCOB. The NCCOB oversees state laws that set specific requirements for bank capital and that regulate deposits in, and loans and investments by, banks, including the amounts, types, and in some cases, rates. The NCCOB supervises and performs periodic examinations of North Carolina-chartered banks to assure compliance with state banking statutes and regulations, and banks are required to make regular reports to the NCCOB describing in detail their resources, assets, liabilities, and financial condition. Among other things, the NCCOB regulates mergers and consolidations of North Carolina state-chartered banks, capital requirements for banks, loans to officers and directors, payment of dividends, record keeping, types and amounts of loans and investments, and the establishment, relocation, and closing of branches.

The NCCOB has extensive enforcement authority over North Carolina banks. Such authority includes the ability to issue cease-and-desist orders and to seek civil money penalties. The NCCOB may also take possession of a North Carolina bank in various circumstances, including for a violation of its charter or of applicable laws, operating in an unsafe and unsound manner, or as a result of an impairment of its capital, and may appoint a receiver.

The Company is also required to maintain registration as a bank holding company with the NCCOB. Subject to certain exceptions, the Company may not acquire control over another bank or bank holding company or consummate a merger or other combination transaction with another company without the prior approval of the NCCOB. The NCCOB also has authority to assert civil money penalties against a holding company if the NCCOB determines such holding company to be in violation of any banking laws and the holding company fails to comply with an NCCOB order to cease and desist from such violations of law.

The primary state banking laws to which the Company and the Bank are subject are set forth in Chapters 53C and 53 of the North Carolina General Statutes. The North Carolina Business Corporation Act is also applicable to the Company as a North Carolina business corporation and to the Bank as a North Carolina banking corporation.

Payment of Dividends and Other Restrictions

The Company is a legal entity separate and distinct from the Bank. While there are various legal and regulatory limitations under federal and state law on the extent to which banks can pay dividends or otherwise supply funds to holding companies, a principal source of cash revenues for the Company is dividends from the Bank. The relevant federal and state regulatory agencies have authority to prohibit a state bank or bank holding company, which would include the Bank and the Company, from engaging in what, in the opinion of such regulatory body, constitutes an unsafe or unsound practice in conducting its business. The payment of dividends could, depending upon the financial condition of a bank, be deemed to constitute an unsafe or unsound practice in conducting its business.

North Carolina commercial banks, such as Live Oak Bank, are subject to legal limitations on the amounts of dividends they are permitted to pay. Specifically, an insured depository institution, such as Live Oak Bank, is prohibited from making capital distributions, including the payment of dividends, if, after making such distribution, the institution would become “undercapitalized” (as such term is defined in the applicable law and regulations).

The Federal Reserve has issued a policy statement on the payment of cash dividends by bank holding companies, which expresses the Federal Reserve's view that a bank holding company should pay cash dividends only to the extent that the holding company's net income for the past four quarters is sufficient to cover both the cash dividends and a rate of earnings retention that is consistent with the holding company's capital needs, asset quality and overall financial condition. The Federal Reserve has also indicated that it would be inappropriate for a holding company experiencing serious financial problems to borrow funds to pay dividends. Furthermore, under the prompt corrective action regulations adopted by the Federal Reserve, the Federal Reserve may prohibit a bank holding company from paying any dividends if any of the holding company's bank subsidiaries are classified as undercapitalized.

A bank holding company is required to give the Federal Reserve prior written notice of any purchase or redemption of its outstanding equity securities if the gross consideration for the purchase or redemption, when combined with the net consideration paid for all such purchases or redemptions during the preceding 12 months, is equal to 10% or more of its consolidated net worth. The Federal Reserve may disapprove such a purchase or redemption if it determines that the proposal would constitute an unsafe or unsound practice or would violate any law, regulation, Federal Reserve order or any condition imposed by, or written agreement with, the Federal Reserve.

Capital Adequacy

General. The Company must comply with the Federal Reserve's established capital adequacy standards, and Live Oak Bank is required to comply with the capital adequacy standards established by the FDIC. The Federal Reserve has promulgated two basic measures of capital adequacy for bank holding companies: a risk-based measure and a leverage measure. A bank holding company must satisfy all applicable capital standards to be considered in compliance.

The risk-based capital standards are designed to make regulatory capital requirements sensitive to differences in risk profiles among banks and bank holding companies, account for off-balance-sheet exposure and minimize disincentives for holding liquid assets.

Assets and off-balance-sheet items are assigned to broad risk categories, each with appropriate weights. The resulting capital ratios represent capital as a percentage of total risk-weighted assets and off-balance-sheet items. Under applicable capital standards, the minimum risk-based capital ratios are a common equity Tier 1 capital to risk-weighted assets ratio of 4.5%, a Tier 1 capital to risk-weighted assets ratio of 6%, and a total capital to risk-weighted assets ratio of 8%. In addition, to avoid restrictions on capital distributions and discretionary bonus payments, the Company and the Bank are required to meet a capital conservation buffer of common equity Tier 1 capital in addition to the minimum common equity Tier 1 capital ratio. The capital conservation buffer is set at a ratio of 2.5% common equity Tier 1 capital to risk-weighted assets, which sits "on top" of the 4.5% minimum common equity Tier 1 to risk-weighted assets ratio. Common equity Tier 1 capital is predominantly composed of retained earnings and common stock instruments (that meet strict delineated criteria), net of treasury stock, and after making necessary capital deductions and adjustments. Tier 1 capital is composed of common equity Tier 1 capital plus Additional Tier 1 capital, which consists of noncumulative perpetual preferred stock and similar instruments meeting specified eligibility criteria and "TARP" preferred stock and other instruments issued under the Emergency Economic Stabilization Act of 2008. Total capital is composed of Tier 1 capital plus Tier 2 capital, which consists of subordinated debt with a minimum original maturity of at least five years and a limited amount of loan loss reserves.

At December 31, 2020, the Company's risk-based capital ratios, as calculated under applicable capital standards were 12.15% common equity Tier 1 capital to risk weighted assets, 12.15% Tier 1 capital to risk weighted assets, and 13.39% total capital to risk weighted assets.

In addition, the Federal Reserve has established minimum leverage ratio guidelines for bank holding companies. These guidelines provide for a minimum ratio of Tier 1 capital to average total on-balance sheet assets, less goodwill and certain other intangible assets, of 4% for bank holding companies. The Company's ratio at December 31, 2020 was 8.40% compared to 10.65% at December 31, 2019. The guidelines also provide that bank holding companies experiencing internal growth or making acquisitions will be expected to maintain strong capital positions substantially above the minimum supervisory levels without significant reliance on intangible assets. Furthermore, the Federal Reserve has indicated that it will consider a "tangible Tier 1 Capital leverage ratio" and other indications of capital strength in evaluating proposals for expansion or new activities.

Failure to meet capital guidelines could subject a bank to a variety of enforcement remedies, including issuance of a capital directive, the termination of deposit insurance by the FDIC, a prohibition on taking brokered deposits and certain other restrictions on its business. As described below, the FDIC can impose substantial additional restrictions upon FDIC-insured depository institutions that fail to meet applicable capital requirements.

Prompt Corrective Action. The Federal Deposit Insurance Act, or FDI Act, requires the federal bank regulatory agencies to take “prompt corrective action” if a depository institution does not meet minimum capital requirements. The FDI Act establishes five capital tiers: “well capitalized,” “adequately capitalized,” “undercapitalized,” “significantly undercapitalized” and “critically undercapitalized.” A depository institution’s capital tier will depend upon how its capital levels compare to various relevant capital measures and certain other factors, as established by regulation.

An institution may be downgraded to, or deemed to be in, a capital category that is lower than is indicated by its capital ratios if it is determined to be in an unsafe or unsound condition or if it receives an unsatisfactory examination rating with respect to certain matters. As of December 31, 2020, Live Oak Bank had capital levels that qualify as “well capitalized” under the applicable regulations.

The FDI Act generally prohibits an FDIC-insured bank from making a capital distribution (including payment of a dividend) or paying any management fee to its holding company if the bank is or would thereafter be “undercapitalized.” “Undercapitalized” banks are subject to growth limitations and are required to submit a capital restoration plan. The federal regulators may not accept a capital restoration plan without determining, among other things, that the plan is based on realistic assumptions and is likely to succeed in restoring the bank’s capital. In addition, for a capital restoration plan to be acceptable, the bank’s parent holding company must guarantee that the institution will comply with such capital restoration plan until the institution has been adequately capitalized on average during each of four consecutive calendar quarters. The aggregate liability of the parent holding company under such guaranty is limited to the lesser of: (i) an amount equal to 5% of the bank’s total assets at the time it became “undercapitalized”; and (ii) the amount which is necessary (or would have been necessary) to bring the institution into compliance with all capital standards applicable with respect to such institution as of the time it fails to comply with the plan. If a bank fails to submit an acceptable plan, it is treated as if it is “significantly undercapitalized.”

“Significantly undercapitalized” insured banks may be subject to a number of requirements and restrictions, including orders to sell sufficient voting stock to become “adequately capitalized,” requirements to reduce total assets, cease receipt of deposits from correspondent banks, or dismiss directors or officers, and restrictions on interest rates paid on deposits, compensation of executive officers, and capital distributions by the parent holding company. “Critically undercapitalized” institutions are subject to the appointment of a receiver or conservator, may not make any payment of principal or interest on certain subordinated debt, extend credit for a highly leveraged transaction, or enter into any material transaction outside the ordinary course of business.

A bank that is not “well capitalized” is also subject to certain limitations relating to brokered deposits. If a bank is not well-capitalized, it cannot accept brokered deposits without prior FDIC approval. Even if approved, rate restrictions will govern the rate the institution may pay on the brokered deposits. In addition, a bank that is less than well-capitalized generally cannot offer an effective yield in excess of 75 basis points over the “national rate” (as defined below) paid on deposits (including brokered deposits, if approval is granted for the bank to accept them) of comparable size and maturity. The “national rate” is defined as a simple average of rates paid by insured depository institutions and branches for which data are available and is published weekly by the FDIC. Institutions subject to the restrictions that believe they are operating in an area where the rates paid on deposits are higher than the “national rate” can use the local market to determine the prevailing rate if they seek and receive a determination from the FDIC that it is operating in a high rate area. Regardless of the determination, institutions must use the national rate to determine conformance for all deposits outside their market area.

Basel III. The regulatory capital framework under which the Company and Live Oak Bank operate changed in significant respects as a result of the Dodd-Frank Act and other regulations, including the separate regulatory capital requirements put forth by the Basel Committee on Banking Supervision, commonly known “Basel III.”

In July 2013, the Federal Reserve, FDIC and Office of the Comptroller of the Currency approved final rules that established an integrated regulatory capital framework that addressed shortcomings in certain capital requirements. The rules implemented in the United States the Basel III regulatory capital reforms from the Basel Committee on Banking Supervision and certain changes required by the Dodd-Frank Act. These rules have applied to the Company since 2015. Compliance by the Company and the Bank with these capital requirements affects their respective operations by increasing the amount of capital required to conduct operations.

Community Bank Leverage Ratio. As discussed below, in 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act (“EGRRCPA”) became law, which directed the federal banking agencies to develop a community bank leverage ratio (“CBLR”) of not less than 8 percent and not more than 10 percent for qualifying community banking organizations. EGRRCPA defines a qualifying community banking organization as a depository institution or depository institution holding company with total consolidated assets of less than \$10 billion, which would include the Company and the Bank. A qualifying community banking organization that exceeds the CBLR level established by the agencies is considered to have met: (i) the generally applicable leverage and risk-based capital requirements under the agencies’ capital rule; (ii) the capital ratio requirements in order to be considered well capitalized under the agencies’ prompt corrective action framework (in the case of insured depository institutions); and (iii) any other applicable capital or leverage requirements. Section 201 of EGRRCPA defines the CBLR as the ratio of a banking organization’s CBLR tangible equity to its average total consolidated assets, both as reported on the banking organization’s applicable regulatory filing.

In 2019, the FDIC passed a final rule on the CBLR, setting the minimum required CBLR at 9 percent. The rule went into effect in 2020. Under the final rule, a qualifying community banking organization may elect to use the CBLR framework if its CBLR is greater than 9 percent. A qualifying community banking organization that has chosen the proposed framework is not required to calculate the existing risk-based and leverage capital requirements. A bank is also considered to have met the capital ratio requirements to be well capitalized for the agencies’ prompt corrective action rules provided it has a CBLR greater than 9 percent. The Company has not elected to implement the CBLR framework at this time.

Acquisitions

The Company must comply with numerous laws related to any potential acquisition activity. Under the BHCA, a bank holding company may not directly or indirectly acquire ownership or control of more than 5% of the voting shares or substantially all of the assets of any bank or merge or consolidate with another bank holding company without the prior approval of the Federal Reserve. The acquisition of non-banking companies is also regulated by the Federal Reserve. Current federal law authorizes interstate acquisitions of banks and bank holding companies without geographic limitation. Furthermore, a bank headquartered in one state is authorized to merge with a bank headquartered in another state, as long as neither of the states has opted out of such interstate merger authority prior to such date, and subject to any state requirement that the target bank shall have been in existence and operating for a minimum period of time, not to exceed five years, and to certain deposit market-share limitations. After a bank has established branches in a state through an interstate merger transaction, the bank may establish and acquire additional branches at any location in the state where a bank headquartered in that state could have established or acquired branches under applicable federal or state law. Additionally, under the Dodd-Frank Act, banks are permitted to open a de novo branch in any state if that state would permit a bank organized in that state to open a branch.

Restrictions on Affiliate Transactions

Sections 23A and 23B of the Federal Reserve Act establish parameters for a bank to conduct “covered transactions” with its affiliates, with the objective of limiting risk to the insured bank. Generally, Sections 23A and 23B (i) limit the extent to which the bank or its subsidiaries may engage in “covered transactions” with any one affiliate to an amount equal to 10% of such bank’s capital stock and surplus, and limit the aggregate of all such transactions with all affiliates to an amount equal to 20% of such capital stock and surplus and (ii) require that all such transactions be on terms substantially the same, or at least as favorable, to the bank or subsidiary as those that would be provided to a non-affiliate. The term “covered transaction” includes the making of loans to the affiliate, purchase of assets from the affiliate, issuance of a guaranty on behalf of the affiliate and several other types of transactions.

The Dodd-Frank Act imposed additional restrictions on transactions between affiliates by amending these two sections of the Federal Reserve Act. Under the Dodd-Frank Act, restrictions on transactions with affiliates are enhanced by (i) including among “covered transactions” transactions between bank and affiliate-advised investment funds; (ii) including among “covered transactions” transactions between a bank and an affiliate with respect to securities repurchase agreements and derivatives transactions; (iii) adopting stricter collateral rules; and (iv) imposing tighter restrictions on transactions between banks and their financial subsidiaries.

FDIC Insurance Assessments

The Bank’s deposits are insured by the FDIC. The standard FDIC insurance coverage amount is \$250,000 per depositor. The FDIC maintains its Deposit Insurance Fund, or DIF, for the purposes of (1) insuring the deposits and protecting the depositors of insured banks and (2) resolving failed banks. The DIF is funded mainly through quarterly assessments on insured banks, but also receives interest income on securities. The DIF is reduced by loss provisions associated with failed banks and by FDIC operating expenses.

The FDIC imposes a risk-based deposit insurance premium assessment on member institutions in order to maintain the DIF. The assessment rates for an insured depository institution vary according to the level of risk incurred in its activities, which for established small institutions like the Bank (i.e., those institutions with less than \$10 billion in assets and insured for five years or more), is generally determined by reference to the institution's supervisory ratings. The assessment rate schedule can change from time to time, at the discretion of the FDIC, subject to certain limits. Live Oak Bank's insurance assessments during 2020 and 2019 were \$7.5 million and \$3.4 million, respectively. The FDIC may terminate insurance of deposits upon a finding that an institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations, or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC.

The Dodd-Frank Act expanded the base for FDIC insurance assessments, requiring that assessments be based on the average consolidated total assets less tangible equity capital of a financial institution. In 2011, the FDIC approved a final rule to implement the foregoing provision of the Dodd-Frank Act. Among other things, the final rule revised the assessment rate schedule to provide initial base assessment rates ranging from 5 to 35 basis points, subject to adjustments which could increase or decrease the total base assessment rates. The FDIC has three possible adjustments to an institution's initial base assessment rate: (1) a decrease of up to five basis points (or 50% of the initial base assessment rate) for long-term unsecured debt, including senior unsecured debt (other than debt guaranteed under the Temporary Liquidity Guarantee Program) and subordinated debt; (2) an increase for holding long-term unsecured or subordinated debt issued by other insured depository institutions known as the Depository Institution Debt Adjustment; and (3) for institutions not well rated and well capitalized, an increase not to exceed 10 basis points for brokered deposits in excess of 10 percent of domestic deposits.

The law also gives the FDIC enhanced discretion to set assessment rate levels. A significant increase in insurance premiums would likely have an adverse effect on the operating expenses and results of operations of the Company and the Bank. Management cannot predict what insurance assessment rates will be in the future.

Privacy

Financial institutions are required by the Gramm-Leach-Bliley Financial Services Modernization Act of 1999 to disclose their policies for collecting and protecting confidential customer information. Customers generally may prevent financial institutions from sharing personal financial information with nonaffiliated third parties except for third parties that market the institutions' own products and services. Additionally, financial institutions generally may not disclose consumer account numbers to any nonaffiliated third party for use in telemarketing, direct mail marketing or other marketing through electronic mail to consumers. The Bank has established a privacy policy that it believes promotes compliance with these federal requirements. In addition, certain state laws could potentially impact the Bank's operations, including those related to applicable notification requirements when unauthorized access to customers' nonpublic personal information has occurred.

Federal Home Loan Bank System

The Federal Home Loan Bank, or FHLB, System consists of 12 district FHLBs subject to supervision and regulation by the Federal Housing Finance Agency, or FHFA. The FHLBs provide a central credit facility primarily for member institutions. As a member of the FHLB of Atlanta, the Bank is required to acquire and hold shares of capital stock in the FHLB of Atlanta. The Bank was in compliance with this requirement with investment in FHLB of Atlanta stock of \$4.3 million at December 31, 2020. The FHLB of Atlanta serves as a reserve or central bank for its member institutions within its assigned district. It is funded primarily from proceeds derived from the sale of consolidated obligations of the FHLB System. It offers advances to members in accordance with policies and procedures established by the FHFA and the Board of Directors of the FHLB of Atlanta. Long-term advances may only be made for the purpose of providing funds for residential housing finance, small businesses, small farms and small agribusinesses.

Community Reinvestment Act

The Community Reinvestment Act requires federal bank regulatory agencies to encourage financial institutions to meet the credit needs of low and moderate-income borrowers in their local communities. An institution's size and business strategy determines the type of examination that it will receive. Large, retail-oriented institutions are examined using a performance-based lending, investment and service test. Small institutions are examined using a streamlined approach. All institutions may opt to be evaluated under a strategic plan formulated with community input and pre-approved by the bank regulatory agency.

The Community Reinvestment Act regulations provide for certain disclosure obligations. Each institution must post a notice advising the public of its right to comment to the institution and its regulator on the institution's Community Reinvestment Act performance and to review the institution's Community Reinvestment Act public file. Each lending institution must maintain for public inspection a file that includes a listing of branch locations and services, a summary of lending activity, a map of its communities and any written comments from the public on its performance in meeting community credit needs. The Community Reinvestment Act requires public disclosure of the regulators' written Community Reinvestment Act evaluations of financial institutions. This promotes enforcement of Community Reinvestment Act requirements by providing the public with the status of a particular institution's community reinvestment record.

The Community Reinvestment Act agreements with private parties must be disclosed and annual Community Reinvestment Act reports relating to such agreements must be made available to a bank's primary federal regulator. A bank holding company will not be permitted to become a financial holding company and no new activities authorized under the Gramm-Leach-Bliley Act may be commenced by a holding company or by a bank financial subsidiary if any of its bank subsidiaries received less than a satisfactory Community Reinvestment Act rating in its latest Community Reinvestment Act examination.

The 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, including hedge funds and private equity funds. The Volcker Rule also places restrictions on proprietary trading, which could impact certain hedging activities. The Volcker Rule became fully effective in 2015, and banking entities had until 2017, to divest certain legacy investments in covered funds. The Federal Reserve, Office of the Comptroller of Currency, FDIC, SEC, and Commodity Futures Trading Commission finalized amendments to the Volcker Rule in 2019, which relate primarily to the Volcker Rule's proprietary trading and compliance program requirements. These amendments do not change the Volcker Rule's general prohibitions, but they offer certain clarifications and a simplified approach to compliance. In June 2020, the agencies finalized further amendments to the Volcker Rule's funds provisions, which clarify key definitions and add new, and modify certain existing, exclusions from the definition of covered fund. Further, pursuant to EGRRCPA enacted in 2018 and discussed below, community banks are excluded from the restrictions of the Volcker Rule if (i) the community bank, and every entity that controls it, has total consolidated assets equal to or less than \$10 billion and (ii) trading assets and liabilities of the community bank, and every entity that controls it, are equal to or less than five percent of its total consolidated assets. The Company and Live Oak Bank are currently below these thresholds and thus exempt from the Volcker Rule.

USA PATRIOT Act

The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, or the USA PATRIOT Act, required each financial institution: (i) to establish an anti-money laundering program; (ii) to establish due diligence policies, procedures and controls with respect to its private banking accounts involving foreign individuals and certain foreign banks; and (iii) to avoid establishing, maintaining, administering or managing correspondent accounts in the United States for, or on behalf of, foreign banks that do not have a physical presence in any country. The USA PATRIOT Act also required the Secretary of the Treasury to prescribe by regulation minimum standards that financial institutions must follow to verify the identity of customers, both foreign and domestic, when a customer opens an account. In addition, the USA PATRIOT Act encouraged cooperation among financial institutions, regulatory authorities and law enforcement authorities with respect to individuals, entities and organizations engaged in, or reasonably suspected of engaging in, terrorist acts or money laundering activities.

Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley, mandated for public companies, such as the Company, a variety of reforms intended to address corporate and accounting fraud and provided for the establishment of the Public Company Accounting Oversight Board, or PCAOB, which enforces auditing, quality control and independence standards for firms that audit SEC-reporting companies. Sarbanes-Oxley imposed higher standards for auditor independence and restricted the provision of consulting services by auditing firms to companies they audit and requires that certain audit partners be rotated periodically. It also requires chief executive officers and chief financial officers, or their equivalents, to certify the accuracy of periodic reports filed with the SEC, subject to civil and criminal penalties if they knowingly or willfully violate this certification requirement, and increases the oversight and authority of audit committees of publicly traded companies.

Fiscal and Monetary Policy

Banking is a business which depends on interest rate differentials for success. In general, the difference between the interest paid by a bank on its deposits and its other borrowings, and the interest received by a bank on its loans and securities holdings, constitutes a significant portion of a bank's earnings. Thus, the Company's earnings and growth will be subject to the influence of economic conditions generally, both domestic and foreign, and also to the monetary and fiscal policies of the United States and its agencies, particularly the Federal Reserve. The Federal Reserve regulates the supply of money through various means, including open market dealings in United States government securities, the discount rate at which banks may borrow from the Federal Reserve and the reserve requirements on deposits. The nature and timing of any changes in such policies and their effect on the Company's business and results of operations cannot be predicted.

Current and future legislation and the policies established by federal and state regulatory authorities will affect the Company's future operations. Banking legislation and regulations may limit the Company's growth and the return to its investors by restricting certain of its activities.

In addition, capital requirements could be changed and have the effect of restricting the activities of the Company or requiring additional capital to be maintained. The Company cannot predict with certainty what changes, if any, will be made to existing federal and state legislation and regulations or the effect that such changes may have on the Company's business and results of operations.

Real Estate Lending Evaluations

The federal regulators have adopted uniform standards for evaluations of loans secured by real estate or made to finance improvements to real estate. Banks are required to establish and maintain written internal real estate lending policies consistent with safe and sound banking practices and appropriate to the size of the institution and the nature and scope of its operations. The regulations establish loan-to-value ratio limitations on real estate loans. Live Oak Bank's respective loan policies establish limits on loan to value ratios that are equal to or less than those established in such regulations.

Commercial Real Estate Concentrations

Lending operations of commercial banks may be subject to enhanced scrutiny by federal banking regulators based on a bank's concentration of commercial real estate, or CRE, loans. The federal banking regulators have issued guidance to remind financial institutions of the risk posed by commercial real estate, or CRE, lending concentrations. CRE loans generally include land development, construction loans, and loans secured by multifamily property, and nonfarm, nonresidential real property where the primary source of repayment is derived from rental income associated with the property. The guidance prescribes the following guidelines for bank examiners to help identify institutions that are potentially exposed to significant CRE risk and may warrant greater supervisory scrutiny:

- total reported loans for construction, land development and other land, or C&D, represent 100% or more of the institution's total capital; or
- total CRE loans represent 300% or more of the institution's total capital, and the outstanding balance of the institution's CRE loan portfolio has increased over 50% or more during the prior 36 months.

As of December 31, 2020, the Bank's C&D concentration as a percentage of bank capital totaled 88.7% and the Bank's CRE concentration, net of owner-occupied loans, as a percentage of capital totaled 96.7%.

Limitations on Incentive Compensation

In 2009, the Federal Reserve issued proposed guidance designed to help ensure that incentive compensation policies at banking organizations do not encourage excessive risk-taking or undermine the safety and soundness of the organization. In connection with the proposed guidance, the Federal Reserve announced that it would review incentive compensation arrangements of bank holding companies such as the Company as part of the regular, risk-focused supervisory process.

In 2010, the Federal Reserve issued the incentive compensation guidance in final form and was joined by the FDIC, and the Office of the Comptroller of the Currency. The final guidance, which covers all employees that have the ability to materially affect the risk profile of an organization, either individually or as part of a group, is based upon the key principles that a banking organization's incentive compensation arrangements should (i) provide employees incentives that appropriately balance risk and reward and, thus, do not encourage risk-taking beyond the organization's ability to effectively identify and manage risks, (ii) be compatible with effective internal controls and risk management, and (iii) be supported by strong corporate governance, including active and effective oversight by the organization's board of directors. Any deficiencies in compensation practices that are identified may be incorporated into the organization's supervisory ratings, which can affect its ability to make acquisitions or perform other actions. The guidance provides that enforcement actions may be taken against a banking organization if its incentive compensation arrangements or related risk-management control or governance processes pose a risk to the organization's safety and soundness and the organization is not taking prompt and effective measures to correct the deficiencies.

While the Dodd-Frank Act contemplated additional regulatory action to be taken related to incentive compensation, the administrative agencies have not yet adopted the contemplated regulations.

Registered Investment Adviser Regulation

LOPW and JAM are registered investment advisers under the Investment Advisers Act of 1940 and the SEC's regulations promulgated thereunder. The Investment Advisers Act imposes numerous obligations on registered investment advisers, including fiduciary, recordkeeping, operational, and disclosure obligations. Supervisory agencies have the power to limit or restrict LOPW and JAM from conducting their business in the event they fail to comply with such laws and regulations. Possible sanctions that may be imposed in the event of such noncompliance include the suspension of individual employees, limitations on business activities for specified periods of time, revocation of registration as an investment adviser and/or other registrations, and other censures and fines. Changes in these laws or regulations could have a material adverse impact on the profitability and mode of operations of LOPW and JAM.

Economic Environment

The policies of regulatory authorities, including the monetary policy of the Federal Reserve, have a significant effect on the operating results of bank holding companies and their subsidiaries. Among the means available to the Federal Reserve to affect the money supply are open market operations in U.S. government securities, changes in the discount rate on member bank borrowings and changes in reserve requirements against member bank deposits. These means are used in varying combinations to influence overall growth and distribution of bank loans, investments and deposits, and their use may affect interest rates charged on loans or paid on deposits. The Federal Reserve's monetary policies have materially affected the operating results of commercial banks in the past and are expected to continue to do so in the future. The nature of future monetary policies and the effect of these policies on the Company's business and earnings cannot be predicted.

Dodd-Frank Act

The Dodd-Frank Act was signed into law in 2010 and implemented many changes in the way financial and banking operations are regulated in the United States, including through the creation of a new resolution authority, mandating higher capital and liquidity requirements, requiring banks to pay increased fees to regulatory agencies and numerous other provisions intended to strengthen the financial services sector. Pursuant to the Dodd-Frank Act, the Financial Stability Oversight Council, or the FSOC, was created and is charged with overseeing and coordinating the efforts of the primary U.S. financial regulatory agencies (including the Federal Reserve, the FDIC and the SEC) in establishing regulations to address systemic financial stability concerns. Under the Dodd-Frank Act, the Consumer Financial Protection Bureau, or the CFPB, was also created as a new consumer financial services regulator. The CFPB is authorized to prevent unfair, deceptive and abusive practices and ensure that consumers have access to markets for consumer financial products and services and that such markets are fair, transparent and competitive.

Federal and State Taxation

The Company and its subsidiaries file a consolidated federal income tax return and separate state income tax returns in North Carolina. All the returns are filed on a calendar year basis. Consolidated income tax returns have the effect of eliminating intercompany income and expense, including dividends, from the computation of consolidated taxable income for the taxable year in which the items occur. In accordance with an income tax sharing agreement, income tax charges or credits are allocated among Live Oak and its subsidiaries on the basis of their respective taxable income or taxable loss that is included in the consolidated income tax return.

Banks and bank holding companies are subject to federal and state income taxes in essentially the same manner as other corporations. Taxable income is generally calculated under applicable sections of the Internal Revenue Code of 1986, as amended (the "Code"), with some modifications required by state law and the 2017 tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). Although Live Oak's federal income tax liability is determined under provisions of the Code, which is applicable to all taxpayers, Sections 581 through 597 of the Code apply specifically to financial institutions.

Among other things, the new Tax Act (i) established a new, flat corporate federal statutory income tax rate of 21%, (ii) eliminates the corporate alternative minimum tax and allowed the use of any such carryforwards to offset regular tax liability for any taxable year, (iii) limited the deduction for net interest expense incurred by U.S. corporations, (iv) allowed businesses to immediately expense, for tax purposes, the cost of new investments in certain qualified depreciable assets, (v) eliminated or reduced certain deductions related to meals and entertainment expenses, (vi) modified the limitation on excessive employee remuneration to eliminate the exception for performance-based compensation and clarified the definition of a covered employee and (vii) limited the deductibility of deposit insurance premiums. The Tax Act also significantly changed U.S. tax law related to foreign operations, however, such changes do not currently impact the Company. Management continues to explore investments which generate investment tax credits and as a result there can be no assurance as to the actual effective rate because it will be dependent upon the nature and amount of future income and expenses as well as actual investments generating investment tax credits and transactions with discrete tax effects.

Economic Growth, Regulatory Relief, and Consumer Protection Act

In 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act ("EGRRCPA") was signed into law, which amended provisions of the Dodd-Frank Act and was intended to ease, and better tailor, regulation, particularly with respect to smaller-sized institutions such as the Company. EGRRCPA's highlights included, among other things: (i) exempting banks with less than \$10 billion in assets from the ability-to-repay requirements for certain qualified residential mortgage loans held in portfolio; (ii) not requiring appraisals for certain transactions valued at less than \$400,000 in rural areas; (iii) clarifying that, subject to various conditions, reciprocal deposits of another depository institution obtained using a deposit broker through a deposit placement network for purposes of obtaining maximum deposit insurance would not be considered brokered deposits subject to the FDIC's brokered-deposit regulations; (iv) raising eligibility for the 18-month exam cycle from \$1 billion to banks with \$3 billion in assets; and (v) simplifying capital calculations by requiring regulators to establish for institutions under \$10 billion in assets a community bank leverage ratio (tangible equity to average consolidated assets) at a percentage not less than 8% and not greater than 10% that such institutions may elect to replace the general applicable risk-based capital requirements for determining well capitalized status. In 2019, the FDIC passed a final rule on the community bank leverage ratio, setting the minimum required community bank leverage ratio at 9 percent. The rule went into effect in 2020. In addition, the Federal Reserve was required to raise the asset threshold under its Small Bank Holding Company Policy Statement from \$1 billion to \$3 billion for bank or savings and loan holding companies that are exempt from consolidated capital requirements, provided that such companies meet certain other conditions such as not engaging in significant nonbanking activities and not having a material amount of debt or equity securities outstanding (other than trust preferred securities) that are registered with the SEC. Consistent with EGRRCPA, the Federal Reserve passed an interim final rule that became effective in 2018 to increase the asset threshold to \$3 billion for qualifying for such policy statement.

The Coronavirus Aid, Relief, and Economic Security Act

In response to the COVID-19 pandemic, the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, was signed into law on March 27, 2020, to provide national emergency economic relief measures. Many of the CARES Act's programs are dependent upon the direct involvement of U.S. financial institutions, such as the Company and the Bank, and have been implemented through rules and guidance adopted by federal departments and agencies, including the U.S. Department of Treasury, the Federal Reserve and other federal banking agencies, including those with direct supervisory jurisdiction over the Company and the Bank. Furthermore, as the ongoing COVID-19 pandemic evolves, federal regulatory authorities continue to issue additional guidance with respect to the implementation, lifecycle, and eligibility requirements for the various CARES Act programs as well as industry-specific recovery procedures for COVID-19. In addition, it is possible that Congress will enact supplementary COVID-19 response legislation, including amendments to the CARES Act or new bills comparable in scope to the CARES Act. For example, the Economic Aid to Hard-Hit Small Businesses, Nonprofits and Venues Act (the Economic Aid Act) passed on December 27, 2020, allocated additional funding to the PPP, which funds can be used not only by small businesses who have yet to receive a PPP loan but also by some small businesses who may be eligible to receive a second PPP loan. The Economic Aid Act also significantly revised various aspects of the PPP terms and conditions, including certain aspects of the forgiveness process. The Company continues to assess the impact of the CARES Act, the Economic Aid Act and other statutes, regulations and supervisory guidance related to the COVID-19 pandemic.

Paycheck Protection Program. The CARES Act amended the SBA's loan program, in which the Bank participates, to create a guaranteed, unsecured loan program, the Paycheck Protection Program, or PPP, to fund operational costs of eligible businesses, organizations and self-employed persons during the COVID-19 pandemic. In June 2020, the Paycheck Protection Program Flexibility Act was enacted, which among other things, gave borrowers additional time and flexibility to use PPP loan proceeds. Shortly thereafter, and due to the evolving impact of the COVID-19 pandemic, additional legislation was enacted authorizing the SBA to resume accepting PPP applications on July 6, 2020 and extending the PPP application deadline to August 8, 2020. As a participating lender in the PPP, the Bank continues to monitor legislative, regulatory, and supervisory developments related thereto.

Troubled Debt Restructuring and Loan Modifications for Affected Borrowers. The CARES Act permits banks to suspend requirements under U.S. generally accepted accounting principles, or GAAP, for loan modifications to borrowers affected by COVID-19 that would otherwise be characterized as troubled debt restructurings and suspend any determination related thereto if (i) the loan modification is made between March 1, 2020 and December 31, 2020 and (ii) the applicable loan was not more than 30 days past due as of December 31, 2019. The federal banking agencies also issued guidance to encourage banks to make loan modifications for borrowers affected by COVID-19 and to assure banks that they will not be criticized by examiners for doing so. The Company is applying this guidance to qualifying loan modifications.

Temporary Community Bank Leverage Ratio Relief. Pursuant to the CARES Act, the federal banking agencies adopted an interim rule, effective until December 31, 2020, to (i) reduce the minimum Community Bank Leverage Ratio from 9% to 8% percent and (ii) give community banks two-quarter grace period to satisfy such ratio if such ratio falls out of compliance by no more than 1%.

Temporary Regulatory Capital Relief related to Impact of CECL. Concurrent with enactment of the CARES Act, federal banking agencies issued an interim final rule that delays the estimated impact on regulatory capital resulting from the adoption of the current expected credit loss model, or CECL, for determining credit loss estimates. The interim final rule provides banking organizations that implemented CECL before the end of 2020 the option to delay for two years the estimated impact of CECL on regulatory capital relative to regulatory capital determined under the prior incurred loss methodology, followed by a three-year transition period to phase out the aggregate amount of capital benefit provided during the initial two-year delay. The federal banking agencies have since issued a final rule that makes certain technical changes to the interim final rule. The changes in the final rule apply only to those banking organizations that elect the CECL transition relief provided under the rule. The Company did not elect this option.

Evolving Legislation and Regulatory Action

New laws or regulations or changes to existing laws and regulations, including changes in interpretation or enforcement, could materially adversely affect the Company's financial condition or results of operations. Some aspects of the Dodd-Frank Act are subject to further rulemaking and will take effect over several years. As a result, the overall financial impact on the Company and Live Oak Bank cannot be anticipated at this time.

Item 1A. RISK FACTORS

An investment in Live Oak Bancshares, Inc.'s common stock involves certain risks. The following discussion highlights the risks that management believes are material for the Company, but do not necessarily include all the risks that we may face. Additional risks and uncertainties that are not currently known or that management does not currently deem material could also have a material adverse impact on our business, results of our operations and financial condition. You should carefully consider the risk factors and uncertainties described below and elsewhere in this Report in evaluating an investment in Live Oak Bancshares, Inc.'s common stock.

Summary of Risk Factors

The following is a summary of the most significant risks and uncertainties that we believe could adversely affect our business, financial condition or results of operations. In addition to the following summary, you should consider the other information set forth in this "Risk Factors" section and the other information contained in this report before investing in our securities.

Risks Related to Our Business

- The COVID-19 pandemic and responsive measures could have a material adverse effect on our business, results of operations, and financial condition; such effects will depend on future developments, which are uncertain and difficult to predict.
- Unexpected credit losses could have a material adverse effect on our capital, financial condition, and results of operations.
- Changes to the SBA or other government-guaranteed lending programs by the federal government, or the loss of our status as an SBA Preferred Lender, could have a material adverse effect on our business.
- Changes in our ability to use, or the terms of our use of, intellectual property owned by other companies could have a material adverse effect on our business.
- We must effectively manage risks in connection with our information systems, which may experience disruption, failure, or security breaches.
- Our loan portfolio is concentrated in commercial real estate loans, which involve a high degree of credit risk.
- We must effectively manage our interest rate risks.
- We must maintain an appropriate allowance for credit losses.
- We must effectively manage our liquidity risk.
- We are subject to environmental liability risk associated with our lending activities.
- We must effectively manage our counterparty risk.
- Our expansion strategy, including new lines of business, new products, acquisitions, and investments, exposes us to risks.
- We are less able to diversify our lending risks than larger financial institutions.
- The replacement of LIBOR with an alternative reference rate may adversely affect interest income or expense.
- Our directors and executive officers own a significant amount of our outstanding common stock, which could limit other shareholders' ability to influence corporate matters and may hinder a third party from acquiring control of the Company.

Risks Related to Our Investment in Apiture

- If the market for Apiture's products and services develops more slowly or in different ways than anticipated, or if Apiture experiences development delays or software defects, our investment could be negatively impacted.
- Information security breaches or other breakdowns in processing systems could damage Apiture's business and negatively impact our investment.

Risks Related to Our Regulatory Environment

- We are subject to extensive government regulation and supervision.
- We must maintain adequate regulatory capital to support our business.

Risks Related to Our Common Stock

- The trading volume in our common stock is less than that of larger financial institutions.
- There is no guarantee that we will be able to pay future dividends.
- Federal laws and regulations impose restrictions on the ownership of our common stock.
- We may issue additional equity or debt securities in the future, which could dilute existing shareholders and affect the market price of our common stock.
- Anti-takeover provisions in our governing documents could adversely affect our shareholders.
- An investment in our common stock is not an insured deposit.

General Risk Factors

- We compete with larger financial institutions and other financial service providers.
- We must attract, retain, and develop key personnel.
- Our risk management framework may not effectively mitigate risks or losses to us.
- Hurricanes or other adverse weather events could disrupt our operations.
- Our failure to maintain an effective system of internal control over financial reporting could harm our business.
- Damage to our business reputation could adversely impact our business and results of operations.

Risks Related to Our Business

The ongoing COVID-19 pandemic and measures intended to prevent its spread could have a material adverse effect on our business, results of operations, and financial condition, and such effects will depend on future developments that are highly uncertain and difficult to predict.

Global health concerns relating to the COVID-19 outbreak and related government actions taken to reduce the spread of the virus have had a significant negative impact on the macroeconomic environment, and the outbreak has significantly increased economic uncertainty and reduced economic activity. The outbreak has resulted in government authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter-in-place or total lockdown orders and business limitations and shutdowns. Such measures have significantly contributed to historically high unemployment and negatively impacted consumer and business spending. The United States government has taken steps to attempt to mitigate some of the more severe anticipated economic effects of the virus, including the passage of the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, the Economic Aid Act and other legislation, and may take additional steps in the future for the same purpose, but there can be no assurance that there will be any further legislation or that any such steps will be effective or achieve their desired results in a timely fashion.

The outbreak has adversely impacted and is likely to further adversely impact our operations and the operations of our borrowers, customers, and business partners. For example, as a result of the significant uncertainty due to the COVID-19 pandemic we realized a substantial build in our allowance for credit losses for 2020. We could also experience declining values of other financial assets and other negative impacts on our financial position, including possible constraints on liquidity and capital, as well as higher costs of capital. A number of factors impacting us or our borrowers, customers or business partners could materially adversely affect our business, results of operations, and financial condition, including but not limited to:

- elevated levels of unemployment may lead to increases in loan delinquencies, losses, and charge-offs;
- collateral for loans, including real estate, may decline in value, which could cause loan losses to increase;
- demand for our products and services may decline, making it difficult to grow or maintain assets and income;
- noninterest income from premiums paid in the secondary market for the sale of loans may be reduced due to deteriorating market conditions and a decrease in the number of potential buyers;
- the net worth and liquidity of loan guarantors may decline, impairing their ability to honor commitments to us;
- we may experience operational failures due to changes in our normal business practices necessitated by the outbreak and related governmental actions;
- third-party vendors on which we rely may not be able to provide us critical services;
- our risk management policies and practices may be negatively impacted in general, including, but not limited to, the effectiveness and accuracy of our models given the lack of data and comparable precedent;
- cyber and payment fraud risk may increase as cybercriminals attempt to profit from the disruption given increased online and remote activity; and
- FDIC deposit insurance premiums may increase if the agency experiences additional resolution costs.

The spread of COVID-19 has caused us to modify our business practices (including restricting employee travel and developing work-from-home and social distancing plans for our employees), and we may take further actions as may be required by government authorities or as we determine are in the best interests of our employees, customers, and business partners. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus or will otherwise be satisfactory to government authorities.

Federal, state and local governmental authorities have enacted, and may enact in the future, legislation, regulations, and protocols in response to the COVID-19 pandemic, including governmental programs intended to provide economic relief to businesses and individuals. Our participation in and execution of any such programs may cause operational, compliance, reputational, and credit risks, which could result in litigation, governmental action or other forms of loss. There remains significant uncertainty regarding the measures that authorities will enact in the future and the ultimate impact of the legislation, regulations, and protocols that have been and will be enacted. For example, the CARES Act temporarily added a new program titled the Paycheck Protection Program (the “PPP”) to the SBA’s 7(a) loan program. The PPP was intended to provide economic relief to small businesses nationwide. Under the PPP, small businesses and other entities and individuals could apply for loans from existing SBA lenders and other approved lenders that enroll in the program, subject to numerous limitations and eligibility criteria. After the PPP launched on April 3, 2020, we were an active participant in the program originating a substantial number and principal amount of PPP loans. In addition, the CARES Act provided regulatory relief on deferrals offered to certain borrowers and provided six months of payment relief through the first quarter of 2021 from the SBA for certain loans guaranteed by that agency. We face the risk that payment deferrals and those subsidy payments being made by the SBA for borrowers under its programs may be skewing actual indications of ability to repay. The Economic Aid Act passed on December 27, 2020, allocated additional funding to the PPP, which funds can be used not only by small businesses who have yet to receive a PPP loan but also by some small businesses who may be eligible to receive a second PPP loan. The Economic Aid Act also significantly revised various aspects of the PPP terms and conditions, including certain aspects of the forgiveness process. Rules and guidance regarding the PPP were not readily available at the start of the program, and the SBA and other government agencies continue to release additional rules and guidance that change or update the requirements and expectations of the regulatory agencies administering the PPP and regulating participating lenders. As of the date of this report, there remains some ambiguity in the laws, rules, and guidance regarding the operation of the PPP, with a number of important aspects of the PPP where regulatory agencies have not provided complete guidance, particularly with respect to process, procedures and criteria for forgiveness and servicing of PPP loans. Banks participating in the PPP have been subject to litigation regarding the process and procedures that such banks used in processing applications for the PPP and regarding claims for fees to be paid to purported agents and other third parties, and we are exposed to the risk of litigation regarding the PPP. If any such litigation is not resolved in a manner favorable to us, it may result in significant financial liability or adversely affect our reputation. In addition, litigation can be costly, regardless of outcome. We also face credit risk on PPP loans if a determination is made by the SBA that there is a deficiency in the manner in which the loan was originated, funded, or serviced by the Bank, such as an issue with the eligibility of a borrower to receive a PPP loan. In the event of a loss resulting from a default on a PPP loan and a determination by the SBA that there was a deficiency in the manner in which the PPP loan was originated, funded, or serviced by the Bank, the SBA may deny its liability under the guaranty, reduce the amount of the guaranty, or, if it has already paid under the guaranty, seek recovery of any loss related to the deficiency from the Bank.

Additionally, our future success and profitability substantially depends on the management skills of our executive officers and directors. The unanticipated loss or unavailability of key employees due to the outbreak could harm our ability to operate our business or execute our business strategy. We may not be successful in finding and integrating suitable successors in the event of key employee loss or unavailability.

The extent to which the COVID-19 outbreak impacts our business, results of operations, and financial condition will depend on future developments that are highly uncertain and are difficult to predict, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume. Even after the COVID-19 outbreak has subsided, we may continue to experience materially adverse impacts to our business, financial condition, and results of operations and prospects as a result of the virus’s global economic impact, including the availability of credit, adverse impacts on our liquidity, and any recession that has occurred or may occur in the future. For more information on the impacts of COVID-19 on our business, results of operations and financial condition, see “Recent Developments” in Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

There are no comparable recent events that provide guidance as to the effect the spread of COVID-19 as a global pandemic may have, and the ultimate impact of the outbreak is highly uncertain and subject to change. We do not yet know the full extent of the impacts on our business, our operations, or the global economy as a whole. However, the effects could have a material impact on our results of operations and heighten many of our known risks described in this “Risk Factors” section.

We may experience increased delinquencies and credit losses, which could have a material adverse effect on our capital, financial condition, and results of operations.

Like other lenders, we face the risk that our customers will not repay their loans. A customer’s failure to repay us is usually preceded by missed monthly payments. In some instances, however, a customer may declare bankruptcy prior to missing payments, and, following a borrower filing bankruptcy, a lender’s recovery of the credit extended is often limited. Since many of our loans are secured by collateral, we may attempt to seize the collateral if and when a customer defaults on a loan.

However, the value of the collateral might not equal the amount of the unpaid loan, and we may be unsuccessful in recovering the remaining balance from our customer. The resolution of nonperforming assets, including the initiation of foreclosure proceedings, requires significant commitments of time from management, which can be detrimental to the performance of their other responsibilities, and which expose us to additional legal costs. Elevated levels of loan delinquencies and bankruptcies in our market areas, generally, and among our customers specifically, can be precursors of future charge-offs and may require us to increase our allowance for credit losses on loans and leases, or ACL. Higher charge-off rates, delays in the foreclosure process or in obtaining judgments against defaulting borrowers or an increase in our ACL may negatively impact our overall financial performance, may increase our cost of funds, and could materially adversely affect our business, results of operations and financial condition.

SBA lending and other government guaranteed lending is an important part of our business. These lending programs are dependent upon the federal government, and we face specific risks associated with originating SBA and other government guaranteed loans.

Our SBA lending program is dependent upon the federal government. As an SBA Preferred Lender, we enable our clients to obtain SBA loans without being subject to the potentially lengthy SBA approval process necessary for lenders that are not SBA Preferred Lenders. The SBA periodically reviews the lending operations of participating lenders to assess, among other things, whether the lender exhibits prudent risk management. When weaknesses are identified, the SBA may request corrective actions or impose enforcement actions, including revocation of the lender's Preferred Lender status. If we lose our status as a Preferred Lender, we may lose some or all of our customers to lenders who are SBA Preferred Lenders, and as a result we could experience a material adverse effect to our financial results. Any changes to the SBA program, including changes to the level of guarantee provided by the federal government on SBA loans, may also have a material adverse effect on our business.

During the fourth quarter of 2018, we began implementing a strategic decision to retain a larger portion of our loans eligible for sale on our balance sheet. Notwithstanding this decision, we anticipate that gains on the sale of loans will comprise a meaningful component of our revenue in 2021. We sell the guaranteed portion of some of our SBA 7(a) loans in the secondary market. These sales have resulted in premium income for us at the time of sale and created a stream of future servicing income. We may not be able to continue originating these loans or selling them in the secondary market. Furthermore, even if we are able to continue originating and selling SBA 7(a) loans in the secondary market, we might not continue to realize premiums upon the sale of the guaranteed portion of these loans. When we sell the guaranteed portion of our SBA 7(a) loans, we incur credit risk on the non-guaranteed portion of the loans, and if a customer defaults on the non-guaranteed portion of a loan, we share any loss and recovery related to the loan pro-rata with the SBA. If the SBA establishes that a loss on an SBA guaranteed loan is attributable to significant technical deficiencies in the manner in which the loan was originated, funded or serviced by us, the SBA may seek recovery of the principal loss related to the deficiency from us, which could materially adversely affect our business, results of operations and financial condition.

In addition, we make loans through the Rural Energy for America Program of the United States Department of Agriculture, or the USDA, which provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy-efficient improvements, and through other USDA guaranteed lending programs. A typical SBA 7(a) loan carries a 75% guarantee while USDA guarantees range from 60% to 80% depending on loan size and type. We expect to continue to sell a large proportion of the USDA loans that we originate in the secondary market as they become eligible for sale. The origination and sale of these loans are subject to similar risks associated with the origination and sale of SBA 7(a) loans as described above. The laws, regulations and standard operating procedures that are applicable to SBA and USDA loan products may change at any time. Because government regulation greatly affects the business and financial results of our organization, changes in the laws, regulations and procedures applicable to SBA and USDA loans could adversely affect our ability to operate profitably.

A prolonged U.S. government shutdown would harm our results of operations.

Our results of operations, including revenue, non-interest income, expenses and net interest income, would be adversely affected in the event of widespread financial and business disruption on account of a prolonged failure to maintain significant U.S. government operations, particularly those pertaining to the SBA, the USDA or the FDIC. Any such failure to maintain such U.S. government operations would impede our ability to originate SBA loans and our ability to sell such loans in the secondary market, which would materially adversely affect our business, results of operations and financial condition.

We are dependent upon the use of intellectual property owned by third parties, and any change in our ability to use, or the terms upon which we may use, this intellectual property could have a material adverse effect on our business.

The technology-based lending platform that is pivotal to our success is dependent on the use of the nCino Bank Operating System and Salesforce.com, Inc.'s Force.com cloud computing infrastructure platform. We rely on a non-exclusive license to use nCino's platform. Because our license is non-exclusive, the nCino Bank Operating System is available to other lenders and nothing would prevent our competitors from developing, licensing or using similar technology. Our license currently expires on November 14, 2024. Notwithstanding the term of our agreement, our license may be terminated if we are in material breach of the license and do not cure the breach within 30 days. In addition, nCino relies on a license to use the Salesforce.com platform, and if nCino were unable to maintain its rights under that license, our ability to rely on the nCino license could be adversely affected. We can offer no assurance that we will be able to renew or maintain our license to use the nCino Bank Operating System on terms that are acceptable. Termination of either of these licenses or the reduction or elimination of our licensed rights may result in our having to negotiate new licenses with less favorable terms, or the inability to obtain access to such licensed technology at all.

Similarly, Apiture LLC ("Apiture") has provided the Bank significant engineering, development, professional and other services under an agreement to deliver the products and services that will comprise the next-generation banking platform that we believe will be important for our future strategy and success. If successful, this banking platform would enable us to offer checking and other transactional accounts on a broad basis to our customers. Offering these types of banking products for the first time to our customers presents greater and more complex operational, compliance and other risks than the risks associated with the deposit products we currently offer. There can be no assurance that Apiture will be able to develop and support the implementation of our new banking platform in a timely and cost-effective manner or that Apiture will continue to provide any services on which we rely at appropriate service levels or at prices that would be market competitive. See "Risks Related to Our Investment in Apiture" below for additional risks that Apiture faces, some or all of which could have a material adverse impact on our Bank as a customer of Apiture. In addition, we are an investor in Finxact, Inc., an early-stage fintech company developing an enterprise class, cloud-native Core-as-a-Service platform that we also believe will be important for our future strategy and success. We also rely on numerous other vendors and third parties to provide software and solutions comprising the new banking platform that we are developing. If this technology is not successfully developed and implemented at our Bank, if we were to lose access to any of this technology, or if we were only able to access the technology on less favorable terms, we would not be able to offer our customers the next-generation banking platform services that we intend to offer, and our business, financial condition, results of operations and prospects could be materially and adversely affected.

A failure in or breach of our operational or security systems, or those of our third party service providers, including as a result of cyber-attacks, could disrupt our business, result in unintentional disclosure or misuse of confidential or proprietary information, damage our reputation, increase our costs and cause losses.

As a financial institution, our operations rely heavily on the secure data processing, storage and transmission of confidential and other information on our computer systems and networks. Cloud technologies, including third-party cloud infrastructure, are also critical to the operation of our systems, and our reliance on cloud technologies is growing. Any failure, interruption or breach in security or operational integrity of these systems could result in failures or disruptions in our online banking system, customer relationship management, general ledger, deposit and loan servicing and other systems. The security and integrity of our systems and the technology we use, including services and solutions provided by third-party vendors, could be threatened by a variety of interruptions or information security breaches, including those caused by computer hacking, cyber-attacks, electronic fraudulent activity or attempted theft of financial assets. The increased use of mobile and cloud technologies, as well as the increase in remote work due to the COVID-19 pandemic, can heighten these and other operational risks. We may fail to promptly identify or adequately address any such failures, interruptions or security breaches if they do occur. While we have certain protective policies and procedures in place, the nature and sophistication of the threats continue to evolve. We may be required to expend significant additional resources in the future to modify and enhance our protective measures.

The nature of our business may make it an attractive target and potentially vulnerable to cyber-attacks, computer viruses, physical or electronic break-ins or similar disruptions. The technology-based platform we use processes sensitive data from our borrowers, depositors and other customers. While we have taken steps to protect confidential information that we have access to, our security measures and the security measures employed by the owners of the technology in the platform that we use could be breached. Any accidental or willful security breaches or other unauthorized access to our systems could cause confidential customer, borrower, employee, vendor, partner or investor information to be stolen and used for criminal purposes. Security breaches or unauthorized access to confidential information could also expose us to liability related to the loss of the information, time-consuming and expensive litigation, and negative publicity. If security measures are breached because of third-party action, employee error, malfeasance or otherwise, or if design flaws in the technology-based platform that we use are exposed and exploited, our relationships with customers, borrowers, employees, vendors, partners and investors could be severely damaged, and we could incur significant liability.

Because techniques used to sabotage or obtain unauthorized access to systems change frequently and generally are not recognized until they are launched against a target, we and our collaborators may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, federal regulators and many federal and state laws and regulations require companies to notify individuals of data security breaches involving their personal data. These mandatory disclosures regarding a security breach are costly to implement and often lead to widespread negative publicity, which may cause customers, borrowers, employees, vendors, partners or investors to lose confidence in the effectiveness of our data security measures. Any security breach, whether actual or perceived, would harm our reputation, we could lose customers, borrowers, employees, vendors, partners, or investors, and our business and operations could be adversely affected.

Additionally, we face the risk of operational disruption, failure, termination or capacity constraints of any of the third parties that facilitate our business activities, including exchanges, clearing agents, clearing houses or other financial intermediaries. Such parties could also be the source of an attack on, or breach of, our operational systems. Any failures, interruptions or security breaches in our information systems could damage our reputation, result in a loss of customer business, result in a violation of privacy or other laws, or expose us to civil litigation, regulatory fines or losses not covered by insurance.

Our business is dependent on the successful and uninterrupted functioning of our information technology and telecommunications systems and third-party providers. The failure of these systems, or the termination of a third-party software license or service agreement on which any of these systems is based, could interrupt our operations. Because our information technology and telecommunications systems interface with and depend on third-party systems, we could experience service denials if demand for such services exceeds capacity or such third-party systems fail or experience interruptions. If significant, sustained or repeated, a system failure or service denial could compromise our ability to operate effectively, damage our reputation, result in a loss of customer business, and/or subject us to additional regulatory scrutiny and possible financial liability, any of which could materially adversely affect our business, financial condition, results of operations and prospects, as well as the value of our common stock.

Our loan portfolio mix, which includes owner-occupied commercial real estate loans, could result in increased credit risk in a challenging economy.

Our loan portfolio is concentrated in owner-occupied commercial real estate and owner-occupied commercial business loans. These types of loans generally are viewed as carrying more risk of default than residential real estate loans or certain other types of loans or investments. In fact, the FDIC has issued pronouncements alerting banks of its concern about heavy loan concentrations in certain types of commercial real estate loans, including acquisition, construction and development loans, and heavy loan concentrations in certain geographic segments. Because a portion of our loan portfolio is composed of these types of higher-risk loans, we face an increased risk of nonperforming loans that could result in a loss of earnings from these loans, an increase in the provision for loan and lease losses, or an increase in loan charge-offs, any of which could have a material adverse impact on our business, results of operations and financial condition.

The current economic environment and any deterioration or downturn in the economies or real estate values in the markets we serve could have a material adverse effect on both borrowers' ability to repay their loans and the value of the real property securing those loans. Our ability to recover on defaulted loans would then be diminished, and we would be more likely to suffer losses on defaulted loans. Any of these developments could materially adversely affect our business, financial condition, results of operations and prospects.

The fair value of our investment securities can fluctuate due to factors outside of our control.

As of December 31, 2020, the fair value of our available for sale securities portfolio was approximately \$750.1 million. Factors beyond our control can significantly influence the fair value of securities in our portfolio and can cause potential adverse changes to the fair value of these securities. These factors include, but are not limited to, rating agency actions in respect of the securities, defaults by the issuer or with respect to the underlying securities, monetary tapering actions by the Federal Reserve, and changes in market interest rates and potential instability in the capital markets. Any of these factors, among others, could cause impairments and realized or unrealized losses in future periods and declines in other comprehensive income, which could materially and adversely affect our business, results of operations, financial condition and prospects, as well as the value of our common stock. The process for determining whether a security is reported at the proper carrying amount usually requires complex, subjective judgments about the future financial performance and liquidity of the issuer and any collateral underlying the security in order to assess the probability of receiving all contractual principal and interest payments on the security. Our inability to accurately predict the future performance of an issuer or to efficiently respond to changing market conditions could result in a decline in the value of our investment securities portfolio, which could have a material and adverse effect on our business, results of operations and financial condition. In addition, adjustments to the allowance for credit losses on available-for-sale investment securities would negatively affect the Company's earnings and regulatory capital ratios.

Our ACL may prove to be insufficient to absorb life-time losses on loans and off-balance sheet credit exposures.

We maintain allowances for credit losses on loans, leases, and off-balance sheet credit exposures. The allowance for credit losses on loans and leases are contra-asset valuation accounts that are deducted from the amortized cost basis of these assets to present the net amount expected to be collected. In the case of off-balance-sheet credit exposures, the allowance for credit losses is a liability account reported as another liability in our consolidated balance sheets. The amount of each allowance account represents management's best estimate of current expected credit losses on these financial instruments considering available information, from internal and external sources, relevant to assessing exposure to credit loss over the contractual term of the instrument. Relevant available information includes historical credit loss experience, current conditions and reasonable and supportable forecasts. As a result, the determination of the appropriate level of allowance for credit losses inherently involves a high degree of subjectivity and requires us to make significant estimates related to current and expected future credit risks and trends, all of which may undergo material changes. Continuing deterioration in economic conditions affecting borrowers; new information regarding existing loans and loan commitments; and identification of additional problem loans, ratings down-grades and other factors, both within and outside of our control, may require an increase in the allowances for credit losses on loans and off-balance sheet credit exposures. In addition, bank regulatory agencies periodically review our allowance for credit losses and may require an increase in credit loss expense or the recognition of further loan charge-offs, based on judgments different than those of management. Furthermore, if any charge-offs related to loans or off-balance sheet credit exposures in future periods exceed our allowances for credit losses on loans or off-balance sheet credit exposures, we will need to recognize additional credit loss expense to increase the applicable allowance. Any increase in the allowance for credit losses on loans and/or off-balance sheet credit exposures will result in a decrease in net income and, possibly, capital, and may have a material adverse effect on our business, financial condition and results of operations. See Note 1. Organization and Summary of Significant Accounting Policies to the Consolidated Financial Statements for further discussion related to our process for determining the appropriate level of the allowance for credit losses.

The valuation of our loans measured at fair value is based on estimates and subject to fluctuation based on market conditions and other factors that are beyond our control.

We have a large portfolio of loans measured at fair value. We determine fair value based on applicable accounting guidance which requires an entity to base fair value on exit price and to maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The fair value of these loans includes adjustments for historical credit losses, market liquidity, and economic conditions at the measurement date. This is an inherently uncertain process, and the fair value of our loans may be adversely impacted by factors that are beyond our control, which may in turn have a material adverse effect on our business, results of operations and financial condition. See Note 1. Organization and Summary of Significant Accounting Policies to the Consolidated Financial Statements for further discussion related to our process for determining the fair value of loans.

The valuation of our servicing rights is based on estimates and subject to fluctuation based on market conditions and other factors that are beyond our control.

The fair value of our servicing rights is estimated based upon projections of expected future cash flows generated by the loans we service, historical prepayment rates, future prepayment estimates, portfolio characteristics, interest rates based on interest rate yield curves, volatility, market demand for servicing rights and other factors. While this evaluation process uses historical and other objective information, the valuation of our servicing rights is ultimately an estimate based on our experience, judgment and expectations regarding our servicing portfolio and the broader market. This is an inherently uncertain process and the value of our servicing rights may be adversely impacted by factors that are beyond our control, which may in turn have a material adverse effect on our business, results of operations and financial condition.

The recognition of gains on the sale of loans reflects certain assumptions.

During the fourth quarter of 2018, we began implementing a strategic decision to retain a larger portion of our loans eligible for sale on our balance sheet. Notwithstanding this decision, we anticipate that gains on the sale of loans will comprise a meaningful component of our revenue in 2021. The determination of noncash gains is based on assumptions regarding the value of unguaranteed loans retained, servicing rights retained and deferred fees and costs. The value of retained unguaranteed loans and servicing rights are determined by our wholly owned subsidiary, GLS, which applies market derived factors such as prepayment rates, current market conditions and recent loan sales to arrive at valuations. Deferred fees and costs are determined using internal analysis of the cost to originate loans. Significant errors in assumptions used to compute gains on sale of loans could result in material revenue misstatements, which may have a material adverse effect on our business, results of operations and profitability. In addition, while we believe that the valuations provided by GLS are at arm's length, reflect fair value and are reperformed for indications of bias by an independent third party on a biannual basis, if such valuations are not reflective of fair market value then our business, results of operations and financial condition may be materially and adversely affected.

Our rental equipment is subject to residual value risk upon disposition, and may not sell at the prices or in the quantities we expect.

The market value of any given piece of rental equipment could be less than its depreciated value at the time it is sold. The market value of used rental equipment depends on several factors, including:

- the market price for new equipment of a like kind;
- the age of the equipment at the time it is sold, as well as wear and tear on the equipment relative to its age;
- the supply of used equipment on the market;
- technological advances relating to the equipment;
- demand for the used equipment; and
- general economic conditions.

We include in income from operations the difference between the sales price and the depreciated value of an item of equipment sold. Changes in our assumptions regarding depreciation could change our depreciation expense, as well as the gain or loss realized upon disposal of equipment. Sales of our used rental equipment at prices that fall significantly below our projections or in lesser quantities than we anticipate will have a negative impact on our results of operations and cash flows.

We are subject to liquidity risk in our operations.

Liquidity risk includes the possibility of being unable, at a reasonable cost and within acceptable risk tolerances, to pay obligations as they come due, to capitalize on growth opportunities as they arise, or to pay regular dividends because of an inability to liquidate assets or obtain adequate funding on a timely basis. Liquidity is required to fund various obligations, including credit obligations to borrowers, loan originations, withdrawals by depositors, repayment of debt, dividends to shareholders, operating expenses, and capital expenditures. Our liquidity is derived primarily from retail deposit growth and retention, the sale of loans in the secondary market, principal and interest payments on loans and investment securities, net cash provided from operations, and access to other funding sources. A significant portion of our deposit base is gathered through our nationwide direct deposit platform, and we have historically also relied on brokered deposits. If our Bank were to become less than well capitalized, we would be subject to regulatory restrictions that could limit the effective yield we offer on deposits or disrupt our ability to accept brokered deposits. Recently revised and modernized FDIC regulations offer some regulatory relief and additional clarification. We are assessing the implications of these new regulations and anticipate that the industry will seek response to situation-specific questions from the regulatory agencies. We also could not accept brokered deposits without FDIC approval. See “Capital Adequacy” under the heading “Supervision and Regulation” above for more details on these restrictions. If we became subject to these restrictions, they could have a material adverse effect on our liquidity, results of operations and financial condition.

Our access to funding sources in amounts adequate to finance our activities or at a reasonable cost could be impaired by factors that affect us specifically or the financial services industry in general. Factors that could adversely affect our access to liquidity sources include a decrease in the level of our business activity due to a market downturn, failures of or interruptions to the next-generation banking platform we are developing, our lack of access to a traditional branch banking network designed to generate core deposits, and adverse regulatory action against us. Our ability to borrow could also be impaired by factors that are not specific to us, such as a severe disruption in the financial markets or negative views and expectations about the prospects for the financial services industry as a whole. Our access to borrowed funds could become limited in the future, and we may be required to pay above market rates for additional borrowed funds, if we are able to obtain them at all, which may adversely affect our business, results of operations and financial condition.

Changes in the interest rate environment could reduce our net interest income, which could reduce our profitability.

As a financial institution, our earnings depend in part on our net interest income, which is the difference between the interest income that we earn on interest-earning assets, such as investment securities and loans, and the interest expense that we pay on interest-bearing liabilities, such as deposits and borrowings. Additionally, changes in interest rates affect the premiums we may receive in connection with the sale of SBA 7(a) and USDA loans in the secondary market, pre-payment speeds of loans for which we own servicing rights, our ability to fund our operations with customer deposits, and the fair value of securities in our investment portfolio. Therefore, any change in general market interest rates, including changes in federal fiscal and monetary policies, affects us more than non-financial companies and can have a significant effect on our net interest income and results of operations. Our assets and liabilities may react differently to changes in overall market rates or conditions because there may be mismatches between the repricing or maturity characteristics of the assets and liabilities. As a result, an increase or decrease in market interest rates could have material adverse effects on our net interest margin, noninterest income and results of operations. In a rising interest rate environment, potential borrowers could seek to defer loans as they wait for interest rates to settle, and borrowers of variable rate loans may be subject to increased interest rates, which could result in a greater rate of prepayment or default. Changes in interest rates may also present additional challenges to our business that we have not anticipated.

The amount of other real estate owned, or OREO, may increase significantly, resulting in additional losses, and costs and expenses that will negatively affect our operations.

In connection with our banking business, we take title to real estate collateral from time to time through foreclosure or otherwise in connection with efforts to collect debts previously contracted. Such real estate is referred to as other real estate owned, or OREO. As the amount of OREO increases, our losses, and the costs and expenses to maintain the real estate, likewise increase. The amount of OREO we hold may increase due to various economic conditions or other factors. Any additional increase in losses and maintenance costs and other expenses due to OREO may have a material adverse effect on our business, results of operations and financial condition. Such effects may be particularly pronounced in a market of reduced real estate values and excess inventory, which may make the disposition of OREO properties more difficult, increase maintenance costs and other expenses, and reduce our ultimate realization from any OREO sales. In addition, at the time of acquisition of the OREO we are required to reflect its fair market value in our financial statements. If the OREO declines in value subsequent to its acquisition, we are required to recognize a loss. As a result, declines in the value of our OREO will have a negative effect on our business, results of operations and financial condition. As of December 31, 2020, we had seven OREO properties with an aggregate carrying value of \$4.2 million.

We are subject to environmental liability risk associated with our lending activities.

A significant portion of our loan portfolio is secured by real property. During the ordinary course of business, we may foreclose on and take title to properties securing certain loans. In doing so, there is a risk that hazardous or toxic substances could be found on these properties. If hazardous or toxic substances are found, we may be liable for remediation costs, as well as for personal injury and property damage. Environmental laws may require us to incur substantial expenses and may materially reduce the affected property's value or limit our ability to use or sell the affected property. In addition, future laws or more stringent interpretations or enforcement policies with respect to existing laws may increase our exposure to environmental liability. The remediation costs and any other financial liabilities associated with an environmental hazard could have a material adverse effect on our business, results of operations and financial condition.

Our use of appraisals in deciding whether to make a loan secured by real property or how to value the loan in the future may not accurately reflect the net value of the collateral that we can realize.

In considering whether to make a loan secured by real property, we generally require an appraisal of the property. However, an appraisal is only an estimate of the value of the property at the time the appraisal is made, and, as real estate values may experience changes in value in relatively short periods of time, especially during periods of heightened economic uncertainty, this estimate might not accurately describe the net value of the real property collateral after the loan has been closed. If the appraisal does not reflect the amount that may be obtained upon any sale or foreclosure of the property, we may not realize an amount equal to the indebtedness secured by the property. In addition, we rely on appraisals and other valuation techniques to establish the value of our OREO and to determine certain loan impairments. If any of these valuations are inaccurate, our consolidated financial statements may not reflect the correct value of OREO, and our Allowance for credit losses on loans and leases may not reflect accurate loan impairments. The valuation of the properties securing the loans in our portfolio may

negatively impact the continuing value of those loans and could materially adversely affect our business, results of operations and financial condition.

We could be subject to losses, regulatory action or reputational harm due to fraudulent and negligent acts on the part of loan applicants, our borrowers, our employees and vendors.

In deciding whether to extend credit or enter into other transactions with customers and counterparties, we may rely on information furnished by or on behalf of customers and other third parties, including financial statements, property appraisals, title information, employment and income documentation, account information and other financial information which may include information furnished by sellers to our borrowers in connection with business acquisitions that we finance. We may also rely on representations of clients and other third parties as to the accuracy and completeness of such information and, with respect to financial statements, on reports of independent auditors. Any such misrepresentation or incorrect or incomplete information may not be detected prior to funding a loan or during our ongoing monitoring of outstanding loans. In addition, one or more of our employees or vendors could cause a significant operational breakdown or failure, either as a result of human error or where an individual purposefully sabotages or fraudulently manipulates our loan documentation, operations or systems. Any of these developments could have a material adverse effect on our business, results of operations and financial condition.

New lines of business or new products and services may subject us to additional risks.

We are focused on our long-term growth and have undertaken various new business initiatives, many of which involve activities that are new to us, or in some cases, are in the early stages of development. From time to time, we may develop, grow and/or acquire new lines of business or offer new products and services within existing lines of business. There are substantial risks and uncertainties associated with these efforts, particularly in instances where the markets for these products and services are not fully developed. For example, we have launched a Venture Banking vertical where we provide credit and other financial services to venture-backed businesses that often have limited operating histories and are incurring significant losses. During 2019, our subsidiary Canapi Advisors began providing investment advisory services to a series of new funds focused on providing venture capital to new and emerging financial technology companies. Given our evolving business and product diversification, these and other new initiatives may subject us to, among other risks, increased business, reputational and operational risk, as well as more complex legal, third-party, regulatory and compliance costs and risks.

In developing and marketing new lines of business and/or new products and services, we may invest significant time and resources. Initial timetables for the introduction and development of new lines of business and/or new products or services may not be achieved, and price and profitability targets may not prove feasible. External factors, such as compliance with regulations, competitive alternatives and shifting market preferences, may also impact the successful implementation of a new line of business or a new product or service. Furthermore, any new line of business and/or new product or service could have a significant impact on the effectiveness of our system of internal controls. Failure to successfully manage these risks in the development and implementation of new lines of business or new products or services could have a material adverse effect on our business, results of operations and financial condition. All service offerings, including current offerings and those which may be provided in the future, may become more risky due to changes in economic, competitive and market conditions beyond our control.

We are subject to risk in connection with our strategic activities, including acquisitions, joint ventures, partnerships, and investments.

We are engaged, and may in the future engage, in strategic activities, including acquisitions, joint ventures, partnerships, investments or other business growth initiatives or undertakings. There can be no assurance that we will successfully identify appropriate opportunities, that we will be able to negotiate or finance such activities or that such activities, if undertaken, will be successful.

Our ability to execute strategic activities and new business initiatives successfully will depend on a variety of factors. These factors likely will vary based on the nature of the activity but may include our success in integrating an acquired company or a new internally-developed growth initiative into our business, operations, services, products, personnel and systems, operating effectively with any partner with whom we elect to do business, meeting applicable regulatory requirements and obtaining applicable regulatory licenses or other approvals, hiring or retaining key employees, achieving anticipated synergies, meeting management's expectations, actually realizing the anticipated benefits of the activities, and overall general market conditions. Our ability to address these matters successfully cannot be assured. In addition, our strategic efforts may divert resources or management's attention from ongoing business operations and may subject us to additional regulatory scrutiny and potential liability. If we do not successfully execute a strategic undertaking, it could adversely affect our business, financial condition, results of operations, reputation or growth prospects. In addition, if we were to conclude that the value of an acquired business

had decreased and that the related goodwill had been impaired, that conclusion would result in an impairment of goodwill charge to us, which would adversely affect our results of operations.

In addition, in order to finance future strategic undertakings, we might require additional financing, which might not be available on terms favorable to us, or at all. If obtained, equity financing could be dilutive and the incurrence of debt and contingent liabilities could have a material adverse effect on our business, results of operations or financial condition.

Our investments in financial technology companies and initiatives, including the activities of our subsidiary Canapi Advisors, subject us to material financial, reputational and strategic risks.

Our investments in various financial technology companies have had a significant impact on our results of operations, and we anticipate they will continue to have a significant impact on our results of operations in the future. Investments where we have the ability to exercise significant influence but not control over the operating and financial policies of the investee are accounted for using the equity method of accounting. For investments accounted for under the equity method, we increase or decrease our investment by our proportionate share of the investee's net income or loss. Those investments where we are not able to exercise significant influence over the investee are accounted for under ASC 323, Investments – Equity Method and Joint Ventures, as equity securities, where changes in fair value resulting from observable price changes arising from orderly transactions are recognized in net income. We also periodically evaluate our investments for impairment. See Note 1. Organization and Summary of Significant Accounting Policies under the subheading entitled "Investments" for more information.

Any earnings from our financial technology investments can be volatile and difficult to predict. Furthermore, we invest in many of these financial technology companies for strategic purposes. Where we are a minority shareholder, we may be unable to influence the activities of these organizations which could have an adverse impact on our ability to execute our strategic initiatives and successfully develop and implement the banking platform we are developing with these and other partners.

Our subsidiary Canapi Advisors is an investment advisor to Canapi Ventures, a series of funds focused on providing venture capital to new and emerging financial technology companies. Canapi Ventures invests in early to growth-stage companies that may include companies that utilize advanced science, technology, engineering and/or mathematics to innovate in the financial technology market. Investments in these companies involve a high degree of business and financial risk that can result in substantial losses. These companies may be unseasoned, unprofitable or have no established operating histories or earnings and may lack technical, marketing, financial and other resources. These companies often have the need for substantial additional capital to support expansion or to achieve or maintain a competitive position. Less established companies tend to have lower capitalization and fewer resources and, therefore, are often more vulnerable to financial failure. These companies may be dependent upon the success of one product or service, a unique distribution channel, or the effectiveness of its manager or management team. The failure of this one product, service or distribution channel, or the loss or ineffectiveness of a key executive or executives within the management team may have a materially adverse impact on such companies. Such companies may face intense competition, including competition from companies with greater financial resources, more extensive development, manufacturing, marketing and service capabilities and a larger number of qualified managerial and technical personnel. If Canapi Advisors is unable to successfully identify investment opportunities, it will likely lose the capital that it invests on behalf of the fund's investors, including the capital that we will invest, and will not generate any carried interest for the benefit of the Company, which would have a materially adverse effect on our results of operations, our reputation and our ability to raise successive funds for similar purposes.

Many of the financial technology companies in which we invest present risks similar to those in which Canapi Ventures invests. The possibility that the companies in which we and Canapi Ventures invest will not be able to commercialize their technology or product concept presents significant risk to our business operations and financial results. These companies tend to lack management depth, to have limited or no history of operations and to not have attained profitability. Additionally, although some of these companies may already have a commercially successful product or product line at the time of investment, technology products and services often have a more limited market or life span than products in other industries. Thus, the ultimate success of these companies may depend on their ability to continually innovate in increasingly competitive markets. Most of the companies in which we and Canapi Ventures invest will require substantial additional equity financing to satisfy their continuing growth and working capital requirements. Each round of venture financing is typically intended to provide a company with enough capital to reach the next stage of development. The circumstances or market conditions under which such companies will seek additional capital is unpredictable. It is possible that one or more of such companies will not be able to raise additional financing or may be able to do so only at a price or on terms which are unfavorable.

Our investments in other companies may be illiquid.

The equity securities of the companies in which we and Canapi Ventures invest are at the time of acquisition unmarketable and illiquid, and there can be no assurance that a ready market for these securities will ever exist. Such securities generally cannot be sold publicly without prior agreement with the issuer to register the securities under the Securities Act or by selling such securities under Rule 144 or other provisions of the Securities Act which permit only limited sales under specified conditions. We generally will realize the value of such securities only if the issuer is able to make an initial public offering of its shares or enters into a business combination with another company which purchases our equity securities or exchanges them for publicly traded securities of the acquirer. The feasibility of such transactions depends upon the company's financial results as well as general economic and equity market conditions. Furthermore, even if the equity securities owned become publicly traded, our ability to sell such securities may be limited by the lack of or limited nature of a trading market for such securities. There can be no assurance that the value at which we carry these assets will necessarily reflect the amount which could be realized upon a sale or other liquidity event.

We may be adversely impacted by the transition from LIBOR as a reference rate.

In 2017, the United Kingdom's Financial Conduct Authority announced that after 2021 it would no longer compel banks to submit the rates required to calculate the London Interbank Offered Rate ("LIBOR"). This announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. Consequently, at this time, it is not possible to predict whether and to what extent banks will continue to provide submissions for the calculation of LIBOR. Similarly, it is not possible to predict whether LIBOR will continue to be viewed as an acceptable market benchmark, what rate or rates may become accepted alternatives to LIBOR, or what the effect of any such changes in views or alternatives may be on the markets for LIBOR-indexed financial instruments.

We have loans and other financial instruments with attributes that are either directly or indirectly dependent on LIBOR. The transition from LIBOR could create considerable costs and additional risk. Since proposed alternative rates are calculated differently, payments under contracts referencing new rates will differ from those referencing LIBOR. The transition will change our market risk profiles, requiring changes to risk and pricing models, valuation tools, product design and hedging strategies. Furthermore, failure to adequately manage this transition process with our customers could adversely impact our reputation. Although we are currently assessing the impact of the transition from LIBOR, failure to adequately manage the transition could have a material adverse effect on our business, financial condition and results of operations.

Our investments and/or financings in certain tax-advantaged projects may not generate returns as anticipated and may have an adverse impact on our financial results.

We invest in and/or finance certain tax-advantaged projects promoting renewable energy sources. Our investments in these projects are designed to generate a return primarily through the realization of federal and state income tax credits, and other tax benefits, over specified time periods. We utilize an investment tax credit for the installation of certain solar power facilities. We are subject to the risk that previously recorded tax credits, which remain subject to recapture by taxing authorities based on compliance features required to be met at the project level, will fail to meet certain government compliance requirements and will not be able to be fully realized. The possible inability to realize these tax credits and other tax benefits can have a negative impact on our financial results. The risk of not being able to realize the tax credits and other tax benefits depends on many factors outside of our control, including changes in the applicable provisions of the tax code and the ability of the projects to be completed and properly managed. In addition, we make loans through the USDA's Rural Energy for America Program, which provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy-efficient improvements. Any changes to applicable provisions of the tax code or other developments could adversely impact demand for these loans even where we are not utilizing an investment tax credit.

Our loan portfolio may be affected by deterioration in real estate markets, including declines in the performance of loans.

Deterioration in real estate markets could result in declining prices and excess inventories. As a result, developers may experience financial deterioration and banking institutions may experience declines in the performance of construction, development and commercial loans. We make credit and reserve decisions based on the current conditions of borrowers or projects combined with our expectations for the future. If conditions are worse than forecast, we could experience higher charge-offs and delinquencies than is provided in the allowance for credit losses on loans and leases, which could materially adversely affect our business, results of operations and financial condition.

Deterioration in the commercial soundness of our counterparties could adversely affect us.

Our ability to engage in routine funding transactions could be adversely affected by the actions and commercial soundness of other financial institutions. Financial services institutions are interrelated as a result of trading, clearing, counterparty or other relationships, and we routinely execute transactions with counterparties in the financial industry. As a result, defaults by, or even rumors or questions about, one or more financial services institutions, or the financial services industry generally, could create another market-wide liquidity crisis similar to that experienced in late 2008 and early 2009 and could lead to losses or defaults by us or by other institutions. The deterioration or failure of our counterparties would have a material adverse effect on our business, results of operations and financial condition.

We have different lending risks than larger, more diversified banks.

Our ability to diversify our economic risks is limited. We lend primarily to small businesses in selected industries, which may expose us to greater lending risks than those of banks lending to larger, better-capitalized businesses with longer operating histories. Small businesses generally have fewer financial resources in terms of capital or borrowing capacity than larger entities and may have limited operating histories. If economic conditions negatively impact the verticals in which we operate, our business, results of operations and financial condition may be adversely affected.

We attempt to manage our credit exposure through careful monitoring of loan applicants and through loan approval and review procedures. We have established an evaluation process designed to determine the adequacy of our allowance for credit losses on loans and leases. While this evaluation process uses historical and other objective information, the classification of loans and the establishment of loan losses is an estimate based on experience, judgment and expectations regarding our borrowers, and the economies in which we and our borrowers operate, as well as the judgment of our regulators. This is an inherently uncertain process, and our loan loss reserves may not be sufficient to absorb future loan losses or prevent a material adverse effect on our business, results of operations and financial condition.

Insiders have substantial control over us, and this control may limit our shareholders' ability to influence corporate matters and may delay or prevent a third party from acquiring control over us.

As of January 31, 2021, our directors and executive officers and their related entities own, in the aggregate, approximately 26.0% of our outstanding common stock. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise. In addition, these shareholders will be able to exercise influence over all matters requiring shareholder approval, including the election of directors and approval of corporate transactions, such as a merger or other sale of our company or its assets. This concentration of ownership could limit the ability of other shareholders to influence corporate matters and may have the effect of delaying or preventing a change in control, including a merger, consolidation or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control, even if that change in control would benefit our other shareholders. For information regarding the ownership of our outstanding stock by our executive officers and directors and related entities, see "Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters" in this Report.

Risks Related to Our Investment in Apiture

If the market for Apiture's digital banking solutions develops more slowly than we expect or changes in ways that we fail to anticipate, our operating results would be adversely affected.

Use of and reliance on digital banking solutions is at an early stage, and we do not know whether the market will develop more slowly than we anticipate. Many financial institutions have invested substantial resources in legacy software, and these institutions may be reluctant or unwilling to convert from their existing systems to Apiture's digital banking solutions. Furthermore, for most financial institutions, transitioning from an existing software provider (or from an internally developed legacy system) to a new provider is a significant and expensive undertaking. Potential customers of Apiture's digital banking solutions may conclude that switching providers involves too many potential disadvantages such as disruption of business operations, loss of accustomed functionality and increased costs (including conversion and transition costs). Furthermore, some financial institutions may be reluctant or unwilling to use a cloud-based solution over concerns such as the security of their data and reliability of the delivery model. These concerns or other considerations may cause potential customers to choose not to adopt cloud-based solutions such as those being developed by Apiture or to adopt alternative solutions, either of which could have a material adverse impact on our business, results of operations and financial condition.

Apiture's future success will depend on its ability to develop, sell and deliver new or enhanced solutions to financial institution clients; however, these solutions and related services may not be attractive to existing or prospective clients. In addition, promoting, selling and delivering these new and enhanced solutions may require increasingly costly sales, marketing and implementation efforts. We also anticipate that Apiture will face challenges from its current competitors, which in many cases are more established and enjoy greater resources than it does, as well as by new entrants into the industry. If Apiture fails to introduce new product designs or technologies in a timely manner, or if existing or prospective clients choose not to adopt Apiture's solutions, our business, results of operations and financial condition could be materially and adversely affected.

Apiture may experience development delays or software defects, which could adversely impact its potential profitability and our results of operations.

Apiture's digital banking solution will require sophisticated software and computing systems that may encounter development delays or software defects. Defects in Apiture's software offerings or delays in the development of such software could result in unforeseen costs, diversion of technical and other resources, loss of credibility with existing and potential clients or reputational harm, any of which could materially adversely affect our business, results of operations and financial condition. Furthermore, to the extent that the Bank is involved in beta testing or early adoption of Apiture's digital banking solutions, the Bank's personnel and resources may be diverted from the day-to-day operation of the Bank, and the Bank's operations may be adversely impacted.

Apiture's ability to anticipate and respond to changing industry trends and the needs and preferences of financial institution clients may affect its competitiveness or demand for its digital banking solutions, which may adversely affect our operating results.

The financial services, payments, and technology industries are subject to rapid technological advancements, new products and services, an evolving competitive landscape, developing industry standards and changing client and consumer needs and preferences. We expect that new services and technologies applicable to the financial services, payments and technology industries will continue to emerge and evolve. These changes in technology may limit the competitiveness of and demand for products or services offered by Apiture. Also, Apiture's existing and prospective financial institution clients and their respective customers continue to adopt new technology for business and personal uses. Apiture must anticipate and respond to these changes in order to compete in its market.

Apiture's failure to develop products and services that meet the needs and preferences of its clients could have an adverse effect on its ability to compete effectively. Furthermore, potential negative reaction to Apiture's products and services can spread quickly through social media and damage its reputation before it has the opportunity to respond. If Apiture is unable to anticipate or respond to technological changes or evolving industry demands on a timely basis, our business, results of operations and financial condition could be materially adversely affected.

If Apiture is unable to effectively integrate its digital banking solutions with other systems used by financial institutions, its solutions will not operate effectively and our results of operations could be adversely affected.

The functionality of Apiture's digital banking solutions will depend on its ability to integrate with other third-party systems used by potential clients, including well-established core processing systems. Certain providers of these third-party systems also offer solutions that are competitive to the solutions being developed by Apiture and may have an advantage with clients already using their software by having better ability to integrate with their software and by being able to bundle their competitive products with other applications used by Apiture's existing and prospective financial institution clients at favorable pricing.

Security breaches or attacks on Apiture's systems may have a significant effect on our business.

In order to offer its products and services, Apiture must process, store, and transmit sensitive business information and personal consumer information, including, but not limited to, names, bankcard numbers, home or business addresses, social security numbers, driver's license numbers and bank account numbers. Under various federal, state and international laws, Apiture is responsible for information provided to it by financial institutions, merchants, third-party service providers, and others. Maintaining the confidentiality of such sensitive business information and personal consumer information will be critical to Apiture's business; however, Apiture cannot be certain that the security measures and procedures it puts in place to protect this sensitive data will be successful or sufficient to counter all current and emerging technology threats designed to breach network security in order to gain access to confidential information. Cloud technologies, including third-party cloud infrastructure, are also critical to the operation of Apiture's systems. The increasing sophistication of cyber criminals and their continuous attempts to breach networks presents risk of a security breach of Apiture's systems. A breach of Apiture's systems processing or storing sensitive business information or personal consumer information could lead to claims against it, reputational damage, lost clients and lost revenue, substantial additional costs (including costs of notification of consumers, credit monitoring, card reissuance, contact centers and forensics), loss of clients' and their customers' confidence, as well as imposition of fines and damages, all of which could materially adversely affect our business, results of operations and financial condition. The increased use of mobile and cloud technologies, as well as the increase in remote work due to the COVID-19 pandemic, can heighten these and other operational risks. In addition, as security threats continue to evolve, Apiture will be required to invest additional resources to modify and update the security of its systems. The level of required investment could materially adversely affect our business, results of operations and financial condition.

Apiture may experience breakdowns in its processing systems that could damage client relations and expose it to liability.

Apiture's business will rely heavily on the reliability of its processing systems. A system outage could have a material adverse effect on Apiture's business, financial condition, and results of operations. Not only would it suffer damage to its reputation in the event of a system outage, but Apiture may also be liable to third parties. To successfully operate its business, Apiture must be able to protect its processing and other systems from interruption, including from events that may be beyond its reasonable control. Events that could cause system interruptions include, but are not limited to, fire, natural disaster, unauthorized entry, power loss, telecommunications failure, computer viruses, terrorist acts, cyber attacks and war. To the extent Apiture outsources its disaster recovery functions, it is at risk of the vendor's unresponsiveness or other failures in the event of system breakdowns.

Legislation relating to consumer privacy might affect Apiture's ability to collect data that it uses in providing customers' account holder and end-user information, which, among other things, could negatively affect its ability to satisfy its customers' needs.

Apiture collects and stores personal and identifying information regarding customers' account holders and end-users to enable certain functionality of its solutions and provide customers with data about their account holders and end-users. The enactment of new or amended legislation or industry regulations pertaining to consumer or private sector privacy issues could have a material adverse impact on Apiture's collection, storage, and sharing of such information. Legislation or industry regulations regarding consumer or private sector privacy issues could place restrictions upon the collection, sharing and use of information that is currently legally available, which could materially increase Apiture's cost of collecting some data. These types of legislation or industry regulations could also prohibit Apiture from collecting or disseminating certain types of data, which could adversely affect its ability to meet customers' requirements and its profitability and cash flow targets. Every state, the District of Columbia, and the Federal Financial Institutions Examination Council have enacted data breach notification laws or requirements. These legislative measures impose strict requirements on reporting time frames for providing notice, as well as the contents of such notices. The costs of compliance with, the inability to determine whether a data breach has occurred within the time frame provided by, and other burdens imposed by, such laws and regulations may lead to significant fines, penalties or liabilities for any noncompliance with such privacy laws. Even the perception of privacy concerns, whether or not valid, may inhibit market adoption of Apiture's solutions, which could have a material adverse effect on our business, financial condition, operating results and the value of our investment in Apiture.

Apiture uses “open source” software in its solutions, which might restrict how it uses or distributes its solutions, require that it release the source code of certain software subject to open source licenses or subject it to litigation or other actions that could adversely affect its business.

Apiture currently uses in its solutions, and may use in the future, software that is licensed under “open source,” “free” or other similar licenses where the licensed software is made available to the general public on an “as-is” basis under the terms of a specific non-negotiable license. Some open-source software licenses require that software subject to the license be made available to the public and that any modifications or derivative works based on the open-source code be licensed in source code form under the same open-source licenses. Although Apiture monitors its use of open-source software, there can be no assurance that all open source software is reviewed prior to use in its solutions, that its programmers have not incorporated open source software into its solutions, or that they will not do so in the future. In addition, some of Apiture’s products may incorporate third-party software under commercial licenses. Apiture cannot be certain whether such third-party software incorporates open-source software without its knowledge. In the past, companies that incorporate open source software into their products have faced claims alleging noncompliance with open source license terms or infringement or misappropriation of proprietary software, but because few courts have interpreted open source licenses, the manner in which these licenses may be interpreted and enforced is subject to some uncertainty. There is a risk that open source software licenses could be construed in a manner that imposes unanticipated conditions or restrictions on Apiture’s ability to market or provide its solutions. As a result of using open source software subject to such licenses, Apiture could be required to release its proprietary source code, pay damages, re-engineer its products, limit or discontinue sales or take other remedial action, any of which could adversely affect our business, financial condition, operating results and the value of our investment in Apiture.

Risks Related to Our Regulatory Environment

We are subject to extensive regulation that could limit or restrict our activities.

We operate in a highly regulated industry and are subject to examination, supervision, and comprehensive regulation by various federal and state regulatory agencies. Our compliance with these regulations is costly and restricts certain of our activities, including the declaration and payment of cash dividends to shareholders, mergers and acquisitions, investments, loans and interest rates charged, interest rates paid on deposits, and locations of offices. We are also subject to capitalization guidelines established by our regulators, which require us to maintain adequate capital to support our growth and operations. See “Supervision and Regulation” above for more information on the federal and state laws, rules and regulations that apply to our business activities. Should we fail to comply with these regulatory requirements, federal and state regulators could impose additional restrictions on the activities of the Company and the Bank, which could materially and adversely affect our business, results of operations and financial condition.

The laws and regulations applicable to the banking industry have changed in recent years and may continue to change, and we cannot predict the effects of these changes on our business and profitability. Because government regulation greatly affects the business and financial results of all commercial banks and bank holding companies, our cost of compliance could adversely affect our business, results of operations and financial condition.

Our financial condition and results of operations are affected by credit policies of monetary authorities, particularly the Federal Reserve. Actions by monetary and fiscal authorities, including the Federal Reserve, could have an adverse effect on our deposit levels, loan demand, or business and earnings, as well as the value of our common stock.

We are required to maintain capital to meet regulatory requirements, and, if we fail to maintain sufficient capital, whether due to growth opportunities, losses or an inability to raise additional capital or otherwise, our financial condition, liquidity and results of operations, as well as our compliance with regulatory requirements, would be adversely affected.

Both we and the Bank are required to meet regulatory capital requirements and otherwise need to maintain sufficient liquidity to support recent and future growth. We have continued to experience considerable growth recently. Asset growth, diversification of our business, expansion of our financial product offerings and other changes in our asset mix continue to require higher levels of capital. Our ability to raise additional capital, when and if needed in the future, to meet such regulatory capital requirements and liquidity needs will depend on conditions in the capital markets, general economic conditions, the performance and prospects of our business and a number of other factors, many of which are outside of our control. We cannot assure you that we will be able to raise additional capital if needed or raise additional capital on terms acceptable to us. If we fail to meet these capital and other regulatory requirements, our financial condition, liquidity and results of operations could be materially and adversely affected.

Although we comply with all current applicable capital requirements, we may be subject to more stringent regulatory capital requirements in the future, and we may need additional capital in order to meet those requirements. If we or the Bank fail to meet applicable minimum capital requirements or cease to be well capitalized, such failure would cause us and the Bank to be subject to regulatory restrictions and could adversely affect customer confidence, our ability to grow, our costs of funds and FDIC insurance costs, our ability to pay dividends on common stock and/or repurchase shares, our ability to make acquisitions, and our business, results of operations and financial condition, generally.

Our deposit operations are subject to extensive regulation, and we expect additional regulatory requirements to be implemented in the future.

We are subject to significant anti-money laundering, “know your customer” and other regulations under applicable law, including the Bank Secrecy Act and the USA PATRIOT Act, and we could become subject in the future to additional regulatory requirements beyond those that are currently adopted, proposed or contemplated. We expect that federal and state bank regulators will increase their oversight, inspection and investigatory role over our deposit operations and the financial services industry generally. Furthermore, we intend to increase our deposit product offerings and grow our customer deposit portfolio in the future and, as a result, we are, and will continue to be, subject to heightened compliance and operating costs that could adversely affect our business, results of operations and financial condition. In addition, legal and regulatory proceedings and other contingencies will arise from time to time that may have an adverse effect on our business practices and results of operations.

The FDIC Deposit Insurance assessments that we are required to pay may continue to materially increase in the future, which would have an adverse effect on our earnings.

As a member institution of the FDIC, our Bank is assessed a quarterly deposit insurance premium. During 2009 to 2012, the large number of bank failures across the nation significantly depleted the deposit insurance fund, or DIF, and reduced the ratio of reserves to insured deposits. On October 19, 2010, the FDIC adopted a DIF Restoration Plan, which requires the DIF to attain a 1.35% reserve ratio by September 30, 2020. The Dodd-Frank Act directs the FDIC to “offset the effect” of the increased reserve ratio for insured depository institutions with total consolidated assets of less than \$10 billion. In addition, the FDIC modified the method by which assessments are determined and, effective April 1, 2011, adjusted assessment rates, which currently range from 2.5 to 45 basis points (annualized), subject to adjustments for unsecured debt and, in the case of small institutions outside the lowest risk category and certain large and highly complex institutions, brokered deposits. As a result, we may be required to pay significantly higher premiums or additional special assessments that could adversely affect our business, results of operations and financial condition. Increased FDIC assessment premiums, due to our risk classification, emergency assessments, or implementation of the modified DIF reserve ratio, could have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Our Common Stock

The low trading volume in our common stock may adversely affect your ability to resell shares at prices that you find attractive or at all.

Our common stock is listed for quotation on the NASDAQ Global Select Market under the ticker symbol “LOB”. The average daily trading volume for our common stock is less than that of larger financial institutions. Due to its relatively low trading volume, sales of our common stock may place significant downward pressure on the market price of our common stock. Furthermore, it may be difficult for holders to resell their shares at prices they find attractive, or at all.

Future sales of shares of our common stock by existing shareholders could depress the market price of our common stock.

Live Oak Bancshares, Inc. had 42,583,232 shares of common stock outstanding at January 31, 2021. In addition, as of January 31, 2021, there were outstanding options to purchase 1,859,911 shares of our common stock that, if exercised, will result in these additional shares becoming available for sale. Also, as of January 31, 2021, there were 842,503 outstanding restricted stock units that vest over time and 382,750 outstanding restricted stock units that vest based on stock price performance criteria, that when vested will result in additional shares becoming available for sale. A large portion of these shares, options and restricted stock units are held by a small number of persons. Sales by these shareholders or option and restricted stock unit holders of a substantial number of shares could significantly reduce the market price of our common stock.

Our ability to pay cash dividends on our securities is limited and we may be unable to pay future dividends.

We may not declare or pay dividends on our securities, including our common stock, in the future. Any future determination relating to dividend policy will be made at the discretion of our board of directors and will depend on a number of factors, including our future earnings, capital requirements, financial condition, future prospects, regulatory restrictions, and other factors that our board of directors may deem relevant. The holders of our capital stock are entitled to receive dividends when, and if, declared by our board of directors out of funds legally available for that purpose. As part of our consideration to pay cash dividends, we intend to retain adequate funds from future earnings to support the development and growth of our business. In addition, our ability to pay dividends is restricted by federal policies and regulations. It is the current policy of the Federal Reserve that bank holding companies should pay cash dividends on capital stock only out of net income available over the past year and only if prospective earnings retention is consistent with the organization's expected future needs and financial condition. Further, a principal source of funds to pay dividends is cash dividends that we receive from the Bank, which, in turn, will be highly dependent upon the Bank's historical and projected results of operations, liquidity, cash flows and financial condition, as well as various legal and regulatory prohibitions and other restrictions on the ability of the Bank to pay dividends, extend credit or otherwise transfer funds to Live Oak Bancshares, Inc.

Additional issuances of common stock or securities convertible into common stock may dilute holders of our common stock.

We may, in the future, determine that it is advisable, or we may encounter circumstances where it is determined that it is necessary, to issue additional shares of common stock, securities convertible into, exchangeable for or that represent an interest in common stock, or common stock-equivalent securities to fund strategic initiatives or other business needs or to build additional capital. Our board of directors is authorized to cause us to issue additional shares of common stock from time to time for adequate consideration without any additional action on the part of our shareholders. The market price of our common stock could decline as a result of other offerings, as well as other sales of a large block of common stock or the perception that such sales could occur.

Live Oak Bancshares, Inc. is subject to extensive regulation, and ownership of its common stock may have regulatory implications for holders thereof.

The Company is subject to extensive federal and state banking laws, including the Bank Holding Company Act of 1956, as amended, or BHCA, and federal and state banking regulations, that impact the rights and obligations of owners of its common stock, including, for example, its ability to declare and pay dividends on its common stock.

Shares of Live Oak Bancshares, Inc.'s common stock are voting securities for purposes of the BHCA and any bank holding company or foreign bank that is subject to the BHCA may need approval to acquire or retain more than 5% of the then outstanding shares of Live Oak Bancshares Inc.'s common stock, and any holder (or group of holders deemed to be acting in concert) may need regulatory approval to acquire or retain 10% or more of the shares of LOB's common stock. Furthermore, the BHCA generally requires regulatory approval before any individual or company may acquire 25% or more of any class of Live Oak Bancshares Inc.'s common stock, and such regulatory approval may be required under certain circumstances if a person, company or group acting in concert acquires 10% or more, but less than 25% of Live Oak Bancshares Inc.'s common stock. Under certain limited circumstances, a holder or group of holders acting in concert may exceed the 25% percent threshold and not be deemed to control us until they own 33% percent or more of our total equity. The amount of total equity owned by a holder or group of holders acting in concert is calculated by aggregating all shares held by the holder or group, whether as a combination of voting or non-voting shares or through other positions treated as equity for regulatory or accounting purposes and meeting certain other conditions. Holders of Live Oak Bancshares Inc.'s common stock should consult their own counsel with regard to regulatory implications.

Offerings of debt, which would rank senior to Live Oak Bancshares, Inc.'s common stock upon liquidation, may adversely affect the market price of Live Oak Bancshares, Inc.'s common stock.

The Company may attempt to increase its capital resources or, if regulatory capital ratios fall below the required minimums, The Company could be forced to raise additional capital by making additional offerings of debt or equity securities, senior or subordinated notes, preferred stock and common stock. Upon liquidation, holders of the Company's debt securities and lenders with respect to other borrowings will receive distributions of available assets prior to the holders of Live Oak Bancshares Inc.'s common stock.

Anti-takeover provisions could adversely affect Live Oak Bancshares, Inc. shareholders.

In some cases, shareholders would receive a premium for their shares if Live Oak Bancshares Inc. were acquired by another company. However, state and federal law and Live Oak Bancshares Inc.'s articles of incorporation and bylaws make it difficult for anyone to acquire the Company without approval of the Live Oak Bancshares Inc.'s board of directors. For example, Live Oak Bancshares Inc.'s articles of incorporation require a supermajority vote of two-thirds of our outstanding common stock in order to effect a sale or merger of the Company in certain circumstances. Consequently, a takeover attempt may prove difficult, and shareholders may not realize the highest possible price for their securities.

Shares of Live Oak Bancshares, Inc.'s common stock are not insured deposits and may lose value.

Shares of Live Oak Bancshares, Inc.'s common stock are not savings accounts, deposits or other obligations of any depository institution and are not insured or guaranteed by the FDIC or any other governmental agency or instrumentality, any other deposit insurance fund or by any other public or private entity. An investment in our common stock is inherently risky for the reasons described in this "Risk Factors" section. As a result, if you acquire shares of our common stock, you may lose some or all of your investment.

General Risk Factors

We face strong competition from a diverse group of competitors.

The banking business is highly competitive, and we experience strong competition from many other financial institutions, including some of the largest commercial banks headquartered in the country, as well as other federally and state chartered financial institutions such as community banks and credit unions, finance and business development companies, commercial and consumer finance companies, peer-to-peer and marketplace lenders, securities brokerage firms, insurance companies, money market and mutual funds and other non-bank lenders.

We compete with these institutions both in attracting deposits and in making loans, primarily on the basis of the interest rates we pay and yield on these products. We also compete with these institutions in our other business lines, including equipment leasing and wealth management. Many of our competitors are well-established, much larger financial institutions. While we believe we can successfully compete with these other lenders in our industry verticals, we may face a competitive disadvantage as a result of our smaller size. Furthermore, nothing would prevent our competitors from developing or licensing a technology-based platform similar to the technology-based platform we currently use in our business. In addition, many of our non-bank competitors have fewer regulatory constraints and may have lower cost structures. We expect competition to continue to intensify due to financial institution consolidation, legislative, regulatory and technological changes, and the emergence of alternative banking sources.

Our ability to compete successfully will depend on a number of factors, including, among other things:

- our ability to build and maintain long-term customer relationships while ensuring high ethical standards and safe and sound banking practices;
- the scope, relevance and pricing of products and services that we offer;
- customer satisfaction with our products and services;
- industry and general economic trends; and
- our ability to keep pace with technological advances and to invest in new technology.

Increased competition could require us to increase the rates we pay on deposits or lower the rates we offer on loans, which could reduce our profitability. Our failure to compete effectively in our primary markets could cause us to lose market share and could have a material adverse effect our business, results of operations and financial condition.

We rely heavily on our management team and depend on our ability to attract and retain key personnel, and the unexpected loss of any of those personnel could adversely affect our operations.

We are a customer-focused and relationship-driven organization. We expect our future growth to be driven in a large part by the relationships maintained with our customers and partners by our chief executive officer, president, and other senior officers.

The unexpected loss of any of our key employees could have an adverse effect on our business, results of operations and financial condition. The implementation of our business strategy will also require us to continue to attract, hire, motivate and retain skilled personnel to develop new customer relationships as well as new financial products and services. We are not party to non-compete or non-solicitation agreements with any of our officers or employees. The market for qualified employees in the businesses in which we operate is competitive, and we may not be successful in attracting, hiring or retaining key personnel. Our inability to attract, hire or retain key personnel could have a material adverse effect on our business, results of operations and financial condition.

Our risk management framework may not be effective in mitigating risks and/or losses to us.

We have implemented a risk management framework to manage our risk exposure. This framework is comprised of various processes, systems and strategies, and is designed to manage the types of risk to which we are subject, including, among others, credit, market, liquidity, interest rate and compliance risks. Our framework also includes financial and other modeling methodologies which involve management assumptions and judgment. Our risk management framework may not be effective under all circumstances and it may fail to adequately identify or mitigate risk or loss to us. If our framework is not effective, we could suffer unexpected losses and be subject to potentially adverse regulatory consequences, and our business, results of operations and financial condition could be materially and adversely affected.

Hurricanes or other adverse weather events could disrupt our operations, which could have an adverse effect on our business or results of operations.

North Carolina's coastal region is affected, from time to time, by adverse weather events, particularly hurricanes. We cannot predict whether, or to what extent, damage caused by future hurricanes or other weather events will affect our operations. Weather events could cause a disruption in our day-to-day business activities and could have a material adverse effect on our business, results of operations and financial condition.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results. As a result, current and potential shareholders could lose confidence in our financial reporting which would harm our business and the trading price of our securities.

If we identify material weaknesses in our internal control over financial reporting or are otherwise required to restate our financial statements, we could be required to implement expensive and time-consuming remedial measures and could lose investor confidence in the accuracy and completeness of our financial reports. We may also face regulatory enforcement or other actions, including the potential delisting of our securities from NASDAQ. This could have a material adverse effect on our business, financial condition and results of operations, and could subject us to litigation.

Changes in accounting standards and management's selection of accounting methods, including assumptions and estimates, could materially impact our financial statements.

From time to time the SEC and the Financial Accounting Standards Board, or FASB, update accounting principles generally accepted in the United States ("GAAP") that govern the preparation of our financial statements. In addition, the FASB, SEC, bank regulators and the outside independent auditors may revise their previous interpretations regarding existing accounting regulations and the application of these accounting standards. These changes can be hard to predict and can materially impact how we record and report our financial condition and results of operations. In some cases, we could be required to apply a new or revised standard retroactively, resulting in changes to previously reported financial results, or a cumulative charge to retained earnings. In addition, management is required to use certain assumptions and estimates in preparing our financial statements, including determining the fair value of certain assets and liabilities, among other items. If the assumptions or estimates are incorrect, we may experience unexpected material adverse consequences that could negatively affect our business, results of operations and financial condition.

Our business reputation is important and any damage to it could have a material adverse effect on our business.

Our reputation is very important to sustain our business, as we rely on our relationships with our current, former and potential customers, our technology and other strategic partners, our shareholders, and the industries that we serve. Any damage to our reputation, whether arising from legal, regulatory, supervisory or enforcement actions, matters affecting our financial reporting or compliance with SEC and exchange listing requirements, negative publicity, the conduct of our business or otherwise could have a material adverse effect on our business, results of operations and financial condition.

Item 1B. UNRESOLVED STAFF COMMENTS

There were no unresolved comments received from the SEC regarding the Company's periodic or current reports.

Item 2. PROPERTIES

The following table sets forth the location of the Company's main offices, as well as additional administrative offices and certain information relating to the facilities.

Office	Address	Year Opened	Approximate Square Footage	Owned or Leased	Operating Segment
Main Offices	1741 Tiburon Dr	2013	36,000	Owned	Banking
	1757 Tiburon Dr	2015	55,000		Fintech
	1805 Tiburon Dr	2019	80,972		
	1811 Tiburon Dr	2019	24,329		
Atlanta, GA Office	3060 Peachtree Rd Ste. 1220	2010	4,455	Leased	Banking
Santa Rosa, CA Office	100 B St Ste. 100	2015	2,386	Leased	Banking
Roseville, CA Office	1223 Pleasant Grove Blvd Ste. 120	2016	1,416	Leased	Banking
Wilmington Flight Operations	1890 Trask Dr	2017	25,500	Owned	Banking Fintech
Washington, DC Office	2099 Pennsylvania Ave, NW	2017	3,698	Leased	Banking
New York, NY Office	212 West 91st St, Apt 635	2018	400	Leased	Banking
Raleigh, NC Office	1017 Main Campus Dr, Ste. 3200	2019	3,889	Leased	Banking
Rocky Mount, NC Office	210 Bryant St, Ste. A	2020	1,698	Leased	Banking

The Company believes that its properties are maintained in good operating condition and are suitable and adequate for its operational needs.

Item 3. LEGAL PROCEEDINGS

In the ordinary course of operations, the Company is at times involved in legal proceedings. In the opinion of management, as of December 31, 2020, 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. In addition, the Company is not aware of any threatened litigation, unasserted claims or assessments that could have a material adverse effect on its business, operating results or financial condition. On December 15, 2020, the Company received a letter from a law firm representing an individual claiming that the Company sought to restrain the mobility of employees in violation of antitrust laws by agreeing not to solicit or hire certain employees. In the letter, the individual threatens to assert claims against the Company and others on a class-action basis. No complaint has yet been filed.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

The Company's voting common stock is traded on the NASDAQ Global Select Market under the symbol "LOB." Quotations of the sales volume and the closing sales prices of the voting common stock of the Company are listed daily in the NASDAQ Global Select Market's listings. As of January 31, 2021, there were 42,583,232 shares outstanding (comprised of 41,603,035 voting common shares and 980,197 non-voting common shares) and 279 holders of record (comprised of 276 holders of record for voting common shares and 3 holders of record for non-voting common shares) for the Company's common stock. The Company's non-voting common stock is not listed for trading on any exchange.

Dividend Policy

The timing and amount of cash dividends paid depends on the Company's earnings, capital requirements, financial condition and other relevant factors. Although the Company has historically paid quarterly cash dividends to its shareholders in the past, shareholders are not entitled to receive dividends. Downturns in domestic and global economies and other factors could cause the Company's board of directors to consider, among other things, the elimination of or reduction in the amount and/or frequency of cash dividends paid on the Company's common stock. See "Supervision and Regulation" under Item 1 of this Report for more information on restrictions on the Company's ability to declare and pay dividends. The Company can offer no assurance that the board of directors will continue to declare or pay cash dividends in any future period.

Recent Sales of Unregistered Securities

On April 1, 2020, the Company issued 89,927 shares of voting common stock to the members of Jolley Asset Management, LLC ("JAM"), pursuant to the acquisition of all of the outstanding membership interests of JAM. These shares were exempt from registration under the Securities Act of 1933, or the Securities Act, because they were issued in a private placement under Section 4(a)(2) of the Securities Act.

Securities Authorized for Issuance under Equity Compensation Plans

See Item 12 of this report for disclosure regarding securities authorized for issuance and equity compensation plans required by Item 201(d) of Regulation S-K.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

On March 15, 2020, the Board of Directors of the Company authorized the repurchase of up to \$20,000,000 in shares of the Company's voting common stock from time to time through December 31, 2020 (the "Repurchase Program"). The Repurchase Program enabled 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 were 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 did not obligate the Company to acquire a specific dollar amount or number of shares and was subject to extension, modification, or discontinuation at any time. Through December 31, 2020, the Company did not make any purchases of shares under the Repurchase Program.

Stock Performance Graph

The stock performance graph required by Item 201(e) of Regulation S-K is incorporated into this Report by reference from the Company's annual report to shareholders for the year ended December 31, 2020, which will be posted on the Company's website subsequent to the date of this Report. The stock performance graph shall not be deemed to be "filed" for purposes of Section 18 of the Exchange Act, nor shall it be deemed to be "soliciting material" subject to Regulation 14A or incorporated by reference in any filing under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 6. SELECTED FINANCIAL DATA

The tables below set forth selected consolidated financial data as of the dates or for the periods indicated. This data should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 and the Consolidated Financial Statements and Notes in Item 8 of this Report.

(dollars in thousands, except per share data)

	As of and for the Year Ended December 31,				
	2020	2019	2018	2017	2016
Income Statement Data					
Net interest income	\$ 194,723	\$ 140,082	\$ 108,043	\$ 78,034	\$ 42,649
Provision for loan and lease credit losses	40,658	15,212	5,558	5,094	4,558
Noninterest income	86,000	63,519	96,265	168,479	85,561
Noninterest expense	192,676	164,924	152,704	143,165	106,445
Income, before income taxes	47,389	23,465	46,046	98,254	17,207
Income tax (benefit) expense	(12,154)	5,431	(5,402)	(2,245)	3,443
Net income	59,543	18,034	51,448	100,499	13,764
Net income attributable to noncontrolling interest	—	—	—	—	9
Net income to common shareholders	59,543	18,034	51,448	100,499	13,773
Period End Balances					
Assets	7,872,303	4,812,828	3,672,937	2,758,474	1,755,261
Loans held for sale	1,175,470	966,447	687,393	680,454	394,278
Loans and leases held for investment	5,145,082	2,627,286	1,825,417	1,329,774	894,876
Allowance for credit losses on loans and leases	52,306	28,234	14,432	9,991	5,519
Deposits	5,712,828	4,226,980	3,152,071	2,260,263	1,485,076
Borrowings	1,542,093	14	1,457	26,564	27,843
Shareholders' equity	567,850	532,386	493,560	436,933	222,847
Per Common Share Data					
Net income per share - basic	1.46	0.45	1.28	2.75	0.40
Net income per share - diluted	1.43	0.44	1.24	2.65	0.39
Operating net income per share (Non-GAAP) - basic (1)	1.49	0.48	1.36	1.29	0.59
Operating net income per share (Non-GAAP) - diluted (1)	1.45	0.47	1.32	1.25	0.57
Dividends declared	0.12	0.12	0.12	0.10	0.07
Book value	13.38	13.20	12.29	10.95	6.51
Tangible book value (1)	13.28	13.20	12.29	10.85	6.51

	As of and for the Year Ended December 31,				
	2020	2019	2018	2017	2016
Performance Ratios					
Return on average assets	0.85%	0.42%	1.52%	4.55%	0.96%
Return on average equity	10.49	3.46	11.00	33.80	6.55
Net interest margin	3.03	3.67	3.64	3.95	3.30
Efficiency ratio (1)	69.10	81.25	74.74	58.08	83.02
Noninterest income to total revenue	30.17	30.99	47.12	68.34	66.73
Average equity to average assets	8.09	12.15	13.83	13.46	14.63
Dividend payout ratio (inclusive of tax distributions)	8.20	26.67	9.38	3.64	17.50
Selected Loan Metrics					
Loans and leases originated	\$4,450,198	\$2,001,886	\$1,765,680	\$1,934,238	\$1,537,010
Guaranteed loans sold	542,596	340,374	945,178	787,926	761,933
Average net gain on sale of guaranteed loans	85.05	84.79	80.91	100.38	98.86
Adjusted average net gain on sale of guaranteed loans (2)	89.89	93.58	80.98	100.53	—
Outstanding balance of sold loans serviced:					
Guaranteed	2,819,625	2,746,480	3,045,460	2,680,641	2,278,618
Unguaranteed	385,998	224,127	174,066	169,355	145,099
Total	3,205,623	2,970,607	3,219,526	2,849,996	2,423,717
Asset Quality Ratios					
Allowance for credit losses to loans and leases held for investment (4)	1.21%	1.57%	1.54%	1.78%	1.91%
Net charge-offs (4)	\$ 15,265	\$ 1,410	\$ 1,117	\$ 622	\$ 1,532
Net charge-offs to average loans and leases held for investment (3) (4)	0.44%	0.10%	0.18%	0.18%	1.15%
Nonperforming loans and leases (4) (5)	\$ 46,110	\$ 21,937	\$ 16,402	\$ 2,902	\$ 5,126
Foreclosed assets	4,155	5,612	1,094	1,281	1,648
Nonperforming loans and leases (unguaranteed exposure) (4) (5)	20,078	7,224	4,118	269	936
Foreclosed assets (unguaranteed exposure)	935	1,120	148	90	246
Nonperforming loans and leases not guaranteed by the SBA and foreclosures (4) (5)	21,013	8,344	4,266	359	1,182
Nonperforming loans, leases and foreclosures, not guaranteed by the SBA, to total assets (4) (5)	0.30%	0.21%	0.15%	0.01%	0.08%
Nonperforming loans accounted for under the fair value option	\$ 35,499	\$ 49,739	\$ 41,289	\$ 19,726	\$ 17,348
Nonperforming loans accounted for under the fair value option (unguaranteed exposure)	5,387	6,700	10,370	2,473	2,509
Capital and Liquidity Ratios					
Common equity tier 1 capital (to risk-weighted assets)	12.15%	14.90%	17.21%	17.92%	15.46%
Total capital (to risk-weighted assets)	13.39	15.74	17.74	18.38	15.86
Tier 1 risk-based capital (to risk-weighted assets)	12.15	14.90	17.21	17.92	15.46
Tier 1 leverage capital (to average assets)	8.40	10.65	13.47	15.59	12.09

(1) See "Non-GAAP Measures" in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of this Report for more information and a reconciliation to the most closely related GAAP measure.

(2) Excludes fair value gain/loss on exchange-traded interest rate futures contracts.

(3) Annual net charge-offs as a percentage of annual average loans and leases held for investment.

(4) Excludes loans measured at fair value.

(5) Year ended December 31, 2020 excludes one \$6.1 million hotel loan classified as held for sale.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

The following presents management's discussion and analysis (MD&A") of the more significant factors that affected the Company's financial condition as of December 31, 2020 and 2019 and results of operations for each of the years in the three-year period ended December 31, 2020. This discussion should be read in conjunction with the financial statements and related notes included elsewhere in this Annual Report on Form 10-K. Results of operations for the periods included in this review are not necessarily indicative of results to be obtained during any future period.

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

Nature of Operations

Live Oak Bancshares, Inc. is a financial holding company and a bank holding company headquartered in Wilmington, North Carolina, incorporated under the laws of North Carolina in December 2008. The Company conducts business operations primarily through its commercial bank subsidiary, Live Oak Banking Company. The Bank was incorporated in February 2008 as a North Carolina-chartered commercial bank. The Bank specializes in lending and deposit related services to small businesses nationwide. The Bank identifies and extends lending to credit-worthy borrowers both within specific industries, also called verticals, through expertise within those industries, and more broadly to select borrowers outside of those industries. A significant portion of the loans originated by the Bank are guaranteed by the U.S. Small Business Administration ("SBA") under the 7(a) Loan program and the U.S. Department of Agriculture ("USDA") Rural Energy for America Program ("REAP"), Water and Environmental Program ("WEP") and Business & Industry ("B&I") loan programs.

In 2018, the Company formed Canapi Advisors, LLC for the purpose of providing investment advisory services to a series of funds focused on providing venture capital to new and emerging financial technology companies. In 2019, Live Oak Clean Energy Financing LLC ("LOCEF") became a subsidiary of the Bank. LOCEF was formed in November 2016 as a subsidiary of the Company for the purpose of providing financing to entities for renewable energy applications. In 2018, the Bank formed Live Oak Private Wealth, LLC, a registered investment advisor that provides high-net-worth individuals and families with strategic wealth and investment management services, and on April 1, 2020, it acquired Jolley Asset Management, LLC to broaden service offerings for existing high-net-worth individuals and families, attract new clients from an expanded footprint and benefit from economies of scale. In 2017, the Bank entered into a joint venture, Apiture LLC ("Apiture"), with First Data Corporation for the purpose of creating next generation technology for financial institutions. In addition to the Bank, the Company owns Live Oak Ventures, Inc., formed in August 2016 for the purpose of investing in businesses that align with the Company's strategic initiative to be a leader in financial technology; Live Oak Grove, LLC, formed in February 2015 for the purpose of providing Company employees and business visitors an on-site restaurant location at the Company's Wilmington, North Carolina headquarters; and Government Loan Solutions, Inc. ("GLS"), a management and technology consulting firm that specializes in the settlement, accounting, and securitization processes for government guaranteed loans, including loans originated under the SBA 7(a) loan program and USDA-guaranteed loans. In 2019, 504 Fund Advisors, LLC ("504FA") exited as the advisor to The 504 Fund, and the Company dissolved this legal entity.

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. The Company elects to account for certain loans under the fair value option with interest reported in interest income and changes in fair value reported in the net (loss) gain on loans accounted for under the fair value option line item of the consolidated statements of 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 in its fintech segment, as discussed more fully later in this section under the caption "Results of Segment Operations."

Recent Developments

The COVID-19 pandemic in the United States continues to have a lingering impact on the economy, the banking industry and the Company, all subject to a high degree of uncertainty. While it is still not possible to know the full universe or extent of these impacts as of the date of this filing, we are disclosing potentially material items of which we are currently aware.

Financial position and results of operations

Relating to our December 31, 2020 financial condition and results of operations, COVID-19 had, and continues to have, impacts on the allowance for credit losses (“ACL”) on loans and leases, loans carried at fair value, loan servicing asset revaluation, net gains on sales of loans and net interest income. However economic forecasts and broader markets did begin to show signs of improvement in the latter part of 2020 and in some cases somewhat reverse pandemic effects recorded earlier in the year. With the pandemic induced economic turmoil of 2020, the ACL and resulting provision for loan and lease credit losses were most significantly impacted by negative economic forecasts (exacerbated by the new current expected credit losses (“CECL”) standard effective January 1, 2020) combined with charge-offs related to COVID-19 while loans accounted for under the fair value were negatively impacted by similar conditions. Improving market conditions in the second half of 2020, also influenced by pandemic response programs, had positive effects on loan fair values. With the ongoing monitoring of effects continuing to emerge in certain pandemic-at-risk verticals combined with the risk that payment deferrals and those being made by the SBA for borrowers under its programs may be skewing actual indications of ability to repay, total credit related reserves continued to grow but at a slower pace due to the above mentioned improving economic forecasts during the latter part of 2020. Refer to the discussion of the ACL and loans at fair value in Notes 3 and 10, respectively, of the note to consolidated financial statements as well as further discussion below in MD&A. Also impacted by improving market conditions was the Company’s valuation of the loan servicing asset as discussed in Note 5 of the notes to consolidated financial statements and net gains on sales of loans, both of which are further discussed below in MD&A. The secondary market continued to improve during the last half of 2020 which also began to somewhat offset earlier negative COVID-19 adjustments for loans carried at fair value and the loan servicing asset valuation. The net interest margin was negatively impacted by significant rate cuts in response to stimulus efforts combined with heightened levels of liquidity earlier in the year as a part of pandemic preparedness, however by year end improvements began to emerge as the deposit portfolio started to reprice and a substantial portion of excess liquidity was utilized to fund significant loan demand, while Paycheck Protection Program (“PPP”) lending had a positive impact on net interest margin as discussed more fully below in MD&A. Should economic conditions worsen, the Company could experience further increases in the ACL and negative fair value marks and record additional credit or market related loss expense. It is also possible that the Company’s asset quality measures could worsen at future measurement periods if there is a significant resurgence of COVID-19 cases or the pandemic’s effects are prolonged.

While there has been a recovery in secondary market pricing, the income from gain on sale of loans in future periods could be reduced due to COVID-19 and the termination of pandemic response programs. Negative impacts began to be felt in the latter part of March and early April 2020 with loan sales executed at that time as secondary market conditions began to weaken. At this time, the Company is unable to project the materiality of such impacts but anticipates that the breadth of the economic impact could impact gains in future periods.

Interest income could be further reduced due to COVID-19. In accordance with guidance from banking regulators, the Company has worked and continues to work with COVID-19 affected borrowers to help defer their payments, interest, and fees. In addition to regulatory relief on deferrals from banking regulators, six months of payment relief was available through the first quarter of 2021 from the SBA for certain loans guaranteed by that agency pursuant to the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”). While interest and fees will still accrue to interest, should eventual credit losses on these loans with deferred payments emerge, interest income and fees accrued would need to be reversed. In such a scenario, interest income in future periods could be negatively impacted. At this time, we are unable to project the materiality of such an impact but anticipate that the breadth of the economic impact may affect our borrowers’ ability to repay in future periods.

Capital and liquidity

As of December 31, 2020, all of the Company’s capital ratios, and the Bank’s capital ratios, were in excess of all minimum regulatory requirements. While the Company believes that capital is sufficient to withstand an extended economic recession brought about by COVID-19, reported and regulatory capital ratios could be adversely impacted by further credit losses. The Company relies on cash on hand as well as dividends from the Bank to service any debt at the Company. If our capital deteriorates such that the Bank is unable to pay dividends to the Company for an extended period of time, the Company may not be able to service its debt.

The Company maintains access to multiple sources of liquidity. Wholesale funding markets have remained open to the Company, but rates for short term funding have recently been volatile and the secondary market for guaranteed loans has shown reactionary and varying responses to the changing economic environment. The Company increased its levels of deposits and borrowings earlier in the year, as discussed further in MD&A. If funding costs are elevated for an extended period of time, it could have an adverse effect on the Company’s net interest margin. If an extended recession causes large numbers of the Company’s deposit customers to withdraw their funds, the Company might become more reliant on volatile or more expensive sources of funding.

The Federal Reserve created the Paycheck Protection Program Liquidity Facility (“PPPLF”) to help provide financing for the origination of PPP loans. The PPPLF extends loans to banks that have loaned money to small businesses under the PPP, discussed in more detail below. Amounts borrowed are non-recourse and have a 100% advance rate equal to the principal amount of PPP loans pledged as security. In addition, loans financed under the PPPLF have a neutral impact on regulatory leverage capital ratios. The maturity date of a borrowing under the PPPLF is equal to the maturity date of the PPP loan pledged to secure the borrowing and would be accelerated (i) if the underlying PPP loan goes into default and is transferred to the SBA to realize on the SBA guarantee or (ii) to the extent that any loan forgiveness reimbursement is received from the SBA. Borrowings under the PPPLF bear interest at a rate of 0.35%, and there are no fees paid by the Company. As of December 31, 2020, the Company had outstanding borrowings of \$1.53 billion from the PPPLF.

Lending operations and accommodations to borrowers

With the establishment of the PPP administered by the SBA, the Company has implemented new loan programs and systems using its technology platform while participating in assisting its customers and other small businesses in need of resources through the program. PPP loans earn interest at 1% and currently have a two-year or five-year contractual term depending on the origination date. For the earlier loans with a two-year term there is an option to extend to five years if agreed upon by the borrower and lender. The Company expects that some portion of these loans will ultimately be forgiven by the SBA in accordance with the terms of the program. As of December 31, 2020, the Company carried 9,990 PPP loans on its balance sheet representing a book balance of \$1.53 billion in originations and \$29.6 million in net deferred fees, to be amortized and recognized in interest income over the remaining lives of the loans. The Company recognized \$27.9 million of interest income in 2020 related to amortization of net PPP fees. As of February 22, 2021, the Company has secured funding from the SBA for 1,620 new PPP loans representing approximately \$230 million in 2021 originations. Loans funded through the PPP are fully guaranteed by the SBA, subject to the terms and conditions of the program. Should those circumstances change, the Company could be required to record additional credit loss expense through earnings.

With the passage of the CARES Act on March 27, 2020, the SBA was making six months of principal and interest payments on all fully disbursed SBA 7(a) and SBA Express loans in regular servicing status that closed by September 25, 2020. In addition, with regulatory guidance to work with borrowers during this unprecedented situation, the Company has also mobilized to provide a payment deferral program when needed by customers that are adversely affected by the pandemic. Depending on the demonstrated need of the client, the Company is deferring either the full loan payment or the principal component of the loan payment for 60 or 90 days. In accordance with interagency guidance issued in March 2020, these short-term deferrals are not considered troubled debt restructurings. After 60 or 90 days, borrowers may apply for an additional deferral. In the absence of other intervening factors, such short-term modifications made on a good faith basis are not categorized as a troubled debt restructuring, nor are loans granted payment deferrals related to COVID-19 placed on non-accrual (provided the loans were not past due or on non-accrual status prior to the deferral). At December 31, and September 30, 2020, the Company estimated that as a percentage of total loans and leases at amortized cost, excluding PPP loans, 20% and 63%, respectively, of its loans were receiving the six months of payments from the SBA and that 11% and 2%, respectively, of its loans had a payment deferral in place. The increase in loans on payment deferral during the fourth quarter was largely a product of the expiration of the SBA’s payment assistance around the end of 2020 for loans with continued pandemic related difficulties. The Company estimated that 48% of its loans and leases at amortized cost, excluding PPP loans, were receiving payments from the SBA and that 3%, had a payment deferral in place as of February 22, 2021. Compared to December 31, 2020, the increase in loans receiving payments from the SBA and decrease in loans on payment deferral was the combined impact of borrowers emerging from deferral needs in conjunction with the effects of the Economic Aid Act discussed below. On October 2, 2020, the SBA began approving PPP forgiveness applications and remitting forgiveness payments to PPP lenders for PPP borrowers. As of February 22, 2021, the Company has received \$499.1 million in PPP forgiveness from 3,366, or 31% of total PPP loans originated in 2020 by count.

On September 5, 2020, the Paycheck Protection Program Flexibility Act (the “new Act”) was signed into law and made significant changes to the PPP to provide additional relief for small businesses. The new Act increased flexibility for small businesses that have been unable to rehire employees due to lack of employee availability or have been unable to operate as normal due to COVID-19 related restrictions. It extended the period that businesses have to use PPP funds to qualify for loan forgiveness to 24 weeks, up from 8 weeks under the original rules. The new Act also relaxed the requirements that loan recipients must adhere to in order to qualify for loan forgiveness. In addition, the new Act extended the payment deferral period for PPP loans until the date when the amount of loan forgiveness is determined and remitted to the lender. For PPP recipients who do not apply for forgiveness, the loan deferral period is 10 months after the applicable forgiveness period ends.

On December 27, 2020 the Economic Aid to Hard-Hit Small Businesses, Nonprofits, and Venues Act (Economic Aid Act) was enacted which allows the SBA to make payments of up to \$9,000 per month for up to six months of principal and interest payments on certain fully disbursed SBA 7(a) and SBA 504 loans in regular servicing status based upon the origination date. In addition this legislation increased the 75% guarantee on many SBA 7(a) loans to 90%, among other things.

Credit

While most industries have and will continue to experience adverse impacts as a result of COVID-19, the Company has \$439.3 million in total unguaranteed exposure in six verticals considered to be “at-risk” of significant impact: hotels, wine and craft beverage, educational services, entertainment centers, fitness centers, and quick service restaurants, each comprising \$134.8 million or 5.2%, \$104.1 million or 4.0%, \$94.2 million or 3.7%, \$55.3 million or 2.1%, \$30.0 million or 1.2%, and \$20.9 million or 0.8% of total unguaranteed loans and leases (all at amortized cost, inclusive of loans carried at fair value) as of December 31, 2020, respectively.

The Company continues to work with customers directly affected by COVID-19 and is prepared to offer short-term assistance in accordance with regulatory guidelines. As a result of the uncertain economic environment caused by COVID-19, the Company is engaging in more frequent communication with borrowers in an effort to better understand their situation and the challenges faced and circumstances evolve, which the Company anticipates will enable it to respond proactively as needs and issues arise.

Executive Summary

Following is a summary of the Company's financial highlights and events for 2020:

- Loans and leases held for sale and investment increased by \$2.73 billion, or 75.9%, to \$6.32 billion at the end of 2020 as a result of over \$2.69 billion in record loan originations from traditional platforms in addition to \$1.76 billion in PPP originations during the year.
- Combined net interest income and loan servicing revenue increased by \$53.2 million, or 31.6%, to \$221.3 million in 2020, \$32.9 million of which was related to PPP loans.
- Guaranteed loans eligible for sale increased by \$763 million, or 82.8%, as a result of robust government guaranteed loan origination volume.
- Net gains on sales of loans increased \$20.4 million, or 70.6%, due to an overall increase in sales volume, the mix of loans sold and higher secondary market premiums.
- Investment securities available-for-sale increased \$210.1 million, or 38.9%, due to availability of surplus liquidity from pandemic readiness efforts.
- Noninterest income from the fintech investments increased \$9.0 million, or 369.6%, largely related to the third quarter \$13.7 million non-cash gain resulting from the increase in the observable fair market value of the Company's investment in Greenlight Financial Technology, Inc. (“Greenlight”), partially mitigated by the Company's pro rata portion of income tax expense of \$7.8 million arising from Apiture's conversion from a partnership to corporation.
- Total nonperforming unguaranteed loans and leases as a percentage of total loans and leases held for investment increased from 0.40% at the end of 2019 to 0.46% at the end of 2020.
- Net charge-offs as a percentage of average held for investment loans and leases carried at historical cost, for the years ended December 31, 2020 and 2019, were 0.44% and 0.10%, respectively. This increase was largely related to the reclassification of fifteen hotel loans from held for investment to held for sale during the third quarter.
- Provision for loan and lease credit losses increased \$25.4 million, or 167.3%, largely due to COVID-19 pandemic related effects and exacerbated by the adoption of CECL.
- Net loss on the valuation adjustment for loans accounted for under the fair value option increased by \$20.5 million, or 276.6%, from a net gain of \$7.4 million in 2019 to a net loss of \$13.1 million in 2020, also largely influenced by pandemic effects.
- Total deposits rose by 35.2% to \$5.71 billion at the end of 2020 driven by funding needs for PPP and other significant loan origination efforts during the year.

- Borrowings under the Federal Reserve’s Paycheck Protection Program Liquidity Facility (“PPPLF”), with a 0.35% interest rate, increased \$1.54 billion to help fund PPP loans and complement the defensive strategy earlier in the year to build liquidity due to the uncertainty of the effects of COVID-19.
- Income tax expense decreased \$17.6 million, resulting in a net tax benefit of \$12.2 million for the year ended December 31, 2020. This decrease was largely the result of tax benefits arising from the vesting of approximately 2.5 million restricted stock unit awards with market price conditions and a tax benefit due to the enactment of the CARES Act.
- Reported net income increased by 230.2% from 2019 to \$59.5 million as discussed in the opening to the section titled “Results of Operations.”

Business Outlook

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

The Company's results for 2020 demonstrated a continuation of strong underlying financial performance and solid growth momentum. Management continues to focus on building recurring revenue streams, promoting change within the financial technology industry, and building out selected existing verticals while adding new verticals to the Company's business model. Management anticipates that the Company's held-for-sale and held-for-investment loan portfolios will continue to grow as a result of healthy origination volumes and higher levels of loan retention that are intended to promote long-term recurring revenue and profitability, including the continued pursuit of potential opportunities in conventional lending outside of SBA or other government guarantee programs.

Non-GAAP Financial Measures

Statements included in this management's discussion and analysis include non-GAAP financial measures and should be read along with the accompanying tables, which provide a reconciliation of non-GAAP financial measures to GAAP financial measures. The reconciliation of non-GAAP measures is presented at the conclusion of this Item 7.

Management believes that non-GAAP financial measures provide additional useful information that allows readers to evaluate the ongoing performance of the Company without regard to certain transactional activities. Non-GAAP financial measures should not be considered as an alternative to any measure of performance or financial condition as reported under GAAP, and investors should consider the Company's performance and financial condition as reported under GAAP and all other relevant information when assessing the performance or financial condition of the Company. Non-GAAP financial measures have limitations as analytical tools, and investors should not consider them in isolation or as a substitute for analysis of the Company's results or financial condition as reported under GAAP. Management’s non-GAAP measures are not necessarily comparable to similar named measures represented by other companies, as they may be calculated differently.

Results of Operations

Years ended December 31, 2020 vs. 2019

The Company reported net income available to common shareholders totaling \$59.5 million, or \$1.43 per diluted share, for 2020 compared to \$18.0 million, or \$0.44 per diluted share, for 2019.

This increase in net income was primarily attributable to the following items:

- Increase in net interest income of \$54.6 million, or 39.0%, predominately driven by significant growth in total loan and lease portfolios which was accentuated by the origination of \$1.76 billion in PPP loans during the second and third quarters of 2020;
- Net gains on sales of loans increased \$20.4 million, or 70.6%;
- Equity security investments gains increased \$11.4 million, or 322.1%, largely due to a \$13.7 million non-cash gain resulting from the increase in the observable fair market value of the Company’s investment in Greenlight arising from orderly transactions in Greenlight’s securities; and

- A decrease in income tax expense of \$17.6 million. This decrease was largely the result of the vesting of restricted stock unit awards and a tax benefit of \$3.7 million due to the enactment of the CARES Act which allows the carryback of certain net operating losses to each of the five taxable years preceding the taxable year of such losses.

Other key factors partially offsetting the year-over-year increase in net income were composed of the following:

- An increase in the provision for loan and lease credit losses of \$25.4 million, or 167.3%;
- The net loss on the valuation adjustment for loans accounted for under the fair value option increased by \$20.5 million, or 276.6%, from a net gain of \$7.4 million in 2019 to a net loss of \$13.1 million in 2020; and
- Increased salaries and employee benefits of \$21.9 million, or 24.2%, as the Company continued to invest in its workforce to support growth and a variety of initiatives combined with \$7.2 million in expense in the second quarter of 2020 for a performance bonus pool that was available to all employees other than executive officers and \$4.1 million in payroll related expense associated with the fourth quarter accelerated vesting of approximately 2.5 million restricted stock unit awards with market price conditions.

Years ended December 31, 2019 vs. 2018

The Company reported net income available to common shareholders totaling \$18.0 million, or \$0.44 per diluted share, for 2019 compared to \$51.4 million, or \$1.24 per diluted share, for 2018.

This decrease in net income was primarily attributable to the following items:

- The strategic shift in the latter part of 2018 to hold substantially more of its eligible-for-sale production on balance sheet resulted in lower net income in the near-term by significantly decreasing net gains on sales of loans by \$46.2 million, or 61.4%. The volume of guaranteed loan sales in 2019 declined to \$340.4 million compared to \$945.2 million in 2018;
- The provision for loan and lease losses increased \$9.7 million primarily due to significant portfolio growth combined with an increase in criticized and classified loans and leases;
- Increased salaries and employee benefits of \$13.2 million, or 17.1% largely due to a reversal of \$4.5 million in accrued incentive compensation in the latter part of 2018 combined with ongoing investment in workforce to support growth and a variety of initiatives;
- The flow-through loss from investments accounted for under the equity method totaled \$7.9 million, largely due to the Company's ownership in Apiture, LLC, compared to \$386 thousand for 2018; and
- Income tax expense increased \$10.8 million. This increase was largely the result of planned reductions in solar panel leasing activity for 2019 which negatively impacted the annual effective tax rate.

Other key factors partially offsetting the year-over-year decline in net income were composed of the following:

- Increased net interest income of \$32.0 million, or 29.7%, predominately driven by significant growth in the combined held for sale and held for investment loan and lease portfolios along with higher investment security holdings; and
- The net gain on the valuation adjustment for loans accounted for under the fair value option increased by \$12.4 million, or 246.9%, from a net loss of \$5.0 million in 2018 to a net gain of \$7.4 million in 2019.

Net Interest Income and Margin

Net interest income represents the difference between the revenue 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 the Bank offers are generally above the industry average.

Years ended December 31, 2020 vs. 2019

For 2020, net interest income increased \$54.6 million, or 39.0%, to \$194.7 million compared to \$140.1 million for 2019. This increase was principally due to the significant growth in the held for investment loan and lease portfolios reflecting the Company's ongoing initiative to grow recurring revenue sources and strengthen liquidity. This increase over 2019 was further enhanced by the above-mentioned origination of PPP loans in the second and third quarters of 2020. Accordingly, average interest earning assets increased by \$2.62 billion, or 68.6%, to \$6.44 billion for 2020, compared to \$3.82 billion for 2019, while the yield on average interest earning assets decreased 149 basis points to 4.48%. The cost of funds on interest bearing liabilities for 2020 decreased 90 basis points to 1.48%, and the average balance of interest bearing liabilities increased by \$2.66 billion, or 72.1%, over 2019. The decrease in cost of interest bearing liabilities was due to deposits repricing at lower rates combined with borrowings from the PPPLF used to help fund PPP loans, with a 0.35% interest rate. The increase in average interest bearing liabilities was largely impacted by strategically heightened levels of liquidity in 2020 related to COVID-19 risks and uncertainties and funding sources for significant loan originations. As indicated in the rate/volume table below, the increase in interest earning asset volume more than offset lower yields, outpacing the higher volume and lower levels of cost declines of interest bearing liabilities, resulting in increased interest income of \$60.4 million and increased interest expense of \$5.8 million for 2020 compared to 2019. For 2019 compared to 2020, net interest margin decreased from 3.67% to 3.03%, respectively, principally due to reductions in the Prime Rate used for quarterly adjusting loans combined with the lower interest yield on PPP loans and higher average liquidity through 2020.

Years ended December 31, 2019 vs. 2018

For 2019, net interest income increased \$32.0 million, or 29.7%, to \$140.1 million compared to \$108.0 million in 2018. This increase was principally due to the significant growth in the combined held for sale and held for investment loan and lease portfolios along with higher investment security holdings reflecting the Company's ongoing initiative to grow recurring revenue sources and fortify its liquidity profile. Average interest earning assets rose by \$853.6 million, or 28.8%, to \$3.82 billion for 2019 compared to \$2.96 billion for 2018, while the yield on average interest earning assets rose by 48 basis points to 5.97% for 2019 versus 5.49% for 2018. A substantial portion of the Company's loan portfolio are variable rate loans that adjust regularly in accordance with changes in designated benchmark indices. The cost of funds on interest bearing liabilities for 2019 increased 46 basis points to 2.38%, and the average balance in interest bearing liabilities increased by \$843.1 million, or 29.7% during the same period. As indicated in the rate/volume table below, the increase in interest bearing liabilities and corresponding cost of funds was outpaced by the positive effects of the increased volume of interest earning assets, resulting in increased interest income of \$65.3 million versus increased interest expense of \$33.3 million for 2019. For 2019 compared to 2018, net interest margin increased from 3.64% to 3.67%. This increase in margin for the year was largely impacted by the cumulative impact of Federal Reserve rate cuts in the latter part of 2019 that favorably impacted deposit rates combined with the delayed repricing timing of the Company's variable rate loans.

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. Loan fees are included in interest income on loans.

	2020			2019			2018		
	Average Balance	Interest	Average Yield/Rate	Average Balance	Interest	Average Yield/Rate	Average Balance	Interest	Average Yield/Rate
Interest earning assets:									
Interest earning balances in other banks	\$ 453,260	\$ 2,346	0.52%	\$ 168,295	\$ 3,734	2.22%	\$ 373,104	\$ 6,600	1.77%
Federal funds sold	68,873	276	0.40	49,036	1,065	2.17	—	—	—
Investment securities	643,023	15,016	2.34	533,364	15,345	2.88	334,175	8,733	2.61
Loans held for sale	1,064,749	58,793	5.52	864,470	58,018	6.71	712,566	46,411	6.51
Loans and leases held for investment ⁽¹⁾	4,206,608	211,977	5.04	2,203,321	149,818	6.80	1,545,046	100,899	6.53
Total interest earning assets	6,436,513	288,408	4.48	3,818,486	227,980	5.97	2,964,891	162,643	5.49
Less: Allowance for credit losses on loans and leases	(37,839)			(20,952)			(10,971)		
Non-interest earning assets	615,368			492,865			427,311		
Total assets	<u>\$7,014,042</u>			<u>\$4,290,399</u>			<u>\$3,381,231</u>		
Interest bearing liabilities:									
Interest bearing checking	\$ 318,667	\$ 1,853	0.58%	\$ 42	\$ 0	1.07%	\$ 32,792	\$ 342	1.04%
Savings	1,531,680	16,558	1.08	1,013,177	20,598	2.03	911,757	15,357	1.68
Money market accounts	87,050	345	0.40	86,175	561	0.65	131,495	1,452	1.10
Certificates of deposit	3,373,012	70,970	2.10	2,585,367	66,738	2.58	1,761,948	37,318	2.12
Total deposits	5,310,409	89,726	1.69	3,684,761	87,897	2.39	2,837,992	54,469	1.92
Other borrowings	1,033,744	3,959	0.38	1,195	1	0.08	4,869	131	2.69
Total interest bearing liabilities	6,344,153	93,685	1.48	3,685,956	87,898	2.38	2,842,861	54,600	1.92
Non-interest bearing deposits	47,655			49,510			50,670		
Non-interest bearing liabilities	54,604			33,481			20,132		
Shareholders' equity	567,630			521,452			467,568		
Total liabilities and shareholders' equity	<u>\$7,014,042</u>			<u>\$4,290,399</u>			<u>\$3,381,231</u>		
Net interest income and interest rate spread		<u>\$194,723</u>	<u>3.00%</u>		<u>\$140,082</u>	<u>3.59%</u>		<u>\$108,043</u>	<u>3.57%</u>
Net interest margin			<u>3.03%</u>			<u>3.67%</u>			<u>3.64%</u>
Ratio of average interest-earning assets to average interest-bearing liabilities			<u>101.46%</u>			<u>103.60%</u>			<u>104.29%</u>

(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 current period volume). The volume column shows the effects attributable to changes in volume (changes in volume multiplied by prior period rate). The total column represents the sum of the prior columns. For purposes of this table, changes 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.

	2020 vs. 2019			2019 vs. 2018		
	Increase (Decrease) Due to			Increase (Decrease) Due to		
	Rate	Volume	Total	Rate	Volume	Total
Interest income:						
Interest earning balances in other banks	\$ (5,287)	\$ 3,899	\$ (1,388)	\$ 1,218	\$ (4,084)	\$ (2,866)
Federal funds sold	(1,044)	255	(789)	—	1,065	1,065
Investment securities	(3,187)	2,858	(329)	1,144	5,468	6,612
Loans held for sale	(11,475)	12,250	775	1,563	10,044	11,607
Loans and leases held for investment	(56,423)	118,582	62,159	5,045	43,874	48,919
Total interest income	<u>(77,416)</u>	<u>137,844</u>	<u>60,428</u>	<u>8,970</u>	<u>56,367</u>	<u>65,337</u>
Interest expense:						
Interest bearing checking	(1)	1,854	1,853	5	(347)	(342)
Savings	(12,113)	8,073	(4,040)	3,356	1,885	5,241
Money market accounts	(221)	5	(216)	(493)	(398)	(891)
Certificates of deposit	(14,220)	18,452	4,232	10,072	19,348	29,420
Other borrowings	4	3,954	3,958	(79)	(51)	(130)
Total interest expense	<u>(26,551)</u>	<u>32,338</u>	<u>5,787</u>	<u>12,861</u>	<u>20,437</u>	<u>33,298</u>
Net interest income	<u>\$ (50,865)</u>	<u>\$ 105,506</u>	<u>\$ 54,641</u>	<u>\$ (3,891)</u>	<u>\$ 35,930</u>	<u>\$ 32,039</u>

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 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. A typical SBA 7(a) loan carries a 75% guarantee while USDA guarantees range from 50% to 90% depending on loan size, which serve to reduce the risk profile of these loans. The Company believes that its focus on compliance with regulations and guidance from the SBA and USDA are key factors to managing this risk.

Years ended December 31, 2020 vs. 2019

For 2020, the provision for loan and lease credit losses was \$40.7 million compared to \$15.2 million in 2019, an increase of \$25.4 million. The Company adopted the new current expected credit losses ("CECL") standard effective January 1, 2020 and accordingly determined to use forecasted levels of unemployment as a primary economic variable in forecasting future expected losses. The majority of the provision for 2020 was due to the effect of negative economic forecasts related to the COVID-19 pandemic, the growing loan and lease portfolio, significant charge-offs during the year and model refinements in recognition of loss experience on non-mature verticals. See below discussion of charge-offs for more information. Approximately \$23.5 million of the 2020 provision was estimated to be based upon the severity of the COVID-19 pandemic.

Loans and leases held for investment at historical cost were \$4.33 billion as of December 31, 2020, increasing by \$2.53 billion, or 140.2%, compared to December 31, 2019. This growth was largely fueled by \$1.76 billion in PPP loan originations in the second and third quarters of 2020. Excluding PPP loan originations and net unearned fees on those loans, the balance in loans and leases held for investment at historical cost was \$2.83 billion at December 31, 2020, an increase of \$1.03 billion, or 57.0%, over December 31, 2019. This growth, outside of PPP activity in the third quarter of 2020, was fueled by robust origination volumes combined with retention of substantially more loans on the balance sheet.

Net charge-offs for loans and leases carried at historical cost were \$15.3 million, or 0.44% of average loans and leases held for investment, carried at historical cost, for 2020, compared to \$1.4 million, or 0.10%, for 2019. The increase in net charge-offs during 2020 was largely driven by the reclassification of fifteen hotel loans in the third quarter from held for investment to held for sale. These loans, aggregating \$81.2 million in net investment, were reclassified as available for sale due to negative trends observed from management's ongoing analysis of COVID-19 impacts and were marked to the lower of cost or fair value upon reclassification with the write down of \$9.8 million reflected in charge-offs. The existing ACL on these loans at the time of charge-off was \$3.4 million with the remaining \$6.4 million requiring an additional provision for loan and lease losses. 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 \$5.4 million and \$6.7 million accounted for under the fair value option at December 31, 2020 and 2019, respectively, totaled \$20.1 million, which was 0.46% of the held for investment loan and lease portfolio carried at historical cost at December 31, 2020, compared to \$7.2 million, or 0.40% of loans and leases held for investment at December 31, 2019. Nonperforming loans and leases carried at historical cost which are not guaranteed by the SBA or USDA were 0.71% of the historical cost portion of the held for investment loan and lease portfolio, excluding PPP loans, at December 31, 2020.

Years ended December 31, 2019 vs. 2018

For 2019, the provision for loan and lease losses was \$15.2 million, an increase of \$9.7 million, or 173.7%, compared to 2018. The increase in the provision for loan and lease losses compared to the prior year was primarily the result of a materially growing loan and lease portfolio through robust loan and lease originations and higher balance sheet retention rates combined with an increase in criticized and classified loans and leases.

Net charge-offs for loans and leases carried at historical cost were \$1.4 million, or 0.10% of average loans and leases held for investment, carried at historical cost, on an annualized basis for 2019, compared to net charge-offs of \$1.1 million, or 0.18% for 2018. Net charge-offs are a key element of historical experience in the Company's estimation of the allowance for loan and lease losses.

In addition, at December 31, 2019, nonperforming loans and leases not guaranteed by the SBA or USDA, excluding \$6.7 million and \$10.4 million accounted for under the fair value option at December 31, 2019 and 2018, respectively, totaled \$7.2 million, which was 0.40% of the held-for-investment loan and lease portfolio compared to \$4.1 million, or 0.44%, of loans and leases held for investment at December 31, 2018.

Noninterest Income

Noninterest income is principally comprised of net gains from the sale of SBA and USDA-guaranteed loans along with 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 common elements of noninterest income include less routine gains and losses on investments.

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

	Years Ended December 31,			2019/2020 Increase (Decrease)		2018/2019 Increase (Decrease)	
	2020	2019	2018	Amount	Percent	Amount	Percent
	Noninterest income						
Loan servicing revenue	\$ 26,600	\$ 28,034	\$ 29,121	\$ (1,434)	(5.12)%	\$ (1,087)	(3.73)%
Loan servicing asset revaluation	(9,958)	(16,581)	(21,224)	6,623	39.94	4,643	21.88
Net gains on sales of loans	49,473	29,002	75,170	20,471	70.58	(46,168)	(61.42)
Net (loss) gain on loans accounted for under the fair value option	(13,083)	7,408	(5,041)	(20,491)	(276.61)	12,449	246.95
Equity method investments income (loss)	(14,691)	(7,889)	(386)	(6,802)	(86.22)	(7,503)	(1,943.78)
Equity security investments gains (losses), net	14,909	3,532	213	11,377	322.11	3,319	1,558.22
Gain on sale of investment securities available-for-sale, net	1,880	620	—	1,260	203.23	620	100.00
Lease income	10,508	9,655	7,966	853	8.83	1,689	21.20
Management fee income	6,352	1,742	—	4,610	264.64	1,742	100.00
Title insurance income	—	—	2,775	—	—	(2,775)	(100.00)
Other noninterest income	14,010	7,996	7,671	6,014	75.21	325	4.24
Total noninterest income	\$ 86,000	\$ 63,519	\$ 96,265	\$ 22,481	35.39%	\$(32,746)	(34.02)%

Years ended December 31, 2020 vs. 2019

For 2020, noninterest income increased by \$22.5 million, or 35.4%, compared to 2019. The increase from the prior year is primarily the result of a \$20.5 million increase in net gains on sales of loans combined with net gains on equity securities discussed above, a net positive increase in the loan servicing asset revaluation of \$6.6 million, management fee income earned by Canapi Advisors increasing by \$4.6 million and a \$6.0 million increase in other noninterest income largely comprised of \$2.7 million in revenue resulting from the sale of services from co-developed technology for processing PPP loans and \$2.2 million in financial planning fees earned by Live Oak Private Wealth. Offsetting the increases in noninterest income in 2020 was the aforementioned net loss on the valuation adjustment related to loans measured at fair value which increased by \$20.5 million and increased losses on equity method investments of \$6.8 million, largely the product of the Company's pro-rata portion of tax expense arising from Apiture's conversion from a partnership to a corporation.

The tables below reflect loan and lease production, sales of guaranteed loans and the aggregate balance in guaranteed loans sold that are being serviced. These components are key drivers of the Company's noninterest income.

	Three months ended December 31,		Three months ended September 30,		Three months ended June 30,		Three months ended March 31,	
	2020	2019	2020	2019	2020	2019	2020	2019
Amount of loans and leases originated	\$ 808,010	\$ 523,688	\$ 966,499	\$ 562,259	\$ 2,175,055	\$ 525,088	\$ 500,634	\$ 390,851
Guaranteed portions of loans sold	110,588	105,002	114,731	100,498	154,980	71,934	162,297	62,940
Outstanding balance of guaranteed loans sold ⁽¹⁾	2,819,625	2,746,480	2,878,664	2,802,073	2,840,429	2,870,108	2,761,015	2,952,774

	Years ended December 31,				
	2020	2019	2018	2017	2016
Amount of loans and leases originated	\$4,450,198	\$2,001,886	\$1,765,680	\$1,934,238	\$1,537,010
Guaranteed portions of loans sold	542,596	340,374	945,178	787,926	761,933
Outstanding balance of guaranteed loans sold ⁽¹⁾	2,819,625	2,746,480	3,045,460	2,680,641	2,278,618

(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 Revenue: While portions of the loans that the Bank originates are sold and generate gain on sale revenue, servicing rights for those sold portions are retained by the Bank. In exchange for continuing to service sold loans, the Bank receives fee income represented in loan servicing revenue equivalent to 1.0% of the outstanding balance of SBA loans sold and 0.40% of the outstanding balance of USDA loans sold. In addition, the standard cost (adequate compensation) for servicing sold loans is approximately 0.40% of the balance of the loans sold, which is included in the loan servicing revaluation computations. Unrecognized servicing revenue above or below the standard cost to service is reflected in a net servicing asset recorded on the consolidated balance sheets. Revenues associated with the servicing of loans are recognized over the expected life of the loan through the income statement, and the servicing asset is reduced as this revenue is recognized. For 2020, loan servicing revenue decreased \$1.4 million, or 5.1%, to \$26.6 million as compared to 2019. The small change in servicing revenue for 2020 has been a result of a relatively static year over year trend in sold loans serviced as well as a decline in the weighted average servicing fee resulting from the growth of the USDA sold and serviced portfolio at approximately 0.40%. At December 31, 2020, the outstanding balance of guaranteed loans sold in the secondary market was \$2.82 billion compared to \$2.75 billion at December 31, 2019.

Loan Servicing Revaluation: The Company revalues its serviced loan portfolio at least quarterly. The revaluation considers the amortization of the portfolio, current market conditions for loan sale premiums, and current prepayment speeds. For 2020, there was a net negative loan servicing revaluation adjustment of \$10.0 million compared to a net negative adjustment of \$16.6 million for 2019. The net positive increase in the revaluation from 2019 to 2020 was primarily a result of slower prepayment speeds and more favorable market conditions.

In consideration of the sensitivity of servicing rights as discussed above and in Note 5 to the accompanying audited consolidated financial statements, the following table is provided as of December 31, 2020 reflecting the effect on fair value due to hypothetical changes in yield curve rates.

Change in Yield Curve Assumption	Increase (Decrease) in Value
+300 basis point	(\$4,720)
+200 basis point	(3,307)
+100 basis point	(1,742)
- 100 basis point	1,952

Net Gains on Sale of Loans: For 2020, net gains on sales of loans increased \$20.5 million, or 70.6%, compared to 2019. The volume of guaranteed loans sold increased \$202.2 million, or 59.4%, in 2020 to \$542.6 million from \$340.4 million in 2019. The average net gain on guaranteed loan sales increased from \$84.8 thousand to \$85.1 thousand, per million sold, in 2019 and 2020, respectively. The increase in net gains on sale of loans is due to the combined effect of an overall increase in sales volume, the mix of loans sold and higher secondary market premiums. The volume of sales in 2020 was largely a product of heightened levels of guaranteed loans eligible for sale during the year.

Net (Loss) Gain on Loans Accounted for Under the Fair Value Option: For 2020, the net loss on loans accounted for under the fair value option increased \$20.5 million, or 276.6%, compared to 2019. The carrying amount of loans accounted for under the fair value option at December 31, 2020 and 2019 was \$851.5 million (\$36.1 million classified as held for sale and \$815.4 million classified as held for investment) and \$840.7 million (\$16.2 million classified as held for sale and \$824.5 million classified as held for investment), respectively, an increase of \$10.8 million, or 1.3%. The 2020 net loss on loans accounted for under the fair value option was estimated to be approximately \$10.4 million related to the severity of ongoing developments of the COVID-19 pandemic. The magnitude of COVID-19 related impacts on loan fair value adjustments first half of 2020 combined with similar factors influencing the provision for loan and lease credit losses was dampened by improving market conditions.

Years ended December 31, 2019 vs. 2018

For 2019, noninterest income decreased by \$32.7 million, or 34.0%, compared to 2018. The decrease from the prior year is primarily the result of the aforementioned strategic decision made in the latter part of 2018 to sell fewer loans, resulting in net gains on sales of loans declining to \$29.0 million for 2019, compared to \$75.2 million for 2018, a reduction of \$46.2 million, or 61.4%. The flow-through loss from investments accounted for under the equity method increased \$7.5 million for 2019, compared to 2018. Also impacting the overall decrease in noninterest income was a decline in title insurance income of \$2.8 million during 2019, compared to 2018, due to the sale of the title insurance business in third quarter of 2018. Partially offsetting the overall decrease in noninterest income was a \$12.4 million, or 247.0%, decrease in the loss loans accounted for under the fair value option principally due to improving market conditions, such as increased premiums, combined with an increase in net gains on equity security investments of \$3.3 million and an increase in solar panel lease income of \$1.7 million.

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

Loan Servicing Revenue: While portions of the loans that the Bank originates are sold and generate gain on sale revenue, servicing rights for those sold portions are retained by the Bank. In exchange for continuing to service sold loans, the Bank receives fee income represented in loan servicing revenue equivalent to 1.0% of the outstanding balance of SBA loans sold and 0.40% of the outstanding balance of USDA loans sold. In addition, the standard cost (adequate compensation) for servicing sold loans is approximately 0.40% of the balance of the loans sold, which is included in the loan servicing revaluation computations. Unrecognized servicing revenue above the standard cost to service is reflected in a servicing asset recorded on the balance sheet. Revenues associated with the servicing of loans are recognized over the expected life of the loan through the income statement, and the servicing asset is reduced as this revenue is recognized. For the year ended December 31, 2019, loan servicing revenue decreased \$1.1 million, or 3.7%, to \$28.0 million as compared to the year ended December 31, 2018, as a result of the declining balance of the serviced portfolio. At December 31, 2019, the outstanding balance of guaranteed loans sold in the secondary market was \$2.75 billion compared to \$3.05 billion at December 31, 2018.

Loan Servicing Revaluation: The Company revalues its serviced loan portfolio at least quarterly. The revaluation considers the amortization of the portfolio, current market conditions for loan sale premiums, and current prepayment speeds. For the years ended December 31, 2019 and 2018, there was a negative loan servicing revaluation of \$16.6 million and \$21.2 million, respectively.

Net Gains on Sale of Loans: For the year ended December 31, 2019, net gains on sales of loans of \$29.0 million, decreased \$46.2 million, or 61.4%, compared to 2018. This decrease was primarily due to the lower volume of guaranteed loans sold in 2019, decreasing \$604.8 million, or 64.0%, from \$945.2 million in 2018 to \$340.4 million in 2019. The average net gain on sale for 2019 was higher at \$84.8 thousand of revenue for each \$1 million in loans sold, compared to \$80.9 thousand of revenue for each \$1 million sold for 2018. The year over year increase in average gains was influenced by the mix of loans sold by the Company and continued strength of market conditions for the purchase of guaranteed loans.

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.

	Years Ended December 31,			2019/2020 Increase (Decrease)		2018/2019 Increase (Decrease)	
	2020	2019	2018	Amount	Percent	Amount	Percent
Noninterest expense							
Salaries and employee benefits	\$ 112,525	\$ 90,634	\$ 77,411	\$ 21,891	24.15%	\$ 13,223	17.08%
Non-staff expenses:							
Travel expense	3,451	6,921	9,156	(3,470)	(50.14)	(2,235)	(24.41)
Professional services expense	6,359	6,859	4,878	(500)	(7.29)	1,981	40.61
Advertising and marketing expense	3,510	5,936	6,015	(2,426)	(40.87)	(79)	(1.31)
Occupancy expense	8,757	8,116	7,065	641	7.90	1,051	14.88
Data processing expense	12,344	9,265	12,010	3,079	33.23	(2,745)	(22.86)
Equipment expense	17,603	16,327	13,724	1,276	7.82	2,603	18.97
Other loan origination and maintenance expense	10,790	9,272	5,967	1,518	16.37	3,305	55.39
Renewable energy tax credit investment impairment	—	602	—	(602)	(100.00)	602	100.00
FDIC insurance	7,473	3,447	3,234	4,026	116.80	213	6.59
Title insurance closing services expense	—	—	912	—	—	(912)	(100.00)
Impairment expense on goodwill and other intangibles	—	—	2,680	—	—	(2,680)	(100.00)
Other expense	9,864	7,545	9,652	2,319	30.74	(2,107)	(21.83)
Total non-staff expenses	80,151	74,290	75,293	5,861	7.89	(1,003)	(1.33)
Total noninterest expense	\$ 192,676	\$ 164,924	\$ 152,704	\$ 27,752	16.83%	\$ 12,220	8.00%

Years ended December 31, 2020 vs. 2019

Total noninterest expense for 2020 increased \$27.8 million, or 16.8%, compared to 2019. The increase in noninterest expense was predominately driven by increased personnel cost, data processing expense, and FDIC insurance.

Salaries and employee benefits: Total personnel expense for 2020 increased by \$21.9 million, or 24.2%, compared to 2019. While personnel expense is carefully managed, the year over year increase is principally due to the Company's commitment to and investment in its workforce to support growth and a variety of initiatives. The year over year increase was influenced by \$7.2 million in expense for a performance bonus pool that was available to all employees other than executive officers during the second quarter of 2020 and \$4.1 million in payroll related expense associated with the fourth quarter accelerated vesting of approximately 2.5 million restricted stock unit awards with market price conditions. Total full-time equivalent employees increased from 612 at December 31, 2019 to 630 at December 31, 2020. Salaries and employee benefits expense included \$14.7 million of stock-based compensation for 2020, compared to \$11.7 million for 2019. Expenses related to the employee stock purchase program, stock grants, stock option compensation and restricted stock expense are all considered stock-based compensation.

Travel & Advertising and marketing expenses: For 2020, travel & advertising and marketing expenses in aggregate decreased \$5.9 million, or 45.9%. This decrease was the result of certain operational adaptations due to the impact of COVID-19.

Data processing expense: Total data processing expense for 2020 increased by \$3.1 million, or 33.2%, compared to 2019. The increase over 2019 was predominantly driven by third party costs incurred in internal software development and with additional software subscriptions to help maximize operational efficiencies.

FDIC insurance: For 2020, FDIC insurance increased \$4.0 million compared to 2019 due to higher required premiums.

Years ended December 31, 2019 vs. 2018

Total noninterest expense for 2019 increased \$12.2 million, or 8.0%, compared to 2018. The increase in noninterest expense was largely driven by salaries and employee benefits. Changes in various components of noninterest expense are discussed below.

Salaries and employee benefits: Total personnel expense for 2019 increased by \$13.2 million, or 17.1%, compared to 2018. This increase is largely due to a reversal of \$4.5 million in accrued incentive compensation in the latter part of 2018 due to not meeting internal performance metrics for that year combined with ongoing investment in workforce to support growth and a variety of initiatives. While personnel expense is carefully managed, the Company continues to invest in human capital to support a variety of initiatives by the Company, including growing loan production and financial services technology. Total full-time equivalent employees increased from 498 at December 31, 2018 to 612 at December 31, 2019. Salaries and employee benefits expense included \$11.7 million and \$9.2 million of stock-based compensation expense in 2019 and 2018, respectively. Expenses related to the employee stock purchase program, stock grants, stock option compensation and restricted stock expense are all considered stock-based compensation.

Travel expense: Travel expense decreased \$2.2 million, or 24.4%, compared to 2018. This decrease was principally due to a reduction in repairs and maintenance costs associated with an older aircraft that was sold during the first quarter of 2019, higher deferred travel costs as more loans were retained, and general improvements in operational efficiency.

Professional services expense: For 2019, total professional services expense increased \$2.0 million, or 40.6%, compared to 2018. This increase was driven by legal, accounting, and consulting fees incurred to support various strategic initiatives, such as the Company's investments in Apiture and Canapi Advisors, LLC.

Data processing expense: Total data processing expense decreased \$2.7 million, or 22.9%, compared to 2018. The decrease is primarily the result of the expiration of software development services provided by Apiture directly to the Company at the end of 2018 combined with the capitalization of certain software development costs during 2019.

Equipment expense: Equipment expense increased \$2.6 million, or 19.0%, compared to 2018. Primary factors contributing to this increase were the depreciation of solar panels arising from operating lease activities and a new aircraft placed in service in the third quarter of 2019.

Other loan origination and maintenance expense: Other loan origination and maintenance expense increased \$3.3 million, or 55.4%, compared to 2018. This increase was due principally to expenses associated with the repurchase of certain guaranteed loans in the portfolio during the third quarter of 2019 along with increases in the ongoing guarantee fees arising from holding a higher volume of loans on balance sheet.

Title insurance closing services expense: Expenses associated with title insurance closing services decreased \$912 thousand, or 100.0%, driven by the exit from the title insurance business during the third quarter of 2018.

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

Results of Segment Operations

Years ended December 31, 2020 vs. 2019

The Company's operations are managed along two primary operating segments" Banking and Fintech. A description of each business and the methodologies used to measure financial performance is described in Note 16. Segments in the accompanying notes to the consolidated financial statements. Net income (loss) by operating segment is presented below:

	Years ended December 31,		
	2020	2019	2018
Banking	\$ 57,462	\$ 29,661	\$ 65,314
Fintech	(1,932)	(8,266)	(1,005)
Other	4,013	(3,361)	(12,861)
Consolidated net income	<u>\$ 59,543</u>	<u>\$ 18,034</u>	<u>\$ 51,448</u>

Banking

Net income increased \$27.8 million, or 93.7%, compared to 2019. The increase was primarily the result of increased net interest income, non-interest income and a decrease in income tax expense.

Net interest income increased \$55.3 million, or 39.6%, compared to 2019. See the analysis of net interest income included in the above section captioned “Net Interest Income and Margin” as it is predominantly related to the Banking segment.

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.

Noninterest income increased \$13.5 million, or 21.0%, compared to 2019. This increase was largely comprised of net gains on sales of loans increasing \$20.4 million, or 70.6% combined with a net positive increase in the loan servicing asset revaluation of \$6.6 million, or 39.9%. See the analysis of these categories of noninterest income included in the above section captioned “Noninterest Income” for additional discussion.

Noninterest expense increased \$29.3 million, or 19.3% compared to 2019. See the analysis of these categories of noninterest expense included in the above section captioned “Noninterest Expense” for additional discussion.

Income tax expense decreased \$14.0 million, or 205.4%, compared to 2019. See the below section captioned “Income Tax Expense.”

Fintech

Net loss decreased by \$6.3 million, or 76.6%, compared to 2019. The decrease was primarily the result of increased non-interest income.

Noninterest income increased \$9.0 million compared to 2019, or 369.6%, compared to 2019. This significant increase was largely due to the earlier discussed \$13.7 million non-cash gain resulting from the increase in the observable fair market value of the Company’s investment in Greenlight combined with an increase of \$4.6 million, or 264.7%, in Canapi’s management fee income. Partially offsetting the increase in noninterest income during 2020 was the Company’s pro rata portion of income tax expense of \$7.8 million arising from Apiture’s conversion from a partnership to a corporation.

Noninterest expense decreased \$1.6 million, or 22.2% compared to 2019. This decrease was largely due to a significant reduction in legal related expenses associated with the formation of Canapi in the prior year.

Income tax expense increased \$4.2 million, or 345.4%, compared to 2019, consistent with the segment’s increase in net income before taxes.

Years ended December 31, 2019 vs. 2018

Banking

Net income for 2019 decreased \$35.7 million, or 54.6%, compared to 2018. The decrease was primarily the result of a higher provision for loan and lease losses, lower non-interest income, higher noninterest expense and higher levels of income tax expense.

Net interest income increased \$31.8 million, or 29.5%, compared to 2018. See the analysis of net interest income included in the above section captioned “Net Interest Income and Margin” as it is predominantly related to the Banking segment.

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.

Noninterest income decreased \$27.6 million, or 30.2%, compared to 2018. This decrease was largely the result of intentionally lower net gains on sales of loans decreasing \$46.2 million, or 61.4%. See the analysis of these categories of non-interest income included in the above section captioned “Noninterest Income” for additional discussion.

Noninterest expense increased \$21.6 million, or 16.6% compared to 2018. See the analysis of these categories of noninterest expense included in the above section captioned “Noninterest Expense” for additional discussion.

Income tax expense increased \$8.5 million compared to 2018. See the below section captioned “Income Tax Expense.”

Fintech

Net loss for 2019 increased by \$7.3 million, compared to 2018. The increase was primarily the result of increased noninterest expenses.

Noninterest income decreased \$2.1 million, or 531.1%, compared to 2018. This decrease was largely due to pro rata losses related to the Company’s equity method investments.

Noninterest expense increased \$6.5 million compared to 2018. This decrease was largely due to legal and other startup expenses associated with the formation of Canapi.

Income tax benefit increased \$1.2 million compared to 2018, consistent with the segment’s decrease in net income before taxes.

Income Tax Expense/Benefit

Years ended December 31, 2020 vs. 2019

Income tax benefit in 2020 was \$12.2 million compared to a net income tax expense in 2019 of \$5.4 million. The income tax benefit in 2020 was principally the product of vesting of restricted stock unit awards with market price conditions during the fourth quarter combined with the tax impact of enactment of the CARES Act on March 27, 2020. Upon vesting, the fair value of the above mentioned awards exceeded the total compensation cost recognized by the Company for book purposes, which resulted in the recognition of a tax benefit of \$22.1 million. The Company also recorded a tax benefit of \$3.7 million due to the CARES Act, which allows the carryback of certain net operating losses to each of the five taxable years preceding the taxable year of such losses.

Years ended December 31, 2019 vs. 2018

For 2019 and 2018, there was an income tax expense of \$5.4 million and benefit of \$5.4 million, respectively, and the Company’s effective tax rates were 23.1% and (11.7)%, respectively. The negative effective rate for 2018 was largely a product of significant investments in renewable energy assets which generate investment tax credits. For 2019, investment tax credits were less of a driver for the Company’s effective tax rate.

The Company invested \$5.9 million and \$70.2 million in renewable energy assets that generated \$1.7 million and \$20.3 million in investment tax credits in 2019 and 2018, respectively.

See Note 9. Income Taxes for more information.

Discussion and Analysis of Financial Condition

December 31, 2020 vs. 2019

Total assets at December 31, 2020 were \$7.87 billion, an increase of \$3.06 billion, or 63.6%, compared to total assets of \$4.81 billion at December 31, 2019. 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, increased \$96.9 million largely as a product of increased levels of borrowings, deposits and loan sales used to fund planned PPP and other loan originations in 2020;
- Increased investment securities available-for-sale by \$210.1 million. This increase in investment securities was due to availability of excess surplus liquidity, discussed above related to pandemic readiness; and
- Growth in loans and leases held for sale and held for investment of \$2.73 billion resulting from strong origination activity in 2020, including \$1.76 billion in PPP loans. Additionally, the Company originated a record of \$2.69 billion loans and leases in 2020 excluding PPP loans.

Cash and cash equivalents, comprised of cash and due from banks and federal funds sold, was \$318.3 million at December 31, 2020, an increase of \$96.9 million, or 43.8%, compared to \$221.4 million at December 31, 2019. As mentioned above, this increase largely reflects funding for significant loan growth efforts during the year.

Total investment securities increased \$210.1 million during 2020, from \$540.0 million at December 31, 2019, to \$750.1 million at December 31, 2020, an increase of 38.9%. The Company increased its investment securities position during 2020 largely as a part of improving returns on excess liquidity and meeting investment asset-liability plans. At December 31, 2020, the investment portfolio was comprised of U.S. government agency, U.S. government-sponsored enterprise mortgage-backed securities and municipal bonds.

Loans and leases held for sale increased \$209.0 million, or 21.6%, during 2020, from \$966.4 million at December 31, 2019, to \$1.18 billion at December 31, 2020. The increase was primarily the result of strong loan originations in 2020.

Loans and leases held for investment increased \$2.52 billion, or 95.8%, during 2020, from \$2.63 billion at December 31, 2019, to \$5.15 billion at December 31, 2020. The increase was primarily the result of the above-mentioned loan originations in 2020, and all PPP loans are classified as held for investment.

Premises and equipment, net, decreased \$19.8 million, or 7.1%, during 2020 which was primarily driven by increased levels of depreciation of facilities and infrastructure to accommodate Company growth and solar panels to meet leasing obligations in prior periods. Also impacting premises and equipment was the decision to sell two aircraft in the year that were carried at an aggregate value of \$19.2 million with a deposit on a single replacement aircraft of \$19.1 million. The decision to sell these aircraft resulted in them being reclassified out of premises and equipment to other assets as held for sale assets carried at the lower of cost or market value. Upon reclassification to held for sale the Company recognized impairment charges of \$1.3 million to mark the aircraft to their estimated fair value at that time. Management's decision to sell two aircraft and replace with one was based upon the determination that the older aircraft were ineffective in efficiently serving the needs of an expanding nationwide customer base.

Other assets increased \$73.2 million, or 46.2%, from \$158.6 million at December 31, 2019 to \$231.8 million at December 31, 2020. This increase was due to a variety of items, principally comprised of a \$21.4 million increase in accrued interest receivable largely due to significantly higher levels of interest earning assets combined with the deferral of payments on PPP loans, the earlier discussed \$13.7 million increase in the carrying value of the Company's investment in Greenlight, \$10.4 million in increased receivables from the SBA for guarantee recoveries, \$8.9 million for one of the two aircraft discussed above remaining unsold at year end, \$7.9 million in net tax receivable and deferred tax assets reclassified from a net liability position in the prior year, \$7.9 million in new investments and \$4.0 million in new intangibles added as a result of the acquisition of Jolley Asset Management, LLC (as discussed more fully in Note 1. Organization and Summary of Significant Accounting Policies under the subheading Business Combination in the notes to the consolidated financial statements).

Total deposits were \$5.71 billion at December 31, 2020, an increase of \$1.49 billion, or 35.2%, from \$4.23 billion at December 31, 2019. The increase in deposits was largely driven by the PPP and other significant loan origination efforts during the year.

Borrowings increased to \$1.54 billion at December 31, 2020 from \$14 thousand at December 31, 2019. This increase was related to \$1.74 billion in new borrowings through the PPPLF in the second and third quarters of 2020. These PPPLF borrowings were used to help fund PPP loans and complement the defensive strategy earlier in the year to build liquidity due to the uncertainty of the effects of COVID-19.

Shareholders' equity at December 31, 2020 was \$567.9 million as compared to \$532.4 million at December 31, 2019. The tangible book value per share (a non-GAAP measure, see "Non-GAAP Measures" below for a description and reconciliation to the most comparable GAAP measure) was \$13.28 at December 31, 2020 compared to \$13.20 at December 31, 2019. Average equity to average assets was 8.1% for 2020 compared to 12.2% for 2019. The increase in shareholders' equity for 2020 was principally the result of net income of \$59.5 million, stock-based compensation expense of \$14.7 million, other comprehensive income of \$9.8 million and stock option exercises of \$3.1 million. Partially offsetting the increase in shareholders' equity was \$49.2 million in cash paid in lieu of stock for employee tax obligations in settlement of vested stock grants, principally related to the approximately 2.5 million awards with market price conditions vesting in the fourth quarter discussed earlier and \$4.9 million in dividends.

During 2020, 1,807,774 shares of Class B common stock (non-voting) were converted to Class A common stock (voting) under private sales. The conversion decreased the value of Class B common stock (non-voting) and increased the value of Class A common stock (voting) by \$19.1 million.

December 31, 2019 vs. 2018

Total assets at December 31, 2019 were \$4.81 billion, an increase of \$1.14 billion, or 31.2%, compared to total assets of \$3.67 billion at December 31, 2018. This increase was principally driven by the following:

- Increased investment securities available-for-sale of \$159.6 million which was driven by the Company's strategic plan to enhance liquidity and improve asset-liability repricing mix; and
- Growth in loan and leases held for sale and held for investment of \$1.08 billion resulting from strong originations and higher levels of balances being retained to support the Company's strategic plan to hold more loans.

Cash and cash equivalents were \$223.5 million at December 31, 2019, a decrease of \$93.3 million, or 29.4%, compared to \$316.8 million at December 31, 2018. This decrease was primarily the result of increased levels of loans held on books combined with the Company's maximization of returns on liquid assets by redeployment of funds into higher-yielding available-for-sale securities.

Total investment securities increased \$159.6 million during 2019, from \$380.5 million at December 31, 2018 to \$540.0 million at December 31, 2019, an increase of 41.9%. The Company began enhancing its investment securities position early in 2019 as part of its strategy to improve the returns of an enhanced liquidity profile and improve asset-liability repricing mix. At December 31, 2019, the investment portfolio was comprised of US treasury and government agency securities, mortgage-backed securities and municipal bonds.

Loans held for sale increased \$279.1 million, or 40.6%, during 2019, from \$687.4 million at December 31, 2018 to \$966.4 million at December 31, 2019. This increase reflected the impact of a significantly lower volume of loan sales combined with strong origination activity during 2019.

Loans and leases held for investment increased \$801.9 million, or 43.9%, during 2019, from \$1.83 billion at December 31, 2018 to \$2.63 billion at December 31, 2019. The increase was primarily the result of \$2.00 billion in loan and lease origination activities during 2019 combined with the late 2018 strategic shift to retain higher levels of loans on the balance sheet.

Premises and equipment increased \$16.6 million, or 6.3%, during 2019, from \$262.5 million at December 31, 2018 to \$279.1 million at December 31, 2019. This increase was primarily driven by construction of new facilities and infrastructure to accommodate Company growth.

Foreclosed assets increased \$4.5 million, or 413.0%, during 2019 from \$1.1 million at December 31, 2018 to \$5.6 million at December 31, 2019. The increase in foreclosed assets arose primarily from four relationships. The underlying loans were subject to an SBA guarantee and the total current estimated exposure to the Company is considered negligible for these more recent foreclosures.

Servicing assets decreased \$12.3 million, or 25.8%, during 2019 from \$47.6 million at December 31, 2018 to \$35.4 million at December 31, 2019 due to the reduced level of loan sales during the year combined with amortization of the outstanding balance of guaranteed loans sold. At December 31, 2019, the outstanding balance of government guaranteed loans sold in the secondary market was \$2.75 billion compared to \$3.05 billion at December 31, 2018. See the preceding Noninterest Income section under the subheading "Loan Servicing Revaluation" for more information.

Operating leases right-of-use assets and operating lease liabilities were additions to the balance sheet pursuant to the adoption of the new lease standard (ASU No. 2016-02) effective January 1, 2019. These balance sheet accounts reflect the Company's rights and obligations created by almost all leases in which it is a lessee with remaining terms of more than 12 months. See Note 1. Organization and Summary of Significant Accounting Policies and Note 4. Leases of the notes to consolidated financial statements for more information on the adoption of this new standard.

Total deposits were \$4.23 billion at December 31, 2019, an increase of \$1.08 billion, or 34.3%, from \$3.15 billion at December 31, 2018. The increase in deposits was driven by the combined success of deposit gathering campaigns to support the growth in loan and lease originations and balance sheet management initiatives.

Other liabilities increased \$25.0 million, or 96.6%, during 2019, from \$25.8 million at December 31, 2018 to \$50.8 million at December 31, 2019. The increase in other liabilities was largely driven by a \$16.3 million increase in unfunded investment commitments to a series of new funds advised by Canapi Advisors, increased accruals for incentive compensation of \$6.2 million and an increased deferred tax liability of \$5.7 million.

Shareholders' equity at December 31, 2019 was \$532.4 million as compared to \$493.6 million at December 31, 2018. The book value per share was \$13.20 at December 31, 2019 and average equity to average assets was 12.2% for 2019, compared to a book value per share of \$12.29 at December 31, 2018 and average equity to average assets of 13.8% for the year ended December 31, 2018. The increase in shareholders' equity is principally the result of net income to common shareholders of \$18.0 million, other comprehensive income of \$13.4 million and stock-based compensation expense of \$11.7 million, partially offset by \$4.8 million in dividends.

Loans Held for Sale & Serviced Portfolio

Any loan or portion of a loan that the Company has the intent and ability to sell is classified as held for sale. The average age of the held for sale portfolio as of December 31, 2020 was 13.5 months from origination date. Less than 25% of the current held for sale portfolio is older than two years. The majority of held for sale loans over one year old are composed of construction loans. Construction loans typically have extended build out periods that inherently result in longer lead times between origination and the ultimate sale date. Approximately 30.0% of the held for sale portfolio is aged between one and two years.

As of December 31, 2020 and 2019, the cumulative total outstanding principal balance of loans sold since May 2007 totaled \$3.20 billion and \$2.97 billion, respectively. The Company generally continues to service loans after the date of sale. As of December 31, 2020 and 2019, the total outstanding principal of loans and leases, including those serviced for others, was \$9.57 billion and \$6.57 billion, respectively.

Loan and Lease Maturity

As of December 31, 2020, \$6.49 billion, or 67.8%, of the total outstanding principal of loans and leases, including those serviced for others, were variable rate loans that adjust at specified dates based on the prime lending rate or other variable indices. As of December 31, 2020, \$4.27 billion, or 44.6%, of total outstanding principal of loans and leases were variable rate loans that adjust on either a calendar monthly or calendar quarterly basis using the prime lending rate or other variable indices.

At December 31, 2020, 62.3%, or \$4.0 billion, of the combined held for sale and held for investment loan and lease portfolio was composed of variable rate loans.

At December 31, 2020, \$2.07 billion, or 40.1%, of the held for investment balance matures in less than five years. Loans and leases maturing in greater than five years total \$3.09 billion of the total \$5.16 billion. The variable rate portion of the total held for investment loans and leases, excluding PPP loans, is 81.4%, which reflects the Company's strategy to minimize interest rate risk through the use of variable rate products.

At December 31, 2020					
Remaining Contractual Maturity of Total Held for Investment Loans and Leases					
	One Year or Less	After One Year and Through Five Years	After Five Years and Through Fifteen Years	After Fifteen Years	Total ⁽¹⁾
Fixed rate loans and leases:					
Commercial & Industrial					
Small Business Banking	\$ 2,187	\$ 15,850	\$ 102,286	\$ 5,238	\$ 125,561
Specialty Lending	29,107	28,030	60,222	20,309	137,668
Paycheck Protection Program	—	1,528,180	—	—	1,528,180
Total	31,294	1,572,060	162,508	25,547	1,791,409
Construction & Development					
Small Business Banking	16,992	7,967	14,678	8,018	47,655
Specialty Lending	25,326	10,362	—	—	35,688
Total	42,318	18,329	14,678	8,018	83,343
Commercial Real Estate					
Small Business Banking	2,949	17,048	8,537	84,634	113,168
Specialty Lending	—	335	1,032	1,760	3,127
Total	2,949	17,383	9,569	86,394	116,295
Commercial Land					
Small Business Banking	7,547	59,570	17,753	136,686	221,556
Total	7,547	59,570	17,753	136,686	221,556
Total fixed rate loans and leases	84,108	1,667,342	204,508	256,645	2,212,603
Variable rate loans and leases:					
Commercial & Industrial					
Small Business Banking	23,200	56,290	713,649	105,837	898,976
Specialty Lending	47,039	68,053	131,656	28,963	275,711
Total	70,239	124,343	845,305	134,800	1,174,687
Construction & Development					
Small Business Banking	5,747	6,169	5,671	117,845	135,432
Specialty Lending	13,403	9,886	10,256	23,380	56,925
Total	19,150	16,055	15,927	141,225	192,357
Commercial Real Estate					
Small Business Banking	7,717	24,230	131,438	1,044,496	1,207,881
Specialty Lending	—	55,784	26,171	90,566	172,521
Total	7,717	80,014	157,609	1,135,062	1,380,402
Commercial Land					
Small Business Banking	31	456	10,670	193,442	204,599
Total	31	456	10,670	193,442	204,599
Total variable rate loans and leases	97,137	220,868	1,029,511	1,604,529	2,952,045
Total held for investment loans and leases	\$ 181,245	\$ 1,888,210	\$ 1,234,019	\$ 1,861,174	\$ 5,164,648

(1) Excludes net deferred (fees) 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.

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

Nonperforming assets and TDRs, excluding loans measured at fair value, at December 31, 2020 were \$82.5 million, which represented a \$40.6 million, or 96.9%, increase from December 31, 2019. These nonperforming assets, at December 31, 2020 were comprised of \$46.1 million in nonaccrual loans and leases and \$4.2 million in foreclosed assets. Of the \$82.5 million of nonperforming assets and TDRs, \$43.1 million carried an SBA guarantee, leaving an unguaranteed exposure of \$39.3 million in total nonperforming assets and TDRs at December 31, 2020. This represents an increase of \$27.1 million, or 221.8%, from an unguaranteed exposure of \$12.2 million at December 31, 2019.

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

	<u>2020⁽¹⁾</u>	<u>2019⁽¹⁾</u>
Nonaccrual loans and leases:		
Total nonperforming loans and leases (all on nonaccrual) (2)	\$ 46,110	\$ 21,937
Total accruing loans and leases past due 90 days or more	—	—
Foreclosed assets	4,155	5,612
Total troubled debt restructurings (3)	39,803	16,566
Less nonaccrual troubled debt restructurings	<u>(7,592)</u>	<u>(2,225)</u>
Total performing troubled debt restructurings (3)	<u>32,211</u>	<u>14,341</u>
Total nonperforming assets and troubled debt restructurings (2) (3)	<u>\$ 82,476</u>	<u>\$ 41,890</u>
Allowance for credit losses on loans and leases	<u>\$ 52,306</u>	<u>\$ 28,234</u>
Total nonperforming loans and leases to total loans and leases held for investment (2)	1.06%	1.22%
Total nonperforming loans and leases to total assets (2)	0.66%	0.55%
Total nonperforming assets and troubled debt restructurings to total assets (2) (3)	1.17%	1.05%
Allowance for credit losses on loans and leases to loans and leases held for investment	1.21%	1.57%
Allowance for credit losses on loans and leases to total nonperforming loans and leases (2)	113.44%	128.70%

(1) Excludes loans measured at fair value.

(2) The year ended December 31, 2020 excludes one \$6.1 million nonaccrual loan classified as held for sale.

(3) The year ended December 31, 2020 excludes one \$5.1 million troubled debt restructuring loan classified as held for sale.

	2020 ⁽¹⁾	2019 ⁽¹⁾
Nonaccrual loans and leases guaranteed by U.S. government:		
Total nonperforming loans and leases guaranteed by the U.S. government (all on nonaccrual)	\$ 26,032	\$ 14,713
Total accruing loans and leases past due 90 days or more guaranteed by the U.S. government	—	—
Foreclosed assets guaranteed by the U.S. government	3,220	4,492
Total troubled debt restructurings guaranteed by the U.S. government	18,160	10,845
Less nonaccrual troubled debt restructurings guaranteed by the U.S. government	(4,271)	(385)
Total performing troubled debt restructurings guaranteed by U.S. government	13,889	10,460
Total nonperforming assets and troubled debt restructurings guaranteed by the U.S. government	\$ 43,141	\$ 29,665
Allowance for credit losses on loans and leases	\$ 52,306	\$ 28,234
Total nonperforming loans and leases not guaranteed by the U.S. government to total held for investment loans and leases	0.46%	0.40%
Total nonperforming loans and leases not guaranteed by the U.S. government to total assets	0.29%	0.18%
Total nonperforming assets and troubled debt restructurings not guaranteed by the U.S. government to total assets	0.56%	0.31%
Allowance for credit losses on loans and leases to total nonperforming loans and leases not guaranteed by the U.S. government	260.51%	390.84%

(1) Excludes loans measured at fair value.

Total nonperforming assets and troubled debt restructurings, including loans measured at fair value, at December 31, 2020 were \$153.2 million, which represented a \$42.1 million, or 37.9%, increase from December 31, 2019. These nonperforming assets, at December 31, 2020 were comprised of \$85.4 million in nonaccrual loans and leases and \$4.2 million in foreclosed assets. Of the \$153.2 million of nonperforming assets and TDRs, \$97.7 million carried an SBA guarantee, leaving an unguaranteed exposure of \$55.5 million in total nonperforming assets and TDRs at December 31, 2020. This represents an increase of \$28.3 million, or 103.9%, from an unguaranteed exposure of \$27.2 million at December 31, 2019.

See the below discussion related to the change in potential problem and individually evaluated 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 8.8% at December 31, 2020, compared to 4.4% at December 31, 2019. 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 December 31, 2020 and December 31, 2019 were 3.8% and 1.5%, respectively.

As of December 31, 2020, and December 31, 2019, potential problem (also referred to as criticized) and classified loans and leases, excluding loans measured at fair value, totaled \$311.4 million and \$129.1 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 used by the Company, see “Credit Quality Indicators” in Note 3 to the notes to consolidated financial statements. At December 31, 2020, the portion of criticized and classified loans and leases guaranteed by the SBA or USDA totaled \$168.9 million resulting in unguaranteed exposure risk of \$142.5 million, or 8.2% of total held for investment unguaranteed exposure carried at historical cost. This compares to the December 31, 2019 portion of criticized and classified loans and leases guaranteed by the SBA or USDA which totaled \$65.8 million resulting in unguaranteed exposure risk of \$63.3 million, or 5.4% of total held for investment unguaranteed exposure carried at historical cost. As of December 31, 2020, 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: Educational Services at 15.3%, Wine and Craft Beverage at 14.3%, Hotels at 13.6%, Entertainment Centers at 12.5%, Healthcare at 10.3%, Fitness Centers at 7.2%, Self Storage at 6.4% and Veterinary at 4.5%. As of December 31, 2019, 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: Healthcare at 20.8%, Hotels at 14.7%, Wine and Craft Beverage at 14.3%, Self Storage at 8.4%, Veterinary at 7.1%, Government Contracting at 6.1%, and Educational Services at 5.7%. Other than Hotels and Government Contracting which are a part of the Company’s Specialty Lending division, all of the above listed verticals are within the Company’s Small Business Banking division. Two Government Contracting relationships were charged off in the first nine months of 2020 which resulted in a reduction in individually evaluated loans for this vertical. The majority of the increase in potential problem and classified loans and leases was comprised of a relatively small number of borrowers largely concentrated in the Company’s more mature verticals. Furthermore, the Company believes that its underwriting and credit quality standards have continued to tighten with emphasis on new production in pandemic resilient verticals and increased monitoring of existing loans in pandemic susceptible verticals as the impacts and uncertainties COVID-19 continue to evolve. With this emphasis, systemic issues have begun to appear within the Hotel, Wine and Craft Beverage, Fitness Centers, Educational Services, and Entertainment Center verticals due to stress related to the COVID-19 pandemic and contributed to the increase in criticized and classified loans and leases.

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, unless the borrower was not past due at the time of a modification as a part of a COVID-19 assistance program. The Bank would consider a modification for a customer experiencing what is expected to be a short-term event that has temporarily impacted cash flow. This could be due, among other reasons, to illness, weather, impact from a one-time expense, slower than expected start-up, construction issues or other short-term issues. In all cases, credit personnel will review the request to determine if the customer is stressed and how the event has impacted the ability of the customer to repay the loan or lease long term. At December 31, 2020, the Company had \$272.3 million in modified unguaranteed loans and leases for borrowers impacted by the COVID-19 pandemic. These modifications were primarily short-term payment deferrals generally no more than six-months in duration and accordingly are not considered troubled debt restructurings. As of February 22, 2021, the Company’s modified unguaranteed loans and leases for borrowers impacted by the COVID-19 pandemic was approximately \$74.3 million, a decrease from December 31, 2020 due to borrowers beginning to emerge from deferral needs.

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 December 31, 2020, and December 31, 2019, Risk Grade 5 loans and leases, excluding loans measured at fair value, totaled \$237.5 million and \$89.5 million, respectively. The increase in Risk Grade 5 loans and leases, exclusive of loans measured at fair value, during 2020 was principally confined to eight verticals: Educational Services (\$37.9 million or 25.6%), Entertainment Centers (\$26.1 million or 17.6%), Fitness Centers (\$18.4 million or 12.4%), Wine and Craft Beverage (\$17.4 million or 11.8%), Senior Care (\$11.9 million or 8.1%), Hotels (\$8.9 million or 6.0%), and Self Storage (\$7.8 million or 5.3%). Other than Hotels, which are a part of the Company’s Specialty Lending division, all of the above listed verticals are within the Company’s Small Business Banking division. At December 31, 2020, approximately 100.0% of loans and leases classified as Risk Grade 5 are performing with no current payments past due more than 30 days. While the level of nonperforming assets fluctuates in response to changing economic and market conditions, in light of the relative size and composition of the loan and lease portfolio and management’s degree of success in resolving problem assets, management believes that a proactive approach to early identification and intervention is critical to successfully managing a small business loan portfolio. In conjunction with this, management believes that volumes of delinquencies may not be an accurate depiction of the borrower’s repayment abilities under the current pandemic induced circumstances due to payments being made by the SBA on behalf of borrower with loans under its programs. This payment assistance commenced in

the first quarter and continued for six months. 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. Management monitors these borrowers closely and has observed improving financial conditions. Management expects most will be able to resume making regular payments in early 2021.

Allowance for Credit Losses on Loans and Leases

See Note 1. Organization and Summary of Significant Accounting Policies of the Notes to the Consolidated Financial Statements in this report for a description of the methodologies used to estimate the allowance for credit losses prior to and after the adoption of ASC 326, *Financial Instruments – Credit Losses*, on January 1, 2020.

The ACL of \$28.2 million at December 31, 2019 increased by \$24.1 million, or 85.3%, to \$52.3 million at December 31, 2020. The ACL, as a percentage of loans and leases held for investment at historical cost amounted to 1.2% at December 31, 2020 and 1.6% at December 31, 2019. Excluding PPP loans and related reserves, the ACL, as a percentage of loans and leases held for investment at historical cost amounted to 1.8% at December 31, 2020. As mentioned earlier, the Company adopted the new CECL standard effective January 1, 2020. Upon adoption, the Company recorded a \$1.3 million decrease in the ACL. In implementing CECL, the Company accordingly determined to use forecasted levels of unemployment as a primary economic variable in forecasting future expected losses. Based upon the severity of ongoing developments resulting from the COVID-19 pandemic, combined with the effects of the above discussed increased levels of loan originations, significant charge-offs and model refinements in recognition of loss experience on non-mature verticals, as addressed more fully in the Provision for Loan and Lease Credit Losses section of Results of Operations, the Company's allowance for credit losses on loans and leases increased significantly in 2020.

Actual past due held for investment loans and leases, inclusive of loans measured at fair value, have increased by \$15.1 million since December 31, 2019. Total loans and leases 90 or more days past due increased \$22.8 million, or 58.4%, compared to December 31, 2019. The increase was comprised of a \$16.3 million and \$6.6 million increase in the unguaranteed and guaranteed portions, respectively, of past due loans compared to December 31, 2019 and was the result of a small number of relationships across fourteen industries but primarily concentrated within the Hotel, Entertainment Center, Wine and Craft Beverage and Self-Storage verticals. At December 31, 2020 and December 31, 2019, 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 1.1% and 1.7%, respectively. Total unguaranteed loans and leases past due were comprised of \$23.1 million carried at historical cost, an increase of \$15.1 million, and \$6.3 million measured at fair value, a decrease of \$5.4 million as of December 31, 2020 compared to December 31, 2019. Management continues to actively monitor and work to improve asset quality. Management believes the ACL of \$52.3 million at December 31, 2020 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, including but not limited to factors related to the above mentioned SBA delinquency effect and pandemic-susceptible verticals. 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 3. Loans and Leases Held for Investment and Credit Quality of the Notes to the Consolidated Financial Statements in this report.

The following table sets forth the breakdown of the allowance for credit losses on loans and leases carried at historical cost by category at the dates indicated.

	2020				2019			
	Allowance	Total Loans and Leases ⁽¹⁾	% of Total Allowance	% of Total Loans and Leases ⁽¹⁾	Allowance	Total Loans and Leases ⁽¹⁾	% of Total Allowance	% of Total Loans and Leases ⁽¹⁾
Commercial & Industrial								
Small Business Banking	\$ 2,297	\$ 716,196	4.39%	16.47%	\$ 8,718	\$ 386,223	30.88%	21.49%
Specialty Lending	19,417	342,289	37.12	7.87	7,039	168,018	24.93	9.35
Paycheck Protection Program	5,259	1,528,180	10.06	35.13	—	—	—	—
Total	26,973	2,586,665	51.57	59.47	15,757	554,241	55.81	30.84
Construction & Development								
Small Business Banking	1,907	183,087	3.65	4.21	2,118	302,470	7.50	16.82
Specialty Lending	3,756	92,613	7.18	2.13	614	44,848	2.18	2.50
Total	5,663	275,700	10.83	6.34	2,732	347,318	9.68	19.32
Commercial Real Estate								
Small Business Banking	11,226	999,697	21.46	22.99	6,415	538,654	22.72	29.97
Specialty Lending	6,922	155,331	13.24	3.57	2,012	123,040	7.13	6.85
Total	18,148	1,155,028	34.70	26.56	8,427	661,694	29.85	36.81
Commercial Land								
Small Business Banking	1,522	331,881	2.91	7.63	1,318	234,133	4.67	13.03
Total	1,522	331,881	2.91	7.63	1,318	234,133	4.67	13.03
Total	\$ 52,306	\$4,349,274	100.00%	100.00%	\$ 28,234	\$1,797,386	100.00%	100.00%

(1) Excludes loans measured at fair value.

Analysis of Loan and Lease Loss Experience. The following table sets forth an analysis of net charge-offs for loans and leases carried at historical cost to average total loans and leases, carried at historical cost, by category for the years indicated.

	2020			2019			2018		
	Net Charge-offs ⁽¹⁾	Average Total Loans & Leases ⁽¹⁾	% of Total Loans ⁽¹⁾	Net Charge-offs ⁽¹⁾	Average Total Loans & Leases ⁽¹⁾	% of Total Loans ⁽¹⁾	Net Charge-offs ⁽¹⁾	Average Total Loans & Leases ⁽¹⁾	% of Total Loans ⁽¹⁾
Commercial & Industrial									
Small Business Banking	\$ 2,669	\$ 463,811	0.58%	\$ 641	\$ 271,756	0.24%	\$ 953	\$ 110,213	0.86%
Specialty Lending	1,648	226,365	0.73	—	125,091	—	—	42,401	—
Paycheck Protection Program	—	1,271,106	—	—	—	—	—	—	—
Total	4,317	1,961,282	0.22	641	396,847	0.16	953	152,614	0.62
Construction & Development									
Small Business Banking	—	112,864	—	—	208,155	—	—	134,250	—
Specialty Lending	—	57,651	—	—	27,774	—	—	9,378	—
Total	—	170,515	—	—	235,929	—	—	143,628	—
Commercial Real Estate									
Small Business Banking	164	821,241	0.02	(18)	410,054	—	164	143,793	0.11
Specialty Lending	10,155	177,774	5.71	615	125,482	0.49	—	84,974	—
Total	10,319	999,015	1.03	597	535,536	0.11	164	228,767	0.07
Commercial Land									
Small Business Banking	629	316,691	0.20	172	192,845	0.09	—	94,775	—
Total	629	316,691	0.20	172	192,845	0.09	—	94,775	—
Total	\$ 15,265	\$3,447,503	0.44%	\$ 1,410	\$1,361,157	0.10%	\$ 1,117	\$ 619,784	0.18%

(1) Excludes loans measured at fair value.

Investment Securities

Investment securities totaled \$750.1 million at December 31, 2020, an increase of \$210.1 million, or 38.9%, compared to \$540.0 million at December 31, 2019. The large increase in the investment portfolio for 2020 was primarily related to a strategic initiative to deploy the Bank's excess cash position that arose from Q2 2020 efforts to safeguard liquidity, in the early stages of the global pandemic, as well as from the pledging of the PPP loans to the Federal Reserve PPPLF. This also included purchases of \$57.8 million in mortgage-backed securities for purposes of complying with the Community Reinvestment Act and purchases of \$237.0 million in mortgage-backed securities and \$102.3 million in collateralized mortgage obligations to increase yield and duration.

The investment securities portfolio consists entirely of available-for-sale securities. The Company purchases securities for the investment securities portfolio to manage interest rate risk, ensure a stable source of liquidity and to provide a steady source of income in excess of cost of funds.

At December 31, 2020, the duration of the overall available-for-sale securities portfolio was approximately 4.63 years.

The following table sets forth the stated maturities and weighted average yields of investment securities at December 31, 2020. Certain mortgage related securities have adjustable interest rates and will reprice annually within the various maturity ranges. These repricing schedules are not reflected in the tables below.

	Total Amortized Cost	Within One Year		After One to Five Years		After Five to Ten Years		After Ten Years	
		Amortized Cost	Average Yield	Amortized Cost	Average Yield	Amortized Cost	Average Yield	Amortized Cost	Average Yield
US government securities	\$ 15,440	\$ 4,999	2.65%	\$ 7,515	2.17%	\$ 2,926	2.84%	\$ —	0.00%
Mortgage-backed securities	703,092	—	0.00%	7,934	2.63%	202,991	2.81%	492,167	2.75%
Municipal bonds	3,267	—	0.00%	—	0.00%	—	0.00%	3,267	4.52%
Total securities	<u>\$721,799</u>	<u>\$ 4,999</u>	<u>2.65%</u>	<u>\$ 15,449</u>	<u>2.40%</u>	<u>\$205,917</u>	<u>2.81%</u>	<u>\$495,434</u>	<u>2.77%</u>

At December 31, 2020, the Company had 97.4% of its total investment securities portfolio in mortgage-backed securities, compared with 93.2% at December 31, 2019. The Company has continued to purchase mortgage-backed securities in order to obtain a favorable yield versus cash alternatives while still maintaining a low risk profile within the investment portfolio.

Deposits

The following table sets forth the composition of deposits.

	2020		2019		2018	
	Total	Percent	Total	Percent	Total	Percent
<i>Period end:</i>						
Noninterest-bearing demand deposits	\$ 75,287	1.32%	\$ 51,965	1.23%	\$ 56,481	1.79%
Interest-bearing deposits:						
Interest-bearing checking	250,060	4.38	—	—	2,099	0.07
Money market	117,010	2.05	86,754	2.05	89,329	2.83
Savings	2,081,561	36.44	1,101,065	26.05	886,718	28.13
Time deposits	3,188,910	55.82	2,987,196	70.67	2,117,444	67.18
Total	<u>5,637,541</u>	<u>98.68%</u>	<u>4,175,015</u>	<u>98.77%</u>	<u>3,095,590</u>	<u>98.21%</u>
Total period end deposits	<u>\$5,712,828</u>	<u>100.00%</u>	<u>\$4,226,980</u>	<u>100.00%</u>	<u>\$3,152,071</u>	<u>100.00%</u>
Total uninsured deposits	<u>\$ 580,912</u>	<u>10.17%</u>	<u>\$ 357,917</u>	<u>8.47%</u>	<u>\$ 316,823</u>	<u>10.05%</u>

	2020			2019			2018		
	Total	Percent	Average Rate	Total	Percent	Average Rate	Total	Percent	Average Rate
<i>Average:</i>									
Noninterest-bearing demand deposits	\$ 47,655	0.89%	—%	\$ 49,510	1.33%	—%	\$ 50,670	1.75%	—%
Interest-bearing deposits:									
Interest-bearing checking	318,667	5.95	0.58	42	0.00	1.07	32,792	1.14	1.04
Money market	87,050	1.62	0.40	86,175	2.31	0.65	131,495	4.55	1.10
Savings	1,531,680	28.59	1.08	1,013,177	27.13	2.03	911,757	31.56	1.68
Time deposits	3,373,012	62.95	2.10	2,585,367	69.23	2.58	1,761,948	61.00	2.12
Total average deposits	\$5,358,064	100.00%	1.67%	\$3,734,271	100.00%	2.35%	\$2,888,662	100.00%	1.89%

Deposits increased to \$5.71 billion at December 31, 2020 from \$4.23 billion at December 31, 2019, an increase of \$1.48 billion, or 35.2%. This increase was primarily due to the growth of the Company's customer base in the savings and time deposit products, enhanced by a nationwide marketing campaign with attractive rates and additional wholesale funding. The \$250.1 million increase in interest-bearing checking during 2020 was related to wholesale funding obtained for the PPP loan disbursements to small businesses. The \$2.1 million decrease in interest-bearing checking during 2019 was related to the remaining wind-down of the Company's trust operations that primarily occurred in 2018. Noninterest-bearing deposits increased \$23.3 million, or 44.9%, during 2020, and interest-bearing deposits increased \$1.46 billion, or 35.0%, during the same period. The growth in deposits during 2019 and 2018 was primarily in savings and time deposits, offset by a strategic initiative to reduce the Company's wholesale money market funds. Long-term wholesale funding contributed to the time deposit increases.

At December 31, 2020, the aggregate balance of uninsured time deposit accounts totaled \$67.2 million. At December 31, 2020, 71.7% of uninsured time deposit accounts were scheduled to mature within one year. The maturity profile of uninsured time deposits at December 31, 2020 is as follows:

Maturity Period	Three months or less	More than three months to six months	More than six months to twelve months	More than twelve months
Amount of time deposits in uninsured accounts	\$ 33,783	\$ 8,330	\$ 6,097	\$ 19,030
Total uninsured time deposits	\$ 33,783	\$ 8,330	\$ 6,097	\$ 19,030

Borrowings

Total borrowings increased \$1.54 billion at December 31, 2020 from December 31, 2019 as a result of the following:

In April 2020, the Company entered into the Federal Reserve Bank's Paycheck Protection Program Liquidity Facility ("PPPLF"). Under the PPPLF, advances must be secured by pledges of loans to small businesses originated by the Company under the U.S. Small Business Administration's 7(a) loan program titled the Paycheck Protection Program. The PPPLF accrues interest at thirty-five basis points and matures at various dates equal to the maturity date of the PPPLF collateral pledged to secure the advance, ranging from April 1, 2022 to August 12, 2025, and will be accelerated on and to the extent of any 7(a) loan forgiveness reimbursement by the SBA for any PPPLF collateral or the date of purchase by the SBA from the borrower of any PPPLF collateral. On the maturity date of each advance, the Company repays the advance plus accrued interest. This \$1.53 billion borrowing was fully advanced at December 31, 2020.

In September 2020, the Company renewed a revolving line of credit originally issued in 2017. The line of credit is unsecured and accrues interest at 30-day LIBOR plus 1.15% for a term of 13 months, with an interest rate cap of 4.25% and an interest rate floor of 2.75%. Payments are interest only with all principal and accrued interest due on October 10, 2021. The terms of this loan require the Company to maintain minimum capital and debt service coverage ratios. The \$50.0 million line of credit was fully advanced at March 31, 2020. The Company made a principal paydown of \$45.0 million on May 28, 2020 and \$12 thousand on September 20, 2020. There was an additional advance and curtailment netting to \$9.5 million on December 29, 2020. There is \$14.5 million outstanding and \$35.5 million of available credit remaining at December 31, 2020.

In October 2017, the Company entered into a financing lease of \$19 thousand with an unaffiliated equipment lease company, secured by fitness equipment which is included in premises and equipment on the consolidated balance sheet. Payments are principal and interest due monthly starting December 15, 2017 over a term of 60 months. At the end of the lease term there is a \$1.00 bargain purchase option. As of January 1, 2019, this borrowing was revised in accordance with ASU 2016-02. At December 31, 2020, the remaining balance is \$9 thousand.

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, FHLB advances, and the Federal Reserve Discount Window. A primary tool in the Company's liquidity management process is the utilization of a Volatile Liability Coverage Ratio ("VLCR") model to stress outflows in various scenarios with targeted days of liquidity coverage. The VLCR model output is then used by management to ensure adequate liquidity sources are available during those future periods. At December 31, 2020, the total amount of these four liquidity source items was \$3.06 billion, or 38.8% of total assets, an increase of 14.1% of total assets from \$1.19 billion, or 24.7% of total assets, at December 31, 2019.

Loans and other assets are funded primarily by loan sales, wholesale deposits and core 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. Additionally, an investment securities portfolio is available for both immediate and secondary liquidity purposes.

At December 31, 2020, none of the investment securities portfolio was pledged to secure public deposits or pledged to retail repurchase agreements, leaving \$750.1 million available to be pledged as collateral.

Asset/Liability Management and Interest Rate Sensitivity

One of the primary objectives of asset/liability management is to maximize the net interest margin while minimizing the earnings risk associated with changes in interest rates. One method used to manage interest rate sensitivity is to measure, over various time periods, the interest rate sensitivity positions, or gaps. This method, however, addresses only the magnitude of timing differences and does not address earnings or market value. Therefore, management uses an earnings simulation model to prepare, on a regular basis, earnings projections based on a range of interest rate scenarios to more accurately measure interest rate risk. For more information, see Item 7A of this Report.

The Company's balance sheet is asset-sensitive with a total cumulative gap position of 0.42% at December 31, 2020. The Company's near-term asset-sensitive position was reduced throughout 2020 as fixed rate investment and lending additions increased the Bank's asset duration, while its retail deposits growth was primarily in savings and short-term certificates of deposits. 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 with the majority of assets and liabilities being short-term, adjustable-rate instruments. The quarterly revaluation adjustment to the servicing asset, however, adjusts in an opposite direction to interest rate changes.

Capital

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

Capital amounts and ratios as of December 31, 2020, 2019 and 2018 are presented in the table below.

	Actual		Minimum Capital Requirement		Minimum To Be Well Capitalized Under Prompt Corrective Action Provisions ⁽¹⁾	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Consolidated - December 31, 2020						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 521,568	12.15%	\$ 193,172	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 574,621	13.39%	\$ 343,417	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 521,568	12.15%	\$ 257,563	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 521,568	8.40%	\$ 248,417	4.00%	N/A	N/A
Bank - December 31, 2020						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 470,069	11.25%	\$ 188,012	4.50%	\$ 271,573	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 522,305	12.50%	\$ 334,243	8.00%	\$ 417,804	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 470,069	11.25%	\$ 250,683	6.00%	\$ 334,243	8.00%
Tier 1 Capital (to Average Assets)	\$ 470,069	7.60%	\$ 247,288	4.00%	\$ 309,110	5.00%
Consolidated - December 31, 2019						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 499,513	14.90%	\$ 150,927	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 527,747	15.74%	\$ 268,315	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 499,513	14.90%	\$ 201,236	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 499,513	10.65%	\$ 187,582	4.00%	N/A	N/A
Bank - December 31, 2019						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 451,807	13.66%	\$ 148,950	4.50%	\$ 215,150	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 480,040	14.51%	\$ 264,800	8.00%	\$ 331,000	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 451,807	13.66%	\$ 198,600	6.00%	\$ 264,800	8.00%
Tier 1 Capital (to Average Assets)	\$ 451,807	9.68%	\$ 186,627	4.00%	\$ 233,283	5.00%
Consolidated - December 31, 2018						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 467,033	17.21%	\$ 122,127	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 481,465	17.74%	\$ 217,115	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 467,033	17.21%	\$ 162,836	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 467,033	13.47%	\$ 138,733	4.00%	N/A	N/A
Bank - December 31, 2018						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 385,030	14.45%	\$ 119,896	4.50%	\$ 173,183	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 399,607	15.00%	\$ 213,148	8.00%	\$ 266,435	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 385,030	14.45%	\$ 159,861	6.00%	\$ 213,148	8.00%
Tier 1 Capital (to Average Assets)	\$ 385,030	11.28%	\$ 136,584	4.00%	\$ 170,730	5.00%

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

Contractual Obligations

The following table presents the Company's significant fixed and determinable contractual obligations by payment date as of December 31, 2020. The payment amounts represent those amounts contractually due to the recipient. The table excludes liabilities recorded where management cannot reasonably estimate the timing of any payments that may be required in connection with these liabilities.

	Payments Due by Period				
	Total	Less than One Year	One to Three Years	Three to Five Years	More Than Five Years
Contractual Obligations					
Deposits without stated maturity	\$2,523,919	\$2,523,919	\$ —	\$ —	\$ —
Time deposits	3,188,910	2,244,543	584,829	263,000	96,538
Borrowings	1,542,093	14,492	1,527,601	—	—
Operating lease obligations	3,390	742	1,202	244	1,202
Total	<u>\$7,258,312</u>	<u>\$4,783,696</u>	<u>\$2,113,632</u>	<u>\$ 263,244</u>	<u>\$ 97,740</u>

As of December 31, 2020 and 2019, the Company had commitments for on-balance sheet instruments in the amount of \$15.8 million and \$16.9 million, respectively.

Off-Balance Sheet Arrangements

In the normal course of operations, the Company engages in a variety of financial transactions that, in accordance with 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 loan or investment commitments, lines of credit and letters of credit.

The contractual amounts of commitments to extend credit represent the amounts of potential accounting loss should the contract be fully drawn upon, the customer defaults and any existing collateral has no value. The Company uses the same credit policies in making commitments and conditional obligations as the Company does for on-balance sheet instruments. Financial instruments whose contract amounts represent credit risk at December 31, 2020, 2019 and 2018 are as follows:

	2020	2019	2018
Commitments to extend credit (1)	\$ 2,054,910	\$ 1,834,449	\$ 1,435,024
Standby letters of credit	22,913	25,532	2,150
Airplane purchase agreement commitments	—	—	10,450
Total commitments	<u>\$ 2,077,823</u>	<u>\$ 1,859,981</u>	<u>\$ 1,447,624</u>

(1) Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments may require payment of a fee and generally have fixed expiration dates or other termination clauses.

Critical Accounting Policies and Estimates

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

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

- Determination of the allowance for credit losses on loans and leases;

- Valuation of loans accounted for under the fair value option;
- Valuation of servicing assets;
- Valuation of equity security investments where no readily available market price exists;
- Consideration of significant influence for certain relationships where we have equity interests;
- Income taxes;
- Restricted stock unit awards with market price conditions;
- Valuation of foreclosed assets; and
- Business combinations and goodwill.

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

Non-GAAP Measures

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

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

- “Non-GAAP net income” is defined as net income adjusted to exclude significant non-routine sources of income and uses of expenses and an estimated corporate income tax expense across all periods being compared. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Noninterest income, non-GAAP” is defined as noninterest income adjusted to exclude significant non-routine sources of income, including gain on sale of aircraft. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Noninterest expense, non-GAAP” is defined as noninterest expense adjusted to exclude significant non-routine uses of expenses, including loss on sale of aircraft, impairment on aircraft held for sale, impairment expense on goodwill and other intangibles, and impairments of renewable energy tax credit investment. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Income before taxes, non-GAAP” is defined as income before taxes adjusted to exclude significant non-routine sources of income and uses of expenses as discussed above. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.
- “Income tax (benefit) expense, non-GAAP” is defined as income tax expense adjusted to exclude significant non-routine sources of income or uses of expenses discussed above. Management believes these measures are important as they allow for an evaluation of the core profitability of the Company's business.

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

	Years Ended December 31,		
	2020	2019	2018
Total shareholders' equity	\$ 567,850	\$ 532,386	\$ 493,560
Less:			
Goodwill	1,797	—	—
Other intangible assets	2,179	—	—
Tangible shareholders' equity (a)	<u>\$ 563,874</u>	<u>\$ 532,386</u>	<u>\$ 493,560</u>
Shares outstanding (c)	42,452,446	40,316,974	40,155,792
Total assets	\$ 7,872,303	\$ 4,812,828	\$ 3,672,937
Less:			
Goodwill	1,797	—	—
Other intangible assets	2,179	—	—
Tangible assets (b)	<u>\$ 7,868,327</u>	<u>\$ 4,812,828</u>	<u>\$ 3,672,937</u>
Tangible shareholders' equity to tangible assets (a/b)	7.17%	11.06%	13.44%
Tangible book value per share (a/c)	\$ 13.28	\$ 13.20	\$ 12.28
Efficiency ratio:			
Noninterest expense (d)	\$ 192,676	\$ 164,924	\$ 152,704
Net interest income	194,723	140,082	108,043
Noninterest income	86,000	63,519	96,265
Less: gain on sale of investment securities available-for-sale, net	1,880	620	—
Adjusted operating revenue (e)	<u>\$ 278,843</u>	<u>\$ 202,981</u>	<u>\$ 204,308</u>
Efficiency ratio (d/e)	69.10%	81.25%	74.74%

	Years Ended December 31,		
	2020	2019	2018
Reconciliation of net income to non-GAAP net income:			
Net income	\$ 59,543	\$ 18,034	\$ 51,448
Loss (gain) on sale of aircraft	6	(357)	—
Impairment on aircraft held for sale	1,263	—	—
Impairment expense on goodwill and other intangibles	—	—	2,680
Renewable energy tax credit investment impairment	—	602	—
Income tax effects and adjustments for non-GAAP items*	(305)	(59)	(643)
Non-GAAP net income	<u>\$ 60,507</u>	<u>\$ 18,220</u>	<u>\$ 53,485</u>
* Estimated at 24.0%			
Non-GAAP earnings per share:			
Basic	\$ 1.49	\$ 0.45	\$ 1.34
Diluted	\$ 1.45	\$ 0.44	\$ 1.29
Weighted-average shares outstanding:			
Basic	40,677,496	40,222,758	40,056,230
Diluted	41,771,250	41,053,514	41,446,750
Reconciliation of financial statement line items as reported to non-GAAP:			
Noninterest income, as reported	\$ 86,000	\$ 63,519	\$ 96,265
Gain on sale of aircraft	—	(357)	—
Noninterest income, non-GAAP	<u>86,000</u>	<u>63,162</u>	<u>96,265</u>
Noninterest expense, as reported	192,676	164,924	152,704
Loss on sale of aircraft	(6)	—	—
Impairment on aircraft held for sale	(1,263)	—	—
Impairment expense on goodwill and other intangibles	—	—	(2,680)
Renewable energy tax credit investment impairment	—	(602)	—
Noninterest expense, non-GAAP	<u>191,407</u>	<u>164,322</u>	<u>150,024</u>
Income before taxes, as reported	47,389	23,465	46,046
Loss (gain) on sale of aircraft	6	(357)	—
Impairment on aircraft held for sale	1,263	—	—
Impairment expense on goodwill and other intangibles	—	—	2,680
Renewable energy tax credit investment impairment	—	602	—
Income before taxes, non-GAAP	<u>48,658</u>	<u>23,710</u>	<u>48,726</u>
Income tax (benefit) expense, as reported	(12,154)	5,431	(5,402)
Income tax effects and adjustment for non-GAAP items	305	59	643
Income tax (benefit) expense, non-GAAP	<u>\$ (11,849)</u>	<u>\$ 5,490</u>	<u>\$ (4,759)</u>

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

The Company has a total cumulative gap in interest-earning assets and interest-bearing liabilities of 0.42% as of December 31, 2020, indicating that, overall, assets will reprice before liabilities. The majority of both the Company's loans and leases and deposits have short-term repricing capabilities. The Company has a funding model which differs from that of traditional banks. A significant portion of the Company's revenue is attributable to non-interest income, so the Company is less dependent on net interest income when compared to a traditional bank model. With the strategic decision to hold more loans, net interest income continues to grow, however, the Company does not have the traditional bank branch network and can operate with lower overhead costs to offset the higher cost of funds used to attract deposits.

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

The matching of assets and liabilities may be analyzed by examining the extent to which such assets and liabilities are "interest rate sensitive." An asset or liability is said to be interest rate sensitive within a specific time period if it will mature or reprice within that time period. The Company analyzes interest rate sensitivity position to manage the risk associated with interest rate movements through the use of two simulation models: economic value of equity, or EVE, and net interest income, or NII, simulations. The EVE simulation provides a long-term view of interest rate risk because it analyzes all of the 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.

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

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

The table below sets forth an approximation of the Company's NII sensitivity exposure for the 12-month periods ending December 31, 2021 and 2022 and the Company's EVE sensitivity at December 31, 2020. The simulation uses projected repricing of assets and liabilities at December 31, 2020 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, deposit betas and lags 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, approximate actual future activity may differ from the results shown below as it will include growth considerations 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 December 31, 2021	12 Months Ending December 31, 2022	As of December 31, 2020
+400	2.1%	(2.6)%	(41.9)%
+300	1.8	(1.9)	(32.1)
+200	1.3	(1.1)	(21.3)
+100	0.8	(0.4)	(10.5)
-100	(8.3)	(9.7)	11.3

Rates are increased instantaneously at the beginning of the projection. The Company is overall slightly asset sensitive in the initial year, as the Company's large variable loan portfolio and cash position will reprice at a faster speed than the Company's funding portfolio. The Company is slightly liability sensitive in the second year of the projection due to interest rates increasing or decreasing for the full year, the Company's remaining short-term funding products repricing and also due to the other assumptions used in the analysis as noted previously. 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 and brokered certificates of deposits. Increased fixed rate loan production in 2020 versus prior years, given the historical low market rate environment, has also been a significant driver in the model results.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

QUARTERLY FINANCIAL INFORMATION

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

Quarterly Financials

(dollars in thousands, except per share data)

	2020			
	4th Qtr	3rd Qtr	2nd Qtr	1st Qtr
Interest income	\$ 83,040	\$ 75,078	\$ 66,817	\$ 63,473
Interest expense	20,739	23,715	25,919	23,312
Net interest income	62,301	51,363	40,898	40,161
Provision for loan and lease credit losses	8,634	10,274	9,958	11,792
Net interest income after provision for loan and lease credit losses	53,667	41,089	30,940	28,369
Noninterest income	10,803	47,044	22,411	5,742
Noninterest expense	52,435	42,650	48,100	49,491
Income (loss) before taxes	12,035	45,483	5,251	(15,380)
Income tax (benefit) expense	(17,553)	11,703	1,474	(7,778)
Net income (loss)	\$ 29,588	\$ 33,780	\$ 3,777	\$ (7,602)
Net income (loss) per share:				
Basic	\$ 0.72	\$ 0.83	\$ 0.09	\$ (0.19)
Diluted	\$ 0.68	\$ 0.81	\$ 0.09	\$ (0.19)

	2019			
	4th Qtr	3rd Qtr	2nd Qtr	1st Qtr
Interest income	\$ 61,813	\$ 61,107	\$ 55,138	\$ 49,922
Interest expense	23,802	23,576	21,203	19,317
Net interest income	38,011	37,531	33,935	30,605
Provision for loan and lease credit losses	4,809	3,960	3,412	3,031
Net interest income after provision for loan and lease credit losses	33,202	33,571	30,523	27,574
Noninterest income	20,125	15,428	14,650	13,316
Noninterest expense	44,410	42,737	39,576	38,201
Income before taxes	8,917	6,262	5,597	2,689
Income tax expense	2,085	2,367	662	317
Net income	\$ 6,832	\$ 3,895	\$ 4,935	\$ 2,372
Net income per share:				
Basic	\$ 0.17	\$ 0.10	\$ 0.12	\$ 0.06
Diluted	\$ 0.17	\$ 0.09	\$ 0.12	\$ 0.06



Report of Independent Registered Public Accounting Firm

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

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Live Oak Bancshares, Inc. (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2021 expressed an unqualified opinion thereon.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for its allowance for credit losses effective January 1, 2020 due to the adoption of Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13").

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Servicing Asset

As described within Notes 1, 5, and 10 to the consolidated financial statements, the Company recognizes servicing assets, which represent the portion of the servicing spread that exceeds adequate compensation for the servicing function of the sold portion of loans originated by the Company. Servicing assets of \$33.9 million as of December 31, 2020 are carried at fair value with changes in the fair value reported in loan servicing asset revaluation within the consolidated statements of income. The determination of fair value of the servicing asset is based on a valuation model that incorporates assumptions 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. The fair value of servicing rights is highly sensitive to changes in underlying assumptions. Changes in prepayment speed assumptions have the most significant impact on the fair value of servicing rights.

We identified the Company's valuation of the servicing asset as a critical audit matter. The principal considerations for that determination included the high degree of auditor judgment required to assess the reasonableness of certain assumptions used in the valuation model. For instance, prepayment speeds and default rates are unobservable inputs developed using proprietary information from management's internal valuation specialist's database. In particular, the assumptions around prepayment speeds are the most subjective and provide the most sensitivity to the servicing rights.

The primary audit procedures we performed to address this critical audit matter included the following:

- We evaluated the design and tested the operating effectiveness of controls relating to the valuation of servicing assets, including controls over:
 - Management's valuation model, which are designed to ensure the completeness and accuracy of data used in the model; and
 - The determination of significant inputs and assumptions, including unobservable inputs such as prepayment speeds, used in the model.
- We involved the firm's internal valuation specialists to assist in:
 - Evaluating the methodologies and assumptions used by management, including assessing the reasonableness of significant unobservable inputs and assumptions of the valuation model including prepayment speeds; and
 - Independently calculating the discounted cash flows at the individual loan level for a sample of loans and comparing to management's estimate.
- We assessed the overall trends for the discount rate, prepayment speed, and servicing asset to compare the quarterly change, over a twelve-quarter period, and how the Company's discount rate assumptions compared to observable market interest rate trends.

Allowance for Credit Losses (ACL)

The Company's allowance for credit losses (ACL) for expected credit losses on loans and leases was \$52.3 million as of December 31, 2020. As described in Note 1 to the consolidated financial statements, the Company adopted ASU 2016-13 on January 1, 2020. The ACL is based on historical experience, current conditions, and reasonable and supportable forecasts and requires enhanced disclosures related to the significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio. The determination of the ACL represents a significant accounting estimate.

As further described in Notes 1, 3, and 10 to the consolidated financial statements, the Company estimates its ACL on a pooled basis for loans and leases that share risk characteristics and on an individual basis for those that do not. For those evaluated on a pooled basis, the Company's historical credit loss experience, adjusted for differences in current risk characteristics and combined with reasonable and supportable forecasts, supports the underlying assumptions for the estimation of a quantitative

component of the ACL. In addition, there is a qualitative factor component of the ACL based on additional internal and external indicators, such as unemployment rates. The Company estimates reserves on individually evaluated loans and leases using a discounted cash flow methodology or through the evaluation of collateral values. The estimation of the ACL is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available.

We identified the Company's estimate of the ACL as a critical audit matter. The principal considerations for that determination included the degree of subjectivity and judgment required to audit management's identification of individually evaluated loans and leases and quantification of the related ACL, as well as management's selection of assumptions for both the quantitative and qualitative factor components of the ACL for the pooled loans and leases. This was particularly true for the areas considered by management in establishing the qualitative factors, as well as the level assigned by management to each qualitative factor.

The primary procedures we performed to address this critical audit matter included the following:

- We obtained an understanding of the Company's process for establishing the ACL, including the implementation of models and basis for development and related adjustments of the qualitative factor components of the ACL.
- We evaluated the design and tested the operating effectiveness of controls relating to management's determination of the ACL, including controls over:
 - The credit administration function to ensure the timely and complete identification of individually evaluated loans and leases;
 - Management's review of portfolio trends that might impact the calculation of the ACL; and
 - Management's review of the ACL, including the review of the qualitative components of the ACL.
- We tested the completeness of the individually evaluated loan and lease population, including testing the modifications for potential troubled debt restructurings, substandard or worse rated loans and leases, non-accrual loans and leases, and past due loans and leases.
- We tested the calculation of losses on a sample of identified individually evaluated loans and leases, including assessing the reasonableness of the significant assumptions including any adjustments made to appraisals for discounts, selling costs and other unobservable adjustments.
- We evaluated the reasonableness of management's application of qualitative factor adjustments to the ACL, including the comparison of factors considered by management to third party or internal sources as well as evaluated the appropriateness and level of the qualitative factor adjustments.
- We assessed the overall trends in credit quality by comparing the Company's year-over-year and quarterly changes in qualitative factors and the ACL.
- We evaluated subsequent events and transactions and considered whether they corroborated or contradicted the Company's conclusion.
- We involved the firm's valuation specialists to assist in evaluating the appropriateness of forecast inputs and assumptions and testing the design of the model calculation through a re-performance of the discounted cash flow on a sample basis.

Loans Held at Fair Value

As described in Notes 1 and 10 to the consolidated financial statements, the Company had \$36.1 million of loans held for sale and \$815.4 million of loans held for investment as of December 31, 2020, representing retained participating interests of government guaranteed loans for which management elected the fair value option. The fair values of loans are determined by discounting estimated cash flows using interest rates approximating prevailing credit-risk adjusted market rates for similar loans. If the loan is collateral dependent, the fair value is determined based on the difference between the fair value of the collateral and the amortized cost basis of the loan as of the measurement date. Fair value of the loan's collateral is determined by appraisal, independent valuation or management's estimation of fair value, which is then adjusted for the cost related to the liquidation of the collateral.

We identified the Company's estimate of the fair value of loans for which the fair value option has been elected as a critical audit matter. The principal considerations for that determination included the high degree of subjectivity and auditor judgment required to assess the reasonableness of the assumptions, particularly as it relates to the qualitative factor adjustments, and calculations in the valuation model related to the credit component of fair value.

The primary procedures we performed to address this critical audit matter included the following:

- We obtained an understanding of the Company's process for establishing the fair value measurement, including the implementation of the model and basis for development and related adjustments of the qualitative factor components for the credit risk.
- We evaluated the design and tested the operating effectiveness of controls relating to the determination of the discount related to the credit risk, including management's assessment of the adjustments applied to determine the qualitative component.
- We evaluated the reasonableness of management's application of qualitative factor adjustments to the fair value calculation, including the comparison of factors considered by management to third party or internal sources as well as evaluated the appropriateness and level of the qualitative factor adjustments.

/s/ DIXON HUGHES GOODMAN LLP

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

**Raleigh, North Carolina
February 25, 2021**



Report of Independent Registered Public Accounting Firm

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

Opinion on Internal Control Over Financial Reporting

We have audited Live Oak Bancshares, Inc.'s (the "Company")'s internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of December 31, 2020 and 2019, and for each of the three years in the period ended December 31, 2020, and our report dated February 25, 2021 expressed an unqualified opinion on those consolidated financial statements. Our report contained a paragraph explaining that the Company changed its method of accounting for credit losses effective January 1, 2020 due to the adoption of Accounting Standards Update No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DIXON HUGHES GOODMAN LLP

**Raleigh, North Carolina
February 25, 2021**

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

	<u>December 31,</u> <u>2020</u>	<u>December 31,</u> <u>2019</u>
Assets		
Cash and due from banks	\$ 297,167	\$ 124,610
Federal funds sold	21,153	96,787
Certificates of deposit with other banks	6,500	7,250
Investment securities available-for-sale	750,098	540,045
Loans held for sale (includes \$36,111 and \$16,198 measured at fair value, respectively)	1,175,470	966,447
Loans and leases held for investment (includes \$815,374 and \$824,520 measured at fair value, respectively)	5,145,082	2,627,286
Allowance for credit losses on loans and leases	<u>(52,306)</u>	<u>(28,234)</u>
Net loans and leases	5,092,776	2,599,052
Premises and equipment, net	259,267	279,099
Foreclosed assets	4,155	5,612
Servicing assets	33,918	35,365
Other assets	<u>231,799</u>	<u>158,561</u>
Total assets	<u>\$ 7,872,303</u>	<u>\$ 4,812,828</u>
Liabilities and Shareholders' Equity		
Liabilities		
Deposits:		
Noninterest-bearing	\$ 75,287	\$ 51,965
Interest-bearing	<u>5,637,541</u>	<u>4,175,015</u>
Total deposits	5,712,828	4,226,980
Borrowings	1,542,093	14
Other liabilities	<u>49,532</u>	<u>53,448</u>
Total liabilities	<u>7,304,453</u>	<u>4,280,442</u>
Shareholders' equity		
Preferred stock, no par value, 1,000,000 authorized, none issued or outstanding at December 31, 2020 and December 31, 2019	—	—
Class A common stock, no par value, 100,000,000 shares authorized, 41,344,689 and 37,401,443, shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	298,890	309,526
Class B common stock, no par value, 10,000,000 shares authorized, 1,107,757 and 2,915,531 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	11,729	30,871
Retained earnings	235,724	180,265
Accumulated other comprehensive income	<u>21,507</u>	<u>11,724</u>
Total shareholders' equity	<u>567,850</u>	<u>532,386</u>
Total liabilities and shareholders' equity	<u>\$ 7,872,303</u>	<u>\$ 4,812,828</u>

See Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2020	2019	2018
Interest income			
Loans and fees on loans	\$ 270,770	\$ 207,836	\$ 147,310
Investment securities, taxable	15,016	15,345	8,733
Other interest earning assets	2,622	4,799	6,600
Total interest income	288,408	227,980	162,643
Interest expense			
Deposits	89,726	87,897	54,469
Borrowings	3,959	1	131
Total interest expense	93,685	87,898	54,600
Net interest income	194,723	140,082	108,043
Provision for loan and lease credit losses			
Net interest income after provision for loan and lease credit losses	40,658	15,212	5,558
Noninterest income			
Loan servicing revenue	26,600	28,034	29,121
Loan servicing asset revaluation	(9,958)	(16,581)	(21,224)
Net gains on sales of loans	49,473	29,002	75,170
Net (loss) gain on loans accounted for under the fair value option	(13,083)	7,408	(5,041)
Equity method investments income (loss)	(14,691)	(7,889)	(386)
Equity security investments gains (losses), net	14,909	3,532	213
Gain on sale of investment securities available-for-sale, net	1,880	620	—
Lease income	10,508	9,655	7,966
Management fee income	6,352	1,742	—
Title insurance income	—	—	2,775
Other noninterest income	14,010	7,996	7,671
Total noninterest income	86,000	63,519	96,265
Noninterest expense			
Salaries and employee benefits	112,525	90,634	77,411
Travel expense	3,451	6,921	9,156
Professional services expense	6,359	6,859	4,878
Advertising and marketing expense	3,510	5,936	6,015
Occupancy expense	8,757	8,116	7,065
Data processing expense	12,344	9,265	12,010
Equipment expense	17,603	16,327	13,724
Other loan origination and maintenance expense	10,790	9,272	5,967
Renewable energy tax credit investment impairment	—	602	—
FDIC insurance	7,473	3,447	3,234
Title insurance closing services expense	—	—	912
Impairment expense on goodwill and other intangibles	—	—	2,680
Other expense	9,864	7,545	9,652
Total noninterest expense	192,676	164,924	152,704
Income before taxes			
Income tax (benefit) expense	47,389	23,465	46,046
Net income	(12,154)	5,431	(5,402)
	59,543	18,034	51,448
Basic earnings per share	\$ 1.46	\$ 0.45	\$ 1.28
Diluted earnings per share	\$ 1.43	\$ 0.44	\$ 1.24

See Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2020	2019	2018
Net income	\$ 59,543	\$ 18,034	\$ 51,448
Other comprehensive income (loss) before tax:			
Net unrealized gain (loss) on investment securities arising during the period	14,752	18,252	(526)
Reclassification adjustment for gain on sale of securities available-for-sale included in net income	(1,880)	(620)	—
Other comprehensive income (loss) before tax	12,872	17,632	(526)
Income tax (expense) benefit	(3,089)	(4,231)	126
Other comprehensive income (loss), net of tax	9,783	13,401	(400)
Total comprehensive income	<u>\$ 69,326</u>	<u>\$ 31,435</u>	<u>\$ 51,048</u>

See Notes to Consolidated Financial Statements

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

	Common stock			Retained earnings	Accumulated other comprehensive income (loss)	Total equity
	Shares		Amount			
	Class A	Class B	Amount			
Balance at December 31, 2017	35,252,053	4,643,530	\$317,725	\$120,241	\$ (1,033)	\$436,933
Net income	—	—	—	51,448	—	51,448
Other comprehensive loss	—	—	—	—	(400)	(400)
Issuance of restricted stock	64,308	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(756)	—	—	(756)
Employee stock purchase program	14,339	—	342	—	—	342
Stock option exercises	181,562	—	1,626	—	—	1,626
Stock option based compensation expense	—	—	1,713	—	—	1,713
Restricted stock expense	—	—	7,463	—	—	7,463
Reclassification of accumulated other comprehensive income due to tax rate change	—	—	—	244	(244)	—
Cash dividends (\$0.12 per share)	—	—	—	(4,809)	—	(4,809)
Balance at December 31, 2018	<u>35,512,262</u>	<u>4,643,530</u>	<u>328,113</u>	<u>167,124</u>	<u>\$ (1,677)</u>	<u>\$493,560</u>
Net income	—	—	—	18,034	—	18,034
Other comprehensive income	—	—	—	—	13,401	13,401
Issuance of restricted stock	61,121	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(409)	—	—	(409)
Employee stock purchase program	29,493	—	437	—	—	437
Non-voting common stock converted to voting common stock in private sale	1,727,999	(1,727,999)	—	—	—	—
Stock option exercises	70,568	—	508	—	—	508
Stock option based compensation expense	—	—	1,723	—	—	1,723
Restricted stock expense	—	—	10,025	—	—	10,025
Cumulative effect of accounting change for Accounting Standards Update 2016-02	—	—	—	(66)	—	(66)
Cash dividends (\$0.12 per share)	—	—	—	(4,827)	—	(4,827)
Balance at December 31, 2019	<u>37,401,443</u>	<u>2,915,531</u>	<u>\$340,397</u>	<u>\$180,265</u>	<u>\$ 11,724</u>	<u>\$532,386</u>
Net income	—	—	—	59,543	—	59,543
Other comprehensive income	—	—	—	—	9,783	9,783
Issuance of restricted stock	1,510,066	—	—	—	—	—
Tax withholding related to vesting of restricted stock and other	—	—	(49,229)	—	—	(49,229)
Employee stock purchase program	39,253	—	520	—	—	520
Non-voting common stock converted to voting common stock in private sale	1,807,774	(1,807,774)	—	—	—	—
Cumulative effect of accounting change for Accounting Standards Update 2016-13	—	—	—	822	—	822
Stock option exercises	496,226	—	3,069	—	—	3,069
Stock option based compensation expense	—	—	1,594	—	—	1,594
Restricted stock expense	—	—	13,146	—	—	13,146
Issuance of common stock in connection with acquisition of wholly-owned subsidiary	89,927	—	1,122	—	—	1,122
Cash dividends (\$0.12 per share)	—	—	—	(4,906)	—	(4,906)
Balance at December 31, 2020	<u>41,344,689</u>	<u>1,107,757</u>	<u>\$310,619</u>	<u>\$235,724</u>	<u>\$ 21,507</u>	<u>\$567,850</u>

See Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2020	2019	2018
<i>Cash flows from operating activities</i>			
Net income	\$ 59,543	\$ 18,034	\$ 51,448
Adjustments to reconcile net income to net cash (used) provided by operating activities:			
Depreciation and amortization	21,688	19,967	16,386
Provision for loan and lease credit losses	40,658	15,212	5,558
Amortization of premium on securities, net of accretion	3,359	507	802
Impairment expense on goodwill and other intangibles, net	—	—	2,680
Deferred tax (benefit) expense	(17,447)	1,467	(5,936)
Originations of loans held for sale	(1,183,152)	(1,005,165)	(1,079,472)
Proceeds from sales of loans held for sale	875,393	457,533	1,086,614
Net gains on sale of loans held for sale	(49,473)	(29,002)	(75,170)
Net loss on sale of foreclosed assets	12	25	38
Net loss (gain) on loans accounted for under fair value option	13,083	(7,408)	5,041
Net decrease in servicing assets	1,447	12,276	4,657
Gain on sale of investment securities available-for-sale, net	(1,880)	(620)	—
Net loss (gain) on sale or disposal of long lived asset	6	(357)	—
Net loss on disposal of premises and equipment	38	109	37
Impairment on premises and equipment, net	1,263	—	—
Equity method investments (income) loss	14,691	7,889	386
Equity security investments (gains) losses, net	(14,909)	(3,532)	(213)
Renewable energy tax credit investment impairment	—	602	—
Stock option based compensation expense	1,594	1,723	1,713
Restricted stock expense	13,146	10,025	7,463
Stock based compensation expense excess tax benefit (shortfall)	22,043	(125)	101
Business combination contingent consideration fair value adjustment	163	—	(260)
Changes in assets and liabilities:			
Lease right-of-use assets and liabilities, net	42	126	—
Other assets	(76,315)	394	(14,040)
Other liabilities	2,018	3,896	(1,539)
Net cash (used) provided by operating activities	<u>(272,989)</u>	<u>(496,424)</u>	<u>6,294</u>
<i>Cash flows from investing activities</i>			
Purchases of securities available-for-sale	(396,187)	(253,100)	(347,184)
Proceeds from sales, maturities, calls, and principal paydowns of securities available-for-sale	197,527	111,290	56,631
Proceeds from SBA reimbursement/sale of foreclosed assets, net	5,282	796	527
Business combination, net of cash acquired	(895)	—	—
Sale of title insurance business, net of cash sold	—	—	(209)
Investment in certificates of deposit with other banks	—	—	(6,750)
Maturities of certificates of deposit with other banks	750	—	2,500
Loan and lease originations and principal collections, net	(2,402,024)	(503,349)	(440,416)
Proceeds from sale of long lived asset	9,063	10,895	—
Proceeds from sale of premises and equipment	4	—	865
Purchases of premises and equipment, net	(20,989)	(37,197)	(111,322)
Net cash used by investing activities	<u>(2,607,469)</u>	<u>(670,665)</u>	<u>(845,358)</u>

See Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2020	2019	2018
<i>Cash flows from financing activities</i>			
Net increase in deposits	\$ 1,485,848	\$ 1,074,909	\$ 891,808
Proceeds from borrowings	1,828,033	—	18
Repayment of borrowings	(285,954)	(1,443)	(25,125)
Stock option exercises	3,069	508	1,626
Employee stock purchase program	520	437	342
Tax withholding related to vesting of restricted stock and other	(49,229)	(409)	(756)
Shareholder dividend distributions	(4,906)	(4,827)	(4,809)
Net cash provided by financing activities	<u>2,977,381</u>	<u>1,069,175</u>	<u>863,104</u>
Net increase (decrease) in cash and cash equivalents	96,923	(97,914)	24,040
<i>Cash and cash equivalents, beginning</i>	<u>221,397</u>	<u>319,311</u>	<u>295,271</u>
<i>Cash and cash equivalents, ending</i>	<u><u>\$ 318,320</u></u>	<u><u>\$ 221,397</u></u>	<u><u>\$ 319,311</u></u>
<i>Supplemental disclosure of cash flow information</i>			
Interest paid	\$ 91,801	\$ 87,280	\$ 54,106
Income tax paid (received), net	11,486	(12,293)	1,750
<i>Supplemental disclosures of noncash operating, investing, and financing activities</i>			
Unrealized holding gains (losses) on available-for-sale securities, net of taxes	\$ 9,783	\$ 13,401	\$ (400)
Transfers from loans and leases to foreclosed real estate and other repossessions	4,089	5,058	346
Net transfers between foreclosed real estate and SBA receivable	252	(281)	(32)
Transfer aircraft from premises and equipment, net to held for sale assets	17,943	—	10,467
Transfer of loans held for sale to loans and leases held for investment	295,981	277,964	131,266
Transfer of loans and leases held for investment to loans held for sale	97,341	39,067	94,154
Accrued premises and equipment additions	—	88	534
Loans to finance sale of other assets	—	—	3,642
Right-of-use assets obtained in exchange for lessee operating lease liabilities	—	2,241	—
Equity method investment commitments	2,940	16,282	—
Business combination:			
Assets acquired (excluding goodwill)	2,523	—	—
Liabilities assumed	2,074	—	—
Goodwill recorded	1,797	—	—

See Notes to Consolidated Financial Statements

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 1. Organization and Summary of Significant Accounting Policies

Organization

Live Oak Bancshares, Inc. (the “Company”) is a bank holding company headquartered in Wilmington, North Carolina incorporated under the laws of North Carolina in December 2008. The Company conducts business operations primarily through its commercial bank subsidiary, Live Oak Banking Company (the “Bank”). The Bank was organized and incorporated under the laws of the State of North Carolina on February 25, 2008 and commenced operations on May 12, 2008. The Bank has seven satellite sales offices across the United States. The Bank specializes in lending and deposit related services to small businesses nationwide. The Bank identifies and extends lending to credit-worthy borrowers both within specific industries, also called verticals, through expertise within those industries, and more broadly to select borrowers outside of those industries. A significant portion of the loans originated by the Bank are guaranteed by the Small Business Administration (“SBA”) under the 7(a) Loan Program and the U.S. Department of Agriculture (“USDA”) Rural Energy for America Program (“REAP”), Water and Environmental Program (“WEP”) and Business & Industry (“B&I”) loan programs.

The Company’s wholly owned 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”).

The Bank’s wholly owned subsidiaries are Live Oak Number One, Inc., Live Oak Clean Energy Financing LLC (“LOCEF”), and Live Oak Private Wealth, LLC. Live Oak Number One, Inc. holds properties foreclosed on by the Bank. LOCEF provides financing to entities for renewable energy applications and became a wholly owned subsidiary of the Bank during the first quarter of 2019. Live Oak Private Wealth, LLC and its wholly owned subsidiary, Jolley Asset Management, LLC (“JAM”), provide high-net-worth individuals and families with strategic wealth and investment management services. See Business Combination discussion below for more information on the acquisition of JAM in 2020.

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 provides investment advisory services to a series of new funds focused on providing venture capital to new and emerging financial technology companies.

The Company jointly formed 504 Fund Advisors, LLC (“504FA”) to serve as the investment adviser for the 504 Fund, a closed-end mutual fund organized to invest in SBA section 504 loans. 504FA exited as advisor for the 504 Fund in May 2019 and the Company subsequently dissolved this legal entity.

On August 1, 2018, the Company sold Reltco Inc. and National Assurance Title, Inc. (collectively referred to as “Reltco”), two nationwide title agencies under common control. See Goodwill and Intangible Assets within this note for more information.

Basis of Presentation

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

The Company has evaluated subsequent events for potential recognition and/or disclosure through the date these consolidated financial statements were issued.

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Consolidation Policy

The consolidated financial statements include the financial statements of the Company and wholly owned subsidiaries of Live Oak Banking Company, Live Oak Number One, Inc., LOCEF, Live Oak Private Wealth, LLC, JAM, GLS, Grove, Live Oak Ventures, Canapi, 504FA and Reltco. All significant intercompany balances and transactions have been eliminated in consolidation. In addition, the Company evaluates its relationships with other entities to identify whether they are variable interest entities and to assess whether it is the primary beneficiary of such entities. If the determination is made that the Company is the primary beneficiary, then that entity is included in the consolidated financial statements. If an entity is not a variable interest entity, the Company also evaluates arrangements in which there is a general partner or managing member to determine whether consolidation is appropriate.

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

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. The primary beneficiary consolidates the variable interest entity ("VIE"). The primary beneficiary is defined as the enterprise that has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could be significant to the VIE.

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

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

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

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

The following table provides a summary of the tax-advantaged VIE that the Company has not consolidated as of December 31, 2020 and 2019:

	<u>2020</u>	<u>2019</u>
Investment carrying amount	\$ —	\$ —
Maximum exposure to loss	879	1,758

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Business Combinations

Business combinations are accounted for by applying the acquisition method in accordance with Accounting Standards Codification (ASC) 805, *Business Combinations*. Under the acquisition method, identifiable assets acquired and liabilities assumed, and any non-controlling interest in the acquiree at the acquisition date are measured at their fair values as of that date, and are recognized separately from any resulting goodwill. Results of operations of the acquired entities are included in the consolidated statements of income and comprehensive income from the date of acquisition. Any subsequent measurement-period adjustments are recorded within 12 months of the acquisition date.

On April 1, 2020, the Company acquired 100% of the equity interests of JAM, a registered investment advisor based in Rocky Mount, North Carolina. Goodwill, intangible assets and contingent consideration of \$1.8 million, \$2.3 million and \$2.1 million, respectively, were recorded by the Company as a result of this transaction. Intangible assets are almost entirely comprised of customer relationships that are being amortized using the straight-line method over 15 years. As a result of this acquisition, the Bank's subsidiary Live Oak Private Wealth, LLC, expects to broaden service offerings to existing high-net-worth individuals and families, attract new clients from an expanded footprint and benefit from economies of scale. The acquisition did not materially impact the Company's financial position, results of operations or cash flows. Given the impact of the above acquisition was immaterial to the Company and its results of operations, additional disclosures have not been included.

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 significant operating segments: Banking and Fintech, as discussed more fully in Note 16. Segments. In determining the appropriateness of segment definition, the Company considers the criteria of ASC 280, *Segment Reporting*.

Use of Estimates

In preparing financial statements in conformity with GAAP, management is required to make estimates and assumptions that affect reported amounts of assets and liabilities as of the date of the balance sheet and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Material estimates that are particularly susceptible to significant change in the near term relate to the determination of the allowance for credit losses on loans and leases, valuations of loans at fair value and servicing assets, restricted stock unit awards with market price conditions and income taxes.

Cash and Cash Equivalents

For the purpose of presentation in the consolidated statements of cash flows, cash and cash equivalents are defined as those amounts included in the balance sheet caption "cash and due from banks" and "federal funds sold." Cash and cash equivalents have an initial maturity of three months or less.

To comply with banking regulations, the Company is required to maintain certain average cash reserve balances. The daily average cash reserve requirement was temporarily suspended for the year ended December 31, 2020 due to COVID-19 crisis response and was approximately \$1.0 million at December 31, 2019.

Certificates of Deposit with other Banks

Certificates of deposit with other banks have maturities ranging from May 2021 through November 2023 and bear interest at rates ranging from 0.15% to 3.55%. All investments in certificates of deposit are with FDIC insured financial institutions and none exceed the maximum insurable amount of \$250 thousand.

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Investments

Securities

Debt securities that management has the positive intent and ability to hold to maturity are classified as “held-to-maturity” and recorded at amortized cost. Trading securities are recorded at fair value with changes in fair value included in earnings. Securities not classified as held-to-maturity or trading are classified as “available-for-sale” and recorded at fair value. Unrealized gains and losses for available-for-sale investment securities, other than certain credit-related impairment losses, are excluded from earnings and reported in other comprehensive income. The Company’s entire portfolio for the periods presented is classified as available-for-sale.

Purchase premiums and discounts are recognized in interest income using the interest method over the terms of the securities. Gains and losses on the sales of securities are typically recorded on the trade date and are determined using the specific identification method.

Other

Other investments are generally non-marketable equity investments and are included in the other assets line in the consolidated balance sheets while the impact is largely reflected in the equity method investments income (loss) and equity security investments gains (losses), net line items on the consolidated statements of income. The Company generally accounts for other investments either under the equity method or the provisions of ASC 323, Investments – Equity Method and Joint Ventures (“equity securities” or “equity security accounting”).

Investments through which there is significant influence but not control over the investee are accounted for under the equity method. The determination of whether the Company has significant influence over an investee requires judgement based on the fact and circumstances of each investment including level of ownership, power to control and legal structure. Significant influence is generally presumed to exist in privately held companies where the Company owns at least 20%, or 5% for limited partnerships or limited liability companies in certain circumstances, or circumstances where there is ability to exercise significant influence over the investee’s operating and financial policies through board involvement or other influence. Under the equity method the Company recognizes its proportionate share of the results of operations of the investee based on most current information available. In instances where cash distributions vary at different points and/or are not directly linked to the Company’s ownership percentage the investee’s net income or loss is allocated using the hypothetical liquidation at book value (“HLBV”) method. The Company’s investment in Apiture is accounted for under the HLBV method.

Investments through which the Company is not able to exercise significant influence over the investee are accounted for under as equity securities whereby investments are measured at fair value with changes in fair value recognized in net income, unless those investments have no readily determinable fair value. Investments without a readily determinable fair value are measured at cost minus impairment, if any, plus or minus changes in value resulting from observable price changes arising from orderly transactions. Management considers a range of factors when adjusting the fair value of these investments, including, but not limited to, the term and nature of the investment, market conditions, values for comparable securities, current and projected operating performance, exit strategies, financing transactions subsequent to the acquisition of the investment and a discount for certain investments that have lock-up restrictions or other features that indicate a discount to fair value is warranted.

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Impairment

Available for Sale Securities

After adoption of ASC 326, discussed more fully under Allowance for Credit Losses (“ACL”)

When debt securities are in an unrealized loss position, the Company first assesses whether it intends to sell, or it is more likely than not that it will be required to sell, the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security’s amortized cost basis is written down to fair value through income. Debt securities that do not meet the aforementioned criteria are evaluated to determine whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, management considers the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected from the security is less than the amortized cost basis, a credit loss exists and an ACL is recorded for the credit loss, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an ACL is recognized in other comprehensive income. Changes in the ACL are recorded as provision for (or reversal of) credit loss expense. Losses are charged against the allowance when management believes the uncollectibility of an available-for-sale security is confirmed or when either of the criteria regarding intent or requirement to sell is met. Management has made the accounting policy election to exclude accrued interest receivable on available-for-sale debt securities from the estimate of credit losses. Securities are charged-off against the allowance or, in the absence of any allowance, written down through income when deemed uncollectible by management or when either of the aforementioned criteria regarding intent or requirement to sell is met.

Prior to adoption of ASC 326

At each reporting date, the Company evaluates each investment in a loss position for other than temporary impairment. The Company evaluates declines in market value below cost for debt securities by assessing the likelihood of selling the security prior to recovering its cost basis. If the Company intends to sell the debt security or it is more-likely-than-not that the Company will be required to sell the debt security prior to recovering its cost basis, the Company will write down the security to fair value with the full charge recorded in earnings. If the Company does not intend to sell the debt security and it is not more-likely-than-not that the Company will be required to sell the debt security prior to recovery, the security will not be considered other-than-temporarily impaired unless there are credit losses associated with the security. In that case: (1) where credit losses exist, the portion of the impairment related to those credit losses is recognized in earnings; (2) any remaining difference between the fair value and the cost basis should be recognized as part of other comprehensive income.

Equity Securities

For equity securities not accounted for at fair value, any impairment is recognized with the full charge recorded in earnings. To determine whether such equity security is impaired, the Company considers various indicators of impairment, including (1) the length of time and the extent to which the fair value has been less than cost, (2) the financial condition and near-term prospects of the issuer, and (3) the intent and ability of the Company to retain its investment in the issuer for a period of time sufficient to allow for any anticipated recovery in fair value.

Federal Home Loan Bank Stock

Membership in the Federal Home Loan Bank of Atlanta (“FHLB”) requires ownership of FHLB stock. FHLB stock is restricted because it may only be sold to the FHLB and all sales must be at par. FHLB stock is carried at cost minus impairment, if any, and is recorded within other assets in the consolidated balance sheets. FHLB stock was \$4.3 million and \$3.3 million at December 31, 2020 and 2019, respectively.

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Loans and Leases

Fair Value Option

Management evaluates retained participating interests of government guaranteed loans for the fair value option election. Those loans for which the fair value option is elected are measured at fair value and are classified as both Held for Sale and Held for Investment, as outlined below. 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. The changes in fair value of loans is reported in noninterest income. Fair value of loans includes adjustments for historical credit losses, market liquidity, and economic conditions.

The historical credit loss adjustment is estimated using a discounted cash flow (“DCF”) methodology for each loan which incorporates measurements of (i) probability of default (“PD”), which is the likelihood a loan or lease will stop performing, (ii) loss given default (“LGD”), which is the expected loss rate for loans or leases in default, (iii) prepayments, (iv) the estimated outstanding exposure at default (“EAD”), and (v) the effective interest rate (“EIR”). PD rates are calculated using the number of defaults divided by the number of loans available to default for 1-year observation periods over the lifetime of data available for a certain pool. LGD rates are calculated by dividing the lifetime net charge-offs for each pool by the pool’s average outstanding balance. PD and LGD rates are adjusted for forecasted national unemployment rates during the reasonable and supportable forecast period. Management has determined that four quarters represents a reasonable and supportable forecast period and adjusted loss rates revert back to a historical loss rate over four quarters on a straight-line basis. Expected historical losses are calculated as the product of PD, LGD, and EAD. Expected historical losses are discounted using the loan or lease EIR, adjusted for prepayments. Market liquidity and economic condition adjustments are estimated using the sale prices of similar loans based on rate, term, and asset size. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available.

Held for Sale

Management designates loans as held for sale based on its intent to sell guaranteed portions in the SBA and USDA Secondary Market and unguaranteed portions to participant banks and credit unions. Salability requirements of the guaranteed portion include, but are not limited to, full disbursement of the loan commitment amount. Loans originated and intended for sale are carried at either fair value, if the fair value option is elected, or the lower of cost or estimated fair value based on a loan-by-loan election. The cost basis of loans held for sale includes the deferral of loan origination fees and costs. Deferred fees and costs are accreted and amortized for non-fair value loans classified held for sale until the sale occurs. At loan settlement, the pro-rata portion, based on the percent of the total loan sold, of the remaining deferred fees and costs are recognized as an adjustment to the gain on sale.

As part of the Company’s management of the loans held in the portfolio, the Company will occasionally transfer loans from held for investment to held for sale. Upon transfer, any associated allowance for credit losses on loans and lease loss is released and the carrying value of the loans is adjusted to the estimated fair value. The loans are subsequently accounted for at the lower of cost or fair value, or fair value if elected, with valuation changes recorded in noninterest income. Gains or losses on the sale of these loans are also recorded in noninterest income. In certain circumstances, loans designated as held for sale may later be transferred back to the held for investment loan and lease portfolio based upon the Company’s intent and ability to hold the loans for the foreseeable future. If not carried at fair value, the Company transfers these loans to loans and leases held for investment at the lower of cost or fair value and establishes a related allowance for credit losses on loans and leases.

In accordance with SBA and USDA regulation, the Bank is required to retain 10% and 5% of the principal balance of any SBA 7(a) or USDA loan, respectively, comprised of unguaranteed dollars. With written consent from the SBA, the Bank may sell down to a 5% exposure comprised of unguaranteed dollars.

The gain on sale recognized in income is the sum of the premium on the guaranteed loan and the fair value of the servicing assets recognized, less the discount recorded on the unguaranteed portion of the loan retained, and any fair value fluctuations in associated exchange-traded interest rate futures contracts.

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The following summarizes the activity pertaining to loans held for sale for the years ended December 31, 2020 and 2019:

	<u>2020</u>	<u>2019</u>
Balance at beginning of year	\$ 966,447	\$ 687,393
Originations	1,183,152	1,005,165
Proceeds from sale	(875,393)	(457,533)
Gain on sale of loans	49,473	29,002
Principal collections, net of deferred fees and costs	50,431	(58,683)
Non-cash transfers, net	(198,640)	(238,897)
Balance at end of period	<u>\$ 1,175,470</u>	<u>\$ 966,447</u>

Held for Investment

Loans and leases receivable that management has the intent and ability to hold for the foreseeable future or until maturity or pay-off are classified as held for investment and reported, based on a loan by loan election, at either fair value or their outstanding principal amount adjusted for any charge-offs, the allowance for credit losses on loans and leases, and any deferred fees or costs on originated loans and leases and unamortized premium or discount on purchased loans. For such loans not carried at fair value, loan origination fees, net of certain direct origination costs, are deferred and recognized as an adjustment of the related loan yield using the interest method. Discounts and premiums on any purchased loans are amortized to income using the interest method over the remaining period to contractual maturity, adjusted for anticipated prepayments. Loans and leases designated as held for investment include those identified as more beneficial to hold for the long term as well as the required retention amount defined by the SBA and USDA. Loans and leases held for investment also consist of certain guaranteed and unguaranteed credits including those designated as troubled debt restructurings, nonaccrual, non-marketable, and risk grade 5 or worse as defined by internal risk rating metrics.

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

Equipment Leasing

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

Direct Financing Leases

Interest income on direct financing leases is recognized when earned. Unearned interest is recognized over the lease term on a basis which results in a constant rate of return on the unrecovered lease investment. The term of each lease is generally 3-7 years which is consistent with the useful life of the equipment with no residual value.

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 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.

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

Allowance for Credit Losses

On January 1, 2020, the Company adopted Accounting Standards Update (“ASU”) No. 2016-13 “Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments” (“ASC 326”) along with its amendments, which replaces the incurred loss impairment methodology in current standards with the current expected credit loss methodology (“CECL”) and requires consideration of a broader range of information to determine credit loss estimates. ASU 2016-13 requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts and requires enhanced disclosures related to the significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization’s portfolio. In addition, ASU 2016-13 amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. One such change is to require credit losses to be presented as an allowance rather than as a write-down on available-for-sale debt securities management does not intend to sell.

The Company adopted ASC 326 using the modified retrospective method for all financial assets measured at amortized cost and off-balance-sheet credit exposures. Results for reporting periods beginning after January 1, 2020 are presented under ASC 326 while prior period amounts continue to be reported in accordance with previously applicable GAAP. The Company recorded a net increase to retained earnings of \$822 thousand, comprised of a \$1.3 million decrease in the allowance for credit losses combined with a \$499 thousand increase in reserve on unfunded commitments, as of January 1, 2020 for the cumulative effect of adopting ASC 326.

Allowance for Credit Losses – Loans and Leases Held for Investment (ASC 326)

The ACL is a valuation account that is deducted from the amortized cost basis of loans and leases to present a net amount expected to be collected. The ACL is not applicable to loans held for sale and loans accounted for under the fair value option. Loans and leases are charged-off against the ACL when management believes the uncollectibility of a loan or lease balance is confirmed. Expected recoveries do not exceed the aggregate of amounts previously charged-off and expected to be charged-off.

The Company’s ACL on loans and leases is estimated using relevant information, from internal and external sources, relating to past events, current conditions, and reasonable and supportable forecasts. The Company’s historical credit loss experience provides the basis for the estimation of expected credit losses.

The ACL is measured on a pooled basis when similar risk characteristics are present in the portfolio. The Company has identified pools based on industry, which aggregates into divisions, and whether the receivable is secured by real estate or another form of collateral. Additional information related to the portfolio segments can be found in Note 3. Loans and Leases Held for Investment and Credit Quality. Expected credit losses for pooled loans and leases are estimated using a DCF methodology for each loan which incorporates measurements of PD, LGD, prepayments, the estimated outstanding EAD, and the EIR. PD rates are calculated using the number of defaults divided by the number of loans available to default for 1-year observation periods over the lifetime of data available for a certain pool. LGD rates are calculated by dividing the lifetime net charge-offs for each pool by the pool’s average outstanding balance. PD and LGD rates are adjusted for forecasted national unemployment rates during the reasonable and supportable forecast period. Management has determined that four quarters represents a reasonable and supportable forecast period and adjusted loss rates revert back to a historical loss rate over four quarters on a straight-line basis. Expected losses are calculated as the product of PD, LGD, and EAD. Expected losses are discounted using the loan or lease EIR, adjusted for prepayments.

Management adjusts historical loss information for differences in current risk characteristics that are not considered within our quantitative modeling processes but are relevant in assessing the expected credit losses within our loan and lease pools. These qualitative factor adjustments generally increase management’s estimate of expected credit losses based upon the estimated level of risk. The various risk factors considered in qualitative adjustments include risk grading, delinquency levels, pool age, portfolio mix & growth rates, and the status of servicing efforts which may be impacted by natural disasters or health pandemics. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available.

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Loans or leases that do not share risk characteristics are evaluated on an individual basis and are excluded from the pooled evaluation. This generally occurs when, based on current information and events, it is probable that the Company will be unable to collect all interest and principal payments due according to the originally contracted, or reasonably modified, terms of the loan or lease agreement. The Company has determined that loans and leases meeting the criteria defined below must be reviewed quarterly to determine if they should be evaluated for expected credit losses on an individual basis.

- All commercial loans and leases classified substandard or worse.
- Any loan or lease that is on nonaccrual, or any loan or lease that is delinquent greater than 90 days past due and still accruing interest.
- Any loan or lease that meets the definition of a troubled debt restructuring (“TDR”).

The Company estimates reserves on individually evaluated loans and leases using a DCF methodology or through the evaluation of collateral values.

Expected credit losses are estimated over the contractual term of the loan or lease, adjusted for expected prepayments when appropriate. The contractual term excludes expected extensions, renewals, and modifications unless management has a reasonable expectation at the reporting date that a TDR will be executed with an individual borrower or the extension or renewal options are included in the contract at the reporting date and are not unconditionally cancellable by the Company.

When the ACL, for pooled or individually evaluated loans and leases, is estimated using the DCF method, the effective interest rate used to discount expected cash flows is adjusted for expected prepayments.

Past due status of loans and leases is determined based on contractual terms. Loans and leases are placed in nonaccrual status and interest accrual is discontinued if they become 90 days delinquent or there is evidence that the borrower’s ability to make the required payments is impaired. When interest accrual is discontinued, all unpaid accrued interest is reversed. Management has made the accounting policy election to exclude accrued interest receivable on loans from the estimate of credit losses.

A loan or lease is accounted for as a TDR if the Company, for reasons related to the borrower’s financial difficulties, restructures a loan or lease, and grants a concession to the borrower that it would not otherwise grant. A TDR typically involves a more than short-term modification of terms such as a reduction of the interest rate below the current market rate for a loan or lease with similar risk characteristics or the waiving of certain financial covenants without corresponding offsetting compensation or additional support.

When management determines that foreclosure is probable or when the borrower is experiencing financial difficulty at the reporting date and repayment is expected to be provided substantially through the operation or sale of the collateral, expected credit losses are based on the fair value of the collateral at the reporting date, adjusted for selling costs as appropriate.

Allowance for Credit Losses – Loans and Leases Held for Investment (Prior to adoption of ASC 326)

Prior to the adoption of ASC 326 on January 1, 2020, the Company’s methodology for determining the ACL is based on the requirements of GAAP (ASC 405 and ASC 310), the Interagency Policy Statement on the Allowance for Loan and Lease Losses and other regulatory and accounting pronouncements. The ACL is determined by the sum of three separate components: (i) the impaired loan and lease component, which addresses specific reserves for impaired loans and leases; (ii) the general reserve component, which addresses reserves for pools of homogeneous loans and leases; and (iii) an unallocated reserve component (if any) based on management’s judgment and experience. The loan and lease pools and impaired loans and leases are mutually exclusive; any loan or lease that is impaired is excluded from its homogenous pool for purposes of that pool’s reserve calculation, regardless of the level of impairment.

The ACL policy for pooled loans and leases is governed in accordance with banking regulatory guidance for homogenous pools of non-impaired loans and leases that have similar risk characteristics. The Company follows a consistent and structured approach for assessing the need for reserves within each individual loan and lease pool. Quantitative allowances are calculated based on the loss experience of specific types of loans. Internal and external risk indicators are considered when calculating

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qualitative allowances. These risk indicators include business type concentrations, vertical maturity, unemployment rates, experience of the bank's servicing staff, and changes in asset quality.

Loans and leases are considered impaired when, based on current information and events, it is probable that the creditor will be unable to collect all interest and principal payments due according to the originally contracted, or reasonably modified, terms of the loan or lease agreement. The Company's criteria for individual impairment review and the methods used to estimate specific reserves under prior GAAP is the same as the criteria and methods used for individual evaluation under ASC 326.

Allowance for Credit Losses – Off-Balance Sheet Credit Exposures (ASC 326)

Expected credit losses on off-balance sheet credit exposures is estimated over the contractual period in which the Company is exposed to such losses, unless the obligation to extend credit is unconditionally cancellable. The estimate of off-balance sheet credit exposures includes consideration of the likelihood that funding will occur and an estimate of expected credit losses on commitments expected to be funded over its estimated losses. The estimate is influenced by historical loss experience, adjusted for current risk characteristics, and economic forecasts. The balance of the allowance for off-balance sheet credit exposures was \$746 thousand and \$165 thousand at December 31, 2020 and 2019, respectively, and is recorded in other expense in the consolidated income statements and other liabilities in the consolidated balance sheets.

Foreclosed Assets

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

Premises and Equipment

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

	<u>Years</u>
Buildings	39
Transportation	5-10
Land improvements	10-15
Furniture and equipment	5-10
Computers and software	3-5
Solar panels	20-25

Servicing Assets

All sales of loans are executed on a servicing retained basis. The standard SBA loan sale agreement is structured to provide the Company with a "servicing spread" paid from a portion of the interest cash flow of the loan. SBA regulations require the Bank to retain a portion of the cash flow from the interest payments received for a sold loan. The SBA retention requirement is at least 100 basis points in servicing spread while the Company's standard USDA loan sale agreement specifies a servicing spread of 40 basis points. The portion of the servicing spread that exceeds adequate compensation for the servicing function is recognized as a servicing asset, while any that is less is considered a servicing liability. Industry practice recognizes adequate compensation for servicing SBA and USDA loans as 40 basis points. The fair value of the servicing asset is measured at the discounted present value of the excess servicing spread over the expected life of the related loan using appropriate discount rates and assumptions based on industry statistics for prepayment speeds.

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Servicing assets are recognized as separate assets when rights are acquired through purchase or through sale of financial assets and are carried at fair value. Generally, purchased servicing rights are capitalized at the cost to acquire the rights. For sales of loans, a portion of the cost of originating the loan is allocated to the servicing right based on fair value. Fair value is based on market prices for comparable servicing contracts, when available, or alternatively, is based on a valuation model that calculates the present value of estimated future net servicing income. The valuation model incorporates assumptions that market participants would use in estimating future net servicing income, such as adequate compensation for servicing, the discount rate, the custodial earnings rate, an inflation rate, ancillary income, prepayment speeds and default rates and losses, with the prepayment speed being one of the most sensitive assumptions. Capitalized servicing rights are carried at fair value as of the reporting date. Changes to fair value are reported in loan servicing asset revaluation.

The Company's investment in a loan is allocated between the retained portion of the loan, the servicing asset, and the sold portion of the loan on the date the loan is sold. The carrying value of the retained portion of the loan is discounted based in part on the estimates derived from the Company's comparable nonguaranteed loan sales.

Servicing fee income is recorded for fees earned for servicing loans. The fees are based on a contractual percentage of the outstanding principal or a fixed amount per loan and are recorded as income when earned.

Derivative Financial Instruments

Interest Rate Futures Contracts

The Company uses exchange-traded interest rate futures contracts to manage interest rate risk that may impact expected gains arising from future secondary market loan sales. Upon entering into a futures contract, the Company is required to pledge to the counterparty an amount of cash equal to a certain percentage of the contract amount, also known as an initial margin deposit. Subsequent payments, known as variation margin, are made or received by the Company each day to settle the daily fluctuations in the fair value of the underlying contract. As of December 31, 2020, there were no cash margin balances while the balance at December 31, 2019 was \$2.7 million. Investments in these derivative contracts are subject to risks that can result in a loss of all or part of an investment. Credit risk is considered low because the counterparties are futures exchanges. The Company has not designated any derivative as a hedging instrument under applicable accounting guidance. Changes in fair value of the derivative contracts is recorded as a component of "net gains on sales of loans" on the consolidated statement of income. The Company recognized a loss of \$2.6 million, \$3.0 million and \$68 thousand on the derivative contracts for the years ended December 31, 2020, 2019 and 2018, respectively. All derivative contracts were closed out in December 2020. The total notional amount of derivative contracts outstanding was \$20.4 million and \$40.3 million as of December 31, 2019 and 2018, respectively. The fair value of the derivative contracts on the balance sheet date is zero due to the daily cash settlement of contracts.

Equity Warrant Assets

In connection with negotiated credit facilities and certain other services, the Company may obtain equity warrant assets giving the Company the right to acquire stock in private companies in certain verticals. These assets are held for prospective investment gains and are not used to hedge any economic risks. Further, the Company does not use other derivative instruments to hedge economic risks stemming from equity warrant assets.

Equity warrant assets in certain private client companies are recorded as derivatives when they contain net settlement terms and other qualifying criteria under ASC 815, *Derivatives and Hedging*. Equity warrant assets entitle the Company to purchase a specific number of shares of stock at a specific price within a specific time period, generally 10 years. Certain equity warrant assets contain contingent provisions, which adjust the underlying number of shares or purchase price upon the occurrence of certain future events to prevent dilution of the Company's implied ownership represented by the warrants. Certain warrant agreements contain net share settlement provisions, which permit the receipt of, upon exercise, a share count equal to the intrinsic value of the warrant divided by the share price (otherwise known as a "cashless" exercise). These equity warrant assets are recorded at fair value and are classified as derivative assets, a component of other assets, on the consolidated balance sheet at the time they are obtained.

The grant date fair values of equity warrant assets classified as derivatives received in connection with the issuance of a credit facility are deemed to be loan fees and recognized as an adjustment of loan yield through loan interest income. Similar to other loan fees, the yield adjustment related to grant date fair value of warrants is recognized over the life of that credit facility.

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Any changes in fair value from the grant date fair value of equity warrant assets classified as derivatives will be recognized as increases or decreases to other assets on the consolidated balance sheet and as net gains or losses on derivative instruments, in other noninterest income, a component of consolidated net income. When a portfolio company is acquired, the Company may exercise these equity warrant assets for shares or cash.

The fair value of equity warrant assets classified as derivatives is reviewed quarterly using a Black-Scholes option pricing model.

For those equity warrant assets that do not contain net share settlement provisions, the Company considers these to be equity investments without readily determinable market values and records the asset at cost, subject to periodic impairment testing.

Goodwill and Intangible Assets

Goodwill is the purchase premium after adjusting for the fair value of net assets acquired. Goodwill is not amortized but is reviewed for potential impairment on an annual basis, or when events or circumstances indicate a potential impairment, at the related reporting unit level. The goodwill impairment test involves comparing the fair value of the reporting unit with its carrying value, including goodwill. If the fair value of the reporting unit exceeds its carrying value, goodwill of the reporting unit is considered not impaired; however, if the carrying value of the reporting unit exceeds its fair value, an impairment charge must be recorded. An impairment loss recognized cannot exceed the amount of goodwill assigned to a reporting unit. An impairment loss establishes a new basis in the goodwill and subsequent reversals of goodwill impairment losses are not permitted under applicable accounting guidance.

For intangible assets subject to amortization, the recoverability test is performed when a triggering event occurs and an impairment loss is recognized if the carrying value of the intangible asset is not recoverable and exceeds fair value. The carrying value of the intangible asset is considered not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use of the asset. Intangible assets deemed to have indefinite useful lives are not subject to amortization. An impairment loss is recognized if the carrying value of the intangible asset with an indefinite life exceeds its fair value.

The carrying amounts and accumulated amortization of all intangible assets as of December 31, 2020 was \$2.2 million and \$115 thousand, respectively, all as a result of the JAM acquisition discussed earlier under Business Combinations. On August 1, 2018, the Company financed the sale of its entire interest in Reltco for \$3.0 million, and as a result had no intangible assets as of December 31, 2019 and 2018.

Impairment related charges are reflected in a separate line in the income statement. These impairment charges were related to Reltco, and are comprised of the following components:

	<u>2018</u>
Intangible assets	\$ 3,979
Goodwill	—
Other net asset dispositions	341
Contingent consideration liability	(1,640)
Total impairment expense on goodwill and other intangibles, net	<u>\$ 2,680</u>

The Company had no impairment related charges in 2020 or 2019.

Long-Lived Assets Impairment Evaluation

The Company evaluates the carrying value of rental equipment and identifiable definite lived intangible assets for impairment whenever events or circumstances have occurred that would indicate the carrying amount may not be fully recoverable. A key element in determining the recoverability of long-lived assets is the Company's outlook as to the future market conditions for its rental equipment. If the carrying amount is not fully recoverable, an impairment loss is recognized to reduce the carrying amount to fair value. The Company determines fair value based upon the condition of the rental equipment and the projected net cash flows from its rental and sale considering current market conditions. During the years ended December 31, 2020 and 2019, and 2018 there were no impairments of long-lived assets.

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Long-Lived Assets Reclassified to Held for Sale

During 2020, the Company determined that retention of two of its aircraft was ineffective in serving the needs of an expanding nationwide customer base. As a result of the determination to sell, the Company began marketing the aircraft for sale and accordingly reclassified them from premises and equipment, net to other assets. The total amount reclassified out of premises and equipment was \$19.2 million and after assessment of fair value \$1.3 million of that balance was recognized as impairment expense included in other expense line item in the 2020 consolidated statement of income. Prior to December 31, 2020 one aircraft was sold for a minimal incremental loss with one remaining in other assets with a carrying amount of \$8.9 million at year end. Subsequent to December 31, 2020, the remaining held for sale aircraft was sold with a gain of \$114 thousand. During 2019, an aircraft previously reclassified to held for sale was sold for a gain of \$357 thousand.

Common Stock

On June 11, 2014, the Company amended its Articles of Incorporation to create two classes of common stock. These two classes are identified as Class A and Class B for Voting Common Stock and Non-Voting Common Stock, respectively, in the accompanying consolidated balance sheet and statement of changes in shareholders' equity. Voting and Non-Voting Common Stock holders have identical rights and privileges, with the exception that Non-Voting Common shares have no voting power unless circumstances arise where instances creating the Non-Voting Common Shares are modified in any way that negatively impact rights of holder. Stock splits or dividends of Voting and Non-Voting Common Shares shall be in like stock (voting for voting and non-voting for non-voting). Any number of Non-Voting Common Stock may be converted to an equal number of Voting Common Stock at the option of the holder; provided that holder is not the initial transferee or an affiliate of initial transferee.

During 2020, 1,807,774 shares of Class B common stock (non-voting) were converted to Class A common stock (voting) in connection with private sales. This conversion decreased the value of Class B common stock (non-voting) and increased the value of Class A common stock (voting) by \$19.1 million. During 2019, 1,727,999 shares of Class B common stock (non-voting) were converted to Class A common stock (voting) in connection with private sales. This conversion decreased the value of Class B common stock (non-voting) and increased the value of Class A common stock (voting) by \$18.3 million.

Advertising Expense

Marketing costs are recognized in the month the event or advertisement takes place. These costs are included in advertising and marketing expense as presented in the consolidated statements of income.

Income Taxes

Income tax expense is the total of the current year income tax due or refundable and the change in deferred tax assets and liabilities (excluding deferred tax assets and liabilities related to business combinations or components of other comprehensive income). Deferred tax assets and liabilities are the expected future tax amounts for the temporary differences between carrying amounts and tax bases of assets and liabilities, computed using enacted tax rates. The effect of a change in tax rates on deferred assets and liabilities is recognized in income taxes during the period that includes the enactment date. A valuation allowance, if needed, reduces deferred tax assets to the expected amount more likely than not to be realized. Realization of deferred tax assets is dependent upon the level of historical income, prudent and feasible tax planning strategies, reversals of deferred tax liabilities and estimates of future taxable income.

The Company uses the flow-through method of accounting on investments that generate investment tax credits. Under this method, investment tax credits are recognized as a reduction to income tax expense immediately in the period that the credit is generated, to the extent permitted by tax law. In accounting for any temporary difference that arise, the Company has elected the income statement method whereby deferred taxes are adjusted through income tax expense.

The Company evaluates uncertain tax positions at the end of each reporting period. The Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefit recognized in the financial statements from any such position is measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. For tax positions not meeting the "more likely than not" test, no tax benefit is recorded. Any interest and/or penalties related to income taxes are reported as a component of income tax expense.

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Comprehensive Income

Annual comprehensive income reflects the change in the Company's equity during the year arising from transactions and events other than investment by and distributions to shareholders. The only components of other comprehensive income consist of realized and unrealized gains and losses related to investment securities.

Stock Compensation Plans

The Company recognizes compensation cost based on the fair value of the equity or liability instruments issued. The expense measures the cost of employee services received in exchange for stock options and restricted stock based on the grant-date fair value of the award and recognizes the cost over the vesting period for all awards within an individual grant, including ones with graded vesting features. The fair value of the restricted stock awards or units with a market price condition and implied service period are calculated using the Monte Carlo Simulation method. The impact of forfeitures on stock-based compensation expense is recognized as forfeitures occur. See Note 12. Benefit Plans for further discussion and detail.

Fair Value of Financial Instruments

GAAP defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company determines the fair values of its financial instruments based on the fair value hierarchy established per GAAP which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. See Note 10. Fair Value of Financial Instruments for further discussion and detail.

Earnings Per Share

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

	December 31,		
	2020	2019	2018
Basic earnings per share:			
Net income	\$ 59,543	\$ 18,034	\$ 51,448
Weighted-average basic shares outstanding	40,677,496	40,222,758	40,056,230
Basic earnings per share	\$ 1.46	\$ 0.45	\$ 1.28
Diluted earnings per share:			
Net income, for diluted earnings per share	\$ 59,543	\$ 18,034	\$ 51,448
Total weighted-average basic shares outstanding	40,677,496	40,222,758	40,056,230
Add effect of dilutive stock options and restricted stock grants	1,093,754	830,756	1,390,520
Total weighted-average diluted shares outstanding	41,771,250	41,053,514	41,446,750
Diluted earnings per share	\$ 1.43	\$ 0.44	\$ 1.24
Anti-dilutive shares	2,179	1,071,467	1,111,236

On January 13, 2021 approximately 200 thousand restricted stock unit awards with market price conditions vested as the Company's share price satisfied applicable target price criteria. After net settlement for related tax withholding, the Company issued approximately 114 thousand shares.

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Revenue Recognition

The Company offers various services to customers that generate revenue. The Company does not typically enter into long-term revenue contracts with customers, and therefore, does not experience significant contract balances. Incremental costs of obtaining a contract are expensed when incurred when the amortization period is one year or less. As of December 31, 2020, 2019 and 2018, remaining performance obligations consisted primarily of serviced based revenues for contracts with an original expected length of two years or less.

Service based revenues are included in other noninterest income and consist of other recurring revenue streams from services provided by the Bank for advisory and successful transactions, GLS to its clients for settlement, accounting and valuation for government guaranteed loan sales and holdings, fund investment advisory services performed by Canapi Advisors, investment management and financial planning services provided by Live Oak Private Wealth, and administration of trust assets held by the Company's trust department.

Service Based Revenues

In addition to lending and related activities, the Bank's specialized industry teams also provide advisory services to certain Government Contracting clients. Performance obligations are satisfied over the contract period and revenue is recognized monthly. Additionally, the Bank may earn additional revenue under these agreements as clients are awarded government contracts or complete merger & acquisition transactions.

GLS provides services when requested by clients. Each requested service represents a specific performance obligation with a transaction price outlined by GLS' fee schedule. Revenue is recognized as the requested services are completed and payment is generally received the following month.

Canapi Advisors provides investment advisory services to two financial technology venture funds where its performance obligations are satisfied over time. Fund management fees are based upon the contractual terms of the limited partnership agreements and are recognized as earned over the specified contract period, which is generally equal to the life of the individual fund. Fund management fees are calculated as a percentage of committed capital, are collected in advance and recognized quarterly.

Live Oak Private Wealth's investment management and financial planning performance obligations are generally satisfied over time. Fees are recognized quarterly based on the quarter-end market value of the managed assets as valued by the custodian of the customer's assets and the applicable fee rate. Payment is generally received within a quarter of service delivery. The Company does not earn performance-based incentives from investment management and financial planning services. Contracts with customers may be terminated at any time by either party.

The Company's trust department ceased operations in the first quarter of 2019. Trust account administration performance obligations were generally satisfied over time and fees were recognized monthly, based on the month-end market value of assets in fiduciary accounts and the applicable fee rate. Fees were generally received after month-end through a direct charge to customers' accounts. The Company did not earn performance-based incentives from trust account administration services.

Reclassifications

Certain reclassification corrections have been made to the prior period's consolidated financial statements to place them on a comparable basis with the current year. Net income and shareholders' equity previously reported were not affected by these reclassifications. Current period reclassifications were primarily related to existing fair value presentation requirements for loans accounted for under the fair value option. This includes a reclassification of amounts representing the credit component of the fair value discount that was previously reported as a component of the allowance for credit losses on loans and leases to be reflected directly in loans and leases held for investment on the Company's consolidated balance sheet. Amounts reclassified from the allowance for credit losses on loans and leases to directly adjust the carrying amount of total loans and leases held for investment was \$20.0 million and \$18.0 million, respectively, as of December 31, 2019 and 2018. In addition, the change in the credit component of the fair value discount was previously reported in the provision for loan and lease credit losses while the change in the liquidity component of the fair value discount was previously reported in the loan servicing asset revaluation in the consolidated statements of income, but both have now been reclassified to net gain (loss) on loans accounted for under the fair value option. Amounts reclassified from the provision for loan and lease credit losses and the loan servicing asset revaluation to net gain (loss) on loans accounted for under the fair value option were \$(4.4) million and \$11.8 million,

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respectively, for the year ended December 31, 2019, and \$(7.5) million and \$2.5 million, respectively, for the year ended December 31, 2018.

	<u>As Reported</u>	<u>Reclassifications</u>	<u>As Reclassified</u>
Consolidated Statement of Income for the three months ended December 31, 2019			
Provision for loan and lease credit losses	\$ 6,208	\$ (1,399)	\$ 4,809
Net interest income after provision for loan and lease credit losses	31,803	1,399	33,202
Loan servicing asset revaluation	(1,304)	(2,831)	(4,135)
Net gain (loss) on loans accounted for under the fair value option	—	1,432	1,432
Total noninterest income	21,524	(1,399)	20,125
Net income	6,832	—	6,832

Consolidated Statement of Income for the twelve months ended December 31, 2019			
Provision for loan and lease credit losses	\$ 19,573	\$ (4,361)	\$ 15,212
Net interest income after provision for loan and lease credit losses	120,509	4,361	124,870
Loan servicing asset revaluation	(4,812)	(11,769)	(16,581)
Net gain (loss) on loans accounted for under the fair value option	—	7,408	7,408
Total noninterest income	67,880	(4,361)	63,519
Net income	18,034	—	18,034

Consolidated Statement of Cash Flows for the twelve months ended December 31, 2019			
Provision for loan and lease credit losses	\$ 19,573	\$ (4,361)	\$ 15,212
Net decrease in servicing assets	12,276	—	12,276
Change in discount on unguaranteed loans	(9,270)	9,270	—
Net loss (gain) on loans accounted for under fair value option	—	(7,408)	(7,408)
Net cash used by operating activities	(493,925)	(2,499)	(496,424)
Loan and lease originations and principal collections, net	(505,848)	2,499	(503,349)
Net cash used by investing activities	(673,164)	2,499	(670,665)

Consolidated Statement of Income for the twelve months ended December 31, 2018			
Provision for loan and lease credit losses	\$ 13,058	\$ (7,500)	\$ 5,558
Net interest income after provision for loan and lease credit losses	94,985	7,500	102,485
Loan servicing asset revaluation	(18,765)	(2,459)	(21,224)
Net gain (loss) on loans accounted for under the fair value option	—	(5,041)	(5,041)
Total noninterest income	103,765	(7,500)	96,265
Net income	51,448	—	51,448

Consolidated Statement of Cash Flows for the twelve months ended December 31, 2018			
Provision for loan and lease credit losses	\$ 13,058	\$ (7,500)	\$ 5,558
Net decrease in servicing assets	4,657	—	4,657
Change in discount on unguaranteed loans	2,768	(2,768)	—
Net loss (gain) on loans accounted for under fair value option	—	5,041	5,041
Net cash provided by operating activities	11,521	(5,227)	6,294
Loan and lease originations and principal collections, net	(445,643)	5,227	(440,416)
Net cash used by investing activities	(850,585)	5,227	(845,358)

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Change to loan and lease classes

As a result of the increase in number and diversification of the industry verticals that the Company serves, management also made changes effective in the second quarter of 2020 to the loan and lease classes used in the credit quality disclosures in Note 3. Loans and leases are now grouped in one of the following classes (also referred to as divisions): Small Business Banking, Specialty Lending, or Paycheck Protection Program. Small Business Banking includes loans to customers in verticals that generally have traditional loan structures. Specialty Lending includes loans to customers in verticals that generally have atypical ownership structures as well as complex collateral arrangements, underwriting requirements, and servicing needs. Paycheck Protection Program (“PPP”) includes all loans originated under the PPP pursuant to the Coronavirus Aid, Relief, and Economic Security Act’s (“CARES Act”) economic relief program and carry a 100% government guarantee. These loan and lease classes were determined based on industry risk characteristics and management’s method for monitoring credit risk and managing those lending divisions. There were no changes to the Company’s portfolio segments.

Recent Accounting Pronouncements

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

In August 2018, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2018-13, “Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement” (“ASU 2018-13”). ASU 2018-13 removes, modifies and adds certain fair value disclosure requirements on fair value measurements. The Company adopted the standard on January 1, 2020 with no material effect on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, “Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract” (“ASU 2018-15”). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The Company adopted the standard on January 1, 2020 with no material effect on its consolidated financial statements.

In March 2019, the FASB issued ASU No. 2019-01, “Leases (Topic 842): Codification Improvements” (“ASU 2019-01”). ASU 2019-01 provides updates to Topic 842 including: (i) guidance on how to determine fair value of leased items for lessors who are not dealers or manufacturers, (ii) cash flow presentation for lessors of sales-type and direct financing leases and (iii) clarifies certain transition disclosures. The Company adopted the standard on January 1, 2020 with no material effect on its consolidated financial statements.

In April 2019, the FASB issued ASU No. 2019-04, “Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments” (“ASU 2019-04”). ASU 2019-04 provides clarification and minor improvements related to ASU 2016-01 “Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities,” ASU 2016-13 “Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments” and ASU 2017-12 “Derivatives and Hedging (Topic 815) - Targeted Improvements to Accounting for Hedging Activities.” The Company adopted the standard on January 1, 2020 with no material effect on its consolidated financial statements.

In January 2020, the FASB issued ASU No. 2020-01, “Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815)-Clarifying the Interactions between Topic 321, Topic 323, and Topic 815” (“ASU 2020-01”). ASU 2020-01 clarifies the interaction between accounting standards related to equity securities, equity method investments, and certain derivatives including accounting for the transition into and out of the equity method and measuring certain purchased options and forward contracts to acquire investments. The amendments in this standard will be effective for the Company on January 1, 2021. The Company does not expect this standard to have a material effect on its consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-03, “Codification Improvements to Financial Instruments” (“ASU 2020-03”). The amendments represent clarification and improvements to the codification and correct unintended application. This standard was effective immediately upon issuance and its adoption did not have a material effect on the Company’s consolidated financial statements.

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In March 2020, the FASB issued 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. The amendments are effective for the Company as of March 12, 2020 through December 31, 2022. The Company does not believe this standard will have a material impact on its consolidated financial statements.

Note 2. 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
December 31, 2020				
US government agencies	\$ 15,440	\$ 479	\$ —	\$ 15,919
Mortgage-backed securities	703,092	28,302	940	730,454
Municipal bonds	3,267	462	4	3,725
Total	<u>\$ 721,799</u>	<u>\$ 29,243</u>	<u>\$ 944</u>	<u>\$ 750,098</u>
December 31, 2019				
US treasury securities	\$ 4,988	\$ 27	\$ —	\$ 5,015
US government agencies	22,444	335	—	22,779
Mortgage-backed securities	488,694	15,530	927	503,297
Municipal bond	8,493	469	8	8,954
Total	<u>\$ 524,619</u>	<u>\$ 16,361</u>	<u>\$ 935</u>	<u>\$ 540,045</u>

During the year ended December 31, 2020, seven securities totaling \$12.8 million matured and twenty securities totaling \$29.6 million were sold resulting in a net gain of \$1.9 million, which consisted of \$2.0 million gross realized gains and \$136 thousand gross realized losses. During the year ended December 31, 2019, eleven securities totaling \$36.2 million were sold resulting in a net gain of \$620 thousand, which consisted entirely of gross realized gains. There were no sales of securities during the year ended December 31, 2018.

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

	Less Than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2020						
Mortgage-backed securities	\$ 156,904	\$ 917	\$ 1,853	\$ 23	\$ 158,757	\$ 940
Municipal bonds	—	—	96	4	96	4
Total	<u>\$ 156,904</u>	<u>\$ 917</u>	<u>\$ 1,949</u>	<u>\$ 27</u>	<u>\$ 158,853</u>	<u>\$ 944</u>
December 31, 2019						
Mortgage-backed securities	\$ 42,835	\$ 460	\$ 36,518	\$ 467	\$ 79,353	\$ 927
Municipal bond	—	—	92	8	92	8
Total	<u>\$ 42,835</u>	<u>\$ 460</u>	<u>\$ 36,610</u>	<u>\$ 475</u>	<u>\$ 79,445</u>	<u>\$ 935</u>

At December 31, 2020, there were three residential mortgage-backed securities and one municipal bond in unrealized loss positions for greater than 12 months and twenty-one residential mortgage-backed securities and eight commercial mortgage-backed securities in unrealized loss positions for less than 12 months. Unrealized losses at December 31, 2019 consisted of twenty-two residential mortgage-backed securities and one municipal bond for greater than 12 months and ten residential mortgage-backed securities, and ten commercial mortgage-backed securities in unrealized loss positions for less than 12 months.

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These unrealized losses are primarily the result of volatility in the market and are related to market interest rates. Since none of the unrealized losses relate to marketability of the securities or the issuer's ability to honor redemption obligations, and the Company has the intent and ability to hold these securities until they recover their value, none of the securities are deemed to be impaired.

All residential mortgage-backed securities in the Company's portfolio at December 31, 2020 and 2019 were backed by US government sponsored enterprises ("GSEs").

The following is a summary of investment securities by maturity:

	December 31, 2020	
	Available-for-sale	
	Amortized cost	Fair value
US government agencies		
Within one year	\$ 4,999	\$ 5,041
One to five years	7,515	7,779
Five to ten years	2,926	3,099
Total	<u>15,440</u>	<u>15,919</u>
Mortgage-backed securities		
One to five years	7,934	8,381
Five to ten years	202,991	218,849
After 10 years	492,167	503,224
Total	<u>703,092</u>	<u>730,454</u>
Municipal bonds		
After 10 years	3,267	3,725
Total	<u>3,267</u>	<u>3,725</u>
 Total	 <u>\$ 721,799</u>	 <u>\$ 750,098</u>

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

There were no investment securities pledged at December 31, 2020 or 2019.

Other

Other investments, largely comprised of non-marketable equity investments, are generally accounted for under the equity method or "equity security" accounting. The below tables provide additional information related to investments accounted for under these two methods.

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Equity Method Accounting

The carrying amount and ownership percentage of each equity method investment at December 31, 2020 and 2019 is reflected in the following table:

	2020		2019	
	Amount	Ownership %	Amount	Ownership %
Apiture, Inc.	\$ 53,344	39.1%	\$ 64,741	47.2%
Canapi Ventures SBIC Fund, LP ⁽¹⁾⁽³⁾	14,843	3.1%	15,227	3.1%
Canapi Ventures Fund, LP ⁽²⁾⁽³⁾	1,686	1.5%	1,689	3.3%
Other fintech investments in private companies ⁽⁴⁾	1,634	Various	4,495	Various
Other ⁽⁵⁾	6,421	Various	—	—
Total	<u>\$ 77,928</u>		<u>\$ 86,152</u>	

(1) Includes unfunded commitments of \$11.3 million and \$14.8 million as of December 31, 2020 and 2019, respectively.

(2) Includes unfunded commitments of \$1.0 million and \$1.5 million as of December 31, 2020 and 2019, respectively.

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

(4) Other fintech investments include Finxact, LLC, Payrailz, Inc. and Kwipped, Inc.

(5) Includes unfunded commitments of \$2.9 million at December 31, 2020.

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 for the year ended December 31, 2020, and on a cumulative basis is reflected in the following table:

	As of and for the year ended December 31, 2020	
	Amount	Cumulative Adjustments
Carrying value ⁽¹⁾	\$ 31,146	
Carrying value adjustments:		
Impairment	—	\$ —
Upward changes for observable prices	14,558	18,272
Downward changes for observable prices	—	(86)
Net upward change	<u>\$ 14,558</u>	<u>\$ 18,186</u>

(1) Includes \$522 thousand in unfunded commitments.

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Note 3. Loans and Leases Held for Investment and Credit Quality

Loan and Lease Portfolio Segments & Classes

The following describes the risk characteristics relevant to each of the portfolio segments.

Commercial and Industrial

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

Construction and Development

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

Commercial Real Estate

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

Commercial Land

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

The loan and lease portfolio is further grouped into one of the following classes (also referred to as divisions): Small Business Banking, Specialty Lending, or Paycheck Protection Program. Small Business Banking includes loans to customers in verticals that generally have traditional loan structures. Specialty Lending includes loans to customers in verticals that generally have atypical ownership structures as well as complex collateral arrangements, underwriting requirements, and servicing needs. Paycheck Protection Program ("PPP") includes all loans originated under the PPP pursuant to the Coronavirus Aid, Relief, and Economic Security Act's ("CARES Act") economic relief program and carry a 100% government guarantee. These loans and lease classes were determined based on industry risk characteristics and management's method for monitoring credit risk and managing those lending divisions.

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Each loan and lease is assigned a risk grade during the origination and closing process based on the Credit Quality Indicators described below.

Past Due Loans and Leases

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

December 31, 2020	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⁽¹⁾	Loans Accounted for Under the Fair Value Option⁽²⁾	Total Loans and Leases
Commercial & Industrial							
Small Business Banking	\$ 695,090	\$ 10,341	\$ 10,765	\$ 21,106	\$ 716,196	\$ 308,341	\$1,024,537
Specialty Lending	341,952	337	—	337	342,289	71,090	413,379
Paycheck Protection Program	1,528,180	—	—	—	1,528,180	—	1,528,180
Total	2,565,222	10,678	10,765	21,443	2,586,665	379,431	2,966,096
Construction & Development							
Small Business Banking	183,087	—	—	—	183,087	—	183,087
Specialty Lending	88,890	—	3,723	3,723	92,613	—	92,613
Total	271,977	—	3,723	3,723	275,700	—	275,700
Commercial Real Estate							
Small Business Banking	987,358	3,730	8,609	12,339	999,697	321,352	1,321,049
Specialty Lending	148,264	5,374	1,693	7,067	155,331	20,317	175,648
Total	1,135,622	9,104	10,302	19,406	1,155,028	341,669	1,496,697
Commercial Land							
Small Business Banking	329,638	—	2,243	2,243	331,881	94,274	426,155
Total	329,638	—	2,243	2,243	331,881	94,274	426,155
Total	\$4,302,459	\$ 19,782	\$ 27,033	\$ 46,815	\$4,349,274	\$ 815,374	\$5,164,648
Net deferred (fees) costs							\$ (19,566)
Loan and Leases, Net of unearned							\$5,145,082

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<u>December 31, 2019</u>	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 ⁽¹⁾	Loans Accounted for Under the Fair Value Option ⁽²⁾	Total Loans and Leases
Commercial & Industrial							
Small Business Banking	\$ 374,283	\$ 7,363	\$ 4,577	\$ 11,940	\$ 386,223	\$ 275,269	\$ 661,492
Specialty Lending	166,710	532	776	1,308	168,018	58,044	226,062
Total	540,993	7,895	5,353	13,248	554,241	333,313	887,554
Construction & Development							
Small Business Banking	302,470	—	—	—	302,470	—	302,470
Specialty Lending	44,848	—	—	—	44,848	—	44,848
Total	347,318	—	—	—	347,318	—	347,318
Commercial Real Estate							
Small Business Banking	525,858	7,210	5,586	12,796	538,654	358,359	897,013
Specialty Lending	121,191	1,849	—	1,849	123,040	27,291	150,331
Total	647,049	9,059	5,586	14,645	661,694	385,650	1,047,344
Commercial Land							
Small Business Banking	234,133	—	—	—	234,133	105,557	339,690
Total	234,133	—	—	—	234,133	105,557	339,690
Total	\$1,769,493	\$ 16,954	\$ 10,939	\$ 27,893	\$1,797,386	\$ 824,520	\$2,621,906
Net deferred (fees) costs							\$ 5,380
Loan and Leases, Net of unearned							\$2,627,286

- (1) Total loans and leases include \$2.61 billion of U.S. government guaranteed loans as of December 31, 2020, of which \$12.9 million is greater than 90 days past due, \$16.7 million is 30-89 days past due and \$2.58 billion is included in current loans and leases as presented above. As of December 31, 2019, total loans and leases include \$622.6 million of U.S. government guaranteed loans, of which \$6.4 million is greater than 90 days past due, \$13.6 million is 30-89 days past due and \$602.6 million is included in current loans and leases as presented above.
- (2) The Company measures the carrying value of the retained portion of loans sold at fair value under ASC 825-10. See Note 10. Fair Value of Financial Instruments for additional information.

Credit Quality Indicators

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

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

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

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

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

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

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

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

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

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

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The following tables present credit quality indicators by portfolio class:

	Term Loans and Leases Amortized Cost Basis by Origination Year						Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term	Total ^(1,2)
	2020	2019	2018	2017	2016	Prior			
December 31, 2020									
Small Business Banking									
Risk Grades 1 - 4	\$ 724,506	\$475,593	\$287,712	\$230,653	\$159,877	\$59,065	\$ 32,373	\$ 1,392	\$1,971,171
Risk Grade 5	16,080	59,595	62,857	44,478	11,203	3,666	2,131	212	200,222
Risk Grades 6 - 8	81	8,976	14,639	15,090	11,424	8,418	631	209	59,468
Total	740,667	544,164	365,208	290,221	182,504	71,149	35,135	1,813	2,230,861
Specialty Lending									
Risk Grades 1 - 4	296,537	96,553	48,930	40,626	—	—	55,229	632	538,507
Risk Grade 5	7,672	6,379	2,752	18,718	—	—	1,711	—	37,232
Risk Grades 6 - 8	—	—	8,635	—	5,782	—	77	—	14,494
Total	304,209	102,932	60,317	59,344	5,782	—	57,017	632	590,233
Paycheck Protection Program									
Risk Grades 1 - 4	1,528,180	—	—	—	—	—	—	—	1,528,180
Risk Grade 5	—	—	—	—	—	—	—	—	—
Risk Grades 6 - 8	—	—	—	—	—	—	—	—	—
Total	1,528,180	—	—	—	—	—	—	—	1,528,180
Total	\$2,573,056	\$647,096	\$425,525	\$349,565	\$188,286	\$71,149	\$ 92,152	\$ 2,445	\$4,349,274

	Total ^(1,2)	
December 31, 2019		
Small Business Banking		
Risk Grades 1 - 4	\$	1,361,220
Risk Grade 5		63,015
Risk Grades 6 - 8		37,249
Total		1,461,484
Specialty Lending		
Risk Grades 1 - 4		307,098
Risk Grade 5		26,497
Risk Grades 6 - 8		2,307
Total		335,902
Total	\$	1,797,386

(1) Total loans and leases include \$2.61 billion of U.S. government guaranteed loans as of December 31, 2020, segregated by risk grade as follows: Risk Grades 1 – 4 = \$2.44 billion, Risk Grade 5 = \$128.0 million, Risk Grades 6 – 8 = \$40.9 million. As of December 31, 2019, total loans and leases include \$622.6 million of U.S. government guaranteed loans, segregated by risk grade as follows: Risk Grades 1 – 4 = \$556.8 million, Risk Grade 5 = \$42.7 million, Risk Grades 6 – 8 = \$23.1 million.

(2) Excludes \$815.4 million and \$824.5 million of loans accounted for under the fair value option as of December 31, 2020 and December 31, 2019, respectively.

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Notes to Consolidated Financial Statements

Nonaccrual Loans and Leases

Loans and leases that become 90 days delinquent, or in cases where there is evidence that the borrower's ability to make the required payments is impaired, are placed in nonaccrual status and interest accrual is discontinued. If interest on nonaccrual loans and leases had been accrued in accordance with the original terms, interest income would have increased by approximately \$1.9 million, \$1.2 million and \$646 thousand for the years ended December 31, 2020, 2019, and 2018, respectively. All nonaccrual loans and leases are included in the held for investment portfolio.

Nonaccrual loans and leases as of December 31, 2020 and December 31, 2019 are as follows:

<u>December 31, 2020</u>	<u>Loan and Lease Balance⁽¹⁾</u>	<u>Guaranteed Balance</u>	<u>Unguaranteed Balance</u>	<u>Unguaranteed Exposure with No ACL</u>
Commercial & Industrial				
Small Business Banking	\$ 17,992	\$ 12,046	\$ 5,946	\$ —
Total	17,992	12,046	5,946	—
Construction & Development				
Specialty Lending	3,723	—	3,723	3,723
Total	3,723	—	3,723	3,723
Commercial Real Estate				
Small Business Banking	15,085	6,725	8,360	5,327
Specialty Lending	7,068	5,533	1,535	—
Total	22,153	12,258	9,895	5,327
Commercial Land				
Small Business Banking	2,242	1,728	514	—
Total	2,242	1,728	514	—
Total	\$ 46,110	\$ 26,032	\$ 20,078	\$ 9,050
<u>December 31, 2019</u>	<u>Loan and Lease Balance⁽¹⁾</u>	<u>Guaranteed Balance</u>	<u>Unguaranteed Exposure</u>	
Commercial & Industrial				
Small Business Banking	\$ 6,162	\$ 5,399	\$ 763	
Specialty Lending	776	157	619	
Total	6,938	5,556	1,382	
Commercial Real Estate				
Small Business Banking	8,245	4,130	4,115	
Total	8,245	4,130	4,115	
Commercial Land				
Small Business Banking	6,756	5,028	1,728	
Total	6,756	5,028	1,728	
Total	\$ 21,939	\$ 14,714	\$ 7,225	

(1) Excludes nonaccrual loans accounted for under the fair value option. See Note 10. Fair Value of Financial Instruments for additional information.

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Notes to Consolidated Financial Statements

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 December 31, 2020:

	Total Collateral Dependent Loans			Unguaranteed Portion			Allowance for Credit Losses
	Real Estate	Business Assets	Other	Real Estate	Business Assets	Other	
December 31, 2020							
Commercial & Industrial							
Small Business Banking	\$ 1,279	\$ 9,440	\$ 197	\$ 531	\$ 4,077	\$ 66	\$ 1,281
Total	1,279	9,440	197	531	4,077	66	1,281
Construction & Development							
Specialty Lending	3,767	—	—	3,767	—	—	—
Total	3,767	—	—	3,767	—	—	—
Commercial Real Estate							
Small Business Banking	11,568	258	332	6,873	9	335	175
Specialty Lending	13,196	—	—	7,663	—	—	23
Total	24,764	258	332	14,536	9	335	198
Commercial Land							
Small Business Banking	2,263	—	—	534	—	—	302
Total	2,263	—	—	534	—	—	302
Total	\$ 32,073	\$ 9,698	\$ 529	\$ 19,368	\$ 4,086	\$ 401	\$ 1,781

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Allowance for Credit Losses – Loans and Leases

On January 1, 2020 the Company adopted ASC 326. Upon adoption, the Company maintains the ACL at levels management believes represents the future expected credit losses in the loan and lease portfolios as of the balance sheet date. See Note 1. Organization and Summary of Significant Accounting Policies for a description of the methodologies used to estimate credit losses under ASC 326 and, for prior periods, ASC 405 and ASC 310.

The following tables detail activity in the allowance for credit losses for the periods presented:

	<u>Commercial & Industrial</u>	<u>Construction & Development</u>	<u>Commercial Real Estate</u>	<u>Commercial Land</u>	<u>Total</u>
<u>December 31, 2020</u>					
Beginning Balance, prior to adoption of ASC 326	\$ 15,757	\$ 2,732	\$ 8,427	\$ 1,318	\$ 28,234
Impact of adopting ASC 326	(4,561)	1,131	1,916	193	(1,321)
Charge offs	(4,401)	—	(10,347)	(644)	(15,392)
Recoveries	84	—	28	15	127
Provision	20,062	1,800	18,124	672	40,658
Ending Balance	<u>\$ 26,941</u>	<u>\$ 5,663</u>	<u>\$ 18,148</u>	<u>\$ 1,554</u>	<u>\$ 52,306</u>

<u>December 31, 2019</u>					
Beginning Balance	\$ 6,524	\$ 2,042	\$ 5,259	\$ 607	\$ 14,432
Charge offs	(887)	—	(615)	(173)	(1,675)
Recoveries	246	—	18	1	265
Provision	9,874	690	3,765	883	15,212
Ending Balance	<u>\$ 15,757</u>	<u>\$ 2,732</u>	<u>\$ 8,427</u>	<u>\$ 1,318</u>	<u>\$ 28,234</u>

<u>December 31, 2018</u>					
Beginning Balance	\$ 4,007	\$ 2,030	\$ 3,509	\$ 445	\$ 9,991
Charge offs	(1,073)	—	(194)	—	(1,267)
Recoveries	120	—	30	—	150
Provision	3,470	12	1,914	162	5,558
Ending Balance	<u>\$ 6,524</u>	<u>\$ 2,042</u>	<u>\$ 5,259</u>	<u>\$ 607</u>	<u>\$ 14,432</u>

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

	<u>Commercial & Industrial</u>	<u>Construction & Development</u>	<u>Commercial Real Estate</u>	<u>Commercial Land</u>	<u>Total⁽¹⁾⁽²⁾</u>
<u>December 31, 2019</u>					
Allowance for credit losses:					
Loans and leases individually evaluated for impairment	\$ 3,989	\$ 17	\$ 2,067	\$ 748	\$ 6,821
Loans and leases collectively evaluated for impairment	11,768	2,715	6,360	570	21,413
Total allowance for credit losses	<u>\$ 15,757</u>	<u>\$ 2,732</u>	<u>\$ 8,427</u>	<u>\$ 1,318</u>	<u>\$ 28,234</u>
Loans and Leases Receivable ¹ :					
Loans and leases individually evaluated for impairment	\$ 14,052	\$ 719	\$ 25,389	\$ 17,347	\$ 57,507
Loans and leases collectively evaluated for impairment	540,189	346,599	636,305	216,786	1,739,879
Total loans and leases receivable	<u>\$ 554,241</u>	<u>\$ 347,318</u>	<u>\$ 661,694</u>	<u>\$ 234,133</u>	<u>\$ 1,797,386</u>

(1) As of December 31, 2019, loans and leases receivable includes \$622.6 million of U.S. government guaranteed loans, of which \$36.0 million are considered impaired.

(2) Loans and leases receivable exclude \$824.5 million of loans accounted for under the fair value option.

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

December 31, 2019	Recorded Investment	Guaranteed Balance	Unguaranteed Exposure
Commercial & Industrial			
Small Business Banking	\$ 11,612	\$ 7,841	\$ 3,771
Specialty Lending	2,440	157	2,283
Total	14,052	7,998	6,054
Construction & Development			
Small Business Banking	719	530	189
Total	719	530	189
Commercial Real Estate			
Small Business Banking	23,473	13,198	10,275
Specialty Lending	1,916	1,387	529
Total	25,389	14,585	10,804
Commercial Land			
Small Business Banking	17,347	12,898	4,449
Total	17,347	12,898	4,449
Total	\$ 57,507	\$ 36,011	\$ 21,496

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

	December 31, 2019				
	Recorded Investment			Unpaid Principal Balance	Related Allowance Recorded
	With a Recorded Allowance	With No Recorded Allowance	Total		
Commercial & Industrial					
Small Business Banking	\$ 11,607	\$ 5	\$ 11,612	\$ 12,577	\$ 1,967
Specialty Lending	2,440	—	2,440	2,307	2,022
Total	14,047	5	14,052	14,884	3,989
Construction & Development					
Small Business Banking	719	—	719	706	17
Total	719	—	719	706	17
Commercial Real Estate					
Small Business Banking	21,370	2,103	23,473	23,996	2,055
Specialty Lending	1,916	—	1,916	1,849	12
Total	23,286	2,103	25,389	25,845	2,067
Commercial Land					
Small Business Banking	17,347	—	17,347	17,399	748
Total	17,347	—	17,347	17,399	748
Total Impaired Loans and Leases	\$ 55,399	\$ 2,108	\$ 57,507	\$ 58,834	\$ 6,821

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

	December 31, 2019		December 31, 2018	
	Average Balance	Interest Income Recognized	Average Balance	Interest Income Recognized
Commercial & Industrial				
Small Business Banking	\$ 10,809	\$ 137	\$ 7,264	\$ 66
Specialty Lending	2,249	59	768	40
Total	13,058	196	8,032	106
Construction & Development				
Small Business Banking	722	15	4,951	15
Specialty Lending	—	—	—	—
Total	722	15	4,951	15
Commercial Real Estate				
Small Business Banking	22,996	632	15,693	423
Specialty Lending	1,855	10	—	—
Total	24,851	642	15,693	423
Commercial Land				
Small Business Banking	17,427	771	8,486	72
Total	17,427	771	8,486	72
Total	\$ 56,058	\$ 1,624	\$ 37,162	\$ 616

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

	December 31, 2020									
	Interest Only		Payment Deferral		Extend Amortization		Other ⁽¹⁾		Total TDRs ⁽²⁾	
	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end
Commercial & Industrial										
Small Business Banking	—	\$ —	6	\$ 1,895	—	\$ —	1	\$ 170	7	\$ 2,065
Specialty Lending	—	—	—	—	2	423	—	—	2	\$ 423
Total	—	—	6	1,895	2	423	1	170	9	2,488
Construction & Development										
Small Business Banking	—	—	—	—	1	1,787	—	—	1	\$ 1,787
Total	—	—	—	—	1	1,787	—	—	1	1,787
Commercial Real Estate										
Small Business Banking	—	—	2	3,738	—	—	—	—	2	\$ 3,738
Specialty Lending	—	—	1	3,627	—	—	2	12,219	3	\$ 15,846
Total	—	—	3	7,365	—	—	2	12,219	5	19,584
Commercial Land										
Small Business Banking	—	—	—	—	1	4,865	—	—	1	\$ 4,865
Total	—	—	—	—	1	4,865	—	—	1	4,865
Total	—	\$ —	9	\$ 9,260	4	\$ 7,075	3	\$ 12,389	16	\$ 28,724

(1) Includes one small business banking interest only and rate concession TDR (\$170 thousand), and two specialty lending interest only and rate concession TDRs (\$12.2 million).

(2) Excludes loans accounted for under the fair value option. See Note 10. Fair Value of Financial Instruments for additional information.

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December 31, 2019										
Interest Only		Payment Deferral		Extend Amortization		Other ⁽¹⁾		Total TDRs ⁽²⁾		
Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	
Commercial & Industrial										
Small Business Banking	1	\$ 348	—	\$ —	—	\$ —	—	\$ —	1	\$ 348
Total	1	348	—	—	—	—	—	—	1	348
Commercial Real Estate										
Small Business Banking	—	—	1	1,841	—	—	1	259	2	2,100
Total	—	—	1	1,841	—	—	1	259	2	2,100
Total	1	\$ 348	1	\$ 1,841	—	\$ —	1	\$ 259	3	\$ 2,448

- (1) Includes one payment deferral and rate concession TDR (\$259 thousand).
(2) Excludes loans accounted for under the fair value option. See Note 10. Fair Value of Financial Instruments for additional information.

December 31, 2018										
Interest Only		Payment Deferral		Extend Amortization		Other ⁽¹⁾		Total TDRs ⁽²⁾		
Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	Number of Loans	Recorded investment at period end	
Construction & Development										
Small Business Banking	1	\$ 634	—	\$ —	1	\$ 3,067	1	\$ 1,872	3	\$ 5,573
Total	1	634	—	—	1	3,067	1	1,872	3	5,573
Commercial Real Estate										
Small Business Banking	—	—	—	—	—	—	1	1,732	1	1,732
Total	—	—	—	—	—	—	1	1,732	1	1,732
Commercial Land										
Small Business Banking	—	—	—	—	1	6	1	3,669	2	3,675
Total	—	—	—	—	1	6	1	3,669	2	3,675
Total	1	\$ 634	—	\$ —	2	\$ 3,073	3	\$ 7,273	6	\$ 10,980

- (1) Includes two interest only and rate concession TDRs (\$1.8 million and \$1.7 million), and one extend amortization and rate concession TDR (\$3.7 million).
(2) Excludes loans accounted for under the fair value option. See Note 10. Fair Value of Financial Instruments for additional information.

Concessions made to improve a loan and lease's performance have varying degrees of success. During the twelve months ended December 31, 2020, no TDRs that were modified within the twelve months ended December 31, 2020 subsequently defaulted. During the twelve months ended December 31, 2019, one TDR that was modified within the twelve months ended December 31, 2019 subsequently defaulted. The TDR default was a commercial real estate healthcare loan that was previously modified for payment deferral and had a recorded investment of \$1.8 million at December 31, 2019. During the twelve months ended December 31, 2018, no TDRs that were modified within the twelve months ended December 31, 2018 subsequently defaulted.

Note 4. Leases

Lessor Equipment Leasing

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

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Direct Financing Leases

The gross lease payments receivable and the net investment included in accounts receivable for such leases are as follows:

	As of December 31,	
	2020	2019
Gross direct finance lease payments receivable	\$ 10,629	\$ 13,959
Less - unearned interest	(1,685)	(2,562)
Net investment in direct financing leases	<u>\$ 8,944</u>	<u>\$ 11,397</u>

Future minimum lease payments receivable under direct finance leases are as follows:

As of December 31, 2020	Amount
2021	\$ 2,937
2022	2,667
2023	2,226
2024	1,582
2025	1,101
Thereafter	116
Total	<u>\$ 10,629</u>

Interest income of \$838 thousand, \$991 thousand and \$401 thousand was recognized in the twelve months ended December 31, 2020, 2019 and 2018, respectively.

Operating Leases

As of December 31, 2020 and 2019, the Company had a net investment of \$134.5 million and \$144.3 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 \$164.3 million and \$164.3 million and accumulated depreciation was \$29.8 million and \$20.0 million as of December 31, 2020 and 2019, respectively. Depreciation expense recognized on these assets for the twelve months ended December 31, 2020, 2019 and 2018 was \$9.8 million, \$9.7 million and \$8.2 million, respectively.

Lease income of \$9.5 million, \$9.4 million and \$8.0 million was recognized in the twelve months ended December 31, 2020, 2019 and 2018, respectively.

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

As of December 31, 2020	Amount
2021	\$ 9,065
2022	9,044
2023	9,075
2024	8,808
2025	8,935
Thereafter	31,175
Total	<u>\$ 76,102</u>

Lessee Lease Arrangements

The Company has operating leases for real property, land, copiers and other equipment. These leases have remaining lease terms of 1 year to 26 years, some of which include options to extend the leases for up to 20 years, and some of which include options to terminate the leases. The Company has concluded that it is reasonably certain it will exercise the options to extend for only one lease, which was therefore recognized as part of the ROU asset and lease liability.

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

The Company has a finance lease for fitness equipment, and it has a remaining lease term of approximately 1.92 years. There are no options to extend or terminate this lease.

The components of lease expense are as follows:

	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Operating lease cost	\$ 787	\$ 669
Short-term lease cost	87	528
Finance lease cost:		
Amortization of right-of-use assets	5	4
Interest expense on lease liabilities	—	—
Sublease income	(29)	(35)
Total net lease cost	<u>\$ 850</u>	<u>\$ 1,166</u>

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

	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Operating lease right-of-use asset	\$ 2,522	\$ 2,427
Operating lease liability	2,756	2,619
Finance lease right-of-use asset	9	13
Finance lease liability	9	14

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

	<u>As of December 31, 2020</u>	<u>December 31, 2019</u>
Weighted average remaining lease term (years)		
Operating leases	12.21	13.41
Finance lease	1.92	2.92
Weighted average discount rate		
Operating leases	2.87%	3.12%
Finance lease	3.10%	3.10%

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

<u>As of December 31, 2020</u>	<u>Operating Leases</u>	<u>Finance Leases</u>
2021	\$ 742	\$ 5
2022	724	5
2023	478	—
2024	202	—
2025	42	—
Thereafter	1,202	—
Total lease payments	3,390	10
Less: imputed interest	(634)	(1)
Total lease liabilities	<u>\$ 2,756</u>	<u>\$ 9</u>

The Company's total rent expense related to the aforementioned leases for 2018 was \$1.2 million.

Note 5. Servicing Assets

Loans serviced for others are not included in the accompanying consolidated balance sheet. The unpaid principal balances of loans serviced for others requiring recognition of a servicing asset were \$2.21 billion, \$2.26 billion and \$2.63 billion at December 31, 2020, 2019 and 2018, respectively. The unpaid principal balance for all loans serviced for others was \$3.21 billion, \$2.97 billion and \$3.22 billion at December 31, 2020, 2019 and 2018, respectively.

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Notes to Consolidated Financial Statements

The following summarizes the activity pertaining to servicing rights:

	<u>2020</u>	<u>2019</u>
Balance at beginning of period	\$ 35,365	\$ 47,641
Additions, net	8,511	4,305
Fair value changes:		
Due to changes in valuation inputs or assumptions	(1,049)	(3,127)
Decay due to increases in principal paydowns or runoff	(8,909)	(13,454)
Balance at end of period	<u>\$ 33,918</u>	<u>\$ 35,365</u>

The fair value of servicing rights was determined using a weighted average discount rate of 11.7% on December 31, 2020 and 14.1% on December 31, 2019. The fair value of servicing rights was determined using a weighted average prepayment speed of 18.8% on December 31, 2020 and 16.4% on December 31, 2019. Changes to fair value are reported in loan servicing asset revaluation within the consolidated statements of income.

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

Note 6. Premises and Equipment

Components of Premises and Equipment

Components of premises and equipment and total accumulated depreciation at December 31, 2020 and 2019 are as follows:

	<u>2020</u>	<u>2019</u>
Buildings	\$ 54,718	\$ 54,671
Land improvements	5,180	5,180
Furniture and equipment	18,032	17,878
Computers and software	6,001	5,134
Leasehold improvements	8,068	8,078
Land	8,650	8,650
Transportation	30,496	60,947
Solar panels	164,295	164,295
Deposits on fixed assets	20,124	596
Premises and equipment, total	<u>315,564</u>	<u>325,429</u>
Less accumulated depreciation	<u>(56,297)</u>	<u>(46,330)</u>
Premises and equipment, net of depreciation	<u>\$ 259,267</u>	<u>\$ 279,099</u>

Deposits on fixed assets at December 31, 2020 consist primarily of a new airplane purchase, software implementation and campus improvement costs. The decrease in the fixed asset category transportation from December 31, 2019 to 2020 is primarily related to the sale of an airplane. Depreciation expense for the years ended December 31, 2020, 2019 and 2018 amounted to \$21.6 million, \$19.3 million and \$16.0 million, respectively.

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

Note 7. Deposits

The types of deposits at December 31, 2020 and 2019 are:

	<u>2020</u>	<u>2019</u>
Noninterest-bearing deposits	\$ 75,287	\$ 51,965
Interest-bearing deposits:		
Interest-bearing checking	250,060	—
Money market	117,010	86,754
Savings	2,081,561	1,101,065
Time deposits	3,188,910	2,987,196
Total	<u>5,637,541</u>	<u>4,175,015</u>
Total deposits	<u>\$ 5,712,828</u>	<u>\$ 4,226,980</u>

The aggregate amount of time deposits in denominations of \$250 thousand or more at December 31, 2020 and 2019 was approximately \$644.0 million and \$554.4 million, respectively. At December 31, 2020 the scheduled maturities of total time deposits are as follows:

<u>Year</u>	<u>Amount</u>
2021	\$ 2,244,543
2022	391,969
2023	192,861
2024	167,798
2025	95,201
Thereafter	96,538
Total	<u>\$ 3,188,910</u>

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Notes to Consolidated Financial Statements

Note 8. Borrowings

Total outstanding borrowings consisted of the following:

	December 31, 2020	December 31, 2019
<u>Borrowings</u>		
In April 2020, the Company entered into the Federal Reserve Bank's Paycheck Protection Program Liquidity Facility ("PPPLF"). Under the PPPLF, advances must be secured by pledges of loans to small businesses originated by the Company under the U.S. Small Business Administration's 7(a) loan program titled the Paycheck Protection Program. The PPPLF accrues interest at thirty-five basis points and matures at various dates equal to the maturity date of the PPPLF collateral pledged to secure the advance, ranging from April 1, 2022 to August 12, 2025, and will be accelerated on and to the extent of any 7(a) loan forgiveness reimbursement by the SBA for any PPPLF collateral or the date of purchase by the SBA from the borrower of any PPPLF collateral. On the maturity date of each advance, the Company shall repay the advance plus accrued interest. This \$1.53 billion borrowing was fully advanced at December 31, 2020.	\$ 1,527,596	\$ —
In September 2020, the Company renewed a revolving line of credit originally issued in 2017. The line of credit is unsecured and accrues interest at 30-day LIBOR plus 1.15% for a term of 13 months, with an interest rate cap of 4.25% and an interest rate floor of 2.75%. Payments are interest only with all principal and accrued interest due on October 10, 2021. The terms of this loan require the Company to maintain minimum capital and debt service coverage ratios. The \$50.0 million line of credit was fully advanced at March 31, 2020. The Company made a principal paydown of \$45.0 million on May 28, 2020 and \$12 thousand on September 20, 2020. There was an additional advance and curtailment netting to \$9.5 million on December 29, 2020 and there is \$35.5 million of available credit remaining at December 31, 2020.	14,488	—
In October 2017, the Company entered into a financing lease of \$19 thousand with an unaffiliated equipment lease company, secured by fitness equipment which is included in premises and equipment on the consolidated balance sheet. Payments are principal and interest due monthly starting December 15, 2017 over a term of 60 months. At the end of the lease term there is a \$1.00 bargain purchase option. As of January 1, 2019, this borrowing was revised in accordance with ASU 2016-02.	9	14
Total borrowings	\$ 1,542,093	\$ 14

The Company may purchase federal funds through unsecured federal funds lines of credit with various correspondent banks, which totaled \$167.5 million and \$72.5 million as of December 31, 2020 and 2019, respectively. These lines are intended for short-term borrowings and are subject to restrictions limiting the frequency and terms of advances. These lines of credit are payable on demand and bear interest based upon the daily federal funds rate. The Company had no outstanding balances on the lines of credit as of December 31, 2020 or 2019.

The Company has entered into a repurchase agreement with a third party for up to \$5.0 million as of December 31, 2020 and 2019. At the time the Company enters into a transaction with the third party, the Company must transfer securities or other assets against the funds received. The terms of the agreement are set at market conditions at the time the Company enters into such transaction. The Company had no outstanding balance on the repurchase agreement as of December 31, 2020 and 2019.

On June 18, 2018, the Company entered into a borrowing agreement with the Federal Home Loan Bank of Atlanta. These borrowings must be secured with eligible collateral approved by the Federal Home Loan Bank of Atlanta. As of December 31, 2020 and 2019, there was \$2.01 billion and \$1.14 billion, respectively, of potential borrowing capacity available under this agreement. There is no collateral pledged and no advances outstanding as of December 31, 2020 or 2019.

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

The Company may borrow funds through the Federal Reserve Bank's discount window. These borrowings are secured by a blanket floating lien on qualifying loans with a balance of \$2.22 billion and \$526.8 million as of December 31, 2020 and 2019, respectively. At December 31, 2020 and 2019, the Company had approximately \$1.77 billion and \$294.5 million, respectively, in borrowing capacity available under these arrangements with no outstanding balance as of December 31, 2020 or 2019.

Note 9. Income Taxes

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

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Current income tax (benefit) expense:			
Federal	\$ 2,071	\$ 1,339	\$ 585
State	3,222	2,625	(51)
Total current tax expense	<u>5,293</u>	<u>3,964</u>	<u>534</u>
Deferred income tax (benefit) expense:			
Federal	(12,946)	3,031	(7,868)
State	(4,501)	(1,564)	1,932
Total deferred tax (benefit) expense	<u>(17,447)</u>	<u>1,467</u>	<u>(5,936)</u>
Income tax (benefit) expense, as reported	<u>\$ (12,154)</u>	<u>\$ 5,431</u>	<u>\$ (5,402)</u>

Reported income tax expense (benefit) differed from the amounts computed by applying the U.S. federal statutory income tax rate of 21% in 2020, 2019 and 2018 to income before income taxes as follows:

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Income tax expense computed at the statutory rate	\$ 9,952	\$ 4,928	\$ 9,670
State income tax (benefit) expense, net of federal	(1,009)	838	1,485
Stock-based compensation expense	(17,489)	443	268
Net operating loss carryback arising from CARES Act	(3,732)	—	—
Change in U.S. tax rate	—	—	244
Decrease in taxes due to investment tax credit	—	(1,561)	(17,846)
Other	124	783	777
Total income tax (benefit) expense	<u>\$ (12,154)</u>	<u>\$ 5,431</u>	<u>\$ (5,402)</u>

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act made broad and complex changes to the U.S. tax code that affected 2018, including, but not limited to, accelerated depreciation that allows for full expensing of qualified property. The Tax Act also enacted a reduction in the U.S. federal corporate income tax rate from 35% to 21% which became effective in 2018.

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Notes to Consolidated Financial Statements

Components of deferred tax assets and liabilities are as follows:

	<u>2020</u>	<u>2019</u>
Deferred tax assets:		
Tax credit carryforwards	\$ 21,892	\$ 37,619
Allowance for loan and lease losses	19,311	11,579
Net operating loss carryforwards	—	83
Mark to market on loans held for sale	25,107	10,501
Deferred loan fees and costs, net	6,535	—
Stock-based compensation expense	1,805	4,918
Goodwill and intangibles	278	720
Accrued expenses	2,487	1,372
Operating lease liabilities	661	629
Other	1,036	977
Total deferred tax assets	<u>79,112</u>	<u>68,398</u>
Deferred tax liabilities:		
Net unrealized losses on equity method investments	11,417	14,703
Unguaranteed loan discount	12,612	13,076
Premises and equipment	39,847	45,291
Deferred loan fees and costs, net	—	1,417
Net unrealized gains on equity securities	4,386	891
Net unrealized gains on securities available for sale	6,792	3,702
Operating lease right-of-use assets	605	584
Other	843	482
Total deferred tax liabilities	<u>76,502</u>	<u>80,146</u>
Net deferred tax asset (liability)	<u>\$ 2,610</u>	<u>\$ (11,748)</u>

The Company has recorded a deferred tax asset of \$21.9 million related to federal tax credit carryforwards which will begin to expire in 2037.

Management assesses the realizability of deferred tax assets at each reporting period and considers whether it is more likely than not that a deferred tax asset will not be realized. The realization of a deferred tax asset is dependent upon the generation of future taxable income during periods in which the related temporary difference becomes deductible or realizable prior to its expiration. Management considers projected future taxable income, scheduled reversal of deferred tax liabilities, cessation of investing in renewable energy assets that generate investment tax credits and tax planning strategies in making this assessment. Based on these considerations, management believes it is more likely than not that the deferred tax assets will be realized.

The Company does not have any material uncertain tax positions and does not have any interest and penalties recorded in the income statement for the years ended December 31, 2020, 2019 and 2018. The Company files a consolidated income tax return in the U.S. federal tax jurisdiction.

Generally, the Company's federal and state tax returns are no longer subject to examination by the taxing authorities for years prior to 2015.

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Notes to Consolidated Financial Statements

Note 10. Fair Value of Financial Instruments

Fair Value Hierarchy

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

Recurring Fair Value

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

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

Loans held for sale: The fair values of loans held for sale are typically determined based on discounted cash flow analyses and adjusted, as appropriate, to reflect current market conditions and borrower-specific credit risk.

Loans held for investment: The fair values of loans held for investment are typically determined based on discounted cash flow analyses and adjusted, as appropriate, to reflect current market conditions and borrower-specific credit risk. If the loan is collateral dependent, the fair value is determined based on the difference between the fair value of the collateral and the amortized cost basis of the loan as of the measurement date. Fair value of the loan's collateral is determined by appraisals, independent valuation, or management's estimation of fair value which is then adjusted for the cost related to liquidation of the collateral.

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

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

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

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

<u>December 31, 2020</u>	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investment securities available-for-sale				
US government agencies	\$ 15,919	\$ —	\$ 15,919	\$ —
Mortgage-backed securities	730,454	—	730,454	—
Municipal bonds ¹	3,725	—	3,629	96
Loans held for sale	36,111	—	—	36,111
Loans held for investment	815,374	—	—	815,374
Servicing assets ²	33,918	—	—	33,918
Mutual fund	2,351	—	2,351	—
Equity warrant assets ³	908	—	—	908
Total assets at fair value	<u>\$ 1,638,760</u>	<u>\$ —</u>	<u>\$ 752,353</u>	<u>\$ 886,407</u>

<u>December 31, 2019</u>	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investment securities available-for-sale				
US treasury securities	\$ 5,015	\$ —	\$ 5,015	\$ —
US government agencies	22,779	—	22,779	—
Mortgage-backed securities	503,297	—	503,297	—
Municipal bond ¹	8,954	—	8,862	92
Loans held for sale	16,198	—	—	16,198
Loans held for investment	824,520	—	—	824,520
Servicing assets ²	35,365	—	—	35,365
Mutual fund	2,206	—	2,206	—
Equity warrant assets ³	570	—	—	570
Total assets at fair value	<u>\$ 1,418,904</u>	<u>\$ —</u>	<u>\$ 542,159</u>	<u>\$ 876,745</u>

- 1 During the year ended December 31, 2020, the Company recorded a fair value adjustment gain of \$4 thousand. During the year ended December 31, 2019, the Company sold \$900 thousand of a municipal bond to a third party and recorded a fair value adjustment loss of \$8 thousand.
- 2 See Note 5 for a rollforward of recurring Level 3 fair values for servicing assets.
- 3 During the year ended December 31, 2020, the Company entered into equity warrant assets with a fair value of \$203 thousand at the time of issuance, recorded net gains on derivative instruments of \$168 thousand, and settlements of \$33 thousand. During the year ended December 31, 2019, the Company entered into equity warrant assets with a fair value of \$97 thousand at the time of issuance, recorded net losses on derivative instruments of \$53 thousand, and no settlements.

Fair Value Option

The Company elects to account for retained participating interests of 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 on loans accounted for under the fair value option is recognized in loans and fees on loans on the Company's consolidated statements of income. There were no loans accounted for under the fair value option that were 90 days or more past due and still accruing interest at December 31, 2020 or December 31, 2019. The unpaid principal balance of unguaranteed exposure for nonaccruals was \$6.9 million and \$10.7 million at December 31, 2020 and December 31, 2019, respectively.

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Notes to Consolidated Financial Statements

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 December 31, 2020 and December 31, 2019.

	December 31, 2020								
	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 sale	\$ 36,111	\$ 38,135	\$ (2,024)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Loans held for investment	815,374	845,082	(29,708)	35,499	39,318	(3,819)	25,532	28,741	(3,209)
	<u>\$851,485</u>	<u>\$883,217</u>	<u>\$(31,732)</u>	<u>\$35,499</u>	<u>\$39,318</u>	<u>\$(3,819)</u>	<u>\$25,532</u>	<u>\$28,741</u>	<u>\$(3,209)</u>

	December 31, 2019								
	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 sale	\$ 16,198	\$ 17,230	\$ (1,032)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Loans held for investment	824,520	842,456	(17,936)	49,739	54,370	(4,631)	26,644	28,137	(1,493)
	<u>\$840,718</u>	<u>\$859,686</u>	<u>\$(18,968)</u>	<u>\$49,739</u>	<u>\$54,370</u>	<u>\$(4,631)</u>	<u>\$26,644</u>	<u>\$28,137</u>	<u>\$(1,493)</u>

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

	Twelve Months Ended December 31,	
	2020	2019
Gains (Losses) on Loans Accounted for under the Fair Value Option		
Loans held for sale	\$ 232	\$ 470
Loans held for investment	(13,315)	6,938
	<u>\$ (13,083)</u>	<u>\$ 7,408</u>

Losses related to borrower-specific credit risk were \$5.6 million and \$6.3 million for the twelve months ended December 31, 2020 and 2019, respectively.

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

	Twelve Months Ended December 31,	
	2020	2019
Loans held for sale		
Balance at beginning of period	\$ 16,198	\$ 17,745
Issuances	35,275	30,730
Fair value changes	232	470
Sales	(6,082)	(32,452)
Settlements	(9,512)	(295)
Balance at end of period	<u>\$ 36,111</u>	<u>\$ 16,198</u>

	Twelve Months Ended December 31,	
	2020	2019
Loans held for investment		
Balance at beginning of period	\$ 824,520	\$ 885,527
Issuances	173,280	139,004
Fair value changes	(13,315)	6,938
Settlements	(169,111)	(206,949)
Balance at end of period	<u>\$ 815,374</u>	<u>\$ 824,520</u>

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Non-recurring Fair Value

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

Collateral dependent loans: Loans are considered collateral dependent when the Company has determined that foreclosure of the collateral is probable or when a borrower is experiencing financial difficulty and the loan is expected to be repaid substantially through the operation or sale of collateral. A collateral dependent loan's ACL is measured based on the difference between the fair value of the collateral and the amortized cost basis of the loan as of the measurement date. Fair value of the loan's collateral is determined by appraisals, independent valuation, or management's estimation of fair value which is then adjusted for the cost related to liquidation of the collateral. Collateral dependent loans are generally classified as Level 3 based on management's judgment and estimation. Loans with agreed upon sales prices are classified as Level 1.

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

Long-lived asset held for sale: Long-lived assets held for sale are carried at the lower of carrying value or fair value less selling costs. Fair value is typically based upon an independent market valuation of the property which is then adjusted for the cost related to the sell the property. Long-lived assets held for sale with an independent market valuation are generally classified as nonrecurring Level 3, given the lack of observable market prices for identical assets and market discounts applied to market prices. Long-lived assets with agreed upon sales prices are classified as Level 1.

Equity security investments with a non-readily determinable fair value: Equity security investments are measured at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. When an observable price change in an orderly transaction occurs for an identical investment of the same issuer, the investment is generally classified as nonrecurring Level 1 within the valuation hierarchy. When an observable price change in an orderly transaction occurs for a similar investment of the same issuer, the investment is generally classified as nonrecurring Level 2 within the valuation hierarchy.

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

December 31, 2020	Total	Level 1	Level 2	Level 3
Collateral dependent loans	\$ 4,159	\$ —	\$ —	\$ 4,159
Foreclosed assets	4,155	—	—	4,155
Long-lived asset held for sale	8,874	8,874	—	—
Equity security investments with a non-readily determinable fair value	25,367	—	25,367	—
Total assets at fair value	<u>\$ 42,555</u>	<u>\$ 8,874</u>	<u>\$ 25,367</u>	<u>\$ 8,314</u>
December 31, 2019	Total	Level 1	Level 2	Level 3
Collateral dependent loans	\$ 1,245	\$ —	\$ —	\$ 1,245
Foreclosed assets	5,612	—	—	5,612
Equity security investment with a non-readily determinable fair value	8,738	8,738	—	—
Total assets at fair value	<u>\$ 15,595</u>	<u>\$ 8,738</u>	<u>\$ —</u>	<u>\$ 6,857</u>

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Level 3 Analysis

For Level 3 assets and liabilities measured at fair value as of December 31, 2020 and December 31, 2019, the significant unobservable inputs used in the fair value measurements were as follows:

December 31, 2020

Level 3 Assets with Significant Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
<i>Recurring fair value</i>				
Municipal bond	\$ 96	Discounted expected cash flows	Discount rate Prepayment speed	4.3% 5.0%
Loans held for sale	\$ 36,111	Discounted expected cash flows	Discount rate Prepayment speed	4.2% to 18.5% WAVG 19.0%
Loans held for investment	\$ 815,374	Discounted expected cash flows	Loss rate	0.0% to 73.2% (WAVG 1.5%)
Equity warrant assets	\$ 908	Discounted appraisals	Discount rate	4.2% to 18.5%
			Prepayment speed	WAVG 19.0%
			Appraisal adjustments	10.0% to 83.0%
			Volatility	26.5-87.1%
			Risk-free interest rate	0.36% to 0.93%
		Black-Scholes option pricing model	Marketability discount	20%
			Remaining life	5 - 10 years
<i>Non-recurring fair value</i>				
Collateral dependent loans	\$ 4,159	Discounted appraisals	Appraisal adjustments ⁽¹⁾	10.0% to 83.0%
Foreclosed assets	\$ 4,155	Discounted appraisals	Appraisal adjustments ⁽¹⁾	10.0% to 20.0%

December 31, 2019

Level 3 Assets with Significant Unobservable Inputs	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
<i>Recurring fair value</i>				
Municipal bond	\$ 92	Discounted expected cash flows	Discount rate Prepayment speed	4.6% 5.0%
Loans held for sale	\$ 16,198	Discounted expected cash flows	Discount rate Prepayment speed	7.7% to 21.4% WAVG 13.1%
Loans held for investment	\$ 824,520	Discounted expected cash flows	Loss rate	0.0% to 10.9% (WAVG 1.3%)
Equity warrant assets	\$ 570	Discounted appraisals	Discount rate	7.7% to 21.4%
			Prepayment speed	WAVG 13.1%
			Appraisal adjustments	10.0% to 70.0%
			Volatility	21.0-75.0%
			Risk-free interest rate	1.90%
		Black-Scholes option pricing model	Marketability discount	20.0%
			Remaining life	8-10 years
<i>Non-recurring fair value</i>				
Collateral dependent loans	\$ 1,245	Discounted appraisals	Appraisal adjustments ⁽¹⁾	10.0% to 57.0%
Foreclosed assets	\$ 5,612	Discounted appraisals	Appraisal adjustments ⁽¹⁾	10.0% to 37.0%

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

Live Oak Bancshares, Inc.

Notes to Consolidated Financial Statements

Estimated Fair Value of Other Financial Instruments

GAAP also requires disclosure of fair value information about financial instruments carried at book value on the consolidated balance sheet. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. In that regard, the derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, could not be realized in immediate settlement of the instruments. Accordingly, the aggregate fair value amounts presented do not represent the underlying value of the Company.

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

December 31, 2020	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
<i>Financial assets</i>					
Cash and due from banks	\$ 297,167	\$ 297,167	\$ —	\$ —	\$ 297,167
Federal funds sold	21,153	21,153	—	—	21,153
Certificates of deposit with other banks	6,500	6,906	—	—	6,906
Loans held for sale	1,139,359	—	—	1,235,122	1,235,122
Loans and leases held for investment, net of allowance for credit losses on loans and leases	4,277,402	—	—	4,366,642	4,366,642
<i>Financial liabilities</i>					
Deposits	5,712,828	—	5,711,781	—	5,711,781
Borrowings	1,542,093	—	—	1,542,171	1,542,171

December 31, 2019	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
<i>Financial assets</i>					
Cash and due from banks	\$ 124,610	\$ 124,610	\$ —	\$ —	\$ 124,610
Federal funds sold	96,787	96,787	—	—	96,787
Certificates of deposit with other banks	7,250	7,568	—	—	7,568
Loans held for sale	950,249	—	—	1,004,135	1,004,135
Loans and leases held for investment, net of allowance for credit losses on loans and leases	1,774,532	—	—	1,822,569	1,822,569
<i>Financial liabilities</i>					
Deposits	4,226,980	—	4,211,522	—	4,211,522
Borrowings	14	—	—	14	14

Live Oak Bancshares, Inc.
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Note 11. Commitments and Contingencies

Litigation

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

Financial Instruments with Off-balance-sheet Risk

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

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

	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Commitments to extend credit	\$ 2,054,910	\$ 1,834,449
Standby letters of credit	22,913	25,532
Total unfunded off-balance sheet credit risk	<u>\$ 2,077,823</u>	<u>\$ 1,859,981</u>

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.

As of December 31, 2020 and 2019, the Company had commitments for on-balance sheet instruments in the amount of \$15.8 million and \$16.9 million, respectively.

Concentrations of Credit Risk

Although the Company is not subject to any geographic concentrations, a substantial amount of the Company's loans and commitments to extend credit have been granted to customers in the agriculture, healthcare and veterinary verticals. The concentrations of credit by type of loan are set forth in Note 3. The distribution of commitments to extend credit approximates the distribution of loans outstanding. The Company does not have a significant number of credits to any single borrower or group of related borrowers whereby their retained exposure exceeds \$7.5 million, except for fifty-one relationships that have a retained unguaranteed exposure of \$676.2 million of which \$387.4 million of the unguaranteed exposure has been disbursed.

Additionally, the Company has future minimum lease payments receivable under non-cancelable operating leases totaling \$76.1 million, of which \$54.8 million is due from four relationships.

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

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Notes to Consolidated Financial Statements

Note 12. Benefit Plans

Defined Contribution Plan

The Company maintains an employee benefit plan pursuant to Section 401(k) of the Internal Revenue Code. The plan covers substantially all employees. Participants may contribute a percentage of compensation, subject to a maximum allowed under the Code. In addition, the Company makes certain matching contributions and may make additional contributions at the discretion of the board of directors. Company expense relating to the plan for the years ended December 31, 2020, 2019, and 2018 amounted to \$3.9 million, \$3.0 million and \$2.7 million, respectively.

Flexible Benefits Plan

The Company maintains a Flexible Benefits Plan which covers substantially all employees. Participants may set aside pre-tax dollars to provide for future expenses such as dependent care.

Employee Stock Purchase Plan

The Company adopted an Employee Stock Purchase Plan (2014 ESPP) on October 8, 2014. On May 24, 2016, the 2014 ESPP was amended and the Amended and Restated Employee Stock Purchase Plan became effective (ESPP), within the meaning of Section 423 of the Internal Revenue Code of 1986, as amended. Under this plan, eligible employees are able to purchase available shares with post-tax dollars as of the grant date. In order for employees to be eligible to participate in this plan they must be employed or on an authorized leave of absence from the Company or any subsidiary immediately prior to the grant date. ESPP stock purchases cannot exceed \$25 thousand in fair market value per employee per calendar year. Options to purchase shares under the ESPP are granted at a 15% discount to fair market value. Expense recognized in relation to the ESPP was \$92 thousand, \$77 thousand and \$60 thousand for fiscal years 2020, 2019 and 2018, respectively.

Stock Option Plans

On March 20, 2015, the Company adopted the 2015 Omnibus Stock Incentive Plan which replaced the previously existing Amended Incentive Stock Option Plan and Nonstatutory Stock Option Plan. Subsequently on May 24, 2016, the 2015 Omnibus Stock Incentive Plan was amended and restated to authorize awards covering a maximum of 7,000,000 common voting shares and has an expiration date of March 20, 2025. On May 15, 2018, the Amended and Restated 2015 Omnibus Stock Incentive Plan was amended to authorize awards covering a maximum of 8,750,000 common voting shares. Options or restricted shares granted under the Amended and Restated 2015 Omnibus Stock Incentive Plan (the "Plan") expire no more than 10 years from date of grant. Exercise prices under the Plan are set by the Board of Directors at the date of grant, but shall not be less than 100% of fair market value of the related stock at the date of the grant. Options vest over a minimum of three years from the date of the grant. Forfeitures are recognized as they occur.

Compensation cost relating to share-based payment transactions are recognized in the financial statements with measurement based upon the fair value of the equity or liability instruments issued. For the years ended December 31, 2020, 2019, and 2018 the Company recognized \$1.5 million, \$1.6 million, and \$1.7 million in compensation expense for stock options, respectively.

Stock option activity under the Plan during the year ended December 31, 2020 is summarized below.

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2019	2,515,727	\$ 11.42		
Exercised	(563,072)	10.23		
Forfeited	(74,893)	11.55		
Outstanding at December 31, 2020	<u>1,877,762</u>	<u>\$ 11.78</u>	<u>4.08 years</u>	<u>\$ 67,006,886</u>
Exercisable at December 31, 2020	<u>855,126</u>	<u>\$ 10.53</u>	<u>3.86 years</u>	<u>\$ 31,579,415</u>

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following is a summary of non-vested stock option activity for the Company for the years ended December 31, 2020, 2019, and 2018.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2017	2,364,999	\$ 4.65
Vested	(308,373)	7.51
Forfeited	(216,796)	5.90
Non-vested at December 31, 2018	1,839,830	4.60
Vested	(288,394)	4.20
Forfeited	(66,040)	3.50
Non-vested at December 31, 2019	1,485,396	4.73
Vested	(387,867)	3.05
Forfeited	(74,893)	4.52
Non-vested at December 31, 2020	1,022,636	\$ 5.38

The total intrinsic value of options exercised during the years ended December 31, 2020, 2019, and 2018 was \$15.9 million, \$785 thousand, and \$3.5 million, respectively.

At December 31, 2020, unrecognized compensation costs relating to stock options amounted to \$2.4 million which will be recognized over a weighted average period of 1.65 years.

There were no options granted in 2020, 2019 or 2018.

Restricted Stock Plan

In 2010, the Company adopted a Restricted Stock Plan. Under this plan, a total of 1,350,000 shares of Common Stock were available for issuance to eligible employees. Restricted stock grants vest in equal installments ranging from immediate vesting to over a seven year period from the date of the grant. Under the 2015 Omnibus Stock Incentive Plan, which replaced the previously existing Restricted Stock Plan, during 2018, 840,150 restricted stock units were granted to eligible employees and outside directors at a weighted average grant date fair value of \$19.72, of which 485,000 restricted stock units had market price conditions or non-market-related performance criteria restrictions. During 2019, 164,828 restricted stock units were granted to eligible employees and outside directors at a weighted average grant date fair value of \$17.00, and 500,000 restricted stock units had market price conditions or non-market-related performance criteria restrictions at a weighted average grant date fair value of \$8.81. During 2020, 586,132 restricted stock units were granted to eligible employees and outside directors at a weighted average grant date fair value of \$17.78. The vesting of these grants was time based and had no market price conditions.

The fair value of each restricted stock unit is based on the market value of the Company's stock on the date of the grant. Restricted stock awards are authorized in the form of restricted stock awards or units ("RSUs") and restricted stock awards or units with a market price condition ("Market RSUs").

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

Market RSUs also have a restriction based on the passage of time and may have non-market-related performance criteria, but also have a restriction based on market price criteria related to the Company's share price closing at or above a specified price for at least twenty (20) consecutive trading days at any time prior to the expiration date of the grants. For the outstanding Market RSUs as of December 31, 2020, the market price conditions ranged from \$45.00 to \$55.00 per share. The non-market-related performance criteria had all been satisfied as of December 31, 2020. The amount of Market RSUs earned will not exceed 100% of the Market RSUs awarded. The fair value of the Market RSUs and the implied service period is calculated using the Monte Carlo Simulation method.

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The following is a summary of non-vested RSU stock activity for the Company for the year ended December 31, 2020.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2019	457,401	\$ 21.54
Granted	586,132	17.78
Vested	(89,426)	20.61
Forfeited	(64,268)	24.55
Non-vested at December 31, 2020	<u>889,839</u>	<u>\$ 18.94</u>

During 2019 and 2018, the Company granted 164,828 and 355,150 RSUs, respectively. The weighted average grant date fair value for RSUs granted in 2019 and 2018 were \$17.00 and \$25.17, respectively.

For the years ended December 31, 2020, 2019, and 2018 the Company recognized \$3.5 million, \$2.2 million, and \$2.6 million in compensation expense for RSUs, respectively.

At December 31, 2020, unrecognized compensation costs relating to RSUs amounted to \$14.1 million which will be recognized over a weighted average period of 4.15 years.

The following is a summary of non-vested Market RSU stock activity for the Company for the year ended December 31, 2020.

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2019	3,154,324	\$ 8.44
Vested	(2,513,233)	8.62
Forfeited	(57,591)	9.25
Non-vested at December 31, 2020	<u>583,500</u>	<u>\$ 8.38</u> ¹

¹ Adjusted for modification in 2019, as described below.

During 2019 and 2018, the Company granted 500,000 and 485,000 Market RSUs with a weighted average grant date fair value of \$8.81, and \$7.93, as modified, respectively.

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

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

On February 11, 2019, 75,000 Market RSUs granted on May 14, 2018 to one employee were modified to lengthen the vesting term from 7 to 10 years and change the target stock price from \$48.00 to a range of \$35.00 to \$48.00 per share for at least twenty (20) consecutive trading days. Additionally, 410,000 Market RSUs granted on August 10, 2018, to eleven employees were modified to lengthen the vesting term from 7 to 10 years and change the amount of Market RSUs that vest at various target stock prices to 20% per tier. As a result of the modification, the Company recognized additional compensation expense of \$543 thousand for the year ended December 31, 2019.

For the years ended December 31, 2020, 2019 and 2018, the Company recognized \$9.7 million, \$7.9 million, and \$4.9 million respectively, in compensation expense for Market RSUs. For the year ended December 31, 2020, 2,513,233 Market RSUs met the performance stock price conditions for the \$34, \$35, \$38, and \$40 stock price for twenty consecutive days. The remaining expense of \$2.4 million was fully recognized due to the accelerated vesting.

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At December 31, 2020, unrecognized compensation costs relating to Market RSUs amounted to \$4.5 million which will be recognized over a weighted average period of 2.78 years.

Employee/Outside Director Bonus Plan

In 2014, the Company adopted a Bonus Plan whereby eligible employees and outside directors were qualified to receive quarterly and annual bonus payments based on each individual's base pay/annual director fees and the profitability of the Company. In 2016, the Company approved a revised Incentive Compensation Plan and the payout criteria was adjusted for exceeding thresholds based on certain performance metrics and the profitability of the Company and applied to full-time employees only. Beginning in 2016, this plan no longer applied to outside directors. Total expenses related to the bonus plan for employees were \$13.9 million, \$7.2 million, and \$632 thousand for the years ended December 31, 2020, 2019, and 2018, respectively.

Note 13. Regulatory Matters

Dividends

The Bank, as a North Carolina banking corporation, may pay dividends to shareholders provided the bank does not make distributions that reduce its capital below its applicable required capital, pursuant to North Carolina General Statutes Section 53C-4-7. However, regulatory authorities may limit payment of dividends by any bank when it is determined that such a limitation is in the public interest and is necessary to ensure financial soundness of the bank.

Capital Requirements

The Company and the Bank are subject to various regulatory capital requirements administered by the federal banking agencies. The Basel III Capital Rules, a comprehensive capital framework for U.S. banking organizations, includes quantitative measures designed to ensure capital adequacy. The Basel III Rules require the Company and the Bank to maintain (i) a minimum common equity Tier 1 ratio minimum of 4.50 percent plus a 2.50 percent "capital conservation buffer" (effectively resulting in minimum common equity Tier 1 ratio of 7.00 percent), (ii) Tier 1 risk-based capital minimum of 6.00 percent plus the capital conservation buffer (effectively resulting in a minimum Tier 1 risk-based capital ratio of 8.00 percent), (iii) total risk-based capital ratio minimum of 8.00 percent plus the capital conservation buffer (effectively resulting in a minimum total risk-based capital ratio of 10.5 percent) and (iv) Tier 1 leverage capital ratio minimum of 4.00 percent. The capital conservation buffer is designed to absorb losses during periods of economic stress and effectively increases the minimum required risk-weighted capital ratios. Failure to meet minimum capital requirements may result in certain actions by regulators that could have a direct material effect on the consolidated financial statements.

As discussed in Note 1. Organization and Summary of Significant Accounting Policies, the Company recorded a cumulative effect increase to retained earnings totaling \$822 thousand on January 1, 2020 as a result of the adoption of ASC 326. The Company did not elect the federal banking agencies' transition option that allowed banking organizations to phase in the day one effects of ASC 326 on their regulatory capital ratios over multiple years.

Federal bank regulatory agencies have issued an interim final rule that permits banks to neutralize the regulatory capital effects of participating in the PPPLF and clarify that PPP loans have a zero percent risk weight under applicable risk-based capital rules. Specifically, a bank may exclude all PPP loans pledged as collateral to the PPPLF from its average total consolidated assets for the purposes of calculating its leverage ratio, while PPP loans that are not pledged as collateral to the PPPLF will be included. Accordingly, the Company's PPP loans are excluded from the calculation of our leverage ratio as of December 31, 2020.

Based on the most recent notification from the Federal Deposit Insurance Corporation, the Bank is well capitalized under the regulatory framework for prompt corrective action. As of December 31, 2020, the Company and the Bank met all capital adequacy requirements to which they are subject and were not aware of any conditions or events that would change each entity's well capitalized status.

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Capital amounts and ratios as of December 31, 2020 and 2019, are presented in the following table.

	<u>Actual</u>		<u>Minimum Capital Requirement</u>		<u>Minimum To Be Well Capitalized</u>	
	<u>Amount</u>	<u>Ratio</u>	<u>Amount</u>	<u>Ratio</u>	<u>Amount</u>	<u>Ratio</u>
Consolidated - December 31, 2020						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 521,568	12.15%	\$ 193,172	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 574,621	13.39%	\$ 343,417	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 521,568	12.15%	\$ 257,563	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 521,568	8.40%	\$ 248,417	4.00%	N/A	N/A
Bank - December 31, 2020						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 470,069	11.25%	\$ 188,012	4.50%	\$ 271,573	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 522,305	12.50%	\$ 334,243	8.00%	\$ 417,804	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 470,069	11.25%	\$ 250,683	6.00%	\$ 334,243	8.00%
Tier 1 Capital (to Average Assets)	\$ 470,069	7.60%	\$ 247,288	4.00%	\$ 309,110	5.00%
Consolidated - December 31, 2019						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 499,513	14.90%	\$ 150,927	4.50%	N/A	N/A
Total Capital (to Risk-Weighted Assets)	\$ 527,747	15.74%	\$ 268,315	8.00%	N/A	N/A
Tier 1 Capital (to Risk-Weighted Assets)	\$ 499,513	14.90%	\$ 201,236	6.00%	N/A	N/A
Tier 1 Capital (to Average Assets)	\$ 499,513	10.65%	\$ 187,582	4.00%	N/A	N/A
Bank - December 31, 2019						
Common Equity Tier 1 (to Risk-Weighted Assets)	\$ 451,807	13.66%	\$ 148,950	4.50%	\$ 215,150	6.50%
Total Capital (to Risk-Weighted Assets)	\$ 480,040	14.51%	\$ 264,800	8.00%	\$ 331,000	10.00%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 451,807	13.66%	\$ 198,600	6.00%	\$ 264,800	8.00%
Tier 1 Capital (to Average Assets)	\$ 451,807	9.68%	\$ 186,627	4.00%	\$ 233,283	5.00%

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Note 14. Transactions with Related Parties

The Company has entered into transactions with its directors, officers, significant shareholders, their affiliates, and equity method investments (related parties). Such transactions were made in the ordinary course of business on substantially the same terms and conditions, including interest rates, as those prevailing at the same time for comparable transactions with other customers, and did not, in the opinion of management, involve more than normal risk or present other unfavorable features.

During the year ended December 31, 2020, \$2.1 million of related party loans were originated with no repayments resulting in \$2.1 million of related party loans as of December 31, 2020. There were no related party loans as of December 31, 2019.

Deposits from related parties held by the Company as of December 31, 2020 and 2019 amounted to \$40.6 million and \$46.9 million, respectively.

During the year ended December 31, 2019, the Company invested \$1.1 million in Plexus Fund II, III, and IV-C, L.P ("Plexus"), which is included in other assets in the consolidated balance sheets at December 31, 2020 and 2019 with a balance of \$2.8 million. A member of the Company's board of directors was also a principal of Plexus Capital, the administrator of Plexus, at the time of the investment. Plexus is accounted for as an equity security investment.

During the year ended December 31, 2019, the Company invested \$156 thousand in DefenseStorm, Inc. ("DefenseStorm"), which is included in other assets in the consolidated balance sheets with a balance of \$2.9 million and \$2.1 million as of December 31, 2020 and 2019, respectively. The Company holds voting and non-voting equity in DefenseStorm which is accounted for as an equity security investment. DefenseStorm provides a broad range of IT and cyber security solutions principally designed for financial institutions. As of December 31, 2020, the Company held approximately 5.0% of DefenseStorm on a fully diluted basis in the form of both voting and non-voting common equity, including approximately 2.6% voting control. Directors and officers of the Company and their affiliates collectively own approximately 4.7% of DefenseStorm on a fully diluted basis as of December 31, 2020, including approximately 0.8% voting control. During 2020 and 2018, the Company paid \$550 thousand and \$71 thousand, respectively, for cyber security event monitoring services. No payments were made for the year ended December 31, 2019.

The Company has an investment in Finxact LLC ("Finxact"), a developer of core processing software and services for the banking industry, which is included in other assets in the consolidated balance sheets with a balance of \$1.4 million and \$4.5 million as of December 31, 2020 and 2019, respectively. As of December 31, 2020, the Company held approximately 16.1% of Finxact on a fully diluted basis in the form of both voting and non-voting equity, including approximately 5.0% voting control. This investment is accounted for as an equity method investment due to the Company's ability to exercise significant influence over financial and operating policies of Finxact. Directors and officers of the Company and their affiliates collectively own approximately 6.4% of Finxact on a fully diluted basis in the form of non-voting equity as of December 31, 2020. During 2020 and 2019, the Company paid \$1.1 million and \$24 thousand, respectively, for core processor services. No payments were made for the year ended December 31, 2018.

The Company has an investment in Payrailz, LLC ("Payrailz"), an entity that provides digital payment services and solutions to the financial services industry, which is included in other assets in the consolidated balance sheets with no balance as of December 31, 2020 and 2019. As of December 31, 2020, the Company holds approximately 14.0% of Payrailz on a fully diluted basis in the form of voting equity. This investment is accounted for as an equity method investment due to the Company's ability to exercise significant influence over financial and operating policies of Payrailz. Certain officers and directors of the Company collectively own approximately 3.7% of Payrailz on a fully diluted basis in the form of voting equity as of December 31, 2020. No payments were made for the year ended December 31, 2020. During 2019 and 2018, the Company paid \$250 thousand and \$4 thousand for digital payment services.

The Company's digital banking joint venture between Live Oak Banking Company and First Data Corporation, Apiture, which is included in other assets in the consolidated balance sheets had a balance of \$53.3 million and \$64.7 million as of December 31, 2020 and 2019, respectively. During the years ended December 31, 2020, 2019 and 2018, the Company paid \$377 thousand, \$524 thousand and \$5.5 million, respectively, for professional services. During 2020, 2019 and 2018, the Company recognized income of \$782 thousand, \$446 thousand and \$255 thousand, respectively, for shared services and rent.

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During the year ended December 31, 2019, the Company committed to invest \$1.8 million in Canapi Ventures Fund, L.P. (“The Fund”), an investment fund which centers around early to growth stage financial technology companies. During 2020 and 2019, \$507 thousand and \$257 thousand of the commitment was invested, respectively. The Fund is included in other assets in the consolidated balance sheets with a balance of \$1.7 million as of December 31, 2020 and 2019. The Fund is accounted for as an equity method investment.

During the year ended December 31, 2019, the Company committed to invest \$15.2 million in Canapi Ventures SBIC Fund, L.P. (“The SBIC Fund”), an investment fund which centers around early to growth stage financial technology companies. During 2020 and 2019, \$3.4 million and \$461 thousand of the commitment was invested, respectively. The SBIC Fund is included in other assets in the consolidated balance sheets with a balance of \$14.8 million and \$15.2 million as of December 31, 2020 and 2019, respectively. The SBIC Fund is accounted for as an equity method investment.

During the year ended December 31, 2019, the Company invested \$300 thousand in Kwipped, Inc. (“Kwipped”), a marketplace platform for renting and leasing equipment, which is included in other assets in the consolidated balance sheets with a balance of \$280 thousand and \$300 thousand as of December 31, 2020 and 2019, respectively. As of December 31, 2020, the Company holds approximately 3.6% of Kwipped on a fully diluted basis in the form of voting equity. During 2019, this investment was accounted for as an equity security. During 2020, the Company became able to exercise significant influence over financial and operating policies of Kwipped, and therefore the Company accounted for this investment as an equity method investment.

During the year ended December 31, 2020, the Company invested \$2.5 million in Cape Fear Collective Impact Opportunity 1, LLC (“Cape Fear Collective”), which serves as a special purpose vehicle to purchase a portfolio of residential homes available for sale in the community. This investment is included in other assets in the consolidated balance sheet with a balance of \$2.5 million as of December 31, 2020. As of December 31, 2020, the Company holds approximately 98.0% of Cape Fear Collective. This investment is accounted for as an equity method investment.

During the year ended December 31, 2020, the Company committed to invest \$3.9 million in Green Sun Tenant LLC (“Green Sun”), a solar income tax credit project. During the year ended December 31, 2020, \$980 thousand of the commitment was invested. This investment is included in other assets in the consolidated balance sheet with a balance of \$3.9 million as of December 31, 2020. As of December 31, 2020, the Company holds approximately 99.0% of Green Sun. This investment is accounted for as an equity method investment.

Note 15. Significant Equity Method Investments

In accordance with Rules 3-09 and 4-08(g) of Regulation S-X, the Company must assess whether any of its equity method investments are significant equity method investments. In evaluating the significance of these investments, the Company performed the income test, the investment test and the asset test described in S-X 3-05 and S-X 1-02(w). Rule 3-09 of Regulation S-X requires separate audited financial statements of an equity method investee in an annual report if either the income or investment test exceeds 20%. As of December 31, 2020, and 2019, none of our investments was considered a significant subsidiary under Rule 3-09. Rule 4-08(g) of Regulation S-X requires summarized financial information in an annual report if any of the three tests exceeds 10%. Under the income test, the Company’s proportionate share of its equity method investees’ aggregated net losses exceeded the applicable threshold of 10% and is accordingly required to provide summarized financial information for these investees for all periods presented in this Form 10-K.

Live Oak Bancshares, Inc.
Notes to Consolidated Financial Statements

The following table provides summarized balance sheet information for the Company's combined equity method investments as of December 31, 2020 and 2019. The Company's equity method investments are included in the other assets line on the consolidated balance sheet and are largely concentrated in new or emerging financial service technology companies.

Balance sheet data	As of December 31,	
	2020	2019
Current assets	\$ 67,843	\$ 56,710
Noncurrent assets	285,018	162,304
Total assets	<u>\$ 352,861</u>	<u>\$ 219,014</u>
Current liabilities	\$ 64,019	\$ 19,910
Noncurrent liabilities	17,151	683
Total liabilities	81,170	20,593
Equity interests	271,691	198,421
Total liabilities and equity	<u>\$ 352,861</u>	<u>\$ 219,014</u>

The following table provides summarized income statement information for the Company's combined equity method investments for the years ended December 31, 2020, 2019, and 2018.

Summary of operations	Years ended December 31,		
	2020	2019	2018
Total revenues	\$ 68,038	\$ 56,928	\$ 54,418
Net loss	(68,406)	(30,367)	(8,251)

Note 16. 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 wholly owned subsidiaries Live Oak Ventures, Canapi and the Bank's investment in Apiture.

Live Oak Bancshares, Inc.

Notes to 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 consolidated financial statements prepared in conformity with GAAP.

	<u>Banking</u>	<u>Fintech</u>	<u>Other</u>	<u>Consolidated</u>
As of and for the year Ended December 31, 2020				
Interest income	\$ 288,305	\$ —	\$ 103	\$ 288,408
Interest expense	93,313	—	372	93,685
Net interest income	194,992	—	(269)	194,723
Provision for loan and lease credit losses	40,658	—	—	40,658
Noninterest income	77,512	6,567	1,921	86,000
Noninterest expense	181,555	5,510	5,611	192,676
Income tax (benefit) expense	(7,171)	2,989	(7,972)	(12,154)
Net income (loss)	<u>\$ 57,462</u>	<u>\$ (1,932)</u>	<u>\$ 4,013</u>	<u>\$ 59,543</u>
Total assets	<u>\$ 7,767,013</u>	<u>\$ 83,946</u>	<u>\$ 21,344</u>	<u>\$ 7,872,303</u>
As of and for the year Ended December 31, 2019				
Interest income	\$ 227,776	\$ 30	\$ 174	\$ 227,980
Interest expense	88,052	—	(154)	87,898
Net interest income	139,724	30	328	140,082
Provision for loan and lease credit losses	15,067	—	145	15,212
Noninterest income	64,034	(2,436)	1,921	63,519
Noninterest expense	152,227	7,078	5,619	164,924
Income tax expense (benefit)	6,803	(1,218)	(154)	5,431
Net income (loss)	<u>\$ 29,661</u>	<u>\$ (8,266)</u>	<u>\$ (3,361)</u>	<u>\$ 18,034</u>
Total assets	<u>\$ 4,724,537</u>	<u>\$ 82,355</u>	<u>\$ 5,936</u>	<u>\$ 4,812,828</u>
As of and for the year Ended December 31, 2018				
Interest income	\$ 163,174	\$ —	\$ (531)	\$ 162,643
Interest expense	55,245	—	(645)	54,600
Net interest income	107,929	—	114	108,043
Provision for loan and lease credit losses	5,451	—	107	5,558
Noninterest income	91,681	(386)	4,970	96,265
Noninterest expense	130,589	619	21,496	152,704
Income tax benefit	(1,744)	—	(3,658)	(5,402)
Net income (loss)	<u>\$ 65,314</u>	<u>\$ (1,005)</u>	<u>\$ (12,861)</u>	<u>\$ 51,448</u>
Total assets	<u>\$ 3,588,667</u>	<u>\$ 87,554</u>	<u>\$ (3,284)</u>	<u>\$ 3,672,937</u>

Live Oak Bancshares, Inc.**Notes to Consolidated Financial Statements****Note 17. Parent Company Only Financial Statements**

The following balance sheets, statements of income and statements of cash flows for Live Oak Bancshares, Inc. should be read in conjunction with the consolidated financial statements and the notes thereto.

Balance Sheets

	As of December 31,	
	2020	2019
Assets		
Cash and cash equivalents	\$ 11,209	\$ 13,585
Investment in subsidiaries	543,740	499,335
Other assets	30,816	21,182
Total assets	<u>\$ 585,765</u>	<u>\$ 534,102</u>
Liabilities and Shareholders' Equity		
Borrowings	\$ 14,488	\$ —
Other liabilities	3,427	1,716
Total liabilities	<u>17,915</u>	<u>1,716</u>
Shareholders' equity:		
Common stock	310,619	340,397
Retained earnings	235,724	180,265
Accumulated other comprehensive income (loss)	21,507	11,724
Total equity	<u>567,850</u>	<u>532,386</u>
Total liabilities & shareholders' equity	<u>\$ 585,765</u>	<u>\$ 534,102</u>

Statements of Income

	Years ended December 31,		
	2020	2019	2018
Interest income	\$ 91	\$ 236	\$ 46
Interest expense	372	—	129
Net interest loss	<u>(281)</u>	<u>236</u>	<u>(83)</u>
Noninterest income:			
Other noninterest income	252	140	562
Total noninterest income	<u>252</u>	<u>140</u>	<u>562</u>
Noninterest expense:			
Salaries and employee benefits	17,250	12,408	10,117
Professional services expense	750	825	853
Renewable energy tax credit investment impairment	—	602	—
Impairment expense on goodwill and other intangibles, net	—	—	2,680
Other expense	1,167	999	1,844
Total noninterest expense	<u>19,167</u>	<u>14,834</u>	<u>15,494</u>
Net loss before equity in undistributed income of subsidiaries	(19,196)	(14,458)	(15,015)
Income tax benefit	<u>(7,785)</u>	<u>(27)</u>	<u>(3,658)</u>
Net loss	(11,411)	(14,431)	(11,357)
Equity in undistributed income of subsidiaries in excess of dividends from subsidiaries	70,954	32,465	62,805
Net income attributable to Live Oak Bancshares, Inc.	<u>\$ 59,543</u>	<u>\$ 18,034</u>	<u>\$ 51,448</u>

Statements of Cash Flows

	Years ended December 31,		
	2020	2019	2018
<i>Cash flows from operating activities</i>			
Net income	\$ 59,543	\$ 18,034	\$ 51,448
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Equity in undistributed net income of subsidiaries in excess of dividends of subsidiaries	(70,954)	(32,465)	(62,805)
Equity used in subsidiary tax withholding related to vesting of restricted stock and other	43,507	—	—
Depreciation	—	—	199
Impairment expense on goodwill and other intangibles, net	—	—	2,680
Deferred income tax	1,163	(790)	(6,633)
Renewable energy tax credit investment impairment	—	602	—
Stock option based compensation expense	1,594	1,723	1,713
Restricted stock expense	13,146	10,025	7,463
Business combination contingent consideration fair value adjustments	163	—	(260)
Net change in other assets	(6,706)	7,100	4,396
Net change in other liabilities	(525)	1,417	142
Net cash provided by (used in) operating activities	<u>40,931</u>	<u>5,646</u>	<u>(1,657)</u>
<i>Cash flows from investing activities</i>			
Capital investment in subsidiaries	(6,354)	(1,109)	(9,325)
Business combination, net of cash acquired	(895)	—	—
Purchases of premises and equipment	—	—	(20)
Net cash used in investing activities	<u>(7,249)</u>	<u>(1,109)</u>	<u>(9,345)</u>
<i>Cash flows from financing activities</i>			
Proceeds from borrowings	70,000	—	—
Repayments of borrowings	(55,512)	(1,441)	(25,123)
Stock option exercises	3,069	508	1,626
Employee stock purchase program	520	437	342
Tax withholding related to vesting of restricted stock and other	(49,229)	(409)	(756)
Shareholder dividend distributions	(4,906)	(4,827)	(4,809)
Net cash used in financing activities	<u>(36,058)</u>	<u>(5,732)</u>	<u>(28,720)</u>
Net change in cash and cash equivalents	(2,376)	(1,195)	(39,722)
Cash and cash equivalents at beginning of year	13,585	14,780	54,502
Cash and cash equivalents at end of year	<u>\$ 11,209</u>	<u>\$ 13,585</u>	<u>\$ 14,780</u>

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

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

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

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2020, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles in the United States of America, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting might not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As of December 31, 2020, management assessed the effectiveness of the Company's internal control over financial reporting based on the criteria for effective internal control over financial reporting established in "Internal Control-Integrated Framework (2013)," issued by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission. Based on the assessment, management determined that the Company maintained effective internal control over financial reporting as of December 31, 2020.

Dixon Hughes Goodman LLP, the independent registered public accounting firm, audited the consolidated financial statements of the Company included in this Annual Report on Form 10-K and has issued an audit report on the Company's internal control over financial reporting as of December 31, 2020. This report entitled "Report of Independent Registered Public Accounting Firm" appears in Item 8.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 10 will be included in the Company's definitive proxy statement for the 2021 Annual Meeting of Shareholders (the "Proxy Statement"), under the headings "Proposal 1: Election of Directors," "Qualifications of Directors," "Code of Ethics and Conflict of Interest Policy," "Director Relationships," "Committees of the Board or Directors," "Executive Officers," "Report of the Audit and Risk Committee," and "Delinquent Section 16(a) Reports" and is incorporated herein by reference. The Proxy Statement will be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days of the end of our 2020 fiscal year.

Item 11. EXECUTIVE COMPENSATION

The information required by Item 11 will be included in the section of the Proxy Statement entitled "Executive Compensation and Other Matters" under the following headings: "Compensation Discussion and Analysis," "Compensation Committee Report," "Summary Compensation and Other Tables," "Potential Payments upon Termination or Change in Control," "Principal Executive Officer Pay Ratio," and "Director Compensation," and in the section of the Proxy Statement entitled "Corporate Governance" under the heading "Compensation Committee Interlocks and Insider Participation."

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

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

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

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

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

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

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements. The following financial statements are filed as part of this report.

Reports of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2020 and 2019

Consolidated Statements of Income for the Years Ended December 31, 2020, 2019 and 2018

Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2020, 2019 and 2018

Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2020, 2019 and 2018

Consolidated Statements of Cash Flows for the Years Ended December 31, 2020, 2019 and 2018

Notes to Consolidated Financial Statements

(a)(2) Financial Statement Schedules. All applicable financial statement schedules required under Regulation S-X have been included in the Notes to the Consolidated Financial Statements.

(a)(3) Exhibits. The exhibits listed below are filed or furnished as a part of this Annual Report on Form 10-K.

Exhibit No.	Description of Exhibit
-------------	------------------------

- | | |
|--------|--|
| 3.1 | Amended and Restated Articles of Incorporation of Live Oak Bancshares, Inc. (incorporated by reference to Exhibit 3.1 of the registration statement on Form S-1, filed on June 19, 2015) |
| 3.2 | Amended Bylaws of Live Oak Bancshares, Inc. (incorporated by reference to Exhibit 3.2 of the amended registration statement on Form S-1, filed on July 13, 2015) |
| 4.1 | Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the registration statement on Form S-1, filed on June 19, 2015) |
| 4.2 | Registration and Other Rights Agreement between Live Oak Bancshares, Inc. and Wellington purchasers (incorporated by reference to Exhibit 4.2 of the registration statement on Form S-1, filed on June 19, 2015) |
| 4.3 | Description of Securities Registered under Section 12 of the Exchange Act (incorporated by reference to Exhibit 4.3 of the annual report on Form 10-K, filed on February 27, 2020) |
| 10.1 | 2008 Incentive Stock Option Plan, as amended (incorporated by reference to Exhibit 10.1 of the registration statement on Form S-1, filed on June 19, 2015) # |
| 10.2.1 | 2008 Nonstatutory Stock Option Plan, as amended (incorporated by reference to Exhibit 10.2 of the registration statement on Form S-1, filed on June 19, 2015) # |
| 10.2.2 | Amendment to 2008 Nonstatutory Stock Option Plan effective July 1, 2019 (incorporated by reference to Exhibit 10.2 of the quarterly report on Form 10-Q, filed on August 6, 2019) # |
| 10.3 | Amended and Restated Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 of the quarterly report on Form 10-Q filed on August 8, 2016) # |
| 10.4.1 | 2015 Omnibus Stock Incentive Plan (incorporated by reference to Exhibit 10.4 of the registration statement on Form S-1 filed on June 19, 2015) # |
| 10.4.2 | Amendment to 2015 Omnibus Stock Incentive Plan dated December 17, 2015 (incorporated by reference to Exhibit 10.4.2 of the 2015 10-K) # |
| 10.4.3 | 2015 Omnibus Stock Incentive Plan as Amended and Restated effective May 24, 2016 (incorporated by reference to Exhibit 10.1 of the current report on Form 8-K filed on May 27, 2016) # |
| 10.4.4 | Amendment to 2015 Omnibus Stock Incentive Plan dated May 15, 2018 (incorporated by reference to Exhibit 10.1 of the current report on Form 8-K filed on May 18, 2018) # |
| 10.5.1 | Software Service Agreement between Live Oak Banking Company and nCino, LLC, dated November 1, 2012 (incorporated by reference to Exhibit 10.10 of the registration statement on Form S-1 filed on June 19, 2015) |

- 10.5.2 Amendment to Software Service Agreement dated October 9, 2015, between Live Oak Banking Company and nCino, Inc. (incorporated by reference to Exhibit 10.7.2 of the 2015 10-K)
- 10.5.3 Amendment to Software Service Agreement dated September 5, 2018, between Live Oak Banking Company and nCino, Inc.*
- 10.5.4 Amendment to Software Service Agreement dated September 21, 2018 between Live Oak Banking Company and nCino, Inc.*
- 10.5.5 Renewal Amendment to Software Service Agreement dated January 18, 2019, between Live Oak Banking Company and nCino, Inc. (incorporated by reference to Exhibit 10.5.3 of the 2018 10-K)
- 10.5.6 Amendment to Software Service Agreement dated April 1, 2020, between Live Oak Banking Company and nCino, Inc. (incorporated by reference to Exhibit 10.2.1 of the quarterly report on Form 10-Q, filed on August 5, 2020)
- 10.5.7 Amendment to Software Service Agreement dated April 5, 2020, between Live Oak Banking Company and nCino, Inc. (incorporated by reference to Exhibit 10.2.2 of the quarterly report on Form 10-Q, filed on August 5, 2020)
- 10.5.8 Amendment to Software Service Agreement dated April 24, 2020, between Live Oak Banking Company and nCino, Inc. (incorporated by reference to Exhibit 10.2.3 of the quarterly report on Form 10-Q, filed on August 5, 2020)
- 10.5.9 Amendment to Software Service Agreement dated December 1, 2020, between Live Oak Banking Company and nCino, Inc.*
- 10.5.10 Amendment to Software Service Agreement dated January 13, 2021, between Live Oak Banking Company and nCino, Inc.*
- 10.5.11 Amendment to Software Service Agreement dated January 15, 2021, between Live Oak Banking Company and nCino, Inc.*
- 10.5.12 Amendment to Software Service Agreement dated January 23, 2021, between Live Oak Banking Company and nCino, Inc.*
- 10.5.13 Amendment to Software Service Agreement dated January 28, 2021, between Live Oak Banking Company and nCino, Inc.*
- 10.5.14 Amendment to Software Service Agreement dated February 23, 2021, between Live Oak Banking Company and nCino, Inc.*
- 10.6.1 Form of Stock Option Award Agreement for executive officers under the 2015 Omnibus Stock Incentive Plan (incorporated by reference to Exhibit 10.8 of the 2015 10-K) #
- 10.6.2 Amended Performance RSU Award Agreement with Stock Price Condition for Susan N. Janson (incorporated by reference to Exhibit 10.6.8 of the 2018 10-K) #
- 10.6.3 Amended form of Performance RSU Award Agreement with Stock Price Condition for certain executive officers (incorporated by reference to Exhibit 99.1 of the current report on Form 8-K filed on February 15, 2019) #
- 10.6.4 RSU Award Agreement for M. Huntley Garriott (incorporated by reference to Exhibit 10.6.10 of the 2018 10-K) #
- 10.6.5 Performance RSU Award Agreement with Stock Price Condition for M. Huntley Garriott (incorporated by reference to Exhibit 10.6.11 of the 2018 10-K) #
- 10.6.6 Form of RSU Award Agreement for certain executive officers (incorporated by reference to Exhibit 99.1 of the current report on Form 8-K filed on February 14, 2020) #
- 10.6.7 Form of 2020 RSU Award Agreement for non-employee directors (incorporated by reference to Exhibit 10.1 of the quarterly report on Form 10-Q filed on August 5, 2020) #
- 10.6.8 RSU Award Agreement for non-employee director Tonya W. Bradford* #
- 10.6.9 Form of RSU Award Agreement for certain executive officers (incorporated by reference to Exhibit 99.2 of the current report on Form 8-K filed on February 24, 2021) #
- 10.6.10 RSU Award Agreement for M. Huntley Garriott (incorporated by reference to Exhibit 99.3 of the current report

on Form 8-K filed on February 24, 2021) #

10.6.11 RSU Award Agreement for non-employee director David G. Lucht* #

21.1 Subsidiaries of the Registrant*

23.1 Consent of the Independent Registered Public Accounting Firm - Dixon Hughes Goodman LLP*

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

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

32 Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

101.INS Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)

101.SCH Inline XBRL Taxonomy Extension Schema Document

101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document

101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document

101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document

104 Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

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

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

Denotes management contract or compensatory plan.

Item 16. FORM 10-K SUMMARY

Registrants may voluntarily include a summary of information required by Form 10-K under this Item 16. We have elected not to include such summary information.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Live Oak Bancshares, Inc.

(Registrant)

Date: February 25, 2021

By: /s/ James S. Mahan III

James S. Mahan III

Chairman and Chief Executive Officer

(Principal Executive Officer)

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

	Date
<u>/s/ James S. Mahan III</u> James S. Mahan III Chairman and Chief Executive Officer (Principal Executive Officer)	February 25, 2021
<u>/s/ S. Brett Caines</u> S. Brett Caines Chief Financial Officer (Principal Financial Officer)	February 25, 2021
<u>/s/ J. Wesley Sutherland</u> J. Wesley Sutherland Chief Accounting Officer (Principal Accounting Officer)	February 25, 2021
<u>/s/ William L. Williams III</u> William L. Williams III Vice Chairman of the Board of Directors	February 25, 2021
<u>/s/ Tonya W. Bradford</u> Tonya W. Bradford Director	February 25, 2021
<u>/s/ William H. Cameron</u> William H. Cameron Director	February 25, 2021
<u>/s/ Diane B. Glossman</u> Diane B. Glossman Director	February 25, 2021
<u>/s/ Glen F. Hoffsis</u> Glen F. Hoffsis Director	February 25, 2021
<u>David G. Lucht</u> David G. Lucht Director	February 25, 2021
<u>/s/ Milton E. Petty</u> Milton E. Petty Director	February 25, 2021
<u>/s/ Neil L. Underwood</u> Neil L. Underwood Director	February 25, 2021

Stock Performance Graph

Our voting common stock is listed for trading on the NASDAQ Global Select Market under the symbol “LOB.” The Stock Performance Graph set forth below compares the cumulative total stockholder return on our common stock for the period from July 23, 2015, through December 31, 2020, with the cumulative total return of the Nasdaq Composite Index and the Nasdaq Bank Index over the same period. The comparison assumes \$100 was invested on July 23, 2015, in the common stock of Live Oak Bancshares, Inc., in the Nasdaq Composite Index and in the Nasdaq Bank Index and assumes reinvestment of dividends, if any.





CORPORATE INFORMATION

Corporate Headquarters

Live Oak Bancshares, Inc.
1741 Tiburon Drive
Wilmington, NC 28403

Stock information

The voting common stock of Live Oak Bancshares, Inc. is traded on the NASDAQ Global Select Market under the symbol "LOB."

Transfer Agent

Broadridge Corporate Issuer Solutions, Inc.
1717 Arch Street, Suite 1300
Philadelphia, PA 19103

Independent Auditors

Dixon Hughes Goodman LLP

Executive Officers

James S. Mahan III - Chairman and Chief Executive Officer
William L. Williams III - Executive Vice President and Vice Chairman
Neil L. Underwood - President and Director
M. Huntley Garriott, Jr. - President, Live Oak Banking Company
S. Brett Caines - Chief Financial Officer
Susan N. Janson - Chief Risk Officer, Live Oak Banking Company
Gregory W. Seward - General Counsel
Steven J. Smits - Chief Credit Officer
J. Wesley Sutherland - Chief Accounting Officer

Directors

Tonya W. Bradford
William H. Cameron
Diane B. Glossman
Glen F. Hoffsis
David G. Lucht
Miltom E. Petty



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